



IN THE SUPREME COURT OF THE STATE OF NEW MEXICO

PROTECT TESUQUE, INC.

Petitioner,

v.

S-1-SC-40872

**THE HONORABLE JAMES KENNEY,
Secretary of Environment, and the
NEW MEXICO ENVIRONMENT
DEPARTMENT,**

Respondents,

BL SANTA FE, LLC,

Real Party in Interest.

**EMERGENCY VERIFIED PETITION FOR
WRIT OF MANDAMUS AND REQUEST FOR STAY**

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Protect Tesuque, Inc. (“Protect Tesuque”) submits this Emergency Verified Petition for Writ of Mandamus and Request for Stay.

INTRODUCTION

When an executive agency refuses to apply a legislative enactment and instead applies a different policy without legislative authority to do so, it abrogates and usurps the legislative authority to make law in violation of Article III, Section 1 of the New Mexico Constitution. *See generally State ex rel. Sandel v. New Mexico Public Utility Commission*, 1999-NMSC-019, 127 N.M. 272. That is precisely what the New Mexico Environment Department (“NMED”) is doing here. By refusing to apply the Liquid Waste Disposal and Treatment Regulations, Part 20.7.3 NMAC (09/14/1973, as amended through 09/15/2014) (“LW Regulations”) mandated by the Environmental Improvement Act of 1971, NMSA 1978, Sections 74-1-2 through -18 (1971, as amended through 2024) (the “EIA”) and promulgated by the Environmental Improvement Board (the “EIB”), NMED is not just abrogating the Legislature’s direction to enforce and apply the EIB’s LW Regulations, it is imperiously usurping the legislative power by substituting a different, far less protective set of regulations than the Legislature and the EIB have mandated, and applying those less protective regulations – not the governing LW Regulations – to a favored subset of liquid waste dischargers.

In 1971, four years *after* enactment of the Water Quality Act, NMSA 1978, Sections 74-6-1 through -17 (1967, as amended through 2025) (the “WQA”), and three years *after* adoption of the Ground and Surface Water Protection regulations, Part 20.2.6.2 NMAC (01/04/1968, as amended through 12/21/2018) (the “GSWP Regulations”), the Legislature enacted the EIA.

This Court “presume[s] that the Legislature acts with full knowledge of, and consistent with, existing legislation.” *Jicarilla Apache Nation v. Rodarte*, 2004-NMSC-035, ¶ 15, 136 N.M. 630, 103 P.2d 554. Cognizant of the pre-existing WQA and the GSWP Regulations, the Legislature clearly stated its purpose in enacting the EIA:

to create a department that will be responsible for environmental management and consumer protection in this state in order to ensure an environment that in the greatest possible measure will confer optimum health, safety, comfort and economic and social well-being on its inhabitants; will protect this generation as well as those yet unborn from health threats posed by the environment; and will maximize the economic and cultural benefits of a healthy people.

NMSA 1978, § 74-1-2.

To fulfill that purpose, the EIA created the EIB, empowered it to “promulgate all regulations applying to persons and entities outside of the department [of environment]”, NMSA 1978, Section 74-1-5, directed it to promulgate comprehensive regulations governing the on-site discharge of domestic and

commercial liquid wastes, and directed the New Mexico Environment Department (the “NMED”) to enforce those regulations. NMSA 1978, §§ 74-1-2, 74-1-7(3).

The purpose of the LW Regulations is:

to protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and ground water contamination from on-site liquid waste disposal practices.

20.7.3.6 NMAC.

The LW Regulations fulfill the EIA’s purpose and mandate by restricting the discharge of *untreated* liquid waste to three permissible alternatives, 20.7.3.201(B) NMAC, and the discharge of *treated* liquid waste to two permissible alternatives. 20.7.3.201(C) NMAC. Where, as here, treated liquid waste is to be discharged to ground from a liquid waste treatment unit, it must be discharged to a permitted and approved “liquid waste disposal system”, as those terms are defined and specifically regulated in the LW Regulations. *Id.* Disposal of such treated liquid wastes in a regulated, on-site liquid waste disposal system is the *only* permissible means of disposal to ground.

On the erroneous and absurd pretext that the EIB’s LW Regulations do not apply to large volume generators of domestic and commercial liquid waste, the NMED has ruled that the LW Regulations’ mandatory safeguards do not apply to the permit application of a luxury resort hotel and 84 private residences to discharge

up to 30,000 gallons of aggregated liquid waste per day. *See* Order on Motion by Protect Tesuque Inc. For Pre-Hearing Permit Denial, dated 04/07/25 (the “Order”), attached as **Ex. 1**.¹ Instead, the Department has ruled that it will apply a different, far less protective set of regulations that allow these favored property owners to avoid virtually all of the mandatory safeguards the LW Regulations require.

The rules of statutory and regulatory construction establish the clear primacy of the LW Regulations over the GSWP Regulations NMED wishes to apply. *See* NMSA 1978, § 12-2A-10. Even the GSWP Regulations make this clear. *See* 20.6.2.3105(B) and 20.6.2.2101(A) NMAC. As demonstrated below, neither the EIA nor the LW Regulations provide any exemption for large volume dischargers of domestic and commercial liquid waste. The EIA and the LW Regulations should be construed in accordance with their express purpose and plain meaning, *see* NMSA 1978, Section 12-2A-18, not misinterpreted, ignored, and undermined by the State agency responsible for their enforcement.

¹ Pursuant to Rule 12-504(B)(2), Protect Tesuque includes the following exhibits for the Court’s consideration: **Ex. 2**, Ground Water Quality Bureau Draft Discharge Permit, DP-75, dated 09/16/24; **Ex. 3**, Protect Tesuque’s Motion for Pre-Hearing Permit Denial (the “Motion”); **Ex. 4**, NMED’s Response to Protect Tesuque’s Motion; **Ex. 5**, BL Santa Fe, LLC’s Response to Protect Tesuque’s Motion; **Ex. 6**, Protect Tesuque’s Consolidated Reply; and **Ex. 7**, J. Herman Email Re DP-75 Leachfield Authorization.

The Supreme Court has original jurisdiction in mandamus to restrain an administrative agency from violating Article III, Section 1 of the New Mexico Constitution by abrogating a legislative enactment or usurping the legislative branch's exclusive authority to make law. *State ex rel. Sandel*, 1999-NMSC-019. In refusing to apply the EIB's LW Regulations, NMED is abrogating both the EIA and the EIB's LW Regulations. In applying the WQA and its implementing regulations to large volume dischargers of liquid waste rather than the LW Regulations, the NMED is also usurping the exclusive authority of the Legislature and the EIB to make the law that governs on-site liquid waste disposal.

The instant Petition presents non-discretionary legal issues regarding the determination and correct application of governing law. This Petition presents fundamental constitutional questions of great public importance that can be answered on the basis of undisputed facts. An expeditious resolution cannot be obtained through a direct appeal.

PARTIES

Petitioner Protect Tesuque is a New Mexico non-profit corporation committed to ensuring clean water for hundreds of Tesuque residents whose water wells are immediately downstream from Bishop's Lodge Resort's (the "Resort") proposed disposal field.

Respondent NMED was created under the EIA and tasked with enforcing, *inter alia*, the LW Regulations promulgated by the EIB.

Real Party in Interest BL Santa Fe, LLC owns the Resort and seeks a permit under the WQA and GSWP Regulations, on behalf of itself and 84 property owners in the Hills and Villas subdivision, to discharge 30,000 gallons per day of partially treated liquid waste.

Originally, both the Resort and the developers of the Hills and Villas subdivision chose to forego on-site disposal to ground of their liquid waste. Instead, they installed a private sewer system to collect and discharge their aggregated liquid waste into an enclosed system or public sewer. *See* 20.7.3.201(B) and (C) NMAC. They now seek to undo that prior decision and instead discharge their aggregated liquid waste to ground without installation of the liquid waste treatment units and disposal systems the LW Regulations require.

ADMINISTRATIVE PROCEEDING

On September 16, 2024, NMED provided public notice of its intent to grant a discharge permit to the Resort under the GSWP Regulations for discharge to ground of 30,000 gallons per day of aggregated domestic and commercial liquid waste. In response to scores of outraged public comments, Secretary Kenney ordered a public hearing on challenges to the proposed permit and appointed a hearing officer to conduct the proceeding. On January 8, 2025, the hearing officer granted Protect

Tesuque's request to entertain a motion challenging the law and regulations applied by NMED for review and approval of the proposed permit. On April 7, 2025, following briefing but no oral argument on the motion, the hearing officer denied Protect Tesuque's motion, ruling without explanation that the LW Regulations do not apply to the Resort's permit application. *See Ex. 1*, Order.

RELIEF REQUESTED

This Petition seeks a Writ of Mandamus directing the Secretary of Environment and NMED to apply the EIA and LW Regulations to the Resort's permit application to discharge 30,000 gallons per day of domestic and commercial liquid waste to ground. Because NMED's hearing officer has set a permit hearing to begin May 19, 2025, the Court should stay the May 19 proceedings, exercise original jurisdiction, vacate NMED's determination that the EIA and LW Regulations do not apply to the Resort's discharge of liquid waste, and direct the Secretary and NMED to adjudicate the Resort's application for a discharge permit pursuant to the requirements of the EIA and LW Regulations.

JURISDICTION

This Court has original jurisdiction over mandamus actions against state officers, boards, or commissions and the power to issue writs of mandamus "necessary or proper for the complete exercise of its jurisdiction." N.M. Const. art. VI, § 3. For the reasons explained below, this Court has authority to issue mandamus

to compel NMED to enforce the EIA and LW Regulations. *See State ex rel. Egolf v. New Mexico Pub. Regulation Comm'n*, 2020-NMSC-018, ¶ 32, 476 P.3d 896 (N.M. 2020).²

As this Court has repeatedly noted, the exercise of original jurisdiction in a mandamus proceeding is governed by a three-part test:

The issue presents a purely legal issue concerning the non-discretionary duty of a governmental official that (1) implicates fundamental constitutional questions of great public importance, (2) can be answered on the basis of virtually undisputed facts, (3) calls for an expeditious resolution that cannot be obtained through other channels such as a direct appeal.

State ex rel. Sandel, 1999-NMSC-019, ¶ 11 (citing *Clark* at 120 N.M. at 569).

This case fully meets these requirements. First, the issue presented is a matter of great public importance: NMED has entirely ignored the Legislature's directive to enforce the LW Regulations under the EIA, violating the separation of powers doctrine as a result. Second, the applicability and primacy of the EIA and the LW Regulations can be determined on the basis of uncontroverted facts. NMED's proposed permit would allow the Resort to discharge to ground 30,000 gallons per day of domestic and commercial liquid waste aggregated from its hotel facilities and

² This is particularly true where “an administrative agency goes beyond the existing New Mexico statutes or case law it is charged with administering and claims authority to modify the existing law or to create new law on its own.” *State ex. Rel. Egolf*, 2020-NMSC-018, ¶ 32 (quoting *State ex Rel. Sandel*, 1999-NMSC-019, ¶ 12).

84 separate property owners. It is uncontroverted that NMED has determined that the WQA alone will govern the permit application, not the EIA and LW Regulations. Third, the issue presented requires an expeditious resolution that cannot be obtained through a direct appeal. NMED has already allowed the Resort to begin discharges of its aggregated liquid wastes into an unpermitted, under-sized disposal field that unlawfully fails to comply with the mandatory requirements of the LW Regulations for on-site disposal fields. *See* J. Herman Email Re DP-75 Leachfield Authorization, dated 02/07/25, attached as **Ex. 7**. The harm to downstream residents is immediate, ongoing, and irreparable.

NMED's refusal to apply the EIA and LW Regulations to the Resort's permit application is not subject to interlocutory review under the applicable regulations. An appeal of the Secretary's final determination to the Commission would afford no opportunity to adjudicate the constitutional issue raised by this Petition. *See Dillon v. King*, 1974-NMSC-096, ¶ 28, 87 N.M. 79; *El Castillo Ret. Residences v. Martinez*, 2015-NMCA-041, ¶¶ 21, 24, 346 P.3d 1164. Meanwhile, however, the Resort continues to discharge unlawfully aggregated liquid wastes into an unlawful disposal field, causing accumulating irreparable harm to all downstream neighbors.

ARGUMENT

I. **The GSWP Regulations Provide Fewer Protections Than the LW Regulations**

In 1967, the WQA empowered the Commission to promulgate water quality standards for surface and groundwater and promulgate discharge regulations to prevent or abate pollution. In 1968, the Commission promulgated the GSWP Regulations, which cover a vast array of waste generators, including industrial, chemical and pharmaceutical manufacturers, oil and gas producers, commercial, residential and recreational waste dischargers, and metal-working and construction industries.

The GSWP Regulations establish maximum concentration levels in groundwater for certain specified contaminants. If the pre-existing *in situ* concentration of a listed contaminant in groundwater is less than the standard established in 20.6.2.3103 NMAC for that contaminant, further “degradation of the groundwater up to the limit of the standard” will be allowed. 20.6.2.3101(A)(1) NMAC. If, however, the pre-existing concentration in groundwater of a listed contaminant exceeds the standard set in 20.6.2.3103, no further degradation of the

groundwater beyond the existing *in situ* concentration for that contaminant will be allowed. 20.6.2.3101(A)(2) NMAC.³

In short, a discharge permit granted under the GSWP Regulations allows contaminant-containing discharges to occur so long as the discharge does not cause the *in situ* groundwater concentration levels of the contaminants listed in 20.6.2.3103 to exceed the concentration levels set in 20.6.2.3103. Instead of preventing contaminant release to the environment, a discharge permit under the GSWP Regulations effectively allows it.

Three years after the WQCC promulgated the GSWP Regulations, the Legislature enacted the EIA, created the EIB, empowered the EIB to “promulgate all regulations applying to persons and entities outside of the department [of environment]”, NMSA 1978, § 74-1-5, specifically defined the meaning of “on-site liquid wastes”, NMSA 1978, § 74-1-3(C), and directed the EIB to promulgate rules

³ As a recent peer-reviewed article in the *Proceedings of the National Academy of Sciences* (“*PNAS*”) confirms, regulating the concentration levels of a small set of known contaminants, such as those listed in 20.6.2.3103 NMAC, fails to prevent the hazard to public health and the environment caused by the ever-growing variety of newly synthesized man-made contaminants present in wastewater. Worse still, its not possible to know the hazards posed by such newly synthesized chemicals on public health and the environment until many years after their release. See [January 7, 2025 PNAS Article](#).

and standards for a small subset of the dischargers covered by the WQA: domestic and commercial liquid waste dischargers. NMSA 1978, § 74-1-8(A)(3).

In enacting the EIA four years after the WQA, and three years after the GSWP Regulations, the Legislature clearly found the WQA and GSWP Regulations insufficient to address the specific environmental and public health hazards posed by the treatment and disposal of domestic and commercial liquid waste. In short, additional regulation specifically addressing the hazards of liquid waste disposal to ground was needed to protect both the environment and public health. Underscoring that conclusion, the Legislature subsequently made clear that any county or municipality requirements for on-site liquid waste systems must be at least as stringent as the LW Regulations. NMSA 1978, § 74-1-14.

Rather than enforce the law and regulations specifically adopted to protect the public against liquid waste disposal, NMED is instead applying superseded regulations that allow polluters to degrade water quality and threaten public health. Whereas the GSWP Regulations allow degradation of *in situ* groundwater up to the contaminant concentration levels specified in 20.6.2.3103 NMAC, the LW Regulations prevent such degradation by regulating the means through which domestic and commercial liquid waste must be treated and disposed to ground, or discharged to a permitted public sewer. 20.7.3.201(C) NMAC. They do so by requiring mandatory safeguards that ensure that on-site treatment and disposal of

liquid waste releases as few contaminants as possible. Those additional safeguards include:

- Prohibiting the introduction of hazardous materials into domestic and commercial liquid waste, 20.7.3.304(A) NMAC;
- Restricting the permissible means by which treated domestic and commercial liquid waste may be disposed, 20.7.3.201(C) and 20.7.3.401(G) NMAC;
- Restricting on-site disposal of domestic and commercial liquid waste to the property that generates the wastes, 20.7.3.201(G) NMAC;
- Specifying the means and limiting the rate at which domestic and commercial liquid wastes can be treated for disposal to ground, 20.7.3.7(L)(5) and 20.7.3.302(C) NMAC;
- Limiting the locations, scale and rates at which treated liquid wastes can be discharged to ground, 20.7.3.301-303 NMAC; and
- Requiring adequately sized, appropriately situated, suitably separated on-site disposal fields for discharge of treated liquid waste to ground. 20.7.3.302 and 703 NMAC.

II. The LW Regulations Prevail Over the GSWP Regulations

The rules of regulatory construction are clearly laid out in NMSA 1978, Section 12-2A-10(B) and (D):

- B. If an administrative agency's rules appear to conflict, they must be construed, if possible, to give effect to each. If the conflict is irreconcilable, the later-adopted rule governs. However, an earlier-adopted specific, special or local rule prevails over a later-adopted general rule unless the context of the later-adopted rule indicates otherwise.
- D. If a rule is a comprehensive revision of the rules on the subject, it prevails over previous rules on the subject, whether or not the revision and the previous rules conflict irreconcilably.

The LW Regulations are not only later-adopted than the GSWP Regulations, but they also provide far more comprehensive and specific rules governing the on-site treatment and disposal of domestic and commercial liquid waste, subjects the GSWP Regulations simply do not address. *See State v. Santillanes*, 2001-NMSC-018, ¶ 7, 130 N.M. 464 (“[I]f two statutes dealing with the same subject conflict, the more specific statute will prevail over the more general statute absent a clear expression of legislative intent to the contrary.”). The LW Regulations specifically address, *inter alia*, the appropriate allocation of risk and responsibility for on-site treatment and disposal of liquid wastes; the acceptable levels and methods of treatment required for specific properties and generators of liquid waste; the acceptable locations, soil conditions, dimensions and set-backs required for on-site disposal fields; the appropriate, site-specific rate and volume of treated wastes to be

disposed; and required standards for waste handling, storage and disposal. All of these subjects are carefully addressed in the LW Regulations; the GSWP Regulations address none of them.

That is why the LW Regulations provide the baseline requirements for on-site treatment and disposal of domestic and commercial liquid waste, and override the earlier, less specific, less comprehensive GSWP Regulations insofar as any conflict between their requirements, as the GSWP Regulations themselves confirm. *See* 20.6.2.1001(A) and 20.6.2.3105(B).

While the LW Regulations establish the governing requirements for on-site treatment and disposal of domestic and commercial liquid waste, they do not preempt the GSWP Regulations, which also apply if effluent from a liquid waste permittee violates the water quality standards of the GSWP Regulations. 20.6.2.3105(B) NMAC. The LW Regulations and the GSWP Regulations thus supplement one another if a liquid waste permittee violates the safeguards required by the LW Regulations or threatens to exceed the water quality standards established by the GSWP Regulations. *See* 20.6.2.3105(B) and 20.7.33.2 NMAC.

III. NMED Is Allowing Large Volume Dischargers to Ignore the LW Regulations

NMED's refusal to apply the LW Regulations to the Resort's permit application allows the Resort and other "large volume" generators of liquid waste to

bypass virtually all of the mandatory safeguards and protections the LW Regulations require, as the following table illustrates:

<u>Requirements LW Regulations</u>	<u>NMED Draft Permit GSWP Regulations</u>
• Every lot owner responsible for safe disposal of its liquid wastes • No introduction of hazardous wastes • Two permissible alternatives for disposal of treated liquid waste: - On-site disposal to ground via permitted liquid waste system - Off-site disposal to public sewer • On-site treatment and disposal must occur on the lot generating the waste • Rate-limited treatment based on site-specific conditions - Tertiary treatment and disinfection • Rate-limited disposal based on site-specific conditions - Minimum surface and absorption area per field - Minimum separation between fields - Minimum setbacks from streams, etc. - Number of disposal fields based on total volume discharged per lot • Effluent from tertiary treatment system sampled and analyzed for total nitrogen	- Tertiary treatment and disinfection • Effluent from tertiary treatment system sampled and analyzed for total nitrogen

While the LW Regulations and the Draft Permit both require tertiary treatment, 20.7.3.603 NMAC, and limited effluent testing for total nitrogen, 20.7.3.901(C)(3) NMAC, nothing in the GSWP Regulations or the Draft Permit requires the Resort to fulfill the many other mandatory safeguards of the LW Regulations. The 84 individual lot owners of the Hills and Villas subdivision have no responsibility under the GSWP Regulations or the Draft Permit to ensure compliance with permitted conditions, nor are they prohibited from introducing hazardous materials to their liquid wastes. Nothing in the GSWP Regulations or the Draft Permit requires treatment and disposal of each lot's liquid waste to occur on the lot generating the waste. Nor do they require the use of a permitted "liquid waste system" as defined in the LW Regulations. Liquid wastes from scores of separate lots are impermissibly aggregated into a much larger combined waste-stream that is then treated and discharged into a single, under-sized disposal field that is ten (10) times smaller – and receives six (6) times more effluent per day – than the LW Regulations allow. Nothing in the GSWP Regulations or the Draft Permit requires an adequate number of adequately sized, appropriately sited, adequately separated disposal fields for discharge of the volume of tertiary treated effluent the Resort seeks to discharge. 20.7.3.302(A), (B) and (C); 20.7.3.303; 20.7.3.701; and 20.7.3.703 NMAC. Nor does anything in the GSWP Regulations or the Draft Permit

restrict the daily rate of discharge per disposal field to 5,000 gpd for on-site disposal of such tertiary treated effluent. 20.7.3.302(C) NMAC.

IV. NMED’s Refusal to Apply the LW Regulations Abrogates the Legislature’s Mandate and the EIB’s LW Regulations

In *State ex rel. Sandel*, this Court issued a writ of mandamus vacating a New Mexico Public Utilities Commission (“PUC”) order that substituted a market-based rate-setting policy for the “just and reasonable” standard adopted by the Legislature, effectively resulting in the deregulation of the retail market for electricity in New Mexico. 1999-NMSC-019, ¶¶ 19, 22 and 30.

In vacating the PUC’s order, this Court unanimously held that the PUC’s refusal to apply the “just and reasonable” standard mandated by the Legislature violated Article III, Section 1 of the New Mexico Constitution by acting “in a manner that is beyond the scope of authority granted to the NMPUC by the Legislature.” *Id.* ¶ 26. By deregulating the electric power industry, the PUC had “abdicate[d] its statutory responsibilities” by refusing to enforce the law enacted by the Legislature and acting contrary to its express objective. *Id.* While the PUC had offered a statutory interpretation to justify its action, this Court gave no deference to that interpretation, noting that the PUC’s attempt to “pour a new meaning into [the statute was] not sufficient to show that the NMPUC has acted within its authority and carried out its responsibilities” under the legislative enactment. *Id.*

“To ensure an environment that in the greatest possible measure will confer optimum health, safety, comfort and economic and social well-being on its inhabitants”, NMSA 1978, Section 74-1-2, the Legislature created the EIB and conferred plenary jurisdiction to it through the EIA to promulgate regulations governing the on-site treatment and disposal of domestic and commercial liquid waste. The Legislature *did not* confer jurisdiction to NMED to supplant, countermand or ignore the EIB’s regulations. And yet, contrary to the Legislature’s mandate and objective, NMED is doing just that by refusing to apply the EIB’s LW Regulations to the Resort’s liquid waste permit application.

Although NMED attempts to “pour new meaning” into the LW Regulations to justify its refusal to enforce them, such artifice will not justify or excuse NMED’s abrogation of the Legislature’s mandate or usurpation of the EIB’s authority, as this Court recognized in *Sandel*. By refusing to apply the LW Regulations to the Resort’s permit application, and by substituting instead the GSWP Regulations as the sole basis for administrative review and approval of the Resort’s permit application, NMED has eviscerated the public policy established by the Legislature and arrogated to itself the legislative authority delegated solely to the EIB.

V. **The LW Regulations Do Not Exclude Large Volume Domestic and Commercial Dischargers From Their Requirements.**

Although not articulated in the hearing officer's Order, NMED's hearing officer apparently accepted NMED's assertion that the EIA and LW Regulations do not apply to generators of more than 5,000 gallons per day of liquid waste.

The Legislature alone has the power to establish the jurisdiction of the LW Regulations. To the extent the EIA defines the jurisdictional scope of authority delegated to the EIB, it does so in Section 74-1-3(C), which limits the generators to be regulated, not the volume of wastes they generate:

“on-site liquid waste system” means a liquid waste system, or part thereof, serving a dwelling, establishment or group, and using a liquid waste treatment unit designed to receive liquid waste followed by either a soil treatment or other type of disposal system.

NMSA 1978, § 74-1-3(E) (emphasis added).

Similarly, no provision of the LW Regulations excludes their applicability to large volume generators of domestic and commercial liquid waste. Parts 20.7.3.201(B) and (C) of the LW Regulations require ***any person*** who wishes to dispose of liquid waste to ground – irrespective of the volume generated – to do so by means of the LW Regulations' specifically defined and regulated on-site treatment and disposal systems.

Pursuant to 20.7.3.2 NMAC, the LW Regulations apply

to on-site *liquid waste systems*, and effluent from such systems, that receive 5,000 gallons or less of liquid waste per day, and do not generate discharges

that require a discharge permit pursuant to 20.6.2 NMAC or a national discharge pollution elimination system (NPDES) permit.

20.7.3.2 NMAC (emphasis added). Plainly, “5,000 gpd” in 20.7.3.2 NMAC refers to the treatment and disposal *systems* by which liquid waste is discharged – not the volume of waste generated or discharged by a dwelling or establishment.

NMED strains to construe the first clause of 20.7.3.2 as though it reads “this part, 20.7.3 NMAC, applies to dwellings, establishments and groups that generate 5,000 gallons or less of liquid waste per day...” But that is plainly *not what the first clause of 20.7.3.2 states*. Rather, properly construed in the context of the LW Regulations entire tire, it states that the regulations apply to the 5,000 gallon per day liquid waste *systems* that 20.7.3.201(B) and (C) require **every person discharging liquid waste to ground** to use for on-site disposal, and to the effluent from such systems.⁴ Pursuant to 20.7.3.203(C) NMAC, properties that generate more than 5,000 gallons of liquid waste per day, like the Resort, may either install multiple on-site liquid waste treatment and disposal systems that each receive no more than 5,000

⁴ The purpose of the 5,000 gpd limitation is self-evident: to prevent overloading of soils and groundwater with effluent contaminants. Significantly, the allowed discharge volume per system has changed over time, increasing from 2,000 gpd (*see* Liquid Waste Disposal Regulations, Section 101(M) (1973)) to 5,000 gpd in 2014. 20.7.3.2 NMAC (09/15/14). These changing limits further demonstrate that the discharge limits restrict the scope of systems that can be used for on-site discharge, not the scope of dischargers subject to the LW Regulations.

gallons per day, or they can discharge their liquid waste to a permitted public sewer.

20.7.3.201(B) and (C) NMAC.

Pursuant to NMSA §12-2A-18, “a statute or rule is construed, if possible, to:

- 1) give effect to its objective and purpose;
- 2) give effect to its entire text; and
- 3) avoid an unconstitutional, absurd or unachievable result.”

This Court has repeatedly held that a statute or rule should be construed, if possible, to give effect to all of its provisions, so that one part will not destroy another. *See State v. Herrera*, 1974-NMSC-037, 86 N.M. 224 (statutes should be construed so that effect will be given to every part thereof); *Maloney v. Neil*, 169-NMSC-095, 80 N.M. 460 (words, phrases and provisions in statutes and rules must be construed to produce a harmonious whole).

By excluding the largest, most hazardous generators of domestic and commercial liquid waste from regulation under the LW Regulations, and failing to apply the mandatory requirements of the LW Regulations to all generators of domestic and commercial liquid waste, NMED’s construction of 20.7.3.2 violates the express purpose of the EIA and LW Regulations in direct violation of NMSA 1978, Section 12-2A-18(A) and 20.7.3.100 NMAC. By construing the LW Regulations based on 20.7.3.2 alone, without regard to the other controlling provisions of the LW Regulations that plainly apply to all generators of liquid waste without regard to the volume of wastes generated, NMED distorts and misconstrues

the plain meaning and full scope of the regulations in violation of NMSA 1978, Section 12-2A-18(B). And, in construing and applying the LW Regulations as excluding the largest, most hazardous generators of domestic and commercial liquid waste from the requirements of the regulations, NMED is producing an absurd, unconstitutional result in violation of NMSA 1978, Section 12-2A-18(A)(3).

The absurdity of NMED's construction is self-evident. Construing a 5,000 gpd limit on the scope of systems allowed for on-site disposal as an exemption from regulation for the largest, most hazardous dischargers who generate more than 5,000 gpd is akin to construing a 30 mph speed limit as inapplicable to vehicles that can go faster than 30 mph. It is not just absurd, it is a disingenuous abnegation of the express purpose for which the Liquid Waste Regulations were adopted.

In rejecting a similar attempt by an administrative agency to read limitations into enabling legislation, this Court made clear that deference to an administrative agency's interpretation is "not boundless" and "does not give the [agency] authority to "pour any meaning" it desires into a statute." *State ex rel. Sandel*, 1999-NMSC-019, citing *Farmers Union Cent. Exchange, Inc. v. F.E.R.C.*, 734 F.2d 1468, 1504 (D.C. Cert. 1984). As this Court held in *State ex rel. Sandel*:

Because we cannot read into a statute or ordinance language which is not there, particularly if it makes sense at written [citations omitted], we cannot read the [Act] as authorizing the [agency] to abdicate its statutory responsibilities by set[ting] at naught an explicit provision of the Act.

Id. at 279, citing *FPC v. Texico, Inc.*, 417 U.S. 380, 394 (1974).

VI. A Domestic or Commercial Discharger of Liquid Waste Cannot Bypass the LW Regulations

NMED also contends that the second clause of 20.7.3.2 (“and do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC”) means the LW Regulations do not apply if a liquid waste discharger, like the Resort, has filed a discharge plan under the GSWP Regulations. This argument not only distorts the plain meaning of 20.7.3.2, but ignores the primacy of the LW Regulations.

As confirmed by NMSA 1978, Section 12-2A-10, the LW Regulations – not the GSWP Regulations – are the primary, baseline regulations governing the on-site treatment and disposal of liquid waste by any dwelling, commercial establishment or group. *See* 20.6.2.1001(A) NMAC. Effluent discharged in compliance with the requirements of the LW Regulations is exempt from regulation under the GSWP Regulations. 20.6.2.3105(B) NMAC. The contention that any discharger of liquid waste can unilaterally bypass the LW Regulations’ mandatory safeguards and nullify their applicability by filing an application for permit under the GSWP Regulations would not only nullify the express provisions of both regulations but render the comprehensive regulatory framework adopted by the EIB at the Legislature’s direction an absurdity, all in violation of NMSA 1978, Section 12-2A-18. NMED cannot undermine the primacy of the LW Regulations by imperiously usurping the

legislative power to enforce different regulations than the Legislature and EIB have mandated.

Nothing in the second clause of 20.7.3.2 NMAC requires this tortuous, absurd result. As the EIA, the LW Regulations, the WQA, and the GSWP Regulations all make clear, every domestic and commercial discharger of liquid waste must in the first instance comply with the requirements of the LW Regulations. *See* 20.6.2.3105(B) and 20.6.2.2101(A). Those who do so are exempt from further additional regulation under the GSWP Regulations, unless they discharge effluent that violates the water quality standards the GSWP Regulations establish.

So long as a discharger of liquid waste fulfills the permit and regulatory requirements of the LW Regulations, the effluent it discharges is exempt from any requirement to file a discharge notice or discharge plan. 20.6.2.3105(B) NMAC. If, however, a liquid waste permittee violates the conditions of its permit or discharges effluent that causes a violation of the water quality standards of 20.6.2.3103, the liquid waste permittee is no longer exempt from regulations under the GSWP Regulations and must then also file a discharge plan. As the WQA states, it provides “additional and cumulative” remedies to prevent or abate pollution, not exclusive or peremptory remedies. NMSA 1978, § 74-6-13. In such cases, as 20.7.3.2 plainly states, the exemption from regulation under the GSWP Regulations no longer applies to such “discharges that require a discharge permit pursuant to 20.6.2 NMAC.” Such

additional and cumulative regulatory protection against pollution does not obviate or supplant the primary protection required by the LW Regulations; rather, it supplements it, just as the Legislature and EIB intended.

VII. The Resort's Tertiary Treatment Process Is No Substitute for the Safeguards the LW Regulations Require

While the Resort – but notably not NMED – insists that its tertiary treatment plant produces effluent that “meets or exceeds” all of the water quality standards of 20.6.2.3103 NMAC, it offers no evidence whatsoever to substantiate that claim.⁵ Indeed, if the Resort's claim were in fact true, the Resort would be exempt from any need for permitting under the GSWP Regulations. 20.6.2.3105(A) NMAC.

The truth is far more sobering than the Resort's flaccid assurances. Neither the GSWP Regulations nor NMED's Draft Permit impose any requirement to identify the contaminants *actually contained* in the Resort's wastewater. Consequently, we simply do not know what contaminants its wastewater contains. Nor do the GSWP regulations or Draft Permit require analytical testing to confirm (1) whether the Resort's treatment process actually removes or reduces such contaminants; (2) whether the Resort's discharged effluent contains such

⁵ The Resort has submitted quarterly analytical testing of its discharged effluent and sampled groundwater for no more than two contaminants listed in Part 20.6.2.3103 NMAC.

contaminants; or (3) whether the *in situ* downstream groundwater contains such contaminants. Again, it is unknown what contaminants the Resort's waste-stream actually contains, whether its treatment plant actually removes or reduces those contaminants, and what concentrations of contaminants the Resort is actually discharging to its disposal field.

The *only restriction* imposed by NMED's Draft Permit on contaminants in the Resort's effluent discharged to its disposal field (Draft Permit Condition 9) is for total nitrogen only.⁶ See Ex. 2, Ground Water Quality Bureau Discharge Permit, DP-75. And the *only analytical testing required* for contamination of *in situ* groundwater is for total nitrogen, total dissolved solids and chloride. Draft Permit Condition 31. No other testing for contaminants in discharged effluent or groundwater is required.

Such incomplete and ineffectual protection is precisely why the Legislature decided 50 years ago that additional protections beyond the WQA and GSWP Regulations were needed. It is why the Legislature created the EIB, and why it directed the EIB to promulgate the LW Regulations to address the specific hazards to public health and the environment that liquid waste disposal creates. It is why

⁶ To use its treated waste-water for surface irrigation of its property, the Resort must also meet "Class 1A" standards for E. coli, biochemical oxygen demand (BOD₅) and turbidity. Draft Permit Condition 10. These requirements do not apply to effluent discharged to the Resort's disposal field.

this Court should issue a Writ of Mandamus to fulfill the Legislature’s stated purpose in enacting the EIA 50 years ago to “protect this generation as well as those yet unborn from health threats posed by the environment.” NMSA 1978, § 74-1-2.

CONCLUSION

For these reasons, this Court should order a stay of the permit hearing scheduled to begin on May 19, 2025, and issue a writ of mandamus to compel the NMED to enforce the EIA and apply the LW Regulations to the Resort’s permit application.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Thomas M. Hnasko

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Attorney for Petitioner Protect Tesuque, Inc.

STATEMENT OF COMPLIANCE WITH TYPE-VOLUME LIMITATIONS

Pursuant to Rule 12-504(H), I certify that this brief complies with the type-volume requirements of Rule of Appellate Procedure 12-504(G). The body of the Petition has 5,996 words and is typed in 14 font/proportionally-spaced Times New Roman.

/s/ Thomas M. Hnasko

Thomas M. Hnasko

CERTIFICATE OF SERVICE

I hereby certify that on April 21, 2025, a true and correct copy of the foregoing was filed and served on the following:

Via Hand Deliver, Email and First-Class Certified Mail to:

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Secretary of the New Mexico Environment Department
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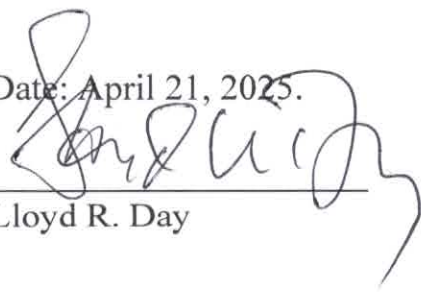
/s/ Thomas M. Hnasko

Thomas M. Hnasko

VERIFICATION

I, Lloyd R. Day, a Director of Protect Tesuque, Inc., state under oath that I have read this *Emergency Petition for Writ of Mandamus and Request for Stay* and that the factual statements it contains are true and correct to the best of my knowledge, information, and belief.

Date: April 21, 2025.



Lloyd R. Day

**STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT**

**IN THE MATTER OF BL SANTA FE, LLC
APPLICATION FOR RENEWAL AND MODIFICATION
OF DISCHARGE PERMIT DP-75**

No. GWQB 24-69 (P)

**ORDER ON MOTION BY PROTECT TESUQUE INC.
FOR PRE-HEARING PERMIT DENIAL**

This matter comes before the Hearing Officer on a Motion for Pre-Hearing Permit Denial filed by Protect Tesuque Inc. (PTI). Pursuant to a Prehearing Order issued following a prehearing conference in January, the New Mexico Environment Department (NMED) Water Protection Division (Division) Ground Water Quality Bureau (Bureau) and the DP-75 Permittee BL Santa Fe, LLC ('Permittee' or 'Bishop's Lodge') timely filed Responses to the Motion, and PTI timely filed a Consolidated Reply to the responses.

Having reviewed the Motion, Responses, and Reply, the Motion is denied for the reasons set out in the Responses. No oral argument on the Motion is needed.

This decision is not a decision on the merits of the draft discharge permit *qua* discharge permit; it is a decision that the Liquid Waste Disposal and Treatment Regulations at 20.7.3 NMAC do not apply to Permittee's application under the New Mexico Water Quality Act and the Ground and Surface Water Protection Regulations, particularly 20.6.2 NMAC, for its wastewater treatment plant that will receive and treat up to 30,000 gpd of wastewater.

This matter will proceed to hearing beginning May 19, 2025. The Bureau shall work with the Administrator to assure timely publication of the hearing notice, and to put all relevant materials on the Department webpage.



Felicia L. Orth, Hearing Officer



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

September 16, 2024

Chris Kaplan, Director
B L Santa Fe, LLC
7001 N. Scottsdale Road, Suite 2050
Scottsdale, Arizona 85253

RE: Draft Discharge Permit Renewal/Modification, DP-75, Bishop's Lodge Wastewater Treatment Facility

Dear Chris Kaplan:

The New Mexico Environment Department (NMED) hereby provides notice to B L Santa Fe, LLC of the proposed approval of Ground Water Discharge Permit Renewal and Modification, DP-75, (copy enclosed), pursuant to Subsection H of 20.6.2.3108 NMAC. NMED will publish notice of the availability of the draft Discharge Permit in the near future for public review and comment and will forward a copy of that notice to you.

Prior to making a final ruling on the proposed Discharge Permit, NMED will allow 30 days from the date the public notice is published in the newspaper for any interested party, including the Discharge Permit applicant, i.e., yourself, to submit written comments and/or a request a public hearing. A hearing request shall set forth the reasons why a hearing is requested. NMED will hold a hearing in response to a timely hearing request if the NMED Secretary determines there is substantial public interest in the proposed Discharge Permit.

Please review the enclosed draft Discharge Permit carefully. Please be aware that this Discharge Permit may contain conditions that require the permittee to implement operational, monitoring or closure actions by a specified deadline.

Please submit written comments or a request for hearing to my attention at the address below, via email to jason.herman@env.nm.gov or to pps.general@env.nm.gov, or directly into the NMED Public Comment Portal at <https://nmed.commentinput.com/comment/search>. If NMED does not receive written comments or a request for hearing during the public comment period, the draft Discharge Permit will become final.

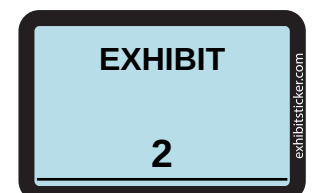
Thank you for your cooperation during the review process. Feel free to contact me with any questions at (575) 649-3871.

Sincerely,

**Jason
Herman**

Jason Herman, Program Manager

Digitally signed by
Jason Herman
Date: 2024.09.16
11:23:47 -06'00'



SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469
Telephone (505) 827-2900 | www.env.nm.gov/gwqb/

Chris Kaplan

September 16, 2024

Page 2 of 2

Encl: Draft Discharge Permit Renewal and Modification, DP-75

cc: Gary Lee, Lee & Company LLC, gary.lee@lee-engineers.com
Jay Lazarus, Glorieta Geoscience, jay.lazarus@gza.com



NEW MEXICO
ENVIRONMENT DEPARTMENT
Ground Water Quality Bureau

1190 Saint Francis Drive / PO Box 5469
Santa Fe, NM 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov



Draft: September 16, 2024

GROUND WATER QUALITY BUREAU
DISCHARGE PERMIT
Issued under 20.6.2 NMAC

Facility Name: Bishop's Lodge Wastewater Treatment Facility
Discharge Permit Number: DP-75
Facility Location: 1297 Bishop's Lodge Road
Santa Fe, NM

County: Santa Fe

Permittee: B L Santa Fe, LLC
Mailing Address: Chris Kaplan, Director
7001 N Scottsdale Road, Suite 2050
Scottsdale, AZ 85253

Facility Contact: Chris Kaplan, Director
Telephone Number/Email: (480) 840-8413 / chris@junipercapital.com

Permitting Action: Renewal and Modification
Permit Issuance Date: DATE
Permit Expiration Date: DATE

NMED Permit Contact: Jason Herman
Telephone Number/Email: 575-649-3871 / jason.herman@env.nm.gov or
505-827-2900 / pps.general@env.nm.gov

JUSTIN D. BALL
Chief, Ground Water Quality Bureau
New Mexico Environment Department

Date

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ATTACHMENTS

Discharge Permit Summary
New Mexico Environment Department Ground Water Quality Bureau Monitoring Well
Construction and Abandonment Guidelines, Revision 1.1, March 2011 (Monitoring
Well Guidance)

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this groundwater discharge permit Renewal and Modification (Discharge Permit or DP-75) to B L Santa Fe, LLC (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from Bishop's Lodge Wastewater Treatment Facility (Facility) in order to protect groundwater and those segments of surface water gaining from groundwater inflow for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health. It is NMED's determination in issuing this Discharge Permit that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. The Permittee is responsible for complying with the terms and conditions of this Discharge Permit pursuant to Section 20.6.2.3104 NMAC; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

Described below are the activities that produce the discharge, the location of the discharge, and the quantity, quality, and flow characteristics.

The Facility receives and treats domestic wastewater at a volume of up to 30,000 gallons per day (gpd) using a Membrane Bioreactor package treatment plant. Class 1A reclaimed domestic wastewater discharges to an irrigation system totaling approximately five acres and from a standpipe for temporary purposes. In addition, treated wastewater discharges to a subsurface low-pressure dosed disposal field. The Facility discharges wastewater treatment plant sludge to a synthetically lined reed bed for treatment and stabilization.

The Discharge Permit modification consists of an increase in the authorized maximum daily discharge volume from 14,760 gpd to 30,000 gpd and the addition of above ground irrigation utilizing reclaimed wastewater as a discharge method and location.

Discharge Permit Location Information:

Physical Address	1297 Bishop's Lodge Road
Nearest Town/City	Santa Fe
Section, Township, Range	5 and 6, 17 north, 10 east
County	Santa Fe
Depth to Groundwater	23 feet below ground surface
Pre-Discharge TDS	300 mg/L

Discharge Permit Issuance History:

Original Permit Issuance	July 11, 1979

Permit Renewal and Modification	February 20, 1984
Permit Renewal and Modification	April 10, 1989
Permit Renewal	January 18, 1994
Permit Renewal and Modification	February 19, 1999
Permit Renewal	December 6, 2004
Permit Renewal	February 14, 2011
Permit Renewal and Modification	September 30, 2019

The application (i.e., discharge plan) associated with this Discharge Permit consists of the materials submitted by the Permittee dated April 4, 2024, and materials contained in the administrative record prior to issuance of this Discharge Permit.

The Permittee shall manage the discharge in accordance with all conditions and requirements of this Discharge Permit.

NMED reserves the right to require a Discharge Permit modification in the event NMED determines that the Permittee is or may be violating, or is likely to violate in the future, the requirements of 20.6.2 NMAC or the standards of Section 20.6.2.3103 NMAC. NMED reserves this right pursuant to Section 20.6.2.3109 NMAC. An NMED requirement to modify the Discharge Permit may result from a determination by the department that structural controls and/or management practices approved under this Discharge Permit are insufficiently protective of groundwater quality and human health. NMED reserves the right to require the Permittee to implement abatement of water pollution and remediate groundwater quality.

NMED issuance of this Discharge Permit does not relieve the Permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

This Discharge Permit may use the following acronyms and abbreviations.

Abbreviation	Explanation		Abbreviation	Explanation
BOD ₅	biochemical oxygen demand (5-day)		NMED	New Mexico Environment Department
CAP	Corrective Action Plan		NMSA	New Mexico Statutes Annotated
CFR	Code of Federal Regulations		NO ₃ -N	nitrate-nitrogen
CFU	colony forming unit		NTU	nephelometric turbidity units
Cl	chloride		QA/QC	Quality Assurance/Quality Control
EPA	United States Environmental Protection Agency		TDS	total dissolved solids
Gpd	gallons per day		TKN	total Kjeldahl nitrogen
LAA	land application area		total nitrogen	= TKN + NO ₃ -N

Abbreviation	Explanation		Abbreviation	Explanation
LADS	Land Application Data Sheet(s)		TRC	total residual chlorine
mg/L	milligrams per liter		TSS	total suspended solids
mL	milliliters		WQA	New Mexico Water Quality Act
MPN	most probable number		WQCC	Water Quality Control Commission
NMAC	New Mexico Administrative Code		WWTF	Wastewater Treatment Facility

II. FINDINGS

In issuing this Discharge Permit, NMED finds the following.

1. The Permittee is discharging effluent or leachate from the Facility so that such effluent or leachate may move into groundwater of the State of New Mexico that has an existing concentration of 10,000 mg/L or less of TDS, within the meaning of Subsection A of 20.6.2.3101 NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant.
2. The Permittee is discharging effluent or leachate from the Facility directly or indirectly into groundwater pursuant to this Discharge Permit and Sections 20.6.2.3000 through 20.6.2.3114 NMAC.
3. The discharge from this Facility has the potential to contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC and is not subject to the exemption at Subsection 20.6.2.3105 NMAC.

III. AUTHORIZATION TO DISCHARGE

The Permittee is responsible for ensuring that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein pursuant to 20.6.2.3104 NMAC.

This Discharge Permit authorizes the Permittee to receive and treat domestic wastewater up to 30,000 gpd using a Membrane Bioreactor package plant. This Discharge Permit authorizes the Permittee to discharge Class 1A reclaimed domestic wastewater to irrigation system totaling five acres and from a standpipe for temporary purposes. In addition, this Discharge Permit authorizes the Permittee to discharge treated wastewater to a subsurface low-pressure dosed disposal field. This Discharge Permit also authorizes the Permittee to discharge wastewater treatment plant sludge to a synthetically lined reed bed for treatment and stabilization.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection D of 20.6.2.3109 NMAC]

IV. CONDITIONS

NMED issues this Discharge Permit for the discharge of water contaminants subject to the following conditions.

A. OPERATIONAL PLAN

#	Terms and Conditions
1.	The Permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 2 and 4 NMAC. [Subsection C of 20.6.2.3109 NMAC]
2.	The Permittee shall operate in a manner that does not violate standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC. [20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]

Operational Actions with Implementation Deadlines

#	Terms and Conditions
3.	A minimum of 90 days prior to construction of the new low-pressure dosed disposal field, the Permittee shall submit final construction plans and specifications for NMED's review of the proposed disposal field. The construction plans and specifications shall bear the seal and signature of a licensed New Mexico professional engineer (pursuant to New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) and shall include the supporting design calculations. The submitted documentation shall include the following elements. a) Wastewater system component(s) design, e.g., lift stations, valves, transfer lines, process units and associated details. b) The infrastructure necessary to discharge wastewater to a subsurface low-pressure dosed disposal field. c) Flow meter design detail - Flow meters to measure the volume of wastewater discharged from the package plant low-pressure dosed disposal field. d) Specifications for all equipment, materials and installation procedures the Permittee will use in the construction of the wastewater system. Prior to constructing the low-pressure dosed disposal field and its associated components, the Permittee shall obtain written verification from NMED that the plans and specifications meet the requirements of this Discharge Permit.

#	Terms and Conditions
	[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
4.	Within 30 days of completing construction of the upgraded package plant and low-pressure dosed disposal field, the Permittee shall submit record drawings to NMED that bear the seal and signature of a licensed New Mexico professional engineer (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) for the constructed upgraded package plant and leachfield. [Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3109 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
5.	Five business days prior to discharging from the upgraded Facility, the Permittee shall submit written notification to NMED stating the date the discharge is to commence. [Subsection A of 20.6.2.3107 NMAC, Subsection H of 20.6.2.3109 NMAC]
6.	Within 30 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall post signs in English and Spanish at all reuse areas. The Permittee shall post signs at the entrance to reuse areas and at other locations where public exposure to reclaimed domestic wastewater may occur. The signs shall state: NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR. The Permittee may submit alternate wording and/or graphics to NMED for approval. Documentation of sign installation shall consist of a narrative statement describing the number and location of the signs and date-stamped photographs. The Permittee shall submit the documentation to NMED in the next required periodic monitoring report. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
7.	Prior to utilizing the former package plant as an aerobic sludge digester, the Permittee shall have the unit evaluated and inspected by a licensed New Mexico professional engineer (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) and shall submit a report with the findings and recommendations to NMED regarding the structural integrity of the unit and its ability for the Permittee to utilize it as an aerobic digester. [Subsection A of 20.6.2.3107 NMAC]
8.	Within 120 days following the submission of the licensed New Mexico professional engineer's report, the Permittee shall submit a plan to NMED for approval for repair or

#	Terms and Conditions
	replacement of the former package plant, if deemed necessary for the intended purpose of converting it into an aerobic digester. The Permittee shall only utilize the former package plant as an aerobic digester once all necessary repairs or replacement are complete. [Subsections A of 20.6.2.3107 NMAC]

Operating Conditions

#	Terms and Conditions																		
9.	The Permittee shall ensure that treated wastewater discharged from the effluent sampling port following the UV disinfection unit does not exceed the following discharge limit. Total Nitrogen: 10 mg/L [Subsection C of 20.6.2.3109 NMAC]																		
10.	The Permittee shall ensure that Class 1A reclaimed domestic wastewater discharged from the effluent sampling port following the UV disinfection unit does not exceed the following discharge limits. <table><tr><th>Test</th><th>30-day Average</th><th>Maximum</th></tr><tr><td>Total Nitrogen</td><td>n/a</td><td>10 mg/L</td></tr><tr><td>E. coli bacteria</td><td>3 CFU or MPN/100 mL</td><td>15 CFU or MPN/100 mL</td></tr><tr><td>BOD₅</td><td>10 mg/L</td><td>15 mg/L</td></tr><tr><td>Turbidity</td><td>3 NTU</td><td>5 NTU</td></tr><tr><td>UV Transmissivity</td><td>Monitor Only</td><td>Monitor Only</td></tr></table> [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]	Test	30-day Average	Maximum	Total Nitrogen	n/a	10 mg/L	E. coli bacteria	3 CFU or MPN/100 mL	15 CFU or MPN/100 mL	BOD ₅	10 mg/L	15 mg/L	Turbidity	3 NTU	5 NTU	UV Transmissivity	Monitor Only	Monitor Only
Test	30-day Average	Maximum																	
Total Nitrogen	n/a	10 mg/L																	
E. coli bacteria	3 CFU or MPN/100 mL	15 CFU or MPN/100 mL																	
BOD ₅	10 mg/L	15 mg/L																	
Turbidity	3 NTU	5 NTU																	
UV Transmissivity	Monitor Only	Monitor Only																	
11.	The Permittee shall ensure adherence to the following general requirements for above-ground use of reclaimed domestic wastewater. a) The Permittee shall install and maintain signs in English and Spanish at all reuse areas such that they are visible and legible for the term of this Discharge Permit. The Permittee shall post signs at the entrance to reuse areas and at other locations where public exposure to reclaimed domestic wastewater may occur. The signs shall state:																		

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	NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR. The Permittee may submit alternate wording and/or graphics to NMED for approval. b) Reclaimed domestic wastewater systems shall have no direct or indirect cross connections with public water systems or irrigation wells pursuant to the latest revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NMAC). c) Above-ground use of reclaimed domestic wastewater shall not result in excessive ponding of wastewater and shall not exceed the water consumptive needs of the crop. The Permittee shall not discharge reclaimed domestic wastewater at times when the reuse area is saturated or frozen. d) The Permittee shall confine discharge of reclaimed domestic wastewater to the reuse area. e) The Permittee shall not discharge reclaimed domestic wastewater to crops used for human consumption. f) Water supply wells within 200 feet of a reuse area shall have adequate wellhead construction pursuant to 19.27.4 NMAC. g) Existing and accessible portions of the reclaimed domestic wastewater distribution system (with the exception of application equipment such as sprinklers or pivots) shall be colored purple or clearly labeled as being part of a reclaimed domestic wastewater distribution system. Piping, valves, outlets, and other plumbing fixtures shall be purple pursuant to the latest revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NMAC) to differentiate piping or fixtures used to convey reclaimed wastewater from those intended for potable or other uses. h) Valves, outlets, and sprinkler heads used in reclaimed wastewater systems shall be accessible only to authorized personnel. The Permittee shall demonstrate adherence to these requirements by submitting documentation consisting of narrative statements and date-stamped photographs as appropriate. The Permittee shall submit the documentation to NMED once during the term of this Discharge Permit in the next required periodic monitoring report after the issuance of the Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1–78, § 74-6–5.D]
12.	The Permittee shall meet the following setbacks, access restrictions and equipment requirements for spray irrigation using Class 1A reclaimed domestic wastewater. a) No required setback between any dwellings or occupied establishments and the edge of the reuse area.

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	b) Postpone irrigation using reclaimed domestic wastewater at times when windy conditions may result in drift of reclaimed wastewater outside the reuse area. c) No required access control. d) Limit spray irrigation system to low trajectory spray nozzles. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1–78, § 74–5.D]
13.	The Permittee shall meet the following requirements for the temporary above-ground use of reclaimed domestic wastewater. a) Restrict access to the reclaimed domestic wastewater distribution system (standpipe). Transfer of reclaimed domestic wastewater to other users shall only be done by the Permittee or its designee. The Permittee shall prohibit public access to the reclaimed domestic wastewater system. b) Notify all recipients of reclaimed domestic wastewater for temporary uses in writing of the following. i. Reclaimed domestic wastewater is approved only for construction activities; soil compaction; mixing of mortars, slurries or cement; dust control on roads and construction sites; animal watering; and irrigation of non-food crops. ii. Reclaimed domestic wastewater shall be discharged by gravity flow or under low pressure in a manner that minimizes misting and does not result in excessive standing or ponding of wastewater. iii. If the discharge method results in misting, the area(s) receiving the reclaimed domestic wastewater must be 100 feet from areas accessible to the public. iv. The area receiving the discharge must be 300 feet from potable water supply wells. v. Transport vehicles and storage tanks containing reclaimed domestic wastewater shall have signs, in English and Spanish, identifying the contents as non-potable water and advising against consumption. vi. The user shall not apply of reclaimed domestic wastewater at times when the receiving area is saturated or frozen. The Permittee shall maintain a log of all recipients of reclaimed domestic wastewater and shall provide the log to NMED upon request. [20.6.2.3109 NMAC]
14.	The Permittee shall institute a backflow prevention method to protect wells and public water supply systems from contamination by reclaimed domestic wastewater prior to discharging to the reuse area. Backflow prevention shall be achieved by a total disconnect (physical air gap separation between the discharge pipe and the liquid surface at least twice the diameter of the discharge pipe), or by a reduced pressure principal

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	backflow prevention assembly (RP) installed on the line between the fresh water supply wells or public water supply and the reclaimed domestic wastewater delivery system. The Permittee shall maintain backflow prevention at all times. The Permittee shall have RP devices inspected and tested by a certified backflow prevention assembly tester at the time of installation, repair or relocation and at least on an annual basis thereafter. The backflow prevention assembly tester shall have successfully completed a 40-hour backflow prevention course based on the University of Southern California's Backflow Prevention Standards and Test Procedures, and obtained certification demonstrating completion. The Permittee shall have all malfunctioning RP devices repaired or replaced within 30 days of discovery. The Permittee shall cease using supply lines associated with the RP device until repair or replacement is complete. The Permittee shall maintain copies of the inspection and maintenance records and test results for each RP device associated with the backflow prevention program at a location available for inspection by NMED. [Subsection C of 20.6.2.3109 NMAC]
15.	The Permittee shall maintain fences around the Facility to restrict access by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing and locking gates. The Permittee shall maintain the fences to serve the stated purpose throughout the term of this Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
16.	The Permittee shall maintain signs indicating that the wastewater at the Facility is not potable. The Permittee shall post signs at the Facility entrance and other areas where there is potential for public contact with wastewater. The Permittee shall print signs in English and Spanish and shall ensure the signs remain visible and legible for the term of this Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
17.	The Permittee shall maintain the reed bed liner to avoid conditions that could affect the liner or the structural integrity of the impoundment. Characterization of such conditions may include the following: • erosion damage; • animal burrows or other damage; • the presence of vegetation including any other aquatic plants other than reeds, weeds, woody shrubs or trees growing within five feet of the top inside edge of a sub-

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	grade impoundment, within five feet of the toe of the outside berm of an above-grade impoundment, or within the impoundment itself; • the presence of large debris or large quantities of debris in the impoundment; • evidence of seepage; or • evidence of berm subsidence. The Permittee shall routinely control vegetation growing around the impoundment by mechanical removal that is protective of the impoundment liner. The Permittee shall visually inspect the impoundment and surrounding berms on a monthly basis to ensure proper maintenance. In the event that inspection reveals any evidence of damage that threatens the structural integrity of an impoundment berm or liner, or that may result in an unauthorized discharge, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit. The Permittee shall create and maintain a log of all impoundment inspections which describes the date of the inspection, any findings and repairs and the name of the person responsible for the inspection. The Permittee shall make the log available to NMED upon request. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
18.	The Permittee shall visually inspect the area above the low-pressure dosed disposal field (disposal system) semi-annually to ensure proper maintenance. The Permittee shall correct any conditions that indicate damage to the disposal system. The Permittee shall ensure conditions corrected include erosion damage, animal activity/damage, woody shrubs, evidence of seepage, or any other condition indicating damage. The Permittee shall keep a log of the inspections that includes a date of the inspection, any findings and repairs, and the name of the inspector. The Permittee shall make the log available to NMED upon request. In the event of a failure of the disposal system, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit. [Subsections A and D of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
19.	The Permittee shall properly manage all solids generated by the treatment system to maintain effective operation of the system by removing solids as necessary and in accordance with associated equipment manufacturer's specifications. If the Permittee disposes of solids offsite, the Permittee shall contain, transport, and dispose of all solids

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	removed from the treatment process in accordance with all local, state, and federal regulations. The Permittee shall maintain manifests for all solids transported from the treatment Facility for off-site disposal. The manifests shall identify the name of the hauler, the date of off-site shipment, the volume of solids removed, the disposal method, and disposal location. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
20.	The Permittee shall inspect the grease interceptor on a monthly basis and remove accumulated grease and settled solids as needed to prevent them from exiting the unit. The Permittee shall create and maintain a log of all grease interceptor inspections which describes all findings, repairs, removals, the date of the inspection, and the name of the person responsible for the inspection. The Permittee shall make the log available to NMED upon request. The Permittee shall maintain a record of grease/solids removal and disposal, including date, volume of grease/solids removed, disposal method and disposal location. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
21.	The Permittee shall inspect and clean the lift station(s) as needed to prevent pump failure. The Permittee shall maintain a record of lift station inspections, repairs, and cleanings. The Permittee shall make the record available to NMED upon request. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
22.	The Permittee shall utilize operators, certified by the State of New Mexico at the appropriate level pursuant to 20.7.4 NMAC, to operate the wastewater collection, treatment, and disposal systems. A certified operator or a direct supervisee of a certified operator shall perform the operations and maintenance of all or any part of the wastewater system. The Permittee shall notify the NMED within 24 hours if at any time the Permittee no longer has a certified operator maintaining the system. [Subsection C of 20.6.2.3109 NMAC, 20.7.4 NMAC]

B. MONITORING AND REPORTING

#	Terms and Conditions
23.	The Permittee shall conduct the monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
24.	METHODOLOGY – Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC. [Subsection B of 20.6.2.3107 NMAC]

Due Dates for Monitoring Reports

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25.	Quarterly monitoring - The Permittee shall perform monitoring and other Permit required actions during the following periods and shall submit quarterly reports to NMED by the following due dates: • January 1st through March 31st – due by May 1st; • April 1st through June 30th – due by August 1st; • July 1st through September 30th – due by November 1st; and • October 1st through December 31st – due by February 1st. [Subsection A of 20.6.2.3107 NMAC]

Monitoring Actions with Implementation Deadlines

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26.	Within 90 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall install the following flow meters. a) One totalizing flow installed on the discharge line from the treatment system to the low-pressure dosed disposal field to measure the volume of treated wastewater discharged to the low-pressure dosed disposal field. b) One totalizing flow meter installed on the discharge line from the treatment system to the reuse area to measure the volume of reclaimed domestic wastewater discharged to the reuse area. c) One totalizing flow meter installed on the discharge line from the aerobic digester to

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	the reed bed to measure the volume of wastewater treatment plant sludge discharged to the reed bed. d) One totalizing flow meter on the standpipe to measure the volume of reclaimed wastewater discharged for temporary purposes. The Permittee shall submit confirmation of meter installation, type, calibration, and locations within 30 days of completed installations. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
27.	Within 60 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall submit a written groundwater monitoring well location proposal for NMED review and approval. The proposal shall designate the installation locations of the monitoring well required by this Discharge Permit. The proposal shall include, at a minimum, the following information. a) A map showing the proposed location of the monitoring well in relation to the boundary of the source it is intended to monitor. b) A written description of the specific location proposed for the monitoring well including the distance (in feet) and direction of the monitoring well from the edge of the source it is intended to monitor and the latitude and longitude coordinates for each well in decimal format. Examples include: 35 feet north-northwest of the northern berm of the synthetically lined impoundment and 35.898306 and -107.281519; 45 feet due south of the leachfield and 35.898306 and -107.281519; and 30 feet southeast of the reuse area and 35.898306 and -107.281519. c) A statement describing the groundwater flow direction beneath the Facility, and documentation and/or data supporting the determination. The Permittee must have NMED's approval of all monitoring well locations prior to their installation. [Subsection A of 20.6.2.3107 NMAC]
28.	Within 120 days of the issuance date of this Discharge Permit (by DATE), the Permittee shall install the following new monitoring well. One monitoring well (MW-4) located 20 to 50 feet hydrologically downgradient of the low-pressure dosed disposal field. The Permittee shall complete the well in accordance with the attached Monitoring Well Guidance.

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	Unless otherwise noted in this Discharge Permit, the requirement to install a monitoring well downgradient of a source is <u>not</u> contingent upon construction of the Facility, or discharge of wastewater from the Facility. [Subsection A of 20.6.2.3107 NMAC]
29.	Within 150 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall perform a professional survey of all new groundwater monitoring wells approved by NMED for Discharge Permit monitoring purposes. The survey shall be tied or referenced to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and elevation to the nearest one-hundredth of a foot or shall be in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). The survey shall bear the seal and signature of a licensed New Mexico professional surveyor (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority). The Permittee shall utilize the survey to establish an elevation at the top-of-casing, with a permanent marking indicating the point of elevation. The Permittee shall measure the depth-to-most-shallow groundwater to the nearest one-hundredth of a foot in all surveyed wells [and referenced to mean sea level], and the data shall be used to develop a groundwater elevation contour, i.e., potentiometric surface, map showing the location of all monitoring wells and the direction and gradient of groundwater flow in the uppermost aquifer below the Facility. The Permittee shall submit the data and groundwater elevation contour map to NMED within 30 days of survey completion. [Subsection A of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
30.	Within 150 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall verify the construction and condition of existing groundwater monitoring wells MW-1, MW-2, and MW-3 by conducting downhole video inspections of the wells. The Permittee shall employ a third party to conduct the downhole video inspection. The Permittee shall notify NMED at least seven days prior to the scheduled video inspection to allow NMED personnel the opportunity to be on-site for the inspection. The third party shall make a video recording of the monitoring well inspection using a downhole camera and perform the inspection in accordance with the following requirements. a) Prior to well inspection with a downhole camera, the Permittee shall measure the depth-to-most-shallow groundwater from the top of well casing to the nearest 0.01

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	feet using an electronic water level indicator consisting of dual conductor wire encased in a cable or tape graduated to 0.01 feet, a probe attached to the end of the conductor wire, and a visual or audible indicator. Care shall be taken when obtaining this measurement so as to not disturb sediments in the well. b) If the Permittee plans to collect a groundwater sample during the inspection event, the third party shall inspect the monitoring well using a downhole camera prior to sampling the well to maximize visibility. c) The third party shall zero the totalizing depth reading or record a value other than zero as an initial reading prior to well inspection with a downhole camera, at the top of the well casing. d) All measurements and totalizing readings (except for depth-to-most-shallow groundwater) shall be obtained to the nearest 0.1 feet. The Permittee is authorized to use downhole cameras that use a measurement system other than 0.1-foot increments; however, the Permittee shall report the direct measurement/reading obtained and the calculated conversion in 0.1 feet on the written log. e) Obtain all measurements and totalizing readings at the top of the well casing. f) The downhole camera shall be lowered into the monitoring well at a consistent speed that allows for clear video capture and does not disturb sediments in the well. g) Lowering of the downhole camera shall be paused long enough to clearly identify totalizing readings at the following points: depth-to-most-shallow groundwater; depth of the top of the screened interval; depth of the bottom of screened interval; and the bottom of the well. Within 60 days following the date of the well inspection, the Permittee shall submit written and video monitoring well camera logs for every monitoring well viewed with a downhole camera. The logs shall include the following information. a) The written monitoring well camera log shall include the following general information: Facility name; Discharge Permit identification number; Permittee's name; monitoring well identification; date and time of the monitoring well camera inspection; location of the monitoring well relative to a source or Facility landmark; camera manufacturer and model; names of camera operator and any technical assistants; diameter of the casing (in inches); and a description of the physical condition of the well's concrete pad, shroud, casing and screened interval. The written log shall include measurements of distance from top of the well casing to the surface of the concrete pad; height from ground surface to the top of the concrete pad; and depth-to-most-shallow groundwater. The written log shall also include totalizing readings obtained from the downhole camera including the initial reading at the top of the well casing; depth-to-most-shallow groundwater using the borehole camera; depth of the top of the screened interval; depth of the bottom of screened interval; and the bottom of the well (total depth). The length of the screened interval

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	shall be calculated by subtracting the depth of the top of the screened interval from the depth of the bottom of screened interval and recorded on the log. b) The video monitoring well camera log shall display the Facility name; Discharge Permit identification number; Permittee's name; monitoring well identification; date and time of the monitoring well camera inspection; and the totalizing readings required in item "g)", above. The Permittee shall submit the video to NMED in Motion Picture Experts Group (MPEG) video format on a compact disc (CD) or digital versatile disc (DVD). [Subsection A of 20.6.2.3107 NMAC]

Groundwater Monitoring Conditions

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31.	The Permittee shall perform quarterly groundwater sampling in the following groundwater monitoring wells and analyze the samples for TKN, NO₃-N, TDS, and Cl. a) MW-1, located hydrologically upgradient of the Facility and approximately 65 feet west of the main resort entrance in the center of the traffic circle (35.730384°, -105.910889°). b) MW-2, located hydrologically downgradient of the old leachfield and approximately 170 feet northwest of the WWTP (35.732250°, -105.911827°). c) MW-3, located hydrologically downgradient of the new leachfield and approximately 130 feet west of the WWTP (35.731621°, -105.912052°). d) MW-4, located hydrologically downgradient of the low-pressure dosed disposal field. The Permittee shall perform groundwater sample collection, preservation, transport, and analysis according to the following procedures. a) Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest one-hundredth of a foot. b) Purge three well volumes of water from the well prior to sample collection. c) Obtain samples from the well for analysis. d) Properly prepare, preserve, and transport samples. e) Analyze samples in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the depth-to-most-shallow groundwater measurements and the laboratory analytical data results including the laboratory QA/QC summary report and Chain of Custody for each well, and a Facility layout map showing the location and number of each well to NMED in the quarterly monitoring reports.

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	[Subsection A of 20.6.2.3107 NMAC]
32.	The Permittee shall develop a groundwater elevation contour map, i.e., potentiometric surface map, on a quarterly basis using the top of casing elevation data from the monitoring well survey and the most recent depth-to-most-shallow groundwater measurements, referenced to mean sea level, obtained during the groundwater sampling required by this Discharge Permit. The groundwater elevation contour map shall depict the groundwater flow direction based on the groundwater elevation contours. The Permittee shall estimate groundwater elevations between monitoring well locations using common interpolation methods. The Permittee shall use a contour interval appropriate to the data but shall not be greater than two feet. Groundwater elevation contour maps shall use arrows to depict the groundwater flow direction based on the orientation of the groundwater elevation contours and shall locate and identify each monitoring well and contaminant source. The Permittee shall submit to NMED a groundwater elevation contour map in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC]
33.	NMED shall have the option to perform downhole inspections of all groundwater monitoring wells identified in this Discharge Permit. NMED shall establish the inspection date and notify the Permittee. The Permittee shall remove any existing dedicated pumps at least 48 hours prior to NMED inspection to allow adequate settling time of sediment agitated from pump removal. Should the Permittee decide to install a pump in a monitoring well without a dedicated pump, the Permittee shall notify NMED at least 90 days prior to pump installation so that NMED can schedule a downhole well inspection(s) prior to pump placement. [Subsections A and D of 20.6.2.3107 NMAC]

Facility Monitoring Conditions

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34.	The Permittee shall on a monthly basis measure the volume of treated wastewater discharged from the treatment system to the low-pressure dosed disposal field during the period.

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	To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located on the discharge line to the disposal field on a monthly basis and calculate the monthly and average daily discharge volume. The Permittee shall submit the calendar monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
35.	The Permittee shall on a monthly basis measure the volume discharged to <i>each</i> zone within the reuse area using a totalizing flow meter. The meter shall be located on the transfer line between the treatment system and the reuse area. The Permittee shall maintain a log that records the date that discharges occur to <i>each</i> zone and the monthly totalizing meter readings and units of measurement. The Permittee shall use the log to calculate the total calendar monthly volume of reclaimed domestic wastewater discharged to <i>each</i> zone. The Permittee shall submit a copy of the log to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
36.	The Permittee shall on a monthly basis measure the volume of wastewater treatment plant sludge discharged from the aerobic digester to the reed bed during the period. To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located on the discharge line from the aerobic digester to the reed bed on a monthly basis and calculate the monthly and average daily discharge volume. The Permittee shall submit the calendar monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
37.	The Permittee shall on a monthly basis measure the volume of reclaimed domestic wastewater discharged from the standpipe for temporary purposes during the period. To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located on the discharge line from the standpipe on a monthly basis and calculate the monthly and average daily discharge volume.

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	The Permittee shall submit the calendar monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
38.	All flow meters shall be capable of having their accuracy verified under working (i.e., real-time in-the-field) conditions. The Permittee shall develop a field verification method for each flow meter and shall utilize that method to check the accuracy of each respective meter. The Permittee shall perform field calibrations, at a minimum, within 90 days of the issuance date of this Discharge Permit (by DATE), and then every other year thereafter. The Permittee shall also perform field calibrations upon repair or replacement of a flow measurement device. The Permittee shall calibrate each flow meter to its manufacturer's recommended specification which shall be no less accurate than plus or minus 10 percent of actual flow, as measured under field conditions. An individual knowledgeable in flow measurement shall perform field calibration and the installation/operation of the device in use. The Permittee shall prepare a flow meter calibration report for each flow measurement device calibration event. The flow meter calibration report shall include the following information. a) The location and meter identification. b) The method of flow meter field calibration employed. c) The measured accuracy of each flow meter prior to adjustment indicating the positive or negative offset as a percentage of actual flow as determined by an in-field calibration check. d) The measured accuracy of each flow meter following adjustment, if necessary, indicating the positive or negative offset as a percentage of actual flow of the meter. e) Any flow meter repairs made during the previous year or during field calibration. f) The name of the individual performing the calibration and the date of the calibration. The Permittee shall maintain records of flow meter calibration(s) at a location accessible for review by NMED during Facility inspections. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
39.	The Permittee shall visually inspect flow meters on a monthly basis for evidence of malfunction. The Permittee shall maintain a log of the inspections that includes a date of the inspection, findings and repairs, and the name of the inspector. The Permittee shall make the log available to NMED upon request.

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	If a visual inspection indicates a flow meter is not functioning as required by this Discharge Permit, the Permittee shall repair or replace the meter within 30 days of discovery. For <i>repaired</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the repair that includes a description of the malfunction; a statement verifying the repair; and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. For <i>replacement</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the replacement that includes a design schematic for the device and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
40.	The Permittee shall collect samples of treated wastewater from the effluent sampling port following the UV disinfection unit on a quarterly basis and analyze the samples for: • TKN; • NO₃-N; • TDS; and • Cl. The Permittee shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the subsequent quarterly monitoring report. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
41.	During any week that the discharge of reclaimed domestic wastewater occurs, the Permittee shall perform the following analyses on the wastewater samples collected at the effluent sampling port following the UV disinfection unit using the following sampling method and frequency: • Fecal coliform or E. coli bacteria: grab sample at peak daily flow once per week; • BOD₅: six-hour composite sample once per two weeks; • Turbidity: continuously monitor reclaimed domestic wastewater for turbidity after the final treatment process and while discharging; record the average and maximum turbidity values for each calendar month; and • UV transmissivity values: record whenever collecting bacteria samples. The Permittee shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the laboratory analytical data results, including the QA/QC

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	summary and Chain of Custody, monthly average and maximum turbidity values, and a copy of the log of UV transmissivity values to NMED in the subsequent quarterly monitoring report. [Subsection A of 20.6.2.3107 NMAC, Subsections B, C and H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
42.	The Permittee shall submit records of solids disposal, including the volume of solids removed and copies of all manifests for the previous calendar year, to NMED annually in the monitoring report due by August 1 st each year. [Subsection A of 20.6.2.3107 NMAC]

C. CONTINGENCY PLAN

#	Terms and Conditions
43.	In the event that groundwater monitoring indicates that groundwater exceeds a standard identified in Section 20.6.2.3103 NMAC, the Permittee shall collect a confirmatory sample from the monitoring well within 15 days of receipt of the initial sampling results to confirm the initial sampling results. Within 60 days of confirmation of groundwater contamination, the Permittee shall submit to NMED a Corrective Action Plan (CAP) that proposes, at a minimum, contaminant source control measures and an implementation schedule. The Permittee shall implement the CAP as approved by NMED. This condition shall apply until the Permittee completes groundwater monitoring for a minimum of eight (8) consecutive quarterly samples demonstrating groundwater does not exceed the standards of Section 20.6.2.3103 NMAC. Violation of the groundwater standard beyond 180 days after the confirmation of groundwater contamination may cause NMED to require the Permittee to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108 and Section 20.6.2.4112 NMAC. [20.6.2.3103 NMAC, Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

#	Terms and Conditions
44.	In the event that information available to NMED indicates that a well is not constructed in a manner consistent with the attached Monitoring Well Guidance, contains insufficient water to effectively monitor groundwater quality, or is otherwise not completed in a manner that is protective of groundwater quality, the Permittee shall install a replacement well(s) within 120 days following notification from NMED. The Permittee shall survey the replacement monitoring well(s) within 30 days following well completion. The Permittee shall install replacement well(s) at locations approved by NMED prior to installation and shall complete replacement well(s) in accordance with the attached Monitoring Well Guidance. The Permittee shall submit well construction and lithologic logs, survey data and a groundwater elevation contour map to NMED within 60 days following well completion. The Permittee shall properly plug and abandon monitoring well(s) requiring replacement upon completion of the replacement monitoring well(s). The Permittee shall complete the well plugging and abandonment, and shall document the abandonment procedures, in accordance with the attached Monitoring Well Guidance and all applicable local, state, and federal regulations. The Permittee shall submit a copy of the well abandonment documentation to NMED within 60 days following the replacement well(s) completion. [Subsection A of 20.6.2.3107 NMAC]
45.	In the event that groundwater flow information obtained pursuant to this Discharge Permit indicates that a monitoring well is not appropriately located, e.g., hydrologically downgradient of the discharge location it is intended to monitor, the Permittee shall install a replacement well within 120 days following notification from NMED. The Permittee shall survey the replacement monitoring well within 30 days following well completion. The Permittee shall install the replacement well at the location approved by NMED prior to installation and shall complete the replacement well in accordance with the attached Monitoring Well Guidance. The Permittee shall submit construction and lithologic logs, survey data and a groundwater elevation contour map within 60 days following well completion. The Permittee shall properly plug and abandon a monitoring well requiring replacement upon completion of the replacement monitoring well. The Permittee shall complete the well plugging and abandonment, and shall document the abandonment procedures, in accordance with the attached Monitoring Well Guidance and all applicable local, state,

#	Terms and Conditions
	and federal regulations. The Permittee shall submit a copy of the well abandonment documentation to NMED within 60 days following the replacement well completion. [Subsection A of 20.6.2.3107 NMAC]
46.	In the event that the Facility exceeds the authorized discharge volume set in this Discharge Permit, the Permittee shall initiate the following Contingency Plan. <u>Contingency Plan</u> a) Notify NMED within seven days of the discovery of the discharge volume exceedance that the Facility exceeded the authorized discharge volume. b) The Permittee shall conduct a physical inspection of the discharge system, i.e., inflow and infiltration issues, collection system failures, etc., and the discharge meter to detect abnormalities and report the findings to NMED within 30 days of the discovery of the discharge volume exceedance. The Permittee shall correct any abnormalities detected with NMED's concurrence. c) If the Permittee does not detect any abnormalities and with NMED's concurrence, the Permittee shall submit a discharge permit modification for the increase in discharge quantity to NMED within 90 days of the discovery of the discharge volume exceedance. The discharge permit modification must include demonstration that the volume increase is sufficient for the design capacity or plans and specifications to upgrade the system to accommodate the discharge volume increase. [Subsection A of 20.6.2.3107 NMAC]
47.	In the event that analytical results of a treated wastewater sample indicate an exceedance of the total nitrogen discharge limit set in this Discharge Permit, the Permittee shall collect and submit for analysis a second sample within 48 hours of the receipt of the initial sampling results. In the event the second sample results indicate an exceedance of the discharge limit, the Permittee shall implement the following contingencies. a) Within 7 days of the second sample analysis date indicating exceedance of the discharge limit, the Permittee shall: i) notify NMED that the Permittee is implementing the Contingency Plan; and ii) submit a copy of the first and second analytical results indicating an exceedance to NMED. b) The Permittee shall increase the frequency of total nitrogen wastewater sampling and analysis of treated wastewater to once per month. c) The Permittee shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational

#	Terms and Conditions
	procedures. d) The Permittee shall conduct a physical inspection of the treatment system to detect abnormalities. The Permittee shall correct any abnormalities discovered. The Permittee shall submit a report to NMED detailing the corrections within 30 days of correction. e) In the event that any analytical results from monthly wastewater sampling indicate an exceedance of the total nitrogen discharge limit, the Permittee shall submit a CAP to NMED for approval proposing to modify operational procedures and/or upgrade the treatment process to achieve the total nitrogen limit. The Permittee shall submit the CAP including a schedule for completion of corrective actions and within 90 days of receipt of the analytical results of the second sample indicating that the discharge continues to exceed the limit. The Permittee shall initiate implementation of the CAP following approval by NMED. When analytical results from three consecutive months of wastewater sampling do not exceed the discharge limit, the Permittee may request NMED authorize a return to a quarterly monitoring frequency. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
48.	In the event that analytical results of a reclaimed domestic wastewater sample exceed any of the maximum discharge limits for BOD₅, turbidity, or E. coli bacteria set by this Discharge Permit, the Permittee shall collect and submit for analysis a second sample within 24 hours after becoming aware of the exceedance. In the event the second sample results confirm the exceedance of the maximum discharge limits, the Permittee shall implement the Contingency Plan below. In the event that analytical results of a reclaimed domestic wastewater sample exceed any of the 30-day average discharge limits for BOD₅, turbidity, or E. coli bacteria set by this Discharge Permit (i.e., confirmed exceedance), the Permittee shall implement the Contingency Plan below. <u>Contingency Plan</u> a) Within 24 hours of becoming aware of a confirmed exceedance (as identified above), the Permittee shall: - notify NMED that the Permittee is implementing the Contingency Plan; and - submit copies of the recent analytical results indicating the exceedance(s) to NMED. b) The Permittee shall immediately cease discharging reclaimed domestic wastewater to the reuse area(s) if the E. coli bacteria maximum limit is exceeded.

#	Terms and Conditions
	c) The Permittee shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational procedures. d) The Permittee shall conduct a physical inspection of the treatment system to detect abnormalities and shall correct any abnormalities discovered. The Permittee shall submit a report detailing the corrections made to NMED within 30 days following correction. When the analytical results from samples of reclaimed domestic wastewater, sampled as required by this Discharge Permit, no longer indicate an exceedance of the maximum discharge limits for fecal coliform or E. coli bacteria, the Permittee may resume discharging reclaimed domestic wastewater to the reuse area(s) with NMED approval. If a Facility is required to implement the Contingency Plan more than two times in a 12-month period, the Permittee shall propose to modify operational procedures and upgrade the treatment process to achieve consistent compliance with the maximum and 30-day average discharge limits by submitting a Corrective Action Plan (CAP) for NMED approval within 60 days following receipt of the analytical results confirming the exceedance. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions and identification of alternative disposal locations/methods. The Permittee shall initiate implementation of the CAP following approval by NMED. NMED may require the Permittee to complete approved corrective actions prior to recommencing discharge to the reuse area(s). NMED may require, prior to recommencing discharge to the reuse area(s), additional sampling of any stored reclaimed domestic wastewater. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
49.	In the event that an inspection reveals significant damage has occurred or is likely to affect the structural integrity of the reed bed or liner or their ability to contain contaminants, the Permittee shall propose the repair or replacement by submitting a CAP to NMED for approval. The Permittee shall submit the CAP to NMED within 30 days after discovery of the damage or following notification from NMED that significant damage is evident. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall initiate implementation of the CAP following approval by NMED. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]

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50.	In the event that the Permittee identifies failure of the low-pressure dosed disposal field, such as surfacing wastewater, the Permittee shall implement the following Contingency Plan. a) Within 24 hours following the discovered failure, the Permittee shall: i) Notify NMED of the failure in accordance with the notification requirements described in the Contingency Plan for unauthorized discharges; and ii) Restrict public access to the area. b) The Permittee shall conduct a physical inspection of the treatment and disposal system to identify additional potential failures and record them in the inspection log. c) The Permittee shall propose actions to address the failure and methods of correction by submitting a CAP to NMED for approval within 15 days following the discovered failure. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall initiate implementation of the CAP following NMED approval. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
51.	In the event that a release occurs that is not authorized under this Discharge Permit (commonly known as a “spill”), the Permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below. A release is defined as such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property. Within <u>24 hours</u> following discovery of the unauthorized discharge, the Permittee shall verbally notify NMED and provide the following information. a) The name, address, and telephone number of the person or persons in charge of the Facility, as well as of the owner and/or operator of the Facility. b) The name and address of the Facility. c) The date, time, location, and duration of the unauthorized discharge. d) The source and cause of unauthorized discharge. e) A description of the unauthorized discharge, including its estimated chemical composition. f) The estimated volume of the unauthorized discharge. g) Any actions taken to mitigate immediate damage from the unauthorized discharge. Within <u>one week</u> following discovery of the unauthorized discharge, the Permittee shall submit written notification to NMED providing the information listed above and any pertinent updates.

#	Terms and Conditions
	Within <u>15 days</u> following discovery of the unauthorized discharge, the Permittee shall submit a CAP to NMED describing any corrective actions previously taken and corrective actions to be taken relative to the unauthorized discharge. The CAP shall include the following information. a) A description of proposed actions to mitigate damage from the unauthorized discharge. b) A description of proposed actions to prevent future unauthorized discharges of this nature. c) A schedule for completion of proposed actions. In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, NMED may require the Permittee to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC. The Permittee shall not construe anything in this condition as relieving them of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC. [20.6.2.1203 NMAC]
52.	In the event that NMED or the Permittee identifies any failures of the discharge plan, i.e., the application, or this Discharge Permit not specifically noted herein, NMED may require the Permittee to submit a CAP and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a discharge permit modification to achieve compliance with 20.6.2 NMAC. [Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

D. CLOSURE PLAN

Closure Actions with Implementation Deadlines

#	Terms and Conditions
53.	Within 150 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall perform the following closure measures on the two leachfields at the Facility. a) Wastewater shall be pumped from the system components (e.g., dosing chambers,

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	distribution boxes) and it shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The Permittee shall maintain a record of all wastes transported for off-site disposal. b) Remove all lines leading to and from the leachfields or permanently plug them and abandon them in place. c) Remove or demolish all closed dosing chambers, distribution boxes or other system components (with the exception of leachfields) and re-grade the area with suitable fill to blend with surface topography to promote positive drainage and prevent ponding. The Permittee shall continue groundwater monitoring of MW-2 until the Permittee meets the requirements of this condition and groundwater monitoring confirms for a minimum of eight consecutive quarterly groundwater sampling events that groundwater does not exceed the standards of Section 20.6.2.3103 NMAC. This period is referred to as "post-closure." If at any time monitoring results show an exceedance of a groundwater quality standard in Section 20.6.2.3103 NMAC or the total nitrogen concentration is greater than 10 mg/L in groundwater, the Permittee shall implement the Contingency Plan required by this Discharge Permit. Following notification from NMED that the Permittee may cease post-closure monitoring of MW-2, the Permittee shall plug and abandon MW-2 in accordance with the attached Monitoring Well Guidance. [Subsection A of 20.6.2.3107 NMAC, 40 CFR Part 503]

Permanent Facility Closure Conditions

#	Terms and Conditions
54.	The Permittee shall perform the following closure measures in the event the Facility, or a component of the Facility, is proposed to be permanently closed. Within <u>90 days</u> of ceasing to discharge to the treatment system, the Permittee shall complete the following closure measures. a) Plug the line leading to the system so that a discharge can no longer occur. b) Evaporate wastewater in the system components, or drain and dispose of in accordance with all local, state, and federal regulations, or discharged from the system to the reuse area as authorized by this Discharge Permit. The discharge of

#	Terms and Conditions
	accumulated solids (sludge) to the reuse area is prohibited. c) Contain, transport, and dispose of solids removed from the treatment system in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The Permittee shall maintain a record of all solids transported for off-site disposal. Within <u>180 days</u> of ceasing to discharge to the treatment system (or unit), the Permittee shall complete the following closure measures. a) Remove all lines leading to and from the treatment system, or permanently plug and abandon them in place. b) Remove or demolish all treatment system components, and re-grade the area with suitable fill to blend with surface topography, promote positive drainage and prevent ponding. c) Perforate or remove the reed bed liner; fill the impoundment with suitable fill; and re-grade the impoundment site to blend with surface topography, promote positive drainage and prevent ponding. The Permittee shall continue groundwater monitoring until the Permittee meets the requirements of this condition and groundwater monitoring confirms for a minimum of eight consecutive quarterly groundwater sampling events that groundwater does not exceed the standards of Section 20.6.2.3103 NMAC. This period is referred to as "post-closure." If at any time monitoring results show an exceedance of a groundwater quality standard in Section 20.6.2.3103 NMAC, the Permittee shall implement the Contingency Plan required by this Discharge Permit. Following notification from NMED that the Permittee may cease post-closure monitoring, the Permittee shall plug and abandon the monitoring well(s) in accordance with the attached Monitoring Well Guidance. When the Permittee has met all closure and post-closure requirements and verified appropriate actions with date stamped photographic evidence or an associated NMED inspection, the Permittee may submit to NMED a written request, including photographic evidence, for termination of the Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]

E. GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
55.	RECORD KEEPING - The Permittee shall maintain a written record of the following: • Information and data used to complete the application for this Discharge Permit; • Information, data, and documents demonstrating completion of closure activities; • Any releases (commonly known as “spills”) not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC; • The operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; • Facility record drawings (plans and specifications) showing the actual construction of the Facility and bear the seal and signature of a licensed New Mexico professional engineer; • Copies of logs, inspection reports, and monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit; • The volume of wastewater or other wastes discharged pursuant to this Discharge Permit; • Groundwater quality and wastewater quality data collected pursuant to this Discharge Permit; • Copies of construction records (well log) for all sampled groundwater monitoring wells pursuant to this Discharge Permit; • The maintenance, repair, replacement or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and • Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including: - o the dates, location and times of sampling or field measurements; - o the name and job title of the individuals who performed each sample collection or field measurement; - o the sample analysis date of each sample; - o the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis; - o the analytical technique or method used to analyze each sample or collect each field measurement; - o the results of each analysis or field measurement, including raw data; - o the results of any split, spiked, duplicate or repeat sample; and - o a copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used.

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	The Permittee shall maintain the written record at a location accessible to NMED during a Facility inspection for a minimum of five years. The Permittee shall make the record available to NMED upon request. [Subsections A and D of 20.6.2.3107 NMAC]
56.	SUBMITTALS – The Permittee shall submit both a paper copy and an electronic copy of all notification and reporting documents required by this Discharge Permit, e.g., monitoring reports. The Permittee shall submit paper and electronic documents to the NMED Permit Contact identified on the Permit cover page. [Subsection A of 20.6.2.3107 NMAC]
57.	INSPECTION and ENTRY – The Permittee shall allow NMED to inspect the Facility and its operations that are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which any maintained records required by this Discharge Permit, the regulations of the federal government, or the WQCC are located. The Permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations. No person shall construe anything in this Discharge Permit as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state or federal regulations. [Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]
58.	DUTY to PROVIDE INFORMATION - The Permittee shall, upon NMED's request, allow for NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records. [Subsection D of 20.6.2.3107 NMAC]
59.	MODIFICATIONS and/or AMENDMENTS – In the event the Permittee proposes a change to the Facility or the Facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the Facility, the Permittee shall notify NMED prior to implementing such changes. The Permittee shall obtain NMED's approval

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	(which may require modification of this Discharge Permit) prior to implementing such changes. [Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]
60.	PLANS and SPECIFICATIONS – In the event the Permittee proposes to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittee shall submit construction plans and specifications of the proposed system or process unit to NMED for approval prior to the commencement of construction. In the event the Permittee implements changes to the wastewater system authorized by this Discharge Permit that result in only a minor effect on the character of the discharge, the Permittee shall report such changes (including the submission of record drawings where applicable) to NMED prior to implementation. [Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
61.	CIVIL PENALTIES - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]
62.	CRIMINAL PENALTIES – No person shall: • Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or maintained under the WQA; • Falsify, tamper with or render inaccurate any monitoring device, method or record maintained under the WQA; or

#	Terms and Conditions
	Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation. Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. [20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]
63.	COMPLIANCE with OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with any other applicable federal, state, and/or local laws, regulations, zoning requirements, nuisance ordinances, permits or orders. [NMSA 1978, § 74-6-5.L]
64.	RIGHT to APPEAL - The Permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues raised and the relief sought. Unless the Permittee files a timely petition for review, the decision of NMED shall be final and not subject to judicial review. [20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.O]
65.	TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this Facility or any portion thereof, the Permittee shall: - Notify the proposed transferee in writing of the existence of this Discharge Permit; - Include a copy of this Discharge Permit with the notice; and - Deliver or send by certified mail to NMED a copy of the notification and proof that the proposed transferee has received such notification.

#	Terms and Conditions
	The Permittee shall continue to be responsible for any discharge from the Facility, until both ownership and possession of the Facility have been transferred to the transferee. [20.6.2.3111 NMAC]
66.	PERMIT FEES – The Permittee shall be aware that the payment of permit fees is due at the time of Discharge Permit approval. The Permittee may pay the permit fees in a single payment or they may pay the fee in equal installments on a yearly basis over the term of the Discharge Permit. The Permittee shall remit single payments to NMED no later than 30 days after the Discharge Permit issuance date. The Permittee shall remit initial installment payments to NMED no later than 30 days after the Discharge Permit issuance date; with subsequent installment payments remitted to NMED no later than the anniversary of the Discharge Permit issuance date. Permit fees are associated with <u>issuance</u> of this Discharge Permit. No person shall construe anything in this Discharge Permit as relieving the Permittee of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the Facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. NMED shall suspend or terminate an approved Discharge Permit if the Permittee fails to remit an installment payment by its due date. [Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Facility Information

Facility Name Bishop's Lodge Wastewater Treatment Facility
Discharge Permit Number DP-75
Legally Responsible Party Chris Kaplan, Director
B L Santa Fe, LLC
7001 N. Scottsdale Road, Suite 2050
Scottsdale, AZ 85253
(480) 840-8413

Treatment, Disposal and Site Information

Primary Waste Type Domestic
Facility Type Hotel/Condominiums/Residential

Treatment Methods

Type	Designation	Description & Comments
Grease Interceptor	Grease Interceptor	3,000-gallon grease interceptor model GT-3000 manufactured by Park USA
Wastewater Treatment System	MBR Package Plant	Package plant consisting of an equalization basin, pre-anoxic basin, aeration basin, post-anoxic basin, ultra-filter membranes, and UV disinfection
Digester	Aerobic Digester	Retrofitted former package plant to be used as an aerobic sludge digester

Discharge Locations

Type	Designation	Description & Comments
Infiltration Gallery	Old Leachfield	110'x114' infiltration gallery with an estimated 9,000 gpd capacity. To be abandoned
Infiltration Gallery	New Leachfield	10,959 gpd disposal capacity. To be abandoned
Infiltration Gallery	Low-Pressure Dosed Disposal Field	To be constructed. 2,500 square feet. 11 laterals, 50 feet per lateral
Sludge Storage	Reed Bed	Synthetically lined impoundment to be used as a reed bed for sludge stabilization
Reuse Area	Irrigation Areas	Approximately 5 acres of sprinkler irrigation areas: North Lawn/Parking, Northeast Lawn, Southeast Hillside, and West Horse Pasture
Standpipe	Standpipe	Standpipe from the 3,000-gallon wet well following UV disinfection for the discharge of reclaimed domestic wastewater for temporary purposes
Tank	Effluent Storage Tank	Effluent storage for sequencing of irrigation periods



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Flow Metering Locations

Type	Designation	Description & Comments
Totalizing Flow Meter	Disposal Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume discharged to the low-pressure dosed disposal field
Totalizing Flow Meter	Irrigation Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume discharged to the reuse areas
Totalizing Flow Meter	Sludge Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume of WWTP sludge discharged to the reed bed
Totalizing Flow Meter	Standpipe Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume of reclaimed domestic wastewater discharged from the standpipe for temporary purposes

Ground Water Monitoring Locations

Type	Designation	Description & Comments
Monitoring Well	MW-1	Located hydrologically upgradient of the Facility and approximately 65 feet west of the main resort entrance in the center of the traffic circle (35.730384°, -105.910889°)
Monitoring Well	MW-2	Located hydrologically downgradient of the old leachfield and approximately 170 feet northwest of the WWTP (35.732250°, -105.911827°)
Monitoring Well	MW-3	Located hydrologically downgradient of the new leachfield and approximately 130 feet west of the WWTP (35.731621°, -105.912052°)
Monitoring Well	MW-4	Located hydrologically downgradient of the low-pressure dosed disposal field. To be installed during this Discharge Permit term

Depth-to-Ground Water 23 feet
Total Dissolved Solids (TDS) 300 mg/L

Permit Information

Original Permit Issued	July 11, 1979
Permit Renewal and Modification	February 20, 1984
Permit Renewal and Modification	April 10, 1989
Permit Renewal	January 18, 1994
Permit Renewal and Modification	February 19, 1999
Permit Renewal	December 6, 2004
Permit Renewal	February 14, 2011
Permit Renewal and Modification	September 30, 2019

Current Action

Renewal and Modification



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Application Received	July 2, 2018
Public Notice Published	[not yet published]
Permit Issued (Issuance Date)	[issuance date]
Permitted Discharge Volume	30,000 gallons per day

NMED Contact Information

Mailing Address

Ground Water Quality Bureau
P.O. Box 5469
Santa Fe, New Mexico 87502-5469

GWQB Telephone Number

(505) 827-2900

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**NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER QUALITY BUREAU
MONITORING WELL CONSTRUCTION AND ABANDONMENT GUIDELINES**

Purpose: These guidelines identify minimum construction and abandonment details for installation of water table monitoring wells under groundwater Discharge Permits issued by the NMED's Ground Water Quality Bureau (GWQB) and Abatement Plans approved by the GWQB. Proposed locations of monitoring wells required under Discharge Permits and Abatement Plans and requests to use alternate installation and/or construction methods for water table monitoring wells or other types of monitoring wells (e.g., deep monitoring wells for delineation of vertical extent of contaminants) must be submitted to the GWQB for approval prior to drilling and construction.

General Drilling Specifications:

1. All well drilling activities must be performed by an individual with a current and valid well driller license issued by the State of New Mexico in accordance with 19.27.4 NMAC. Use of drillers with environmental well drilling experience and expertise is highly recommended.
2. Drilling methods that allow for accurate determinations of water table locations must be employed. All drill bits, drill rods, and down-hole tools must be thoroughly cleaned immediately prior to the start of drilling. The borehole diameter must be drilled a minimum of 4 inches larger than the casing diameter to allow for the emplacement of sand and sealant.
3. After completion, the well should be allowed to stabilize for a minimum of 12 hours before development is initiated.
4. The well must be developed so that formation water flows freely through the screen and is not turbid, and all sediment and drilling disturbances are removed from the well.

Well Specifications (see attached monitoring well schematic):

5. Schedule 40 (or heavier) polyvinyl chloride (PVC) pipe, stainless steel pipe, carbon steel pipe, or pipe of an alternate appropriate material that has been approved for use by NMED must be used as casing. The casing must have an inside diameter not less than 2 inches. The casing material selected for use must be compatible with the anticipated chemistry of the groundwater and appropriate for the contaminants of interest at the facility. The casing material and thickness selected for use must have sufficient collapse strength to withstand the pressure exerted by grouts used as annular seals and thermal properties sufficient to withstand the heat generated by the hydration of cement-based grouts. Casing sections may be joined using welded, threaded, or mechanically locking joints; the method selected must provide sufficient joint strength for the specific well installation. The casing must extend from the top of the screen to at least one foot above ground surface. The top of the casing must be fitted with a removable cap, and the exposed casing must be protected by a locking steel well shroud. The shroud must be large enough in diameter to allow easy access for removal of the cap. Alternatively, monitoring wells may be completed below grade. In this case, the casing must extend from the top of the screen to 6 to 12 inches below the ground surface; the monitoring wells must be sealed with locking, expandable well plugs; a flush-mount, watertight well vault that is rated to withstand traffic loads must be emplaced around the wellhead; and the cover must be secured with at least one bolt. The vault cover must indicate that the wellhead of a monitoring well is contained within the vault.
6. A 20-foot section (maximum) of continuous-slot, machine slotted, or other manufactured PVC or stainless steel well screen or well screen of an alternate appropriate material that has been approved for use by NMED must be installed across the water table. Screens created by cutting slots into solid casing with saws or other tools must not be used. The screen material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. Screen sections may be joined using welded, threaded, or mechanically

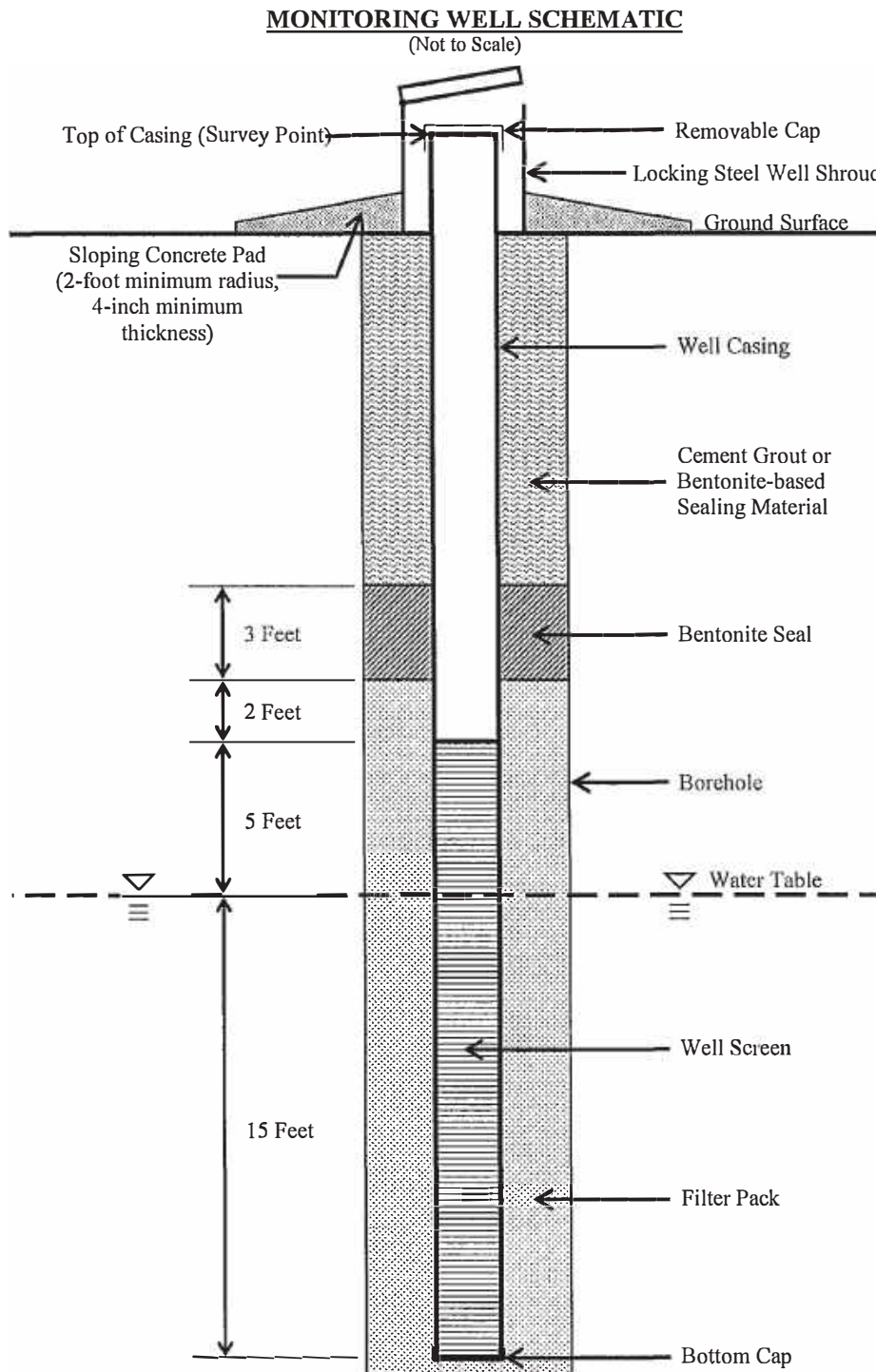
locking joints; the method selected must provide sufficient joint strength for the specific well installation and must not introduce constituents that may reasonably be considered contaminants of interest at the facility. A cap must be attached to the bottom of the well screen; sumps (i.e., casing attached to the bottom of a well screen) should not be installed. The bottom of the screen must be installed no more than 15 feet below the water table; the top of the well screen must be positioned not less than 5 feet above the water table. The well screen slots must be appropriately sized for the formation materials and should be selected to retain 90 percent of the filter pack. A slot size of 0.010 inches is generally adequate for most installations.

7. Casing and well screen must be centered in the borehole by placing centralizers near the top and bottom of the well screen.
8. A filter pack must be installed around the screen by filling the annular space from the bottom of the screen to 2 feet above the top of the screen with clean silica sand. The filter pack must be properly sized to prevent fine particles in the formation from entering the well; clean medium to coarse silica sand is generally adequate as filter pack material for 0.010-inch slotted well screen. For wells deeper than 30 feet, the sand must be emplaced by a tremmie pipe. The well should be surged or bailed to settle the filter pack and additional sand added, if necessary, before the bentonite seal is emplaced.
9. A bentonite seal must be constructed immediately above the filter pack by emplacing bentonite chips or pellets (3/8-inch in size or smaller) in a manner that prevents bridging of the chips/pellets in the annular space. The bentonite seal must be 3 feet in thickness and hydrated with clean water. Adequate time should be allowed for expansion of the bentonite seal before installation of the annular space seal.
10. The annular space above the bentonite seal must be sealed with cement grout or a bentonite-based sealing material acceptable to the State Engineer pursuant to 19.27.4 NMAC. A tremmie pipe must be used when placing sealing materials at depths greater than 20 feet below the ground surface. Annular space seals must extend from the top of the bentonite seal to the ground surface (for wells completed above grade) or to a level 3 to 6 inches below the top of casing (for wells completed below grade).
11. For monitoring wells finished above grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the shroud and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the wellhead. The installation of steel posts around the well shroud and wellhead is recommended for monitoring wells finished above grade to protect the wellhead from damage by vehicles or equipment. For monitoring wells finished below grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the well vault and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the well vault.

Abandonment:

12. Approval for abandonment of monitoring wells used for ground water monitoring in accordance with Discharge Permit and Abatement Plan requirements must be obtained from NMED prior to abandonment.
13. Well abandonment must be accomplished by removing the well casing and placing neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer for wells that encounter water pursuant to 19.27.4 NMAC from the bottom of the borehole to the ground surface using a tremmie pipe. If the casing cannot be removed, neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer must be placed in the well using a tremmie pipe from the bottom of the well to the ground surface.
14. After abandonment, written notification describing the well abandonment must be submitted to the NMED. Written notification of well abandonment must consist of a copy of the well plugging record submitted to the State Engineer in accordance with 19.27.4 NMAC, or alternate documentation containing the information to be provided in a well plugging record required by the State Engineer as specified in 19.27.4 NMAC.

Deviation from Monitoring Well Construction and Abandonment Requirements: Requests to construct water table monitoring wells or other types of monitoring wells for groundwater monitoring under groundwater Discharge Permits or Abatement Plans in a manner that deviates from the specified requirements must be submitted in writing to the GWQB. Each request must state the rationale for the proposed deviation from these requirements and provide detailed evidence supporting the request. The GWQB will approve or deny requests to deviate from these requirements in writing.



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**STATE OF NEW MEXICO
BEFORE THE SECRETARY OF THE ENVIRONMENT**

**IN THE MATTER OF BISHOPS LODGE
RENEWAL AND MODIFICATION
DISCHARGE PERMIT APPLICATION
FOR DP-75**

GWQB 24-69 (P)

**PROTECT TESUQUE INC.'S
MOTION FOR PRE-HEARING PERMIT DENIAL
AND MEMORANDUM IN SUPPORT**

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EXHIBIT

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EXHIBITS:

1. September 11, 2000 letter from J. Maestas, Chairman, Santa Fe - Pojoaque Soil and Water Conservation District to Vincent Ojinaga, Santa Fe County Land Use and Code Administrator
2. 2002 Disclosure Statement for Bishop’s Lodge Hills Subdivision
3. 2002 Declaration of Covenants, Conditions and Restrictions for the Bishop’s Lodge Hills Subdivision
4. 2004 Amended and Restated Disclosure Statement
5. 2004 Shared Facility Agreement regarding Bishop’s Lodge Hills Homeowners Association, Inc.

INTRODUCTION

Pursuant to Rule 20.1.4.200(D) & 20.1.4.100(E)(2) of the New Mexico Environment Department's ("NMED") permitting procedures, and the Hearing Officer's oral briefing order at the scheduling conference held on January 8, 2025, Protect Tesuque, Inc. ("Protect Tesuque") submits this motion and memorandum of law in support of its request that the Hearing Officer issue a Recommended Decision finding that:

(1) in reviewing Bishop's Lodge LLC's (the "Resort") discharge permit application, the NMED has ignored the governing Liquid Waste Disposal and Treatment Regulations ("Liquid Waste Regulations") set forth in 20.7.3.201(B) NMAC, and that these regulations apply to the Resort's proposed discharge plan;

(2) the Resort has not met the requirements for a discharge permit under the Liquid Waste Regulations, set forth in 20.7.3.201(B) NMAC, and that, as a result, the Resort's proposed discharge plan creates a substantial, unacceptable, and imminent threat to the environment, including the human environment; and

(3) the Secretary of Environment should deny the Resort's permit application, as a matter of law, without the need for an evidentiary hearing.

In support of the relief requested, Protect Tesuque states as follows:

BRIEF SUMMARY

The New Mexico Environment Department ("NMED") is failing to apply the Liquid Waste Disposal and Treatment regulations to the Resort's liquid waste discharge permit application. In so doing, it is allowing the Resort to circumvent the regulatory safeguards that were specifically adopted by the Environmental Improvement Board ("EIB") at the Legislature's direction to protect the health and welfare of present and future New Mexico citizens by providing for the prevention

and abatement of public health hazards and surface and groundwater contamination from on-site liquid waste disposal practices.

During or about 2002-2004, the owners of Bishop's Lodge Resort subdivided a portion of their property to create 49 single-family residential lots and 34 condominium units in addition to the existing resort hotel and associated facilities. Earlier technical assessments of the proposed subdivision had apparently determined that the soils comprising the subdivided lots were either unsuitable for installation of on-site septic systems or that doing so would prove to be prohibitively costly.¹

Pursuant to New Mexico law, "[n]o person shall discharge untreated liquid waste except into a permitted and approved enclosed system, a permitted and approved liquid waste treatment unit or a public sewer system...." 20.7.3.201(B) and (C) NMAC. Faced with the infeasibility and prohibitive cost of on-site disposal to ground, the developers chose to forgo the installation and permitting of on-site liquid waste treatment systems. Instead, they apparently decided to pursue one of the other two permissible alternatives: either discharge into a permitted enclosed system or connection to a public sewer system. Both alternatives required the installation of a sewer infrastructure within the subdivision to collect the liquid waste from each residential lot.

The developers installed the private sewer lines needed to collect liquid waste from each residential unit and chose to dispose of that waste in an enclosed system that processed the collected waste in a mechanical treatment plant, then discharged the treated effluent into lined containment ponds for evapotranspiration and vegetative treatment prior to on-site reuse for irrigation and dust control. By choosing at some time during the approval of its Hills and Villas subdivision to forego the installation of the septic systems needed for on-site treatment and

¹ See September 11, 2000 Letter of Joseph Maestas, Chairman, Santa Fe – Pojoaque Soil and Water Conservation District to Vincent Ojinaga, Land Use and Code Administrator, Santa Fe County, attached as **Exhibit 1**.

disposal of the liquid wastes generated by each of its proposed residential lots, the developers committed themselves and their property owners to use either an enclosed system that does not discharge to ground, or connection to a public sewer system. The fact that the developers' prior choice may now prove more costly than they previously had hoped to incur in no way justifies or excuses their attempt to ignore and circumvent the regulatory safeguards enacted to protect the public health, the State's waters, and the water rights of surrounding property owners.

Simply put, because the Resort is seeking permission for on-site treatment and disposal to ground of liquid waste from 84 separate residential and commercial properties, its application for a liquid waste discharge permit is governed by the Liquid Waste Regulations, 20.7.3 NMAC, promulgated by the EIB and authorized by the Environmental Improvement Act, NMSA 1978, Section 74-1-1 *et seq.* Pursuant to those regulations, every New Mexico property owner is responsible for the safe storage, treatment and disposal of the liquid wastes generated on their specific property. If a property owner wishes to use on-site treatment and disposal to ground for its liquid wastes, the waste must be treated and disposed of:

1. On the lot that generates that liquid waste;
2. In one or more on-site disposal systems, each of which:
 - a. Limits the rate of liquid waste influent to no more than 5,000 gallons per day ("gpd") per liquid waste system;
 - b. Limits the rate of liquid waste effluent discharged to each disposal system to no more than 5,000 gpd per on-site disposal system;
 - c. Is adequately separated from every other disposal system;
 - d. Is safely sited on the property; and
 - e. Is appropriately sized, sited and engineered to safely dispose of the daily volume of effluent it receives.

See generally 20.7.3 NMAC. Because the Resort's proposed treatment and disposal permit violates every one of these mandatory regulatory requirements, each of which was specifically adopted to

prevent the very hazards the Resort's proposed permit would pose, NMED's draft permit must be denied.

Even more troubling, however, the Resort's disposal plan is cynically crafted to shift the hazards of contamination that its non-compliant practices will create away from the property owners responsible for those hazards, and onto their off-site, downstream neighbors, in gross violation of the allocation of hazards the Liquid Waste Regulations expressly mandate. The Liquid Waste Regulations require each generator to localize and compartmentalize the hazards that its on-site disposal of its liquid wastes will create by restricting their disposal to the property that generates them. The Regulations require each generator to further reduce those hazards through suitable on-site treatment, and then reduce the remaining hazard of on-site disposal still further by limiting the rate at which treated effluent is discharged to on-site soils, and by restricting its discharge to one or more appropriately engineered on-site disposal fields that are appropriately located, sized, and situated to prevent the release of the discharged contaminants to surrounding soils and water. .

By collecting and aggregating 30,000 gpd² of liquid wastes from 84 generators and then piping those wastes downhill to a single treatment plant, the Resort greatly increases the volume, complexity and difficulty of effectively treating that excessive waste stream over time, and thus the hazard and risk of doing so successfully – continuously – into the future. It also increases the importance of rigorously enforcing the engineering safeguards the Liquid Waste Regulations impose for on-site disposal of that treated waste flow. Not only must the on-site disposal of such treated wastes be localized and contained to the property that generated them, but the volume and rate of on-site disposal must be limited to no more than 5,000 gpd of treated waste per on-site

² The Resort's permit application indicates it plans to treat and discharge to ground 60,000 gpd of liquid waste in a 5,000 square foot disposal field in a "second phase."

disposal field, and the disposal field itself must be appropriately sized, sited and engineered to prevent that volume and rate of treated waste disposal from over-loading the disposal field's soils and contaminating surrounding soils or water.

By discharging six times the permissible volume of treated effluent into a single 2,500 square foot disposal field that is ten times smaller than the minimum area required by the Liquid Waste Regulations for permissible on-site disposal, doing so in a single disposal field instead of the six (6) widely separated fields the Regulations require, and doing so under pressure into alluvial soils that are 8 feet above the seasonal high water table immediately adjacent to the Little Tesuque Creek, the Resort is effectively directly injecting its effluent into the underlying aquifers and the private wells they supply. And it is doing so at the downstream edge of its property, where the contaminants it is releasing will forever impact its off-site neighbors, but not the Resort or its associated property owners.

In short, the Resort's disposal plan not only exacerbates the hazards of contaminant release, but ensures that any and all resulting contamination will flow off of its property and into the aquifers and wells of its downstream neighbors.

It is the off-site downstream neighbors who will bear all the risk that the Resort's aggregated waste stream will create; all the risk that hazardous contaminants are added unlawfully to that waste stream; all the risk that treatment proves ineffective to remove the waste stream's harmful contaminants; and all the risk that an overloaded disposal field will eventually release the Resort's contaminants to the aquifers that feed and sustain their wells and drinking water. It is the downstream neighbors who will bear all of the burden of continually monitoring their wells for traces of the Resort's contamination, and all of the initial cost and risk of remediating it once detected.

The Liquid Waste Regulations were specifically crafted and adopted to prevent such transfers of hazard and risk. They should be applied and enforced. By ignoring the applicability of the Liquid Waste Regulations to the Resort's hazardous plan, and by pretending that the Resort's self-interested monitoring of a few wells for a few specific contaminants a few times a year is an adequate substitute for the stringent safeguards the Liquid Waste Regulations would impose, NMED is complicit in the Resort's cynical transfer of hazard and risk to its downstream neighbors.

LEGAL OVERVIEW

I. The Water Quality Act, NMSA 1978, Sections 74-6-1 et seq.

First enacted in 1967, New Mexico's Water Quality Act establishes the Water Quality Control Commission (the "Commission"), empowers and directs the Commission *inter alia* to adopt a comprehensive water quality management program, water quality standards for surface and ground waters, and promulgate regulations to prevent or abate water pollution and govern the disposal of septage and sludge. By regulation, the Commission may require persons to obtain from a constituent agency designated by the Commission a permit for the discharge of any water contaminant or for the disposal or reuse of septage or sludge.

Pursuant to NMSA 1978, Section 74-6-12:

[t]he Water Quality Act does not apply to any activity or condition subject to the authority of the environmental improvement board pursuant to the Hazardous Waste Act [Chapter 74, Article 4 NMSA 1978], the Ground Water Protection Act [Chapter 74, Article 6B NMSA 1978] or the Solid Waste Act [74-9-1 to 74-9-43 NMSA 1978] except to abate water pollution or to control the disposal or use of septage and sludge.

NMSA 1978, § 76-6-12(B).

The Water Quality Act provides various civil and criminal penalties for violation of any requirement, regulation, water quality standard or compliance order issued under the Act.

Pursuant to NMSA 1978, Section 74-6-13, the Act provides:

additional and cumulative remedies to prevent, abate and control water pollution, and nothing abridges or alters rights of action or remedies in equity under the common law or statutory law, criminal or civil. No provision of the Water Quality Act or any act done by virtue thereof estops the state or any political subdivision or person as owner of water rights or otherwise, in the exercise of their rights in equity or under the common law or statutory law to suppress nuisances or to abate pollution.

II. Ground and Surface Water Protection Regulations, 20.6.2 NMAC

To “implement the Water Quality Act, NMSA 1978, Sections 74-6-1 et seq.,” the Commission promulgated the Ground and Surface Water Protection Regulations, NMAC 20.6.2 et seq., effective December 1, 1995 (“Water Protection Regulations”). The Water Protection Regulations were last amended effective December 21, 2018.

Section 20.6.2.1201(A) of the Water Protection Regulations recognizes and affirms that discharges governed by the Liquid Waste Regulations are not subject to the Water Protection Regulations’ discharge notice and permitting requirements:

... any person intending to make a new water contaminant discharge or to alter the character or location of an existing water contaminant discharge, ***unless the discharge is ... subject to the Liquid Waste Disposal Regulations adopted by the New Mexico environmental improvement board***, shall file a notice with the ground water quality bureau of the department for discharges that may affect ground water and/or the surface water quality bureau of the department for discharges that may affect surface water.

(emphasis added).

III. The Environmental Improvement Act, NMSA 1978, Sections 74-1-1 et seq.

Four years after enactment of the Water Quality Act in 1967, the legislature enacted the Environmental Improvement Act:

to create a department that will be responsible for environmental management and consumer protection in this state in order to ensure

an environment that in the greatest possible measure will confer optimum health, safety, comfort and economic and social well-being on its inhabitants; will protect this generation as well as those yet unborn from health threats posed by the environment; and will maximize the economic and cultural benefits of a healthy people.

NMSA 1978, § 74-1-2. To help achieve these objectives, the Act established the Environmental Improvement Board to promulgate all regulations applying to persons and entities outside of the Department of Environment. Pursuant to 74-1-8(A)(3), the Board is not only responsible for environmental management and consumer protection, but is specifically required to promulgate rules and standards for liquid waste.

Section 74-1-3(C) of the Environmental Improvement Act defines “on-site liquid waste system” as:

a liquid waste system, or part thereof, serving a dwelling, establishment or group, and using a liquid waste treatment unit designed to receive liquid waste followed either by soil treatment or other types of disposal system. ‘On-site liquid waste system’ includes holding tanks and privies but does not include systems or facilities designed to receive or treat mine or mill tailings or wastes.

NMSA 1978, § 74-1-3(C). Notably, the Environmental Improvement Act does not limit or define the jurisdiction of the EIB by reference to the volume of liquid waste generated or disposed by a regulated generator. Rather, it defines the EIB’s jurisdiction by reference to specific categories of generators engaging in specific types of activities: “a liquid waste system, or part thereof, serving a dwelling, establishment or group, and using a liquid waste treatment unit designed to receive liquid waste followed either by soil treatment or other types of disposal system.” Recognizing the unique public health and environmental hazards that liquid waste systems serving dwellings and other establishments or groups present, the Environmental Improvement Act of 1971 confers broad jurisdiction to the EIB to regulate all dwellings, establishments and other groups that treat and dispose of liquid waste to soils no matter what volume of waste they may generate or dispose of.

Pursuant to the Environmental Improvement Act, NMSA 1978, sections 74-1-6, 74-1-7(A)(3), 74-1-8(A)(3) and 74-1-9, the EIB promulgated the Liquid Waste Disposal and Treatment Regulations, NMAC 20.7.3. (Liquid Waste Regulations”)³ These regulations are carefully designed to address and prevent the challenging array of hazards posed by hundreds of thousands of privately motivated property owners generating and disposing of liquid waste to ground. They do so by establishing mandatory, fail-safe engineering and hydrologic constraints on the treatment and disposal of liquid waste to prevent and reduce the hazards to public health and the environment that unregulated liquid waste disposal to ground would otherwise create.

Part 20.7.3.201 of the Liquid Waste Regulations sets forth many of the Regulations’ most important requirements:

*(A) Every owner shall be responsible for the storing, treating and disposing of liquid waste generated on that property. Every owner shall be responsible for ensuring that the liquid waste system on that property and any excavation related to the liquid waste system do not pose a public safety hazard.*⁴

*(B) No person shall discharge untreated liquid waste except into a permitted and approved enclosed system, a permitted and approved liquid waste treatment unit or a public sewer system, except for the discharge of graywater pursuant to 20.7.3.810 NMAC. All liquid waste systems installed in accordance with a liquid waste permit issued by the department prior to July 1, 2012 shall be deemed to have operational approval. No person shall discharge liquid waste or effluent into a cesspool or effluent disposal well.*⁵

*(C) No person shall discharge effluent from a liquid waste treatment unit except through a permitted and approved liquid waste disposal system or to a permitted public sewer system. No person shall discharge effluent from a liquid waste treatment unit to a cesspool or effluent disposal well.*⁶

³ The Liquid Waste Disposal and Treatment regulations were last amended effective September 1, 2013.

⁴ See 20.7.3.201(A) NMAC (September 2005) for the prior version of this requirement.

⁵ See 20.7.3.301(A) NMAC (October 1997) and 20.7.3.201(B) NMAC (September 2005) for the prior version of this requirement.

⁶ See 20.7.3.301(B) NMAC (October 1997) and 20.7.3.201(C) NMAC (September 2005) for the prior version of this requirement.

(D) No person shall install, have installed, modify or have modified, own, operate or use an on-site liquid waste system that, by itself or in combination with other on-site liquid waste systems, may cause a hazard to public health or degrade any body of water. All on-site liquid waste systems shall be installed, operated and maintained in accordance with the permit and applicable regulations.⁷

(E) ...

(F) The type of on-site liquid waste system shall be determined on the basis of location, lot size, soil and site characteristics. The system, except as otherwise approved, shall consist of a liquid waste treatment unit and associated disposal system.⁸

(G) An on-site liquid waste system shall be located wholly on the same lot, which is the site of the source or sources served by the on-site liquid waste system.⁹

IV. Liquid Waste Regulations, 20.7.3 NMAC.

A. Scope of Regulations

Pursuant to 20.7.3.2 NMAC, the Liquid Waste Regulations apply “to on-site liquid waste systems, and effluent from such systems, that receive 5,000 gallons or less of liquid waste per day, and that do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC or a national pollutant discharge elimination system (NPDES) permit.” 20.7.3.2 NMAC. As 20.7.3.2 NMAC plainly states, the Liquid Waste Regulations apply to the rate-limiting 5,000 gallon per day on-site liquid waste systems that 2.7.3 NMAC regulations elsewhere define and require every dwelling, establishment or group to use for on-site treatment and disposal of the liquid wastes it generates. *See* 20.7.3.7(L)(6); 20.7.3.201(B) and (C); and 20.7.3.302(C) NMAC. As demonstrated below, the 20.7.3 NMAC Regulations cited in 20.7.3.2 NMAC define the scope of permissible liquid waste systems that can be used for on-site treatment and disposal of liquid waste to ground,

⁷ *See* 20.7.3.301(C) NMAC (October 1997) and 20.7.3.201(D) NMAC (September 2005) for the prior version of this requirement.

⁸ *See* 20.7.3.401(A) NMAC (October 1997) and 20.7.3.201(F) NMAC (September 2005) for the prior version of this requirement.

⁹ *See* 20.7.3.302(B) NMAC (October 1997) and 20.7.3.201(G) NMAC (September 2005) for the prior version of this requirement.

not the scope of generators who must comply with the regulations. If a property owner wishes to discharge more than 5,000 gallons of liquid waste per day, 20.7.3.302(C) NMAC requires the installation and permitting of multiple on-site liquid waste systems, each limited to no more than 5,000 gallons per day, and each set back from every other on-site liquid waste system at a required distance.

While the Liquid Waste Regulations establish the baseline requirements for all liquid waste systems, they do not pre-empt the Water Protection Regulations, which may be implicated if a permittee under the Liquid Waste Regulations violates a numerical contaminant standard under 20.6.2.3103 NMAC or for other violations of the Liquid Waste Regulations themselves. For instance, 20.7.3.201(O)(3)(f) NMAC provides that a permittee with a wastewater flow that exceeds the 5,000 gallon per day maximum from each permitted system may have the permit voided and referred to the Ground Water Quality Bureau for enforcement action. The Water Protection Regulations thus act in concert with the Liquid Waste Regulations where a liquid waste permittee fails to implement the engineering requirements imposed by the Liquid Waste Regulations and thereby causes harm to the environment.

Remarkably, NMED struggles to convert a reference to the critical rate-limiting means by which the 20.7.3 Regulations prevent the release and overloading of harmful contaminants to soils and groundwater – the mandatory use of on-site systems that each receive and discharge no more than 5,000 gpd of liquid waste per system -- into a jurisdictional limitation that would erroneously preclude application of the Regulations' requirements to the largest generators of residential and commercial liquid waste. But those are the liquid waste generators who pose the larger hazard and thus the greater need for application of the Regulations' stringent safeguards.

The Regulations' objective is clear: "to protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and groundwater contamination from on-site liquid waste disposal practices." 20.7.3.6 NMAC. And yet, despite the express command of 20.7.3.1001 NMAC to liberally construe 20.7.3 NMAC to carry out that purpose, NMED strains to interpret the Regulations to frustrate that purpose by excluding the dischargers who pose the greater hazard from the mandatory safeguards the Regulations impose.

B. Prevention of Public Health Hazards

A comparison of the definition of "hazard to public health" as used in the Water Protection Regulations with the definition used in the Liquid Waste Regulations underscores the critical difference in regulatory approach and outcome resulting from the two regulatory regimes. As used in the Water Protection Regulations, "*hazard to public health*" is defined by reference to a specified set of contaminants detected in surface or ground water at specified levels under specific conditions:

'hazard to public health' exists when water which is used or is reasonably expected to be used in the future as a human drinking water supply exceeds at the time and place of such use, ***one or more of the standards of Subsection A of 20.6.2.3103 NMAC, or the naturally occurring concentrations***, whichever is higher in determining whether a discharge would cause a hazard to public health to exist, the secretary shall investigate and consider the purification and dilution reasonably expected to occur from the time and place of discharge to the time and place of withdrawal for use as human drinking water. (emphasis added)

20.6.2.7(H) NMAC (emphasis added).

In contrast, the Liquid Waste Regulations adopt a much more expansive and protective definition of "hazard to public health," one that is consistent with the Liquid Waste Regulations'

proactive objective to prevent the release of biological, chemical or other contaminants to water or soils that could adversely impact human health:

‘hazard to public health’ means the indicated ***presence in water or soil of biological, chemical or other contaminants under such conditions that could adversely impact human health***, including, but is not limited to, surfacing liquid waste, degradation to a body of water used as, or has the potential to be used as, a domestic water supply source, presence of an open cesspool or tank or exposure of liquid waste or septage in a manner that allows transmission of disease. (emphasis added)

20.7.3.7(H)(1) NMAC (emphasis added).

Consistent with its statutory and regulatory objectives, the Liquid Waste Regulations are carefully designed to protect the health and welfare of present and future citizens by preventing ***any biological or chemical contaminant*** that could adversely impact human health – not only the 50 or so contaminants specifically listed in the 20.6.2.3101 NMAC water quality standards – from entering soils or water as a result of on-site liquid waste disposal. And that is why – in stark contrast to the Water Protection Regulations – the Liquid Waste Regulations impose engineering constraints on the treatment and disposal of liquid waste to soils, constraints that are carefully designed to prevent the presence in water or soil of ***any biological, chemical or other contaminant*** “that could adversely impact human health.” In short, the Liquid Waste Regulations are specifically designed to go beyond regulation of the set of individual contaminants specified in the 20.6.2.3103 NMAC water quality standards, and prevent the release to soils and water of ***any biological, chemical or other contaminant*** that could adversely impact human health.

V. **The Different Legislative and Regulatory Approaches of the Water Quality Act and the Environmental Improvement Act.**

The Water Quality Act of 1967 and the Environmental Improvement Act of 1971 adopt very different legislative and regulatory approaches to the protection of our environment and public health against hazards posed by chemical and biological contamination.

The approach adopted in the Water Quality Act of 1967, and implemented through the Commission's Water Protection Regulations, identifies and regulates specific concentrations of individual contaminants detected in water. As a recent Proceedings of the National Academy of Sciences ("PNAS") article points out,¹⁰ however, this approach falls short of effective prevention against adverse impacts to public health and the environment caused by an ever-growing variety of newly synthesized man-made contaminants in wastewater. Why? Because we do not know and can never know the hazards posed by the ever-increasing array of newly synthesized chemicals on public health and the environment, let alone the harmful effects that an infinite array of possible combinations and concentrations of existing and newly synthesized chemical and biological contaminants will have.

Perhaps recognizing this shortcoming – that we do not and cannot know the hazards posed by an ever-increasing number and combination of natural and man-made contaminants in an ever-changing heterogeneous waste stream – the New Mexico Legislature wisely chose in 1971 to adopt a second, additional approach to protect public health and the environment: impose prudent engineering constraints on the treatment and disposal to ground of certain harmful classes of contaminant-containing wastes, such as residential and commercial sewage.

¹⁰ See *High organofluorine concentrations in municipal wastewater affect downstream drinking water supplies for millions of Americans* (PNAS January 2025) (<https://www.pnas.org/doi/full/10.1073/pnas.2417156122>)

This second approach, enacted by the Legislature in the 1971 Environmental Improvement Act and implemented through the EIB's Liquid Waste Regulations, is carefully designed to prevent the release to ground and water of ***any and all biological or chemical contaminants*** that may adversely impact public health or the environment, not just the few contaminants specifically enumerated in the 20.6.2.3013 NMAC Water Protection Regulations. Unlike the Water Quality Act and its Water Protection Regulations, the Environment Improvement Act and its Liquid Waste Regulations do not regulate specifically identified contaminants. Rather, the Liquid Waste Regulations prophylactically act to prevent the release of any and all biological and chemical contaminants that may be contained in liquid waste by specifying the engineering constraints that must be followed (e.g., treatment and disposal locations, maximum daily rate of liquid waste treatment per system, required methods and means, minimum setbacks, minimum absorption areas, minimum soils conditions, maximum daily rates of effluent disposal per disposal field) to prevent such hazardous mixtures from contaminating soils and water.

VI. The Basic Requirements of the Liquid Waste Regulations

Collectively, the Liquid Waste Regulations impose fail-safe, engineered constraints on waste treatment and disposal that protect soils and groundwater against the release of any and all contaminants in treated sewage effluent. Both separately and in combination, these mandatory safeguards work to prevent contamination and protect public health by reducing the likelihood and extent of potential contaminant release to the environment:

- By establishing the responsibility of each separate property owner for the safety of the wastes treated and disposed on its property (20.7.2.304(A) NMAC) as well as the safe treatment, storage and on-site disposal of those wastes (20.7.3.201(A) NMAC), the Regulations provide the personal incentive and accountability needed to obtain and enforce compliance with the Regulations' mandatory safeguards;
- By restricting the permissible options for discharge of untreated liquid waste to three alternatives – a permitted and approved enclosed system, a permitted and approved

liquid waste treatment unit, or connection to a public sewer system (20.7.3.201(B) NMAC) – the Regulations ensure that responsible persons acting in responsible ways will work to prevent the release of sewage contaminants;

- By restricting the permissible options for discharge of effluent from a liquid waste treatment unit to two alternatives – a permitted and approved liquid waste disposal system or connection to a permitted public sewer system (20.7.3.201(C) NMAC) – the Regulations ensure that no private persons will discharge treated effluent to surface waters, and that any discharge to ground will occur in a permitted and approved liquid waste disposal system;
- By restricting each property owner's treatment, storage and disposal of the liquid wastes it generates to the property on which the wastes are generated (20.7.3.2019G) NMAC), the Regulations not only ensure personal accountability and incentive to do so safely, but protect off-site properties and neighbors against the hazards of contamination;
- By restricting the maximum volume and daily rate at which each on-site liquid waste system can treat and discharge treated effluent to ground (20.7.3.7(L)(5) and 20.7.3.302(C) NMAC), the Regulations reduce the risk and extent of contamination through treatment malfunction and neglect or excessive daily discharges of treated effluent;
- By requiring minimum treatment standards based on each property's specific site conditions (20.7.3.201(F)), the Regulations reduce the hazard of contaminant release to soils and groundwater and protect public health; and
- By requiring minimum setbacks (20.7.3.302 NMAC), minimum disposal areas (20.7.3.703 NMAC), minimum clearance distances (20.7.3.303), minimum soil and lot size conditions (20.7.3.301) and restricting the maximum daily rate at which discharges can be made to each disposal field (20.7.3.7(L)(5), 20.7.3.201(Q)(3)(f), 20.7.3.302(C) NMAC), the Regulations further reduce the hazard of contaminant release to soils and groundwater and protect public health.

A. The Three Alternatives for Discharge of Untreated Liquid Waste

Pursuant to 20.7.3.201(B) NMAC, “[n]o person shall discharge untreated liquid waste except into a permitted and approved enclosed system, a permitted and approved liquid waste treatment unit or a public sewer system.” In short, 20.7.3.201(B) NMAC prohibits any discharge by any person of untreated liquid waste except to one of the three enumerated alternatives. This blanket prohibition against discharge of untreated liquid waste applies to all persons and discharge volumes without exception, and limits the permissible alternatives for such discharges to:

1. A permitted and approved “enclosed system,” as defined in the regulations.¹¹
2. A permitted and approved “liquid waste treatment unit,” also defined in the regulations.¹²
3. A public sewer system.

Thus, if a liquid waste generator wishes to discharge its liquid waste to on-site soils, 20.7.3.201(B) NMAC restricts the discharger to one choice only: one or more permitted and approved on-site liquid waste systems located on the lot where the waste is generated, which by regulatory definition, limits each “liquid waste system” to no more than 5,000 gpd or less of liquid waste. By definition, a “liquid waste system”

means a liquid waste treatment unit or units and associated disposal systems, or parts thereof, serving a residential or commercial unit; liquid waste systems include enclosed systems, holding tanks, vaults and privies but do not include systems or facilities designed to treat or receive mine or mill tailings or wastes.

20.7.3.7(L)(6) NMAC. A “liquid waste treatment unit”

means a component of the on-site liquid waste system where removal, reduction or alteration of the objectionable contaminants of wastewater is designed to occur; it may include a holding component but does not include soil.

20.7.3.7(L)(7) NMAC.

B. The Two Alternatives for Disposal of Treated Liquid Waste

Under 20.7.3.201(C) NMAC, “[n]o person shall discharge effluent from a liquid waste treatment unit except through a permitted and approved liquid waste disposal system or to a

¹¹ 20.7.3.7(E)(6) NMAC defines “enclosed system” as “a watertight on-site liquid waste system that does not discharge to the soil, including, but not limited to, holding tanks and lined evapotranspiration systems.”

¹² 20.7.3.7(L)(7) NMAC defines “liquid waste treatment unit” as a component of the on-site liquid waste system where removal, reduction or alteration of the objectionable contaminants of wastewater is designed to occur; it may include a holding component but does not include soil.” Part 20.7.3.7(O)(3) NMAC defines “on-site liquid waste system” as “a liquid waste system located on the lot where the liquid waste is generated.”

permitted public sewer system.” Part 20.7.3.201(C) NMAC prohibits any discharge by any person of effluent from the treatment unit of an on-site liquid waste system except to one of the two enumerated alternatives. Of the two alternatives, the only alternative for on-site disposal of liquid waste is discharge to an on-site liquid waste disposal system.

The blanket prohibition of 20.7.3.201(C) NMAC against discharge of effluent from an on-site liquid waste treatment unit applies to all persons without exception, and limits the permissible alternatives for such discharges to:

- i. A permitted and approved liquid waste disposal system,¹³ or
- ii. A permitted public sewer system.

C. Individuated Responsibility of Each Property Owner

Part 20.7.3.201(A) NMAC specifically provides that every property owner “shall be responsible for the storing, treating and disposal of liquid waste generated on that property,” such that its treatment and disposal do not pose a public safety hazard. The Regulations also prohibit any person from introducing “hazardous household wastes, solvents, fertilizers, livestock wastes, vehicle and equipment wash water or other materials of a composition or concentration not generally considered liquid waste as defined in 20.7.3 NMAC” into an on-site liquid waste system. 20.7.3.304(A) NMAC.

By establishing the responsibility of each property owner for the safe treatment and disposal of liquid wastes generated on its property, 20.7.3.201(A) NMAC provides the legal basis by which each property owner that generates such wastes can be held legally accountable for the

¹³ 20.7.3.7(D)(5) NMAC defines “disposal system” as “a generally recognized system for disposing of the discharge from a liquid waste treatment unit and includes, but is not limited to, seepage pits, drainfields, evapotranspiration systems, sand mounds and irrigation systems.” Because a liquid waste treatment unit is restricted by definition to 5,000 gpd or less of influent, the associated disposal system is also necessarily restricted to 5,000 gpd or less of effluent discharge.

safe treatment and disposal of the wastes generated on its property or any violation of NMED's regulations or permits. It also provides the basis by which waste generators can be held accountable for violations of 20.7.3.304(A) NMAC, which prohibits the introduction of household hazardous wastes, solvents, fertilizers, livestock wastes, vehicle and equipment wash water or other materials not generally considered liquid waste into an on-site liquid waste system.

D. Disposal Must Occur Wholly Within the Lot That Generates the Waste to Be Disposed

Part 20.7.3.201(G) NMAC specifically provides that “[a]n on-site liquid waste system ***shall be located wholly on the same lot***, which is the site of the source or sources served by the on-site liquid waste system.” (Emphasis added). Thus, the treatment and/or disposal of liquid waste generated on one property cannot be aggregated across multiple properties or transferred for treatment, storage or disposal to off-property locations.

By requiring on-site liquid waste treatment and disposal systems to be located on the property from which the subject waste is generated, 20.7.3.201(G) NMAC:

- i. Establishes and implements the fundamental principle that the risk associated with on-site treatment and disposal of liquid waste must be allocated to the property generating such wastes and that the treatment and on-site disposal of those wastes must be scaled to the particularized needs and constraints of that property;
- ii. Facilitates rapid, precise tracing of discharge violations or system malfunctions; and
- iii. Enhances accountability for safe disposal practices, and prevention of hazards to public health and the environment.

E. No On-Site Liquid Waste System May Receive More Wastewater Than 5,000 gpd

Part 20.7.3.7(L)(5) NMAC defines “liquid waste” as wastewater generated from any residential or commercial unit where the total wastewater received by a liquid waste system does not exceed 5,000 gallons per day or less; a “liquid waste system” as a liquid waste treatment unit

or units and associated disposal systems or parts thereof; and a “disposal system” as a generally recognized system for disposing of the discharge from a liquid waste treatment unit, including, but not limited to, seepage pits, drain fields, evapotranspiration systems, sand mounds and irrigation systems.¹⁴

No on-site liquid waste treatment or disposal system may receive more than 5,000 gpd of liquid waste influent or effluent.¹⁵ By restricting the rate of wastewater influent to 5,000 gpd or less for each on-site treatment unit and disposal system, NMED’s Liquid Waste Regulations simplify system design and maintenance, reduce hazards by reducing the scale of any malfunction or mishap,¹⁶ prevent overloading of the aquifer in one location and saturation of disposal fields, prevent resulting contamination of soils, surface and ground water, and reduce the hazards that system failures, malfunctions or adverse weather can cause. For example, an unexpected shut down of a secondary or tertiary system can quickly result in an aggregate flow of untreated wastewater that overwhelms any on-site storage or removal capacity. Alternatively, effluent discharges in excess of 5,000 gpd can quickly saturate or overload the capacity of on-site disposal fields to receive, cleanse and filter such effluents.

¹⁴ The September 2005 version of 20.7.3.7 NMAC defined “liquid waste” as “the discharge of wastewater from any residential or commercial unit where the total wastewater discharge on a lot is 2000 gallons per day or less.”

¹⁵ Pursuant to 20.7.3.201(O) NMAC, “[e]ligibility for permitting under 20.7.3.2 NMAC, which restricts effluent flow to 5,000 gallons per day or less, shall be determined as follows:”

- i. for residential units by calculating 80% of the wastewater design flow for each single family unit in accordance with NMAC 20.7.201(P); or
- ii. for residential and nonresidential sources based on Table 201.1; or
- iii. for residential and nonresidential sources based on professional engineering calculations; or
- iv. actual effluent flow meter data.

¹⁶For example, a 10-day shutdown of a treatment facility that discharges 30,000 gallons of effluent per day would aggregate 300,000 gallons of untreated liquid waste, far beyond the on-site holding or storage capacity of the Resort.

F. Lots Generating Liquid Wastes More Than 5,000 gpd Must Install Multiple On-Site Liquid Waste Systems

While the capacity of an on-site system for treatment and disposal of liquid wastes cannot exceed 5,000 gpd per system, 20.7.3.302(C), (E) and (F) NMAC make clear that lots generating greater than 5,000 gpd of liquid waste may install multiple on-site liquid waste systems, each with an actual design flow of 5,000 gpd or less, to treat and dispose of such wastes. However, as the Regulations also make clear, each such system must be located wholly within the lot generating the wastes it treats and discharges (20.7.3.201(G) NMAC); each system's associated disposal system must be setback from every other disposal system by a distance specified in 20.7.3.302(C) NMAC;¹⁷ and effluent may not be discharged at a rate greater than 5,000 gpd to any single disposal system (20.7.3.302(C) NMAC).¹⁸

G. Part 20.7.3.302(C) NMAC Makes Clear That the Regulations' 5,000 gpd Limitation Merely Restricts the Permissible Volume and Rate at Which Liquid Waste Can be Treated in a Single On-Site Liquid Waste Treatment Unit and Discharged in its Associated On-Site Disposal System.

As set forth in 20.7.3.301 NMAC, the suitability of lots for on-site disposal of liquid waste is determined based on a lot-by-lot assessment of the lot's total wastewater design flow, the lot's size and the lot's site-specific hydrogeologic conditions to determine what hazard on-site discharge would pose to surface and groundwater. In determining whether a system whose design flow exceeds the minimum required acreage for such flows may nonetheless be permitted, 20.7.3.301(F) NMAC sets out the following hydrogeologic considerations:

- Groundwater does not exist;

¹⁷ Applying the formula specified in 20.7.3.302(C) NMAC, the calculated minimum required separation distance between two 5,000 gpd disposal fields is approximately 745 feet: $[\sqrt{((5,000 \text{ gpd} \times 87.12)/3.1416)} = 372.364] \times 2 = 744.728$.

¹⁸ The September 2005 version of Part 20.7.3.302 NMAC did not contain subsections (C), (D) or (E) and had no express setback provision for multiple on-site waste-water treatment systems on a single lot.

- The uppermost groundwater contains a total dissolved solids concentration greater than 10,000 milligrams per liter;
- The uppermost groundwater occurs under confined conditions;
- The uppermost groundwater occurs at a depth between 400 and 600 feet with one or more geologic strata in the vadose zone that may act as a capillary barrier; and
- The uppermost groundwater occurs at a depth greater than 600 feet.

H. Minimum Treatment Levels Based on Site Conditions

In accordance with 20.7.3.605 NMAC, the level of wastewater treatment that will be required to permit a given liquid waste treatment unit is based on the most restrictive combination of the lot's siting conditions:

- Soil Type (may require secondary treatment and disinfection);
- Depth of Suitable Soil (may preclude any discharge);
- Hydraulic Loading and Lot Size (discharges greater than 500 gpd/acre require tertiary treatment); and
- Reduction in Setback Distance to Drinking Well (requires tertiary treatment and disinfection).

Natural soils having gravel content >30% are not suitable for use as disposal fields. NMAC 20.7.3.703(I).

I. Minimum/Maximum Area of Disposal Field

Part 20.7.3.703 NMAC establishes a minimum required absorption area for disposal fields using conventional treatment systems. The minimum required ground surface absorption area is calculated by multiplying the system's design flow rate by an application rate determined by the drain field's soil classification:

- i. For coarse sand or <30% gravel, the application rate requires a minimum of 1.25 square feet of disposal area per gallon of daily discharge

- ii. All other soil types require at least 2.0 square feet of disposal area per gallon of daily discharge

Thus, by way of example, a liquid waste system with a design flow of 5,000 gpd and a disposal field with coarse sand or <30% gravel would require an absorption area of $(1.25 \text{ sf} \times 5,000 \text{ gpd}) = 6,250$ square feet of surface area. All other soil types would require a disposal field of 10,000 square feet of surface area.

The minimum area required for disposal of effluent from a conventional treatment system may be reduced by up to 30% for effluent produced from secondary and tertiary treatment systems. “In no case shall the maximum reduction for the drain field absorption area exceed 30%.” 20.7.3.703(M) and 20.7.3.701(E) NMAC. Again, by way of example, a 30% reduction in a 6,250 square foot disposal field required for a 5,000 gpd conventional treatment system would result in a minimum 4,375 square foot disposal field required for a 5,000 gpd secondary or tertiary treatment system $(6,250 \times 0.70 = 4,375)$.

J. Minimum Clearance

Pursuant to 20.7.3.303(B) NMAC, no conventional on-site liquid waste system shall discharge liquid waste into the soil where the vertical clearance from the bottom of the absorption area to the seasonal high groundwater table is less than four feet of suitable soil. A reduction in clearance may be allowed with appropriate advance treatment or alternative disposal.

K. Minimum Setbacks

Part 20.7.3.302 NMAC establishes minimum setback requirements for various elements of waste treatment and disposal systems, including 100 feet from any private drinking or irrigation well, 200 feet from any public drinking well and 100 feet from any watercourse other than an arroyo. Under the current application, the proposed drain field appears to be within 100 feet of the

Little Tesuque Creek and its distance from surrounding drinking and irrigation wells has not been disclosed.

L. Minimum Setbacks for Lots with Multiple Disposal Fields

Pursuant to 20.7.3.302(C) and (F) NMAC, lots generating total design flows greater than 5,000 gpd may be permitted to install multiple liquid waste systems, each with an actual design flow of 5,000 gpd or less, provided the disposal systems are set back from each other “by a distance equal to the sum of two radii of adjacent circular areas, each circle representing certain boundaries of a disposal system,” using the formula $r = \sqrt{(A/\pi)}$ where $A = \text{design flow} \times 87.12$. Thus, two drain fields each having 5,000 gpd design flows would require a separation of approximately 745 feet:

i. $(5,000 \text{ gpd} \times 87.12/3.1416) = 138,655$

ii. $\sqrt{138,655} = 372.36$

iii. $372.36 \times 2 = 745$

M. More Stringent Requirements If Necessary to Prevent Hazard to Public Health or Degradation of Body of Water

NMAC 20.7.3.201(L) provides:

Nothing contained in 20.7.3 NMAC shall be construed to prevent the department from requiring compliance with more stringent requirements than those contained herein, where the department finds that such more stringent requirements are necessary to prevent a hazard to public health or the degradation of a body of water.

Pursuant to 20.7.3.7(D)(1) NMAC, “‘degrade a body of water’ means to reduce the physical, chemical or biological qualities of a body of water and includes, but is not limited to, the release of material that could result in the exceeding of standards established by 20.6.4 NMAC, Standards for Interstate and Intrastate Surface Waters, by 20.6.2 NMAC, Ground and Surface Water Protection, and by 20.7.10 NMAC, Drinking Water. When determining if a body of water is vulnerable to degradation from liquid waste effluents, and whether more stringent requirements

may be necessary to prevent such degradation, 20.7.3.201(L) NMAC identifies the following parameters for consideration:

- i. “a water-table aquifer (includes both unconfined and semi-confined conditions) with a vadose zone thickness of 100 feet or less containing no soil or rock formation that would act as a barrier to saturated or unsaturated wastewater flow”;
- ii. “sites within 1/4 mile of a known groundwater plume of anthropogenic anoxic or nitrate contamination caused by migration through undisturbed vadose zone, provided that the site overlies the same aquifer”;
- iii. “an aquifer overlain by fractured bedrock”;
- iv. “an aquifer in karst terrain”; and
- v. “a gaining stream or other body of water adversely affected by nutrients from liquid waste systems.”

N. Applicable Regulations

NMAC 20.7.3.201(K) provides:

Existing on-site liquid waste systems shall meet the regulations in effect at the time of their initial installation or subsequent modification or the current regulation, whichever is less stringent, unless otherwise noted in this regulation.

FACTUAL BACKGROUND

Protect Tesuque's knowledge of the facts surrounding NMED's communications and dealings with the Resort's discharge activities, its permitting of those activities and its enforcement and non-enforcement of past permit and discharge violations has been hamstrung by NMED's ongoing failure or inability to produce the records requested in November, as well as the Resort's refusal to provide any of its records regarding all such activities.

On February 4, 2025, one day prior to the filing of this Motion, NMED provided additional documents and stated, “This will complete the records NMED has in response to your November 6, 2024 IPRA request.” As a result, Protect Tesuque's summary of the factual background is based

on publicly available documents in the County records and photographs and notes taken from Protect Tesuque's limited review of selected documents at the NMED offices that Protect Tesuque was not allowed to copy.

I. The Resort's Subdivision

A. December 2002 Subdivision Disclosure Statement

On December 11, 2002, a Disclosure Statement for Bishop's Lodge Hills Subdivision was recorded in Book 2286, Page 328 on behalf of the Bishop's Lodge Resort Communities, LLC, the subdivider. The Disclosure describes a County-approved plan to create 48 single family lots and 3 tracks with 34 condominium units. The Disclosure indicates that water and sewer will be provided by Bishop's Lodge Water and Sewer Co., LLC, and that all utility mains will be installed by December 2006. *See* December 2002 Disclosure Statement, attached as **Exhibit 2**.

Liquid waste from each lot will be conveyed by sewer line to the Bishop's Lodge wastewater treatment plant located near the main entrance for the Bishop's Lodge Resort. The plant is an extended air, activated sludge facility, with an associated constructed wetlands. The treated effluent is used to irrigate much of the landscaping for the Bishop's Lodge Resort.

A September 11, 2000 letter to the County of Santa Fe from the Santa Fe-Pojoaque Soil and Water Conservation District, also attached to the Disclosure Statement, states: "The District does have concerns about the slopes and soils that will be the foundation for construction at the site. The soil report indicates the soils present on this site have severe limitations for septic use and maybe cost prohibitive to the buyer due to costly installation of an alternative septic system. This statement should be listed in the Disclosure Statement for this property." *See* **Exhibit 1**.

B. December 2002 Declaration of Covenants, Conditions and Restrictions

A Declaration of Covenants, Conditions and Restrictions for the Bishop's Lodge Hills Subdivision was recorded on December 11, 2002 as Instrument 2286348. *See* December 2002 Declaration of Covenants, Conditions and Restrictions, attached as **Exhibit 3**.

Section 4.1.1 states: "The Association is responsible for the operation and maintenance of all Common Amenities, Common Roads, Common Facilities, the Community Water System and the Community Sewer System." Section 4.2.2 states: "The Single Family Residential Lots and Units are served by, and must connect to, the Community Water System and Community Sewer System serving the Subdivision."

Section 4.2.3 states: "Sanitary sewer service lines connected to sewer mains with Common Roadways or utility easements and all grinder pumps shall be owned by the Lot Owner served by such service lines and grinder pumps from the point of connection at the sewer main to the residence. Lot owners are responsible for the cost of installing and maintaining all such service lines and all grinder pumps." Finally, Section 1.155 defines "Community Sewer System" as "the sewer system operated by Bishop's Lodge Water and Sewer Co. LLC, a New Mexico limited liability company."

C. January 2004 Subdivision Disclosure Statement

A January 22, 2004 Disclosure Statement, replaces the December 11, 2002 Disclosure Statement. It indicates that water and sewer will be provided as part of the monthly Homeowners Association fee under a shared facilities agreement with the hotel owner. *See* January 2004 Subdivision Disclosure Statement, attached as **Exhibit 4**.

The Disclosure repeats the December 11, 2002 statement regarding liquid waste disposal, then adds a requirement for approval by the Homeowners' Association of the manufacture, location

and installation of the low-pressure grinder pump system required for certain lots. “NOTE: No other liquid waste disposal system may be used in a development other than the system approved by the Homeowners’ Association.” **Exhibit 4 ¶ 25.**

The Shared Facilities Agreement contemplated that all lots would ultimately be connected to a governmental sewer system. Section 6.3, entitled “Reserves,” states (emphasis added):

The annual budget shall establish an amount to collect for Reserves being the anticipated replacement, expansion, remediation, and repair, of the Water System and Sewer System components at the end of their useful life and ***for reconnecting the Association and Association Members to a governmental system as provided in Article 8.*** VEF shall establish and maintain a separate account or accounts for Reserves.

See Shared Facilities Agreement, attached as **Exhibit 5.**

II. Prior NMED Permits

According to NMED’s February 14, 2011 discharge permit, NMED’s original DP-75 discharge permit was issued on July 11, 1979, then subsequently modified and/or renewed on February 20, 1984, April 10, 1989, January 18, 1994, February 19, 1999, December 6, 2004, and February 14, 2011. Copies of most of the permits issued to the Resort, or any of the records relating to their review and approval, have not been made available to Protect Tesuque, Inc. pursuant to its outstanding IPRA requests.

The 2011 permit allowed the Resort to use a wetlands system for liquid waste treatment and disposal. The 2011 permit noted that the Resort’s discharge contains water contaminants or toxic pollutants which may be elevated above the standards of 20.6.2.3103 NMAC. The permit included a “Closure Plan” that addressed closure of the facility, including removal of all lines to the treatment system, disposal areas and land application areas so a discharge can no longer occur, drain or evaporation of all liquids from all treatment units, ornamental ponds and wetland cells,

disposal of sludge in accordance with all local, State and federal regulations, and removal of all tanks. It is unclear whether and when this was expected to occur.

Subsequent to the issuance of the 2011 permit, the Resort engaged in numerous acts of non-compliance. On May 5, 2016, NMED informed Richard Holland on behalf of the Resort that its February 14, 2011 Discharge Permit had expired and that no renewal application had been timely filed to continue the permit. The Resort operated its disposal system with no permit until 2019, when it belatedly filed its renewal application.

On July 12, 2018, long after the Resort's 2011 permit had expired, NMED informed the Resort of the following permit violations:

- i. Nitrogen levels in the effluent discharged from the constructed wetlands has exceeded permit limitations;
- ii. The permittee has failed to implement the required contingency plan or submit the required corrective action plan;
- iii. The permittee has failed to submit the required closure plan for the two wetland cells in March 2018, and failed to perform the required sludge characterization or disposal site validation; and
- iv. The permittee has continued to operate its treatment and disposal facility more than two years after its 2011 permit expired without renewal of its permit

Although the Resort apparently engaged in some form of corrective action, on August 24, 2018, NMED informed the Resort that corrective actions taken to date by the Resort have been insufficient to correct deficiencies in the treatment process for control of total nitrogen in effluent.

On June 6, 2019, in response to NMED's Notice of Violation, the Resort admitted that it hauled several loads of mud, dirt, plant material and cattails to the Pojoaque Pueblo's landfill. "According to the hauling receipts HRV provided the GWQB, six hauling companies and a 'little white truck' hauled approximately 147 loads of sewage sludge and other materials" to the Pueblo. The sewage sludge was not taken to the Santa Fe County transfer station at the Pueblo, or the

Pueblo's wastewater treatment plant. "Instead, they dumped the waste materials on open ground inside a fenced and gated area of land belonging to the Pueblo." According to the Pueblo, on July 23, 2018, NMED's Surface Water Quality Bureau also issued a Notice of Violation to the Resort for disposal of "cut tree limbs, branches and green waste, trash, broken plastic pipe and black liner, and suspect sludge" in the Little Tesuque Creek, adjacent to the Bishop's Lodge property.

III. NMED's September 16, 2024 Draft Water Quality Discharge Permit DP-75

NMED's September 16, 2024 Draft Discharge Permit would allow the Resort to collect untreated wastewater from 49 separately owned single family residential lots and 33 separately owned condominium units in the Hills and Villas subdivision and combine that liquid waste with untreated liquid waste from the Resort's multiple restaurant, spa, maintenance and hotel facilities to produce a combined waste stream of up to 30,000 gpd. That untreated liquid waste is then piped to a liquid waste treatment unit located at the northern (downstream) edge of the Resort's property near the Little Tesuque Creek.

The eighty-three (83) separately owned residential lots and condominium units from which the Resort collects liquid waste are located on the northeastern foothills above the Resort at elevations ranging from 400 to 700 feet above the proposed disposal field and the Little Tesuque Creek. The Resort itself is located at elevations 50 to 350 feet above the disposal field.



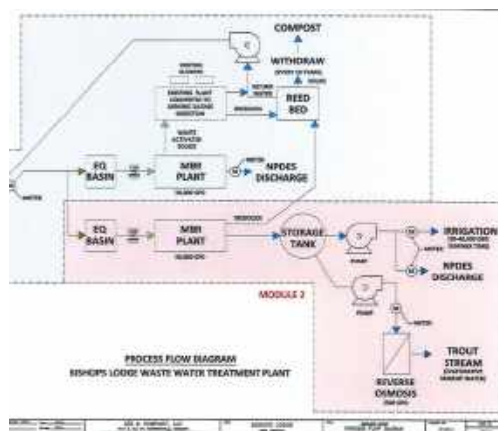
While the Resort is thus acting as though it were a public utility that collects, aggregates, treats and disposes to ground the combined liquid wastes from scores of private residences, it is not a licensed or permitted public utility. Nor would a public utility ever be allowed to site a POTW at the headwaters of a pristine watershed, especially at such a vulnerable point, namely, precisely where the watershed first leaves the Santa Fe National Forest and Hyde State Park to feed and recharge the watershed's alluvial aquifers that supply hundreds of pre-existing downstream drinking and agricultural wells. For centuries, thousands of residents immediately below the Resort and its subdivision have used and continue to use and consume the water produced by those downstream wells.

NMED's Draft Permit makes no findings regarding the hazards to public health or the environment created by aggregating the liquid wastes of 84 separately owned residential and commercial properties; no findings regarding the identity and concentrations of contaminants present in the Resort's untreated aggregated liquid waste; no findings regarding the hazards of such contaminants; and no findings regarding the hazards of treating the Resort's aggregated 30,000 gpd liquid waste stream in a single liquid waste treatment unit.¹⁹

The Resort's single liquid waste treatment unit would utilize micro-organisms in a membrane bioreactor to breakdown and convert organic contaminants in its liquid waste influent to simpler compounds. It would then subject the resulting liquid waste stream to membrane filtration to remove suspended solids, bacteria and certain other contaminants. Following biological treatment and membrane filtration, ultraviolet disinfection would be applied to remove certain pathogens.

¹⁹ The Resort's permit application envisions a second phase discharge permit that would expand the rate of liquid waste treatment and discharge from 30,000 gpd to 60,000 gpd, and the size of disposal field from 2,500 square feet to 5,000 square feet.

Notably, a process flow diagram submitted by the Resort to the County of Santa Fe reveals its plan to add a final reverse osmosis treatment step for effluent discharged to its trout stream, but not for effluent discharged to the disposal field or used for irrigation. See figure below.



NMED’s Draft Permit would require effluent produced by the treatment process not to exceed stated limits for Total Nitrogen, E. coli bacteria, Biological Oxygen Demand (BOD), Turbidity and UV Transmissivity.²⁰ Quarterly effluent samples must be tested for Total Kjeldahl Nitrogen (TKN), Nitrate (NO₃-N) and Chloride (Cl).²¹ The Draft Permit sets no allowable limits for any of those three compounds other than the limit set in Condition 10 for Total Nitrogen, and sets no limits on the presence or concentration of any other contaminant.²²

NMED’s Draft Permit makes no findings regarding the identity or concentration of contaminants present in the Resort’s treated effluent, nor does it impose any obligation on the Resort to test for, identify and analyze the concentration of contaminants in effluent beyond the contaminants listed in Conditions 10 and 40. The Draft Permit finds that “the discharge from this Facility has the potential to contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC” but the Draft Permit makes no findings as to what those

²⁰ Draft Permit Condition 10.

²¹ Draft Permit Conditions 40 and 41.

²² Draft Permit Conditions 40 and 41.

contaminants are and imposes no requirement or condition to monitor and test pre-discharge effluent for their presence.

Up to 30,000 gpd of treated effluent would be used either for irrigation of approximately three acres of the Resort's property during summer months, or piped to and discharged under pressure into a single 2,500 square foot disposal field during the remaining months. The disposal field is located on highly transmissive alluvial soils situated less than 100 feet from the Little Tesuque Creek within a FEMA flood zone. The seasonal high-water table beneath the disposal field is reportedly eight feet below ground surface, and four feet below the bottom of the drain field.

The Draft Permit makes no findings regarding the nature or condition of the soils beneath or around the disposal field, their transmissivity, their ability to receive, retain or release the cumulative daily loading of 30,000 gpd of effluent discharged under pressure, or the effectiveness with which the disposal field's soils will contain, retard or release the contaminants it would receive from such cumulative daily discharges. The Draft Permit makes no findings regarding the depth of ground water aquifers beneath and downstream from the disposal field, their extent and hydrologic condition or their interaction with the soils in and around the disposal field. The Draft Permit makes no findings regarding the rates of effluent percolation under pressurized and potential flood conditions, the rate and extent to which effluent discharged into the disposal field can migrate to underlying and adjacent soils, ground water, or aquifers, or the impacts that cumulative, long-term discharges of effluent under pressure that can have on the Little Tesuque Creek, downstream aquifers and wells, and the drinking water they provide.

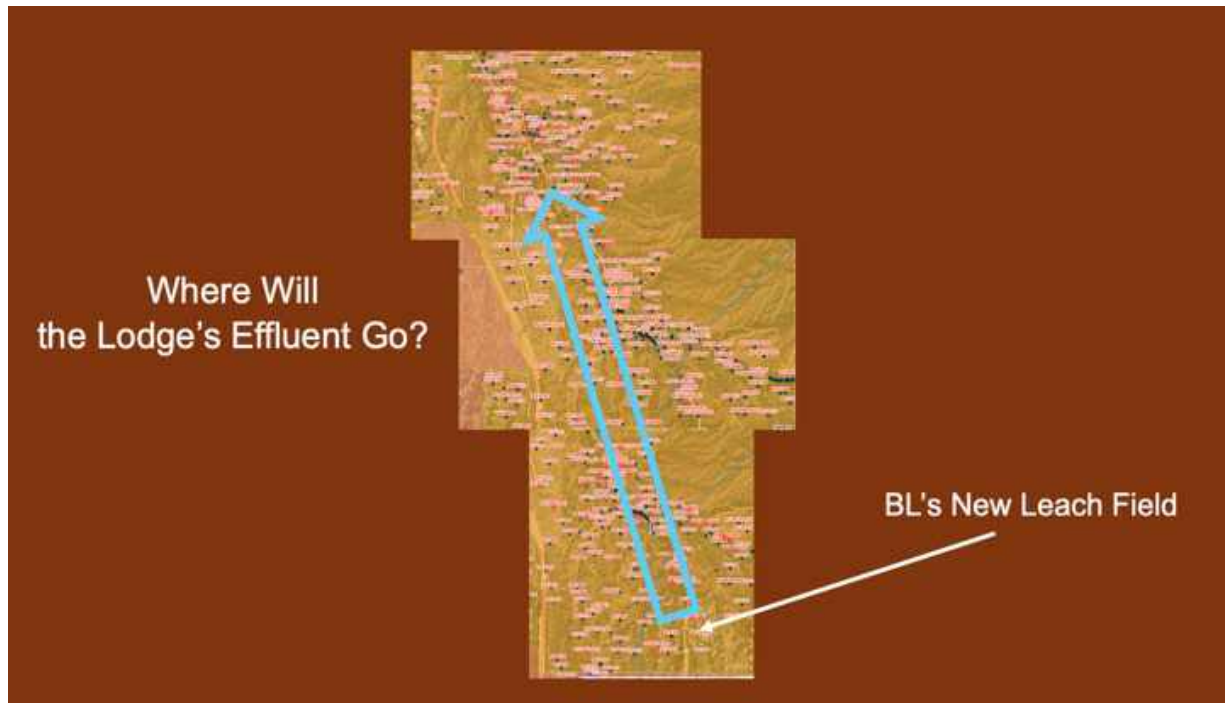
The location chosen for installation of the Resort's disposal field is perhaps the most hazardous possible location anywhere on the Resort's property for such voluminous daily discharges of pressurized liquid waste effluent to ground.

The Resort and the Bishop's Lodge Hills Subdivision are situated at the base of the Little Tesuque Basin along the Little Tesuque Creek. The Little Tesuque Creek drains a steep watershed formed by the Sangre de Cristo mountains (elevation 11,000 to 12,000 feet asl) and Hyde State Park (elevation 8,000 feet to 10,000 feet asl), along a narrow, winding ravine whose creek bed enters the Resort's property at an elevation of approximately 7,400 feet and exits the property north of Bauer Road at an elevation of approximately 7,090 feet. The Resort is situated within a hydrogeological bowl formed by 7,700 foot high foothills to the east, 7,600 foot high foothills to the south and southeast, and 7,400 foot high foothills to the southwest and west and northeast.

The bowl created by the surrounding foothills acts much like a funnel, with the Little Tesuque Creek acting as the drain for that funnel. As shown by the expanded Google Earth image below, the proposed disposal field is situated at the neck of that funnel. The funnel collects water from the Sangre de Cristo mountains, Hyde State Park and the elevated foothills surrounding the Resort and Little Tesuque Creek. Surface and ground water from the surrounding hills to the northeast, east, south and west drain to and converge at the leach field's location adjacent to the Little Tesuque Creek, from which surface and ground water flows northwest to downstream aquifers and hundreds of private drinking and agricultural wells.



The potentiometric surface across the Resort's property likely forms a steep conical gradient within the funnel toward the disposal field and from there generally northward along the path of the Little Tesuque Creek toward hundreds of private drinking and agricultural wells. Situated immediately downgradient of the Resort's property, these private wells supply drinking and agricultural water for thousands of downgradient residents. The composite graphic below is taken from the on-line website of the Office of State Engineer (OSE) ([OSE Website](#)). It shows the locations of many of the recorded private wells registered with the OSE, their proximity to the Resort's disposal field, and the northward direction of groundwater flow along the path of the Little Tesuque Creek.



While the Draft Permit requires quarterly water samples from one upgradient and three downgradient monitoring wells to be tested for TKN, NO₃-N, Total Dissolved Solids (TDS) and Cl,²³ no limits are set on the allowable presence of these analytes in well samples other than the total nitrogen limit set in Condition 10.

The Draft Permit includes no requirement to test groundwater samples for the presence of contaminants other than the four (4) analytes listed in Condition 31, or the procedures by which any such testing must be performed and reported. According to the Draft Permit's contingency plan, however, if ground water monitoring indicates ground water exceeds a 20.6.2.3103 NMAC water quality standard, the Draft Permit requires collection of a confirmatory sample from the same monitoring well within 15 days of receipt of the initial sampling results.²⁴ If confirmed, the

²³ Draft Permit Condition 31.

²⁴ Draft Permit Condition 43.

Resort must submit a corrective action plan and implementation schedule to NMED within 60 days.

No other testing of treated effluent or monitoring well samples is required. Whatever other contaminants the Resort's influent, effluent or groundwater may contain is apparently of no concern to NMED. But it is of deep concern to surrounding residents who rely on the waters beneath the Resort and its leach field for the water they drink. And it should be of deep concern to responsible public health authorities.

ARGUMENT

I. Summary of Argument

The Liquid Waste Regulations require multiple prophylactic steps in combination with one another to prevent and contain unanticipated hazards to human health and contamination that can result from on-site liquid waste systems. They establish personal responsibility of lot owners for the safe treatment and disposal of the liquid wastes their lots generate. 20.7.3.201(A), (B) and (G) NMAC. Private liquid waste generators who wish to dispose of their liquid wastes to ground must do so through a permitted and approved liquid waste treatment unit and a permitted liquid waste disposal system. 20.7.3.201(B) and (C) NMAC.

NMED's Draft Permit violates virtually all of the fundamental hazard prevention mandates the Liquid Waste Regulations require:

1. The permitted treatment and disposal plan conforms to NONE of the three permissible options the Liquid Waste Regulations allow for discharge of *untreated* liquid waste, and NEITHER of the two permissible options the Regulations allow for discharge of *treated* liquid waste.

2. By collecting the liquid waste generated by 83 privately owned lots and condominium units, the permitted treatment and disposal plan circumvents and nullifies the personal accountability that 20.7.3.201(A) NMAC imposes on each lot owner for the safe on-site treatment, storage and disposal of the wastes generated on its property.
3. By permitting the aggregation of liquid wastes from 84 separate properties, the transport of 30,000 gpd of that aggregated waste to a single treatment and disposal system for on-site treatment and discharge to ground the Draft Permit:
 - a. Violates the Liquid Waste Regulations' requirement to localize and contain the on-site treatment and disposal of liquid wastes to the property that generates them; and
 - b. Exceeds and violates the maximum daily liquid waste treatment and discharge rates that apply to every on-site treatment unit and disposal system for on-site discharge of liquid waste.
4. By discharging up to 30,000 gpd of treated effluent into a single 2,500 square foot leach field that is located within 100 feet of Little Tesuque Creek and eight feet above the seasonal high water table in a FEMA flood zone, the Resort would:
 - a. Discharge its effluent into a disposal field that is ten (10) times smaller than the Regulations require;
 - b. Discharge its effluent at a daily discharge rate that is six (6) times greater than the Regulations permit; and
 - c. Violate the mandatory minimum number of disposal fields, minimum absorption area, minimum setbacks, and minimum soils conditions the Regulations require for permitted disposal fields.

The fundamental safety constraints the Draft Permit violates were expressly adopted by the EIB to ensure that private treatment and disposal practices are appropriately sited, designed, operated and rate-limited to prevent contaminant release to ground and surface water. They form the basis for all of the other requirements of the Liquid Waste Regulations. For example, the regulations that govern alternative treatment systems are based on the premise that the rate of influent and effluent flow of each such system shall not exceed 5,000 gpd. Similarly, the regulations that govern disposal systems (such as suitable soils, minimum absorption areas, minimum clearance, maximum pipe lengths and setbacks) are also based on the premise that the rate of effluent released through such disposal systems shall not exceed 5,000 gpd and that each such disposal field will be appropriately sited and physically separated from every other disposal field.

By allowing the Resort to aggregate the liquid waste from 83 separate property owners along with its own waste, NMED is not only increasing the public health and environmental hazards the Liquid Waste Regulations were specifically adopted to prevent, but it is also exempting 83 separate property owners – the generators of the wastes to be treated and discharged – from the mandatory requirements and constraints imposed by the Liquid Waste Regulations on every generator of liquid waste. The 83 property owners from whose lots the wastes are collected and then transported off-site for off-site treatment and disposal to ground escape responsibility and accountability for the safe, on-site disposal of the wastes they generate. Additionally, by allowing the Resort to perform on-site treatment and disposal of liquid wastes collected from 83 other property owners under its discharge permit, the NMED is obviating any enforceable means to hold the 83 other waste generators accountable for compliance with 20.7.3.304(A) NMAC prohibitions

against disposal of hazardous wastes, contrary to the Regulations' stated objective to prevent all such hazards.

The Liquid Waste regulations were carefully crafted by the EIB to protect public health and the environment by allocating the hazard and risk of on-site liquid waste disposal to the property owner that generates the waste. In condoning the Resort's violation of the Regulations' allocation of that hazard and risk, the NMED is not just countermanding and nullifying the regulatory requirements adopted by the EIB, it is imperiously substituting its judgment for the judgment entrusted by the legislature to EIB alone. That it cannot do.

II. Standard of Review

Bishop's Lodge, as the permit applicant, has the burden of proving, by a preponderance of the evidence, that it met all criteria for a liquid waste discharge permit. 20.1.4.400 NMAC (the applicant has the burden of proof that a permit, license, or variance should be issued and not denied). This burden does not shift. *Id.*; *see also* Trial Handbook for New Mexico Lawyers § 9:1 ("It is almost universally held that the burden of proof or persuasion...does not shift. In the strict sense, the burden of proof remains with the party with the affirmative on an issue whereas the burden of going forward with the evidence may shift at various times from one party to the other as the respective parties produce evidence."). Under 20.1.4.200(D) NMAC, any party may file a motion seeking relief, which may be granted by the Hearing Officer. *See* 20.1.4.100(E)(2) NMAC.

Protect Tesuque Inc. requests that the Hearing Officer enter summary disposition of this matter because Bishops Lodge cannot meet its burden that it met all criteria for a liquid waste discharge permit. That is, the Liquid Waste Regulations were not applied to the permit application. Further, if the Regulations were applied, Bishops Lodge has failed to meet the Regulations' requirements. For the reasons set forth below, the Hearing Officer should find that: (1) the Liquid

Waste Regulations were not applied to the Resort's permit application; and (2) if applied, the Resort fails to meet the Liquid Waste Regulations' discharge requirements. As a result of this failure, the Hearing Officer should conclude that the permit should be denied.

III. The Liquid Waste Regulations Should Have Been Applied to the Resort's Permit Application.

A. The More Recently Enacted Statute Specifically Addressing Liquid Waste Governs.

The legislature enacted the Water Quality Act four years before the Environmental Improvement Act. *Compare* L. 1967, Ch. 190, § 1 (Water Quality Act) *with* L. 1971, Ch. 277, § 1 (Environmental Improvement Act). The Water Quality Act established the Water Quality Control Commission, which was tasked with establishing water quality standards and to generally prevent or abate water pollution. *See* NMSA 1978, § 74-6-3 through - 4 (1967, as amended and recompiled through 2019). However, four years later, the Legislature enacted the Environmental Improvement Act, which established the EIB and specifically mandated that the EIB promulgate rules and standards for the disposal of liquid waste. *See* NMSA 1978, § 74-1-7 through -8 (1971, as amended and recompiled through 2024). The stated purpose of the Liquid Waste Regulations is “[t]o protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and groundwater contamination ***from on-site liquid waste disposal practices.***” 20.7.3.6 NMAC.

The Legislature was certainly aware of the Water Quality Act when it enacted the Environmental Improvement Act and determined that the protections afforded by the Water Quality Act were insufficient to regulate the ever-changing composition of liquid waste. *See Jicarilla Apache Nation v. Rodarte*, 2004-NMSC-035, ¶ 15, 136 N.M. 630, 634, 103 P.3d 554, 558 (“[The New Mexico Supreme Court] presume[s] that the Legislature acts with full knowledge of, and consistent with, existing legislation.”). In these circumstances, where two statutes deal with a

related subject matter, the more recently-enacted statute must prevail. See NMSA 1978, § 12-2A-10(A) (“If statutes appear to conflict, they must be construed, if possible, to give effect to each. If the conflict is irreconcilable, the later-enacted statute governs.”).²⁵ Further, because the Liquid Waste Regulations specifically deal with a specific set of water contaminants – liquid waste – they govern and control over the more generally applicable regulations promulgated under the Water Quality Act. See *State v. Santillanes*, 2001-NMSC-018, ¶ 7, 130 N.M. 464, 467–68, 27 P.3d 456, 459–60 (“[I]f two statutes dealing with the same subject conflict, the more specific statute will prevail over the more general statute absent a clear expression of legislative intent to the contrary.”). This time-honored legal principle is based on the maxim *generalia specialibus non derogant*, requiring application of the more specific statute where two statutes address the same subject matter.²⁶

B. The Liquid Waste Regulations Do Not Exclude Dwellings and Establishments That Generate More Than 5,000 Gallons Of Liquid Waste Per Day.

Pointing to 20.7.3.2 NMAC, the Resort and NMED mistakenly contend that the mandatory requirements of the Liquid Waste Disposal regulations do not apply to dwellings, establishments or groups that generate more than 5,000 gpd of liquid waste, and that such large generators of liquid waste are exclusively regulated by the Water Protection Regulations adopted under the Water Quality Act. Both contentions are wrong as a matter of law. The first misconstrues a

²⁵ Likewise, “[i]f an administrative agency's rules appear to conflict, they must be construed, if possible, to give effect to each. If the conflict is irreconcilable, the later-adopted rule governs.” NMSA 1978, § 12-2A-10(B).

²⁶ In the current circumstances, the Ground and Surface Water Protection Regulations also recognize the special protections afforded by the Liquid Waste Regulations by providing that liquid waste discharges are not subject to notices of intent filed with the Ground Water Protection Bureau.

See 20.6.2.1201(A) NMAC (requiring any person intending to discharge water contaminants to file a notice with the GWQB “unless the discharge is . . . subject to the Liquid Waste Disposal Regulations . . .”). Thus, the Ground and Surface Water Protection Act acknowledge the conclusion that the Liquid Waste Regulations apply to all applications seeking approval to discharge liquid waste.

description of the rate-limiting means by which every generator of liquid waste who wishes to dispose of its wastes to ground must treat and discharge that waste. The second presumes a grant of exclusive jurisdiction to the Water Protection Regulations that simply does not exist.

Part 20.7.3.2(A) NMAC provides:

This part, 20.7.3 NMAC, applies to on-site liquid waste systems, and effluent from such systems, that receive 5,000 gallons or less of liquid waste per day, and that do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC or a national pollutant discharge elimination system (NPDES) permit.

As 20.7.3.2(A) NMAC plainly states, the Liquid Waste Regulations apply to the rate-limiting 5,000 gpd on-site liquid waste systems that the Regulations elsewhere require every dwelling, establishment or group to use for on-site treatment and disposal of the liquid wastes that a dwelling, establishment or group generates. *See* 20.7.3.201(B) and (C) NMAC. A dwelling, establishment or group that wishes to dispose of its liquid waste to ground must do so through one or more rate-limited liquid waste systems, each of which is designed and built to dispose of no more than 5,000 gallons of liquid waste per day. If a residential or commercial establishment generates more than 5,000 gallons of liquid waste per day, then multiple rate-limiting on-site liquid waste systems must be installed and approved for on-site disposal of that waste to ground. *See* 20.7.3.302(C) NMAC. If a large volume generator does not wish to use the rate-limiting systems the Liquid Waste Regulations require, then it can alternatively discharge its *untreated* liquid waste to a permitted enclosed system or to a public sewer system (20.7.3.201(B) NMAC), or it can dispose its *treated* liquid waste to a permitted public sewer system. 20.7.3.201(C) NMAC.

The contention that 20.7.3.2 NMAC limits the application of the Liquid Waste Regulations to dwellings and establishments that generate 5,000 gpd or less of liquid waste misconstrues the plain meaning of the provision and is simply non-sensical. The term “5,000 gpd” as used in 20.7.3.2 NMAC does not refer to the volume of liquid waste generated by a dwelling or

establishment. Rather, it refers to the rate-limited systems by which that waste must be treated and disposed to ground.

If, as the Resort and NMED apparently contend, the meaning and purpose of 20.7.3.2 were to exclude application of the Liquid Waste Regulations to liquid waste flows greater than 5,000 gpd, the 5,000 gpd limitation stated in 20.7.3.2 NMAC should refer to the volume of waste generated by a given property or generator, not the permitted system by which every dwelling and establishment is required to treat and dispose of the liquid waste it generates. As the Resort and NMED construe 20.7.3.2 NMAC, it should read: “This part, 20.7.3 NMAC, applies to ***dwelling, establishments and groups that generate*** 5,000 gallons or less of liquid waste per day....” The fact that the phrase “5,000 gpd” refers to the treatment and disposal system by which liquid waste is discharged – not the volume of waste generated by a dwelling or establishment – necessarily means 20.7.3.2 NMAC does not define the applicability of the Regulations by reference to the volume of waste generated, as the Resort and NMED erroneously contend. Rather, 20.7.3.2 NMAC defines the applicability of the Regulations by reference to the rate-limited systems by which every on-site discharger of liquid waste – both large and small – are required to treat and dispose of the liquid wastes they generate.

The effort to interpret the Liquid Waste Regulations' stringent engineering safeguards – and the Act that enables them – as though they were inapplicable to large volume generators of liquid waste is not just non-sensical; it is also absurd public policy. Dwellings and establishments that generate more than 5,000 gpd of liquid waste pose a greater environmental and public health hazard than smaller generators. Not only are large generators the generators whose on-site disposal practices are most in need of the stringent engineering safeguards the Regulations require, but they are explicitly covered by the Regulations, which require the use of multiple 5,000 gpd systems to

treat and dispose of on-site waste streams greater than 5,000 gpd. Interpreting the Regulations mandatory engineering safeguards as somehow inapplicable to the largest liquid waste generators whose practices pose the greater environmental and public health hazard would turn on its head the Environmental Improvement Act's express mandate to protect public health and the environment against the hazards of liquid waste disposal.

That mistaken interpretation is also directly contradicted by the Legislature's adoption of the Environmental Improvement Act four years after the Water Quality Act. If, as NMED and the Resort appear to contend, the Water Quality Act and its Water Protection Regulations have exclusive jurisdiction over liquid waste generators who treat and discharge more than 5,000 gpd, why did the Legislature enact the Environmental Improvement Act four years later, grant the EIB jurisdiction over the treatment and disposal of liquid waste without limitation on the volume of waste generated, and direct the EIB to adopt regulations for the treatment and disposal of all liquid waste of dwellings, establishments and groups? The fact that the Legislature determined that further specific regulation of liquid waste generators by the EIB was needed, and granted it the authority to do so without limiting the applicability of the regulations EIB adopted based upon the volume of waste generated or discharged, further demonstrates the fallacy of NMED's interpretation of the applicability of the Liquid Waste Regulations to small generators only.²⁷

That mistaken interpretation is also directly contradicted by the Water Quality Act and Water Protection regulations themselves, neither of which claim exclusive jurisdiction over large

²⁷ The fact that successive iterations of the Liquid Waste Regulations have altered the permissible daily rate of liquid waste treatment and discharge over the past fifty years demonstrates that the rate limitation is not and never has been a jurisdictional limitation on the applicability of the Regulations. The first limitation on the rate of treatment and discharge was imposed by the Regulations in the early 1970s and limited the rate to 2,000 gallons per day. The regulations have evolved over time, presumably to account for technological advancements in liquid waste systems. The Regulations currently allow each system to receive up to 5,000 gallons per day of liquid waste. Certainly, no one could seriously assert that the EIB had the authority under the Environmental Improvement Act to amend and expand its jurisdiction from 2,000 gallons per day to 5,000 gallons per day, without express authority under the Environmental Improvement Act to do so.

volume liquid waste generators. Indeed, as the Water Quality Act expressly states, it provides “additional and cumulative remedies” to prevent or abate pollution, not exclusive or preemptory remedies. NMSA 1978, § 74-6-13. If, as NMED apparently contends, it has the authority to regulate large volume generators of liquid waste exclusively under the Water Protection Regulations, what is the statutory authority for that contention? There is none.

The correct interpretation of the overlapping jurisdiction of the Liquid Waste Regulations and the Water Protection Regulations is simple and conclusive: the Liquid Waste Regulations govern the on-site treatment and disposal of all liquid waste generated by any dwelling, establishment or group, regardless of the volume of waste it generates. If a permitted liquid waste system discharges treated liquid waste whose effluent exceeds the 20.6.2.3103 NMAC water quality standards, the permit granted under the Liquid Waste Regulations will no longer obviate the additional need for a discharge permit under the Water Protection Regulations.

In short, both sets of regulations apply to liquid waste generators in an overlapping and complementary way. So long as the treated effluent discharged by a liquid waste system permitted under the Liquid Waste Regulations complies with the constraints imposed by the permit, no discharge plan under the Water Quality Act is required. If, however, the effluent discharged by a liquid waste system permitted under the Liquid Waste Regulations exceeds the 20.6.2.3103 NMAC water quality standards, or violates a requirement of the Liquid Waste Regulations, a discharge permit under the Water Protection Regulations may also be required.

IV. NMED has no Authority to Alter or Limit the Regulatory Jurisdiction of the EIB or the Liquid Waste Regulations

It is axiomatic that the scope of an agency’s authority and jurisdiction is defined by the statute that creates and governs the agency. See *Citizens for Fair Rates & the Environment v. New Mexico Public Regulation Commission*, 2022-NMSC-010, ¶ 21, 503 P.3d 1138 (holding that an

administrative agency is “created by statutes, limited to the power and authority expressly granted or necessarily implied by those statutes.”) Thus, an agency cannot, through the adoption or misapplication of a regulation, seek to alter, amend or in any way affect the jurisdiction conferred upon it by the legislature. *See New Mexico Mining Ass’n v. New Mexico Mining Comm’n*, 1996-NMCA-098, ¶ 15, 122 N.M. 332, 337, 924 P.2d 741, 746 (“while it is clear that administrative agencies may properly exercise those powers that are within the scope of the authority delegated to them, they may not, however, amend or enlarge their authority through the device of promulgated rules and regulations.”)

In the current circumstances, the EIB’s jurisdiction to regulate liquid waste has been conferred by the Environmental Improvement Act of 1971, the enabling statute that defines the scope of authority delegated by the legislature to the EIB to regulate liquid waste disposal. The Environmental Improvement Act confers plenary jurisdiction to the EIB to promulgate all rules and standards for liquid waste disposal, sets no limitation on the volume of waste to be regulated, and confers no jurisdiction on NMED to supplant, countermand or ignore the regulations the EIB adopts. Nor does NMED have authority to alter or limit the regulatory jurisdiction of the EIB or the regulatory jurisdiction of the Liquid Waste Regulations EIB adopts. And yet, by ignoring the applicability of the Liquid Waste Regulations to the Resort’s permit application, and by substituting in their place the Water Quality Regulations as the basis upon which to review and approve the Resort’s application, NMED is doing just that: It is abrogating the legislature’s delegation of express statutory authority to the EIB to establish rules and standards of all residential and commercial liquid waste disposal, and it is arrogating to itself the authority expressly delegated by the legislature to the EIB.

In short, the Environmental Improvement Act expressly confers jurisdiction to the EIB, not NMED or the Commission, to promulgate the rules and standards that regulate *all discharges* of liquid waste. Any attempt by the NMED to amend or ignore the Liquid Waste Regulations promulgated by the EIB is contrary to the legislature's explicit command to protect public health and the environment from the hazards associated with all disposition of liquid waste. Because the Liquid Waste Regulations specifically address liquid waste, and the legislature commanded that all dwellings, establishments and groups seeking to discharge liquid waste to soils do so subject to the regulations adopted by the EIB, the NMED must apply the Liquid Waste Regulations to the Resort's pending permit application.

V. NMED's Proposed Permit Violates Many if not all of the Fundamental Safeguards Adopted by the Liquid Waste Regulations to Prevent the Hazards to Public Health and Water Contamination That On-Site Liquid Waste Disposal Create.

In violation of 20.7.3.201(A) NMAC, the proposed permit would authorize the collection, treatment, and disposal to ground of liquid waste generated by 49 residential lots, 34 condominium units and a resort hotel serving more than 1,000 individuals without regard to the individuated responsibility of each such property owner for the safe storage, treatment and on-site disposal of its liquid wastes. By ignoring and side-stepping the personal responsibility of each such property owner for the storage, treatment, and disposal of liquid waste generated on its property, the permit obviates one of the principal safeguards by which the Liquid Waste Regulations prevent hazards to public health.

In violation of 20.7.3.201(G) NMAC, each of the 49 residential lots within the Bishop's Lodge Hills Subdivision and each of the three tracts containing condominium units requires a separate on-site treatment and disposal system scaled to and servicing the liquid waste flow generated on that lot. In violation of 20.7.3.201(G) NMAC, the proposed permit would authorize

the private collection and off-site treatment and disposal to ground of liquid waste generated from 49 residential lots and 34 condominium units.

In violation of 20.7.3.201(B), (C) and (F); 20.7.3.302(C); 20.7.3.303; 20.7.3.304; 20.7.3.605; and 20.7.3.703 NMAC, the Draft Permit fails to apply the applicable requirements and restrictions that govern the maximum design flow of permitted liquid waste treatment units and the on-site disposal systems and disposal fields; the minimum surface areas of disposal fields; the clearance standards for disposal fields; the siting and soils conditions for disposal fields; or the setback requirements for disposal fields.

Pursuant to 20.7.3.703 and 302(C) NMAC, a discharge of 30,000 gpd from a conventional treatment unit would require a minimum of six (6) disposal fields, each with a minimum surface area of at least 6,250 square feet, suitable soils, adequate clearance and minimum setbacks to prevent hazards to public health or water contamination. For secondary and tertiary treated effluent, 20.7.3.302(C) also requires a minimum of six (6) disposal fields, but the minimum required absorption area may be reduced by 30%. *See* 20.7.3.703(M) NMAC (“In no case shall the maximum reduction for drain-field absorption area exceed 30%.”). Applying the maximum allowable reduction for drain-field absorption area to the minimum possible surface area for each disposal field would result in six disposal fields of at least 4,375 square feet each ($0.70 \times 6,250 \text{ sf} = 4,375 \text{ sf}$), receiving no more than 5,000 gpd per field.

In violation of 20.7.3.7 and 20.7.3.302(C) NMAC, NMED’s Draft Permit does not limit the size of each on-site treatment and disposal system to a design flow of 5,000 gpd or less. The proposed permit also does not require the installation and permitting of multiple on-site liquid waste treatment and disposal systems, each scaled to treat and dispose of 5,000 gpd or less, for treatment and disposal of the 30,000 gpd design flow projected by the applicant. And in violation

of 20.7.3.703 and 302(C) NMAC, the proposed NMED permit would authorize the discharge of 30,000 gpd of partially treated effluent into a single 2,500 square foot drain field with unsuitable soils and inadequate clearance to prevent hazards to public health or water contamination.

In violation of 20.7.3.302(C) NMAC, the Draft Permit does not require physical separation of suitably sized disposal fields with suitable soils and adequate clearance to prevent hazards to public health or water contamination.

In violation of 20.7.3.605 NMAC, the Draft Permit includes no findings by NMED regarding the soils and hydrogeologic conditions surrounding the applicant's proposed disposal field or the site's hydrogeologic suitability for on-site disposal of the Resort's effluent. Specifically, no analysis or assessment of the contaminants contained in the proposed influent or effluent of the applicant's liquid waste system has been disclosed by NMED in connection with the proposed permit. And no soils or hydrogeologic analysis has been disclosed by NMED to assess the hazards the proposed 30,000 gpd discharge would pose to soils and water contamination or public health, nor has NMED proposed any findings regarding such hazards.

In violation of 20.7.3.304 NMAC, the Draft Permit includes no prohibition enforceable against dischargers on the introduction of household hazardous wastes, solvents, fertilizers, livestock wastes, vehicle and equipment wash water or other non-liquid waste materials.

In violation of 20.7.3.201(L) NMAC, the Draft Permit makes no findings sufficient to determine whether more stringent requirements are necessary to prevent a hazard to public health or the degradation of a body of water.

The Draft Permit does more than simply violate the Liquid Waste Regulations' critical safeguards and engineering constraints, all of which were adopted to protect public health and the environment by preventing the release of contaminants to soils and water. Even more importantly,

by permitting excessive daily volumes of the Resort's aggregated wastes to be discharged into a single, woefully undersized disposal field located at the downstream edge of the Resort's property, the Draft Permit not only exacerbates the hazards of contaminant release, but allocates virtually all of the ensuing hazard and risk of aquifer and drinking well contamination to the Resort's off-site, downstream neighbors.

It is the off-site downstream neighbors who will bear the hazards and risk that the Resort's aggregated waste stream will create:

- the risk that hazardous contaminants are added unlawfully to that waste stream;
- the risk that treatment proves ineffective to remove the waste stream's harmful contaminants; and
- the risk that a grossly overloaded disposal field will eventually release the Resort's contaminants to the aquifers that feed and sustain their wells and drinking water.

It is the downstream neighbors who will bear all of the burden of continually monitoring their wells for traces of the Resort's contamination, and all of the initial cost and risk of remediating it once detected.

The Liquid Waste Regulations were specifically crafted and adopted to prevent such transfers of hazard and risk. They should be applied and enforced. By ignoring the applicability of the Liquid Waste Regulations to the Resort's hazardous plan, and by pretending that the Resort's self-interested monitoring of a few wells for a few specific contaminants a few times a year is an adequate substitute for the stringent safeguards the Liquid Waste Regulations would impose, NMED is complicit in the Resort's cynical transfer of hazard and risk to its downstream neighbors.

VI. Application of the Water Quality Regulations to the Resort's Permit Application is no Substitute for Application of the Liquid Waste Regulations

Four years after enactment of the Water Quality Act, the New Mexico Legislature directed the EIB to adopt regulations for the disposal of liquid waste generated by dwellings and commercial establishments to protect public health and the environment. The express purpose of the regulations adopted by the EIB to accomplish the legislative mandate is set forth in the Liquid Waste Regulations themselves:

To protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and groundwater contamination from on-site liquid waste disposal practices.

20.7.3.6 NMAC. The Regulations also expressly define the public health hazards they seek to prevent:

'hazard to public health' means the indicated ***presence in water or soil of biological, chemical or other contaminants under such conditions that could adversely impact human health***, including, but is not limited to, surfacing liquid waste, degradation to a body of water used as, or has the potential to be used as, a domestic water supply source, presence of an open cesspool or tank or exposure of liquid waste or seepage in a manner that allows transmission of disease. (emphasis added)

20.7.3.7(H)(1) NMAC. In short, the Liquid Waste Regulations are designed and intended to prevent the presence in water or soil of any biological, chemical or other contaminants – not just a few specified contaminants, such as those listed in the Water Protection Regulations – under conditions that could adversely impact human health. By substituting and applying the Water Protection Regulations in lieu of the Liquid Waste Regulations, NMED is failing to respect and apply the mandatory safeguards needed to fulfill the broader legislative and regulatory objectives of the Environmental Improvement Act of 1971 and the Liquid Waste Regulations.

Liquid waste contains an infinitely complex, ever-changing array of bacteria, microbes, nutrients, minerals, pathogens, chemicals and biologics as well as contaminated water and other

harmful fluids. Consequently, the prevention of soils and water contamination from discharges of liquid waste poses a highly complex challenge for which no single approach alone is sufficient to protect public health and the environment.

A peer-reviewed study recently published in the Proceedings of the National Academy of Sciences points out some of the shortcomings of even the most advanced forms of pre-discharge treatment. See Ruyle, et al., “High organofluorine concentrations in municipal wastewater affect downstream drinking water supplies for millions of Americans” (PNAS January 7, 2025)([January 7, 2025 PNAS Article](#)).

First, as the article notes, discharge regulations, such as the 20.6.2.3013 NMAC water quality standards, address only those risks associated with a limited set of less than 100 individual contaminants when considered in isolation from one another. But liquid waste comprises thousands if not tens of thousands of different, ever-changing combinations and concentrations of contaminants, the vast majority of which are unknowable and uncharacterized. The hazard these contaminants present is not just their individual toxicity, but the combined toxicity of the entire mixture of ever-changing combinations and concentrations of all of the contaminants that can be present in liquid waste.²⁸

Second, regulators are belatedly beginning to recognize that an ever-growing class of fluorinated pharmaceuticals account for an alarming portion of hazardous contaminants present in both untreated and treated wastewater ([January 7, 2025 PNAS Article](#)).²⁹ In the past five years, nine specific organofluorines (OFEs) have been listed by EPA for regulation based on known

²⁸ The challenge is further complicated by the fact that thousands of new man-made compounds are synthesized and introduced into liquid waste every year. The toxicity and harmful effect of such compounds when released to the environment is unknown and unknowable for years to come if ever.

²⁹ Organofluorine contaminants in wastewater, such as PFAS, are highly stable, high-priority pollutants ([EPA Roadmap](#)) ([California Water Quality Control Board PFAS Fact Sheet](#)).

potential for toxic, carcinogenic, mutagenic, or teratogenic effects on humans or other life forms ([EPA Fact Sheet re PFAS Drinking Water Regulation](#)).³⁰ None of those contaminants are listed in 20.6.2.3103 NMAC or included for testing in the Draft Permit.

Third, while EPA has determined that such chemical contaminants are potentially harmful to human health, current wastewater treatment technologies, including such advanced technologies as reverse phase osmosis and carbon filtration, are incapable of removing more than 25% of OFE contaminants in sewage. [January 7, 2025 PNAS Article](#). And that is why it is critically important to implement multiple coordinated approaches to prevent the release of such contaminants in sewage to soils and water, and not rely on partially effective treatment technologies alone. [January 7, 2025 PNAS Article](#).

Confronted with this reality, the EIB wisely decided to go beyond the contaminant-by-contaminant regulations of the Water Quality Act's (20.6.2.3103 NMAC) standards, and instead impose a carefully-crafted set of mandatory engineering and hydrologic constraints that collectively interoperate with one another to prophylactically ***prevent or reduce the hazard of any and all liquid waste contaminants*** from reaching surface and ground water. Thus, rather than rely upon treatment alone to reduce the concentrations of a few specified contaminants among the thousands of other uncharacterized contaminants discharged to soils, the Liquid Waste Regulations manifest the EIB's decision to design and require the use of mandatory engineering controls to reduce and prevent the contamination of soils and water that can be caused by ***any and all*** of the contaminants liquid waste contains – even *treated liquid waste*.

Applying several critically important, well-established approaches to hazard reduction, the Liquid Waste Regulations localize, compartmentalize, limit, reduce and prevent the release and

³⁰ EPA and NIH researchers are quickly acquiring toxicity, toxicokinetic, and other types of data for 150 other PFAS compounds to assess risk ([EPA PFAS Chemical Testing Methods](#)).

spread of all liquid waste contaminants that could potentially harm the environment or public health.

First, the Regulations **localize** to each generator of liquid waste the personal responsibility for the safe treatment, storage and disposal of all liquid wastes generated on its property. Assigning personal responsibility for the liquid waste each property generates is key to establishing and enforcing a regime of personal accountability for the safety of the waste generation and disposal practices of each generator of liquid waste.

Second, the Regulations provide each property owner that generates liquid waste three permissible choices for the treatment and disposal of the wastes it generates: on-site treatment and disposal to ground, discharge to an enclosed watertight system with no disposal to ground, or connection to a public sewer system. This ensures the application of standardized best practices to the handling, treatment and storage of untreated waste under the control of responsible individuals or public officials.

Third, if the property owner chooses to dispose of its liquid wastes to ground, the Regulations **compartmentalize and contain** the hazards such disposal can create by requiring all treatment and disposal of such wastes to occur within the property on which they are generated. This precludes the aggregation of even more complex mixtures of sewage contaminants from multiple sources. It simplifies treatment by tailoring system capabilities and capacity to the specific waste flow generated on each specific property. It reduces the hazard of overloading any given disposal site, allocates that hazard to the property generating the waste, and reduces the scale of hazard created when treatment or disposal systems fail or maintenance practices lapse.

Fourth, the Regulations **limit** the maximum daily rate at which liquid waste can be treated in a single, on-site liquid waste treatment unit. By limiting the volume and rate at which liquid

waste can be treated for discharge to ground, the Liquid Waste Regulations *simplify* the implementation, maintenance and upkeep of each system and reduce the hazards of system failure or neglect.

Fifth, by requiring differing levels of pre-discharge treatment based on the design flow and site-specific conditions of the generator's liquid waste and property, the Regulations reduce the concentration and hazard of contaminants in discharged effluent.

Sixth, recognizing the shortcomings of pre-discharge treatment systems, the Regulations further reduce the hazard of contaminant release by *limiting* the volume and daily rate at which treated effluent can be discharged into each disposal field. This protects against the hazard of overloaded soils and drain field failure, which reduces the hazard and risk of effluent contaminants entering surrounding soils and water. To *reduce* and prevent such hazards still further, the Regulations also require minimum absorption areas based on the volume of effluent discharged, require minimum setbacks from neighboring creeks and wells, minimum setbacks between drain fields and site-specific soils conditions for every disposal field, irrespective of the disposal system's level of pre-discharge treatment. Notably, these rate-limiting, dispersal and setback safeguards and minimum standards apply even to the most advanced forms of secondary and tertiary treatment.

Collectively, these fundamental engineering constraints act in conjunction with one another to reduce the hazard of any contamination of surface and ground water by the release to ground of treated liquid waste effluent.

While the water quality standards of the Water Protection Regulations complement the engineering safeguards of the Liquid Waste Regulations, they are no substitute for them, and NMED's failure to apply the Liquid Waste Regulations to the Draft Permit requires its rejection.

In managing the hazards of liquid waste disposal that multiple property owners within a community or subdivision generate, the Liquid Waste Regulations prevent contamination by disaggregating and compartmentalizing the particular hazards that disposal of each generator's liquid wastes create. The Liquid Waste Regulations localize responsibility for safe generation, safe treatment and safe on-site disposal to the property owner on whose property the wastes are generated. It allocates and assigns the responsibility and the hazards of generating, treating and discharging the liquid wastes each generator creates to the generator who creates them. Before discharging those wastes, it imposes multiple sequential techniques – such as rate-limited treatment, rated-limited disposal, and adequately sized, adequately spaced on-site disposal fields – to impose engineered, fail-safe measures that reduce the hazard of potential contamination each generator's wastes and disposal practices create.

Ignoring all this, NMED's Draft Permit would instead allow multiple generators to aggregate their separate waste flows into a much larger, more complex liquid waste flow that is not only more difficult and hazardous to treat effectively over time, but also more hazardous and difficult to discharge safely to ground over time. At the same time, it would eliminate the protections that many, if not all, of multiple redundancies and safeguards the Liquid Waste Regulations require. Rather than multiple, rate-limited treatment units treating smaller, simpler waste flows, it allows a single, over-sized treatment unit treating a much larger, more complex and difficult waste stream, thus increasing the hazardous consequences of system failure and neglect. Rather than multiple rate-limited discharges into multiple disposal fields appropriately sized and sited to distribute and cleanse the resulting effluent, it permits grossly excessive daily discharges into a single woefully under-sized and dangerously sited disposal field.

Even if NMED erroneously believes the 20.6.2.3103 NMAC water quality standards provide adequate protection against the increased hazards of the fail-prone on-site treatment and disposal system its Draft Permit allows, and a suitable substitute for the stringent engineering constraints the Liquid Waste Regulations require, that decision is not NMED's choice to make. The Legislature assigned the authority and the responsibility to make that decision to the EIB when it delegated the authority and responsibility to the EIB –not NMED – to promulgate the rules by which on-site discharges of residential and commercial liquid waste can be made. The EIB wisely chose to impose strict, fail-safe engineering constraints on every dwelling, establishment and group that seeks to discharge its liquid wastes to ground, no matter the volume of wastes it generates, and NMED has no authority to countermand, ignore or undermine the mandatory requirements that determination imposes.

VII. The Developers' Decision to Install Sewer Lines Rather than On-site Treatment and Disposal Facilities in the Bishop's Lodge Hills Subdivision Precludes any Permit to Dispose of the Subdivision's Liquid Wastes to Ground

Contrary to the requirements of the Liquid Waste Regulations, the Resort seeks permission to act as though it were a public utility that collects, aggregates, treats and disposes to ground the combined liquid wastes from scores of private residences. The Resort is a business establishment expressly subject to the requirements of the Liquid Waste Regulations. It is not a licensed or permitted public utility. Nor should it be allowed to act like one.

The setting in which the Resort seeks permission to aggregate and dispose of excessive liquid wastes to ground is situated at the headwaters of an important, pristine watershed that supplies surface and ground water to Tesuque Pueblo, Pojoaque Pueblo, San Ildefonso Pueblo and thousands of residents. The Resort's liquid waste disposal plan is especially hazardous to public health and the environment because the site chosen for its disposal field is located precisely where

the watershed first leaves the Santa Fe National Forest and Hyde State Park to feed and recharge the alluvial aquifers that supply hundreds of pre-existing and long-standing drinking and agricultural wells. For centuries, thousands of residents immediately below the Resort and its subdivision have used and continue to use and consume the water produced by those downstream wells.

Critically, the developers of the Bishop's Lodge Hills subdivision originally chose to forego the use of on-site treatment and discharge to ground. Instead, they chose to install a private sewer system needed to collect and discharge the subdivision's liquid waste into an enclosed system or to a public sewer. As explained above, no person shall discharge untreated liquid waste except into a permitted and approved enclosed system, a permitted and enclosed liquid waste treatment unit or a public sewer system. 20.7.3.201(B) NMAC. Additionally, no person shall discharge effluent from a liquid waste treatment unit except through a permitted and approved waste disposal system or to a permitted public sewer system. 20.7.3.201(C) NMAC.

The fact that the developers of the Bishop's Lodge Hills subdivision chose to forego the construction and permitting of the facilities required for discharge to permitted and approved on-site liquid waste treatment and disposal systems precludes them from now seeking to make liquid waste discharges to ground without the infrastructure and engineering constraints the Liquid Waste Regulations require. The Liquid Waste Regulations could not be clearer. Having chosen to install a neighborhood sewer instead of on-site septic, the Resort and its property owners have two available choices: either invest in the infrastructure needed for a permitted and approved on-site enclosed system that does not discharge liquid waste to ground, or connect to a permitted public sewer system. 20.7.3.201(C) NMAC.

CONCLUSION

For the reasons set forth above, Protect Tesuque Inc. respectfully requests that the Hearing Officer grant Protect Tesuque Inc.'s Motion for Pre-Hearing Permit Denial and recommend that the Secretary deny the Resort's Renewal and Modification Discharge Permit Application for DP-75 without need for a further hearing.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the 5th day of February, 2025, a true and correct copy of the foregoing was filed with the GWQB and served via email to those listed below:

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**STATE OF NEW MEXICO
BEFORE THE SECRETARY OF THE ENVIRONMENT**

**IN THE MATTER OF BISHOPS LODGE
RENEWAL AND MODIFICATION
DISCHARGE PERMIT APPLICATION
FOR DP-75**

GWQB 24-69(P)

**NEW MEXICO ENVIRONMENT DEPARTMENT'S RESPONSE TO
PROTECT TESUQUE INC.'S MOTION FOR PRE-HEARING PERMIT DENIAL**

I. INTRODUCTION

Pursuant to 20.1.4.200(D)(4) NMAC, the New Mexico Environment Department (NMED) submits this response to Protect Tesuque Inc.'s February 5, 2025, *Motion for Pre-Hearing Permit Denial and Memorandum in Support* (02-05-25 Motion). Protect Tesuque alleges that B L Santa Fe, LLC's (Bishop's Lodge or Permittee) groundwater discharge permit (DP-75) was improperly issued under the New Mexico Water Quality Act, NMSA 1978, §§ 74-6-1 to -17, and the Ground and Surface Water Protection regulations, 20.6.2 NMAC. Protect Tesuque requests in its 02-05-25 Motion that the Hearing Officer find that the Liquid Waste Disposal and Treatment regulations, 20.7.3 NMAC, promulgated pursuant to the Environmental Improvement Act, NMSA 1978, §§ 74-1-1 to -100, apply to Bishop's Lodge's proposed discharge plan, that the Liquid Waste regulations were not applied to the Bishop's Lodge permit application, that Bishop's Lodge has not met the requirements for a discharge permit under the Liquid Waste Disposal and Treatment regulations, and that the Hearing Officer recommend that the Secretary deny Bishop's Lodge's DP-75 renewal and modification application without a hearing. [02-05-25 Motion, pp. 1, 40-41, 60].

For the following reasons, NMED requests that the Hearing Officer deny Protect Tesuque's 02-05-25 Motion and find that draft DP-75 was properly issued under the New Mexico Water

Quality Act and the Ground and Surface Water Protection regulations, and that a hearing on draft DP-75 under the Water Quality Act is required.

II. DP-75 BISHOP'S LODGE WASTEWATER TREATMENT FACILITY

On July 11, 1979, NMED issued the original discharge permit (DP-75) to BL Santa Fe, LLC for the Bishop's Lodge Wastewater Treatment Facility. Since 1979, DP-75 has been renewed seven times under the Ground and Surface Water Protection regulations, 20.6.2 NMAC. [NMED Exhibit 2, PDF pp. 30-31].

On April 4, 2024, Bishop's Lodge submitted to NMED its eighth renewal and modification application for a groundwater discharge permit. On September 2, 2024, Bishop's Lodge submitted to NMED a revised application for renewal and modification of DP-75. The Permittee is requesting a modification to reflect (1) an increase in discharge to 30,000 gallons per day (GPD) and an increase of water quality to a class 1A reclaimed wastewater, (2) a change in treatment plant to a new Membrane Bioreactor treatment process with UV disinfection, and (3) the option to irrigate on Bishop's Lodge property utilizing reclaimed wastewater.

The draft discharge permit includes conditions to ensure compliance with the permitting requirements of 20.6.2.3000-3115 NMAC for the treatment and disposal of domestic wastewater. The draft DP-75 authorizes Bishop's Lodge to receive and treat domestic wastewater up to 30,000 GPD using an Ultra-Filter Membrane Bioreactor package plant and discharge treated wastewater to a replacement subsurface low-pressure disposal field, as well as reuse it for landscaping irrigation at the facility.

III. STANDARD OF REVIEW

Protect Tesuque alleges that Bishop's Lodge has the burden of proving that it met all criteria for a "liquid waste discharge permit, pursuant to 20.1.4.400 NMAC." [02-05-25 Motion, p.40].

However, this requirement outlined at 20.1.4.400 NMAC is not intended for liquid waste permits. The Liquid Waste Disposal and Treatment regulations do not require a hearing before the Secretary prior to the issuance of a liquid waste permit, but rather only “complete and accurate [application] information before a permit is issued for an on-site liquid waste system,” excluding the public participation requirements provided under the Ground and Surface Water Protection regulations 20.7.3.401(E)-(F) NMAC. If an affected person is dissatisfied with action taken by NMED on a liquid waste permit application, they may appeal to the Secretary. 20.7.3.406(A) NMAC. The Secretary is then required to hold a hearing on the appeal and it is the person who made the appeal and requested the hearing that has the burden of proof. 20.7.3.406(B)-(C) NMAC. Here, for Protect Tesuque’s 02-05-25 Motion, *the moving party must specify the grounds for the motion* and state the relief or order sought, and the motion “shall be decided by the Hearing Officer without a hearing.” 20.1.4.200(D) NMAC (emphasis added).

IV. THE LIQUID WASTE DISPOSAL AND TREATMENT REGULATIONS AND THE GROUND AND SURFACE WATER PROTECTION REGULATIONS ARE BOTH PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

Protect Tesuque contends that “the Liquid Waste Regulations are specifically designed to go beyond regulation of the set of individual contaminants specified in the 20.6.2.3103 NMAC water quality standards” and that “the Liquid Waste Regulations prophylactically act to prevent the release of any and all biological and chemical contaminants that may be contained in a liquid waste by specifying the engineering constraints that must be followed...to prevent such hazardous mixtures from contaminating soils and water.” [02-05-25 Motion, pp. 13, 15]. While the Liquid Waste Disposal and Treatment regulations, with their engineering constraints approved by the wastewater technical advisory committee, are more *prescriptive* than the Ground and Surface

Water Protection regulations, they do not provide any more *protection* of human health and the environment than the Ground and Surface Water Quality regulations. See 20.7.3.401 NMAC (Permitting; General Requirements). While the Ground and Surface Water Protection regulations do not prescribe engineering design constraints for wastewater treatment design, they do allow an applicant to propose protective measures for review and evaluation by NMED, who then works with the applicant and their proposal to create a discharge plan that meets the requirements of 20.6.2.3107 NMAC and is protective of human health and the environment. 20.6.2.3106 NMAC. Both regulatory schemes are designed for the protection of human health and the environment. NMSA 1978, §§ 74-6-4(D) (*“The standards shall at a minimum protect the public health or welfare, enhance the quality of water and serve the purposes of the Water Quality Act”*); 20.7.3.6 NMAC (*“To protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and groundwater contamination from on-site liquid waste disposal practices.”*)

V. THE APPLICATION OF THE GROUND AND SURFACE WATER PROTECTION REGULATIONS WAS PROPER

Whether a discharge is regulated under the Liquid Waste Disposal and Treatment regulations or the Ground and Surface Water Protection regulations is not complicated. Pursuant to NMSA 1978, § 74-1-7(A)(3) and 20.7.3.7(L)(5) NMAC, the NMED liquid waste program within the Environmental Health Bureau regulates any domestic wastewater discharges to an on-site septic system that is less than 5,000 gallons per day. Pursuant to NMSA 1978, §§ 74-6-4, 74-6-5, and 74-6-8, and 20.6.2.1201 and 20.6.2.3000-3114 NMAC, the NMED pollution prevention section within the Ground Water Quality Bureau issues permits for many types of facilities, including domestic wastewater facilities and large capacity (greater than 5,000 gallons per day)

septic tank leachfield systems. Whether an applicant applies for a Liquid Waste Permit or a Groundwater Discharge Permit, the NMED Environmental Health liquid waste program and Ground Water Quality pollution prevention section may consult to determine which regulations govern the proposed discharge.

For Bishop's Lodge, a determination for a Groundwater Discharge Permit requirement was made on May 15, 1979 [NMED Exhibit 4], eight years after the enactment of the Environmental Improvement Act and six years following the 1973 Liquid Waste Disposal regulations, which had a system discharge capacity limit of 1,000 GPD at the time. [NMED Exhibit 5]. Today, 46 years later, the draft DP-75 renewal and modification consists of an increase in the authorized maximum daily discharge volume from 14,760 GPD to 30,000 GPD and the addition of above ground irrigation utilizing reclaimed wastewater as a discharge method and location, [NMED Exhibit 2, PDF p. 30], which is well above the 5,000 GPD capacity limitation that the Liquid Waste Disposal and Treatment regulations prescribe.

In its review of the Permittee's renewal and modification application, NMED has found that the Permittee is discharging effluent or leachate from the Facility so that such effluent or leachate may move into groundwater that has an existing concentration of 10,000 mg/L or less of TDS, within the meaning of 20.6.2.3101(A) NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant. [NMED Exhibit 2, PDF p. 32]. NMED has also found that the Permittee is discharging effluent or leachate from the Facility directly or indirectly into groundwater pursuant to DP-75 and Sections 20.6.2.3000 through 20.6.2.3114 NMAC. *Id.* In addition, the discharge from this Facility has the potential to contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC and *is not subject to the*

exemptions at Subsection 20.6.2.3105 NMAC, which includes an exemption for effluent which is regulated pursuant to the Liquid Waste Disposal and Treatment regulations. *Id* (emphasis added).

VI. THE LIQUID WASTE REGULATIONS DO NOT APPLY TO DP-75

The Liquid Waste Disposal and Treatment regulations, 20.7.3 NMAC, apply “to on-site liquid waste systems, and effluent from such systems, that receive *5,000 gallons or less* of liquid waste per day, and *that do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC* or a national pollutant discharge elimination system (NPDES) permit.” 20.7.3.2(A) NMAC (emphasis added). “Liquid waste” is defined as “wastewater generated from any residential or commercial unit where the total wastewater received by a liquid waste system is *5,000 gallons per day or less.*” 20.7.3.7(L)(5) NMAC (emphasis added). A “liquid waste system” is a liquid waste treatment unit or units and associated disposal systems, or parts thereof, serving a residential or commercial unit and includes enclosed systems, holding tanks, vaults and privies. 20.7.3.7(L)(6) NMAC.

Here, Bishop’s Lodge is seeking authorization for a maximum daily discharge volume that increases from 14,760 GPD to 30,000 GPD, which is six times the capacity limit of “5,000 gallons or less” of liquid waste per day. In addition, Bishop’s Lodge is proposing to generate discharges that “require a discharge plan pursuant to 20.6.2 NMAC,” which excludes the facility from regulatory requirements under 20.7.3 NMAC.

VII. A HEARING ON DP-75 IS REQUIRED

On September 16, 2024, NMED provided notice to Bishop’s Lodge of the proposed approval of DP-75, pursuant to 20.6.2.3108(H) NMAC. [NMED Exhibit 2]. On September 20, 2024, NMED published notice of the draft DP-75 for public review and a 30-day comment period. [NMED Exhibit 3]. NMED received public comment on the draft DP-75 from 146 individuals,

and 80 requests for hearing. On November 5, 2024, NMED Cabinet Secretary James C. Kenney approved a hearing request determination due to substantial public interest, pursuant to 20.6.2.3108(M) NMAC, and ordered a hearing and appointed a hearing officer in the matter on November 23, 2024, pursuant to 20.1.4.100(E) NMAC. Concerns over discharge location and permit conditions should be addressed via public comment and hearing proceedings, pursuant to 20.6.2.3110 NMAC (Public Hearing Participation).

VIII. CONCLUSION

For the foregoing reasons, the New Mexico Environment Department respectfully requests that the Hearing Officer deny Protect Tesuque's 02-05-25 Motion, pursuant to 20.1.4.200(D) NMAC, and find that draft DP-75 was properly issued under the New Mexico Water Quality Act and the Ground and Surface Water Protection regulations, and that a hearing on draft DP-75 under the Water Quality Act is required.

Respectfully submitted,
NEW MEXICO ENVIRONMENT DEPARTMENT

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/s/ Christal weatherly
Christal Weatherly



NEW MEXICO ENVIRONMENT
DEPARTMENT
GROUND WATER QUALITY BUREAU
GROUND WATER DISCHARGE PERMIT
APPLICATION



Instructions for completing the application are included in the form itself and in the Supplemental Instructions found at the back of the application. You may fill out the application manually, or a Microsoft Word version may be downloaded from www.env.nm.gov (Ground Water Quality) and filled out electronically. Timely processing of this application is contingent upon the technical completeness of the submission. Failure to provide all of the information pursuant to Section 20.6.2.3106 NMAC, following notice of technical deficiency, may result in denial of the application.

**Send two complete paper copies AND one electronic copy of this application,
with the filing fee to:**

Program Manager
Ground Water Pollution Prevention Section
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502

Introduction

Facility Name: Bishops Lodge

For Existing Discharge Permits:

DP Number: DP 75

Expiration Date: 9-29-2024

Type of Discharge (check one):

- ☒ Domestic
☐ Industrial
☐ Agricultural
☐ Mining

GWQB – Date of Receipt
(Department use only)

Type of Application (check appropriate box)

- ☐ New – new facility
☐ New – existing (unpermitted) facility
☐ Renewal only
☐ Modification only
“modification” includes a change in the location of a discharge, and/or increase in the quantity of the discharge, and/or a change in the quality of the discharge.
☒ Renewal and Modification

If this application is to *modify* or *renew and modify* a Discharge Permit, what is the reason for modification of the Discharge Permit? Describe the proposed changes that would result in modification, meaning a change in the location of a discharge, and/or an increase in the quantity of the discharge, and/or a change in the quality of the discharge.

The permit is to be modified to reflect the following:

1. An increase in discharge to 30,000 gpd and water quality to a class 1A effluent
2. A change in treatment plant to a new MBR treatment process with UV disinfection
3. Option to irrigate on Bishops Lodge property

Fees Included with Application

All applicants are required to submit a **\$100 Application Filing Fee**. An additional fee will be assessed prior to permit issuance. Permit fees are listed in section 20.6.2.3114 NMAC. **Make checks payable to: NMED-Ground Water Quality Bureau**

Application Checklist

The following checklist has been provided to assist in ensuring that the application is complete prior to submission (*check all that apply*):

☒	Part I. Administrative Completeness ☒ \$100 Application Filing Fee ☒ A. General Information ☒ B. Public Notice Information ☒ C. Public Notice Preparation
☒	Part II. Technical Completeness ☒ A. Discharge Volume and Description ☒ B. Identification and Physical Description of Facility ☒ C. Flow Metering ☒ D. Ground Water Monitoring ☒ E. Engineering and Surveying (electronic copies) ☒ F. Land Application Area
☒	Part III. Site-Specific Proposals
☒	Part IV. Electronic (PDF) format of Maps and Logs is required (additional paper copies of maps and logs are optional and may be requested by the Department if required for review) ☒ A. Surface Soil Survey and Vadose Zone Geology ☒ B. Location Map ☒ C. Flood Zone Map

Copies of Application

An applicant applying for a Discharge Permit shall submit **two paper copies of the signed application, and an electronic copy of the signed application including all supporting documentation**, to the address listed below.

- ☒ Two paper copies – completed and signed
- ☒ Electronic copy in portable document format (PDF) of the signed application and all supporting documentation (designs, maps, logs), on the following media (*choose one*):
 - ☒ Compact disc (CD)/DVD
 - ☐ Flash drive

Send application and fees to the following address:

Program Manager
Ground Water Pollution Prevention Section
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502

Applicant's Signature

Signature must be that of the person listed as the legally responsible party on this application (Part I, 2a).

I, the applicant, attest under penalty of law to the truth of the information and supporting documentation contained in this application for a Ground Water Discharge Permit.

Signature: _____

Date: _____

Printed Name: _____

Title: _____

Part I. Administrative Completeness

General Information

1. Facility Information

See Supplemental Instructions to determine what constitutes a “facility.” The physical address must be provided. If the facility does not have an address, the location can be described by road intersections, mile posts, or landmarks, as appropriate. See Supplemental Instructions for additional information.

Facility Name	Bishop's Lodge
Discharge Permit #	DP-75
Physical Address	1297 Bishop's Lodge Road
County	Santa Fe
Type of Facility	Hotel, Condos and Residences
Driving Directions	From Santa Fe Plaza drive north on Washington which becomes Bishop's Lodge Road. Turn right at the sign for the lodge.

2. Contact Information

a) Applicant Information The applicant is the person or entity (e.g., corporation, partnership, organization, *municipality*, etc.) legally responsible for the discharge and for complying with the terms of the Discharge Permit. If the applicant is an entity, then the name and title of a contact person must be provided. This application must be signed by the applicant or contact person named here.

Applicant Name	B L Santa Fe, LLC	Title				
Mailing Address	7001 N Scottsdale Road Suite 2050					
	City	Scottsdale	State	AZ	Zip	85253
Contact Person	Chris Kaplan	Title				
Contact Information	Office Number	480-861-7188	Fax Number			
	Cell Number		E-mail			

b) Facility Operator/Manager Information Provide the contact information for the facility operator or manager below. If the facility is required to have an operator certified by the State of New Mexico, please include the certification level of the operator named here.

Name		Title				
Mailing Address						
	City		State		Zip	
Contact Information	Office Number		Fax Number			
	Cell Number		E-mail			
	Cell Number		E-mail			
Certification Level						

(if applicable)

c) Consultant's Information (if applicable) If the consultant is a company or organization, then the name and title of a contact person must be provided here.

Company Name (1)	Lee & Company LLC					
Company Contact	Gary M. Lee PE					
Mailing Address	1612 East Elm Street					
	City	Harrisonville	State	Missouri	Zip	64701
Contact Information	Office Number	816-805-3546	Fax Number	NA		
	Cell Number	816-805-3546	E-mail	gary.lee@lee-engineers.com		
Company Name (2)						
Company Contact						
Mailing Address						
	City		State		Zip	
Contact Information	Office Number		Fax Number			
	Cell Number		E-mail			

d) Permit Contact Information (if applicable) If someone other than the contacts listed above is a primary contact for this application and/or facility, list here.

Name		Title	
Mailing Address			
	City	State	Zip
Contact Information	Office Number	Fax Number	
	Cell Number	E-mail	
Facility Affiliation			

3. Ownership and Real Property Agreements [20.6.2.7HH NMAC]

The applicant owns (check as appropriate):

- ☒ The facility
- ☒ All discharge sites
- ☐ Some discharge sites

If someone other than the applicant owns the facility or any of the discharge sites, provide ownership information below. For any portion of the facility where the applicant is not the owner of record, the applicant shall submit a copy of any lease agreement or other agreement which authorizes the use of the real property for the duration of the term of the requested permit (typically five years). Lease prices or other prices may be redacted.

- If more than one person has ownership interest, or a partnership exists, list all persons with an ownership interest.
- If a corporate entity holds an ownership interest, provide the name of the corporate entity and the entity's registered agent as filed with the New Mexico Public Regulation Commission.

Name	_____		Title	_____
Mailing Address	_____			
	City	_____	State	_____ Zip _____
Contact Information	Office Number	_____	Fax Number	_____
	Cell Number	_____	E-mail	_____
Owens	☐	The facility	☐	A discharge site
	☐	Attached – lease (or other authorized use) agreement		

Name	_____		Title	_____
Mailing Address	_____			
	City	_____	State	_____ Zip _____
Contact Information	Office Number	_____	Fax Number	_____
	Cell Number	_____	E-mail	_____
Owens	☐	The facility	☐	A discharge site
	☐	Attached – lease (or other authorized use) agreement		

4. Public Notice Information

a) Proposed Maximum Daily Discharge Volume: 30,000 gallons per day

Note: Use the information from Part II.A.2 following its completion.

b) Depth-to-Most-Shallow Ground Water: 10 feet

Note: Use the information from Part II.A.2 following its completion.

c) Pre-Discharge Total Dissolved Solids Concentration in Ground Water

[Subsection C of 20.6.2.3106 NMAC]

Provide the concentration of total dissolved solids (TDS) in ground water prior to discharging from the facility. *Note: This information is likely the same as that submitted in the first application for a Discharge Permit for this facility.*

- Pre-discharge TDS concentration in ground water: 300 mg/L (ppm)
☐ Attached – Copy of laboratory analysis report (if available)
- From what source was the sample collected (e.g., upgradient monitoring well, on-site supply well, nearest well within a one-mile radius of the facility)?

5. Facility Location

In the table below, describe the location for the entire facility by listing the Township, Range, and Section, and/or latitude and longitude for the locations of all components of the processing, treatment, storage, and/or disposal system. See Supplemental Instructions for additional information. [Paragraph (2) and (5) of Subsection C of 20.6.2.3106 NMAC]

Component¹ ID	Town ship	Range	Section(s)	Latitude	Longitude
WWTP	17N	10E	5&6		

6. Processing, Treatment, Storage, and Disposal System

Briefly describe how wastewater, sludge, etc. is processed, treated, stored, and/or disposed of at your facility. Include each component listed in the table above.

The existing WWTP is being replaced with the following:

1. Influent lift station
2. Fine Screen
3. Nitrification Denitrification
4. Membrane Bioreactor
5. Ultra Violet Disinfection
6. Option to Irrigate or Discharge to Subsurface Low Pressure Dosing Leachfield
7. Sludge holding and sludge reed bed

7. Public Notice Preparation [20.6.2.3108 NMAC]

Once NMED has determined that your application is administratively complete, you must complete the applicant's public notice requirements of Section 20.6.2.3108 NMAC. Language for notifications will be mailed to you with an administratively complete determination. Note: Guidance and instructions for completion of applicant's public notice can also be found at the following link:

¹ Components include: septic tanks, impoundments, treatment systems, irrigation sites, leachfields, monitoring wells, mine stockpiles, etc. Additional examples are listed in the Supplemental Instructions. Each component should have a unique ID, for example septic tank-1, monitoring well-3, etc.

<https://www.env.nm.gov/gwb/NMED-GWQB-PublicNotice.htm>. The information requested below will be used by NMED to approve or reject the proposed public notice newspaper and signage posting locations in accordance with Subsection A of 20.6.2.3108 NMAC. Note: Other requirements of Section 20.6.2.3108 NMAC not listed here, such as certified mailings to nearby landowners, may also apply.

a) Public Notice Posting Locations

Select the type of application you are submitting and provide the requested information. Language to be used in the required notifications will be included in the administratively complete packet.

☒ Renewal Application

1. Following receipt of an administrative completeness determination from NMED, the applicant is required to provide public notice of this application by placing a 2 inch by 3 inch display ad (classified or legal sections are not acceptable) in a newspaper of general circulation in the location of the proposed discharge. Indicate the newspaper in which you intend to place the ad. [Subsection C of 20.6.2.3108 NMAC]

Newspaper: Santa Fe New Mexican

☐ New Application, Modification Application, or Renewal with Modification Application

1. Following receipt of an administrative completeness determination from NMED, the applicant is required to provide public notice of this application by placing a display ad (classified or legal sections are not acceptable) in a newspaper of general circulation in the location of the proposed discharge. Indicate the newspaper in which you intend to place the ad. [Paragraph (4) of Subsection B of 20.6.2.3108 NMAC]

Newspaper: _____

2. Following receipt of an administrative completeness determination from NMED, the applicant is required to post a sign(s) (2 feet x 3 feet in size) for 30 days in a location conspicuous to the public at or near the facility. One sign must be posted for each 640 contiguous acres or less. NMED may require additional postings for facilities of more than 640 acres or when the discharge site(s) is not located on contiguous properties. Indicate the location(s) where you intend to display the sign(s). [Paragraph (1) of Subsection B of 20.6.2.3108 NMAC]

Note: Conspicuous location means a location where the sign is visible and legible to the public and the public has access (e.g., at facility entrance on public road).

- o Is the entire facility (including all components and discharge sites) contained within **less than** 640 acres, and is the acreage contiguous?

- ☒ Yes - Indicate a sign location below.
☐ No – Indicate **two** sign locations below.

Sign Location(s): Near North Gate entrance to lodge and houses

3. Following receipt of an administrative completeness determination from NMED, the applicant is required to post an additional notice (a flyer 8.5" X 11" or larger) for 30 days at an off-site location conspicuous to the public (e.g., public library). Indicate the location where you intend to display the flyer. [Paragraph (1) of Subsection B of 20.6.2.3108 NMAC]

Note: The U.S. Postal Service no longer allows the posting of flyers in post offices.

Flyer Location:

Library near plaza and/or Tesuque Village Market

b) Mailing Instructions

a) The administrative completeness determination letter, including public notice instructions, should be sent to:

☒ Applicant

☒ Consultant

Part II. Technical Completeness

1. Discharge Volume and Description

a. Date of Initial Discharge at the Facility [Subsections A and B of 20.6.2.3106 NMAC]

Date of Initial Discharge: 1983

b. Determination of Maximum Daily Discharge Volume [Subsection C of 20.6.2.3106 NMAC]

See Supplemental Instructions for more information.

1. **Proposed maximum daily discharge volume:** 30,000 gallons per day.

(Note: Use this volume to complete Part I.4.a (Public Notice).

- Describe the methods and calculations used to determine this volume. Acceptable methods are described in the Supplemental Instructions. If you are relying on metered flows, attach a two-year record of meter readings.

1. Evaluation by Lee & Company (See report)
 2. Meter readings

- Describe what generates the wastewater, sludge, or other discharges processed and/or disposed of at your facility. Identify all sources (e.g., RV spaces, mobile homes, shower facilities, laundromat, restaurant, backwash systems, septage haulers, contaminated media, etc.). See Supplemental Instructions.

1. Single Family Housing
2. Condominiums
3. Hotel Rooms
4. Meeting Rooms
5. Restaurant
6. Spa

2. **Identify other wastewater or stormwater discharges at the facility** not described in this application and indicate what other permits apply to them. Examples include discharges from small septic systems covered by Liquid Waste Permits, discharges to surface waters under a NPDES permit, a discharge covered by a separate Discharge Permit, etc. Be sure these other discharge locations are identified on the site map required in item Part II.B.1.

Other Discharges	Permit Number
None	N/A

2. Identification and Physical Description of Facility

[Subsection C of 20.6.2.3106 NMAC]

a. Scaled Map

Provide a clear and legible scaled electronic map of the components of your proposed system and relevant surrounding features, indicating the location of all the following features present at the site:

- overall facility layout
- treatment units
- lagoons
- tanks
- sumps
- land application fields
- domestic wastewater re-use areas
- pits
- stockpiles
- leachfields
- sludge drying beds
- fences
- roads
- buildings
- supply wells
- monitoring wells
- extraction/injection wells
- arroyos
- nearby water bodies such as ponds or canals
- property boundaries
- other permitted discharges
- required setbacks
- north arrow

b. Description of Components

Provide descriptive details of all components of your processing, treatment, storage, and/or disposal system. Include all components listed in the table of Part I.5.

Component	Status ¹	Date of installation or construction (mm/dd/yyyy)	Description (construction material, liner type, irrigation method, capacity, dimensions, area, model number, etc.)
Pump Station	Proposed	05/15/2024	Reinforced Concrete Wet Well , 45 gpm submersible pump, vertical auger screen on inlet
Equalization Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 20'x8'x10'swl
Pre-Anoxic Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 14'x8'x10'swl
Aeration Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 27'x8'3"x10'swl
Post-Anoxic Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 7'x8'3"x10'swl
Ultra-filter Membranes	Proposed	05/15/2024	6 - Zeeweed 500S Modules (See attachment for more details)
Ultraviolet Light Disinfection	Proposed	05/15/2024	Two UV -Hallett, 1000W Units
Conversion of Existing Aeration Basin to Aerobic Sludge Digester	Proposed	05/15/2024	See Process Tanks
Conversion of Existing Emergency Holding Pond to a Sludge Reed Bed	Proposed	05/15/2024	See Attached Drawing

¹ Status = **proposed;** **existing in use;** **existing not in use**, but proposed for use; **abandoned** without closure, not proposed for use; or **closed**

Component	Status ¹	Date of installation or construction (mm/dd/yyyy)	Description (construction material, liner type, irrigation method, capacity, dimensions, area, model number, etc.)
Collection System	Existing	1980-2009	Some Old Clay Tile mostly PVC
Headworks	Existing	2000	Concrete Box and Screen with Muffin Monster
Low Pressure Dosing Leachfield	Propose	10/15/2024	See Attachment

3. Flow Metering

Describe the facility's flow metering system. See Supplemental Instructions for more information.

Meter ID ¹	Proposed or Existing?	Influent or Effluent?	Location Description	Flow Type ²	Meter Type ³	Supporting Documents Attached
Greyline DFM5 Doppler Flow Meter	Existing To be Abandoned	Effluent	Inside Existing Blower Room	Pressure	Closed Pipe	No
TAG 0702	Proposed	Effluent	Inside Newterra Structure	Pressure	MagneticInductive	See Attached Mechanical Package
TAG 0701	Proposed	Effluent	Inside Newterra Structure	Pressure	MagneticInductive	See Attached Mechanical Package

¹ Meter ID means the numbering or labeling system used to individually identify each meter (e.g., Meter-1, Irrigation Meter-1, etc.).

² Flow type - **gravity** flow or pressurized (**pumped**) flow

³ Meter type - **open channel** such as a weir or flume, or a **closed-pipe** velocity meter such as an electromagnetic meter

4. Discharge Quality

Indicate the expected quality of the discharge (wastewater, leachate, sludge, etc.) that is generated, stored, treated, processed and/or discharged at your facility.

Note: Not all facilities need to characterize influent quality. See Supplemental Instructions for additional guidance.

Contaminants	Contaminants	
	Incoming (Influent)	Final (Effluent)
Nitrate as Nitrogen (NO ₃ -N, mg/L) ¹	40-60	Less than 10
Total Kjeldahl Nitrogen (TKN, mg/L) ¹	60	Less than 10
Total Dissolved Solids (TDS, mg/L) ¹	300	300
Chloride (Cl, mg/L) ¹	40	40
Total Suspended Solids (TSS, mg/L) ²	375	Less than 1
Biochemical Oxygen Demand (BOD, mg/L) ²	200	Less than 5
Fecal Coliform Bacteria (CFU/100 mL) ²	?	2.2MPN/100 ml
pH ³	7.5	7.5
Metals (attach list) ³	See Attached	No Change
Organic Compounds (attach list) ³		

1. Include for all domestic systems.
2. Include for domestic systems that use an advanced treatment process.
3. Include for industrial or mining systems if these are contaminants of concern. If metals or organic compounds are present in the discharge, attach a list of influent and effluent concentrations for each metal/organic compound.

5. Ground Water Monitoring

Discharge Permits typically require that ground water samples be collected quarterly from properly constructed monitoring wells located downgradient from discharge locations. The samples must be analyzed for contaminants of concern. For most domestic and agricultural Discharge Permits, the typical contaminants of concern are total Kjeldahl nitrogen (TKN), nitrate-nitrogen (NO₃-N), total dissolved solids (TDS), and chloride (Cl). For most industrial Discharge Permits, typical contaminants of concern are volatile and semi-volatile organic compounds (VOC's), polynuclear aromatic hydrocarbons (PAH's), polychlorinated biphenyls (PCB's), metals, and radionuclides. See Supplemental Instructions for additional information.

a. Depth-to-Most-Shallow Ground Water [Subsection C of 20.6.2.3106 NMAC]

1. Facilities *with* on-site monitoring wells

Provide the depth-to-most-shallow ground water from the most recent ground water levels obtained from monitoring wells at the facility. Depth-to-ground water shall be measured to the nearest 0.01 feet using standard methods and techniques [Subsection B of 20.6.2.3107 NMAC].

Depth-to-ground water is: 20 feet dry season 8 to 12 snow melt feet

Note: Use this depth to complete Part I.4.b (Public Notice).

2. Facilities *without* on-site monitoring wells

If a facility does not have a monitoring well intersecting most-shallow ground water, provide depth-to-most-shallow ground water for all wells on file located within one mile of the boundary of the facility. This information can be obtained from the Office of the State Engineer (<http://www.ose.state.nm.us>).

Depth-to-ground water is: _____ feet

Note: Use the range of depths from these records to complete Part I.4.b (Public Notice).

- ☐ Attached – Records from the Office of the State Engineer, including the following:
- location of each well by latitude/longitude and township, range, and section
 - use of each well
 - depth to ground water in each well
 - total depth of each well

b. Ground Water Flow Direction [Subsection C of 20.6.2.3106 NMAC]

1. Facilities with *three or more* on-site monitoring wells

Provide ground water flow direction beneath the facility on a ground water elevation contour map. The ground water elevation contour map shall be developed based upon the most recent ground water levels and survey data obtained from on-site monitoring wells.

Flow Direction _____

- ☐ Included – Ground water contour map from on-site monitoring wells
- ☐ Included – Monitoring well survey
- ☐ No survey has been conducted
- ☐ Survey previously submitted on _____ (date)

2. Facilities with *less than three* on-site monitoring wells

If a facility does not have at least three monitoring wells intersecting most-shallow ground water, provide ground water flow direction based upon either the most recent regional water level data or published hydrogeologic information. Attach the sources of information used to determine ground water flow direction. *Select all that apply.*

- ☒ Ground water flow direction of the most-shallow ground water beneath the facility based upon the *most recent regional water level data* is NW.
-- Reference: New Mexico Bureau of Geology and Mineral References (attach relevant portions)
- ☐ Attached - Survey data from nearby monitoring wells and a *ground water elevation contour map* indicating the direction of ground water flow.

- ☒ Ground water flow direction of the most-shallow ground water beneath the facility based upon *published hydrogeologic information* is NW.

-- Reference: New Mexico Bureau of Geology and Mineral Resources (attach relevant portions)

c. Monitoring Well Construction and Identification [Subsection C of 20.6.2.3106 NMAC; Subsection A of 20.6.2.3107 NMAC]

1. For existing monitoring wells

Submit construction logs for all existing, on-site monitoring wells, which indicate the date of installation and well driller.

- ☐ Included - Construction logs for each existing monitoring well.
- ☒ Previously Submitted
Date _____

2. For all monitoring wells - Identify proposed and existing monitoring well (MW) locations.

MW ID ¹	Proposed or Existing?	Location Description ² AND Latitude and Longitude	Screen Interval (ft)	Depth to Water
301	Existing	35-43-49 N; 105-54-39W		
302	Existing	35-43-56 N; 105-54-42 W		
303	Existing	35-43-54 N; 105-54-73 W		

¹ MW ID (Monitoring Well ID) is the numbering or labeling system used to identify a MW (e.g., MW-1, MW-2, etc.).

² Example: 60 feet south of the top inside edge of the berm of Wastewater Impoundment-1

d. Past Ground Water Monitoring Results

This item applies only to existing facilities seeking renewal and/or modification of a Discharge Permit that required ground water monitoring. See Supplemental Instructions for additional information.

1. **Attach a graph or table showing all analytical results from ground water monitoring.**

e. Engineering and Surveying

Proposed New Structures or Improvements to Existing Structures

Include electronic plans and specifications for any *proposed* new structures or improvements to existing structures. All final plans and specifications must bear the stamp of a New Mexico licensed Professional Engineer.

- Proposed plans and specifications included (*Select all that apply*)
 - ☒ Included for new structure(s)
 - ☐ Included for improvements to an existing structure
 - ☐ No proposals for new or improved structures

f. Land Application Area Information

For facilities proposing to apply reclaimed or treated wastewater to a land application area, provide calculations showing that nitrogen loading does not exceed 200 lbs/acre/year or that the amount of total nitrogen in the combined application of wastewater and fertilizer does not exceed by more than 25% the amount reasonably expected to be taken up by the crop(s) and removed by harvesting in any 12-month period. Forms to assist in these calculations can be found at:

<https://www.env.nm.gov/gwb/FORMS/NewMexicoEnvironmentDepartment-GroundWaterQualityBureau-Forms.htm>.

- ☒ Attached – Nitrogen loading calculations

Part III. Additional Proposals and Conditions (if applicable)

In the space provided, propose revisions or additions to the standard Discharge Permit requirements. If you propose any revisions or additions, also provide the rational for your proposal.

Please see the attached letter

Part IV. Maps and Logs to be Attached

1. Surface Soil Survey and Vadose Zone Geology

[Subsection C of 20.6.2.3106 NMAC]

- ☒ Attached - Most recent regional soil survey map and associated descriptions identifying surface soil type(s).
- ☐ Attached - Lithologic logs for all existing on-site monitoring wells (if available).

2. Topographic Map [Subsection C of 20.6.2.3106 NMAC]

- ☒ Attached - Location map with topographic surface contours identifying all of the following features located within a one-mile radius of the facility:
 - watercourses
 - lakebeds
 - sinkholes
 - playa lakes
 - springs (springs used to provide water for human consumption shall be so denoted)
 - wells supplying water for a public water system
 - private domestic water wells
 - irrigation supply wells
 - ditch irrigation systems
 - acequias
 - irrigation canals
 - drains

3. Flood Zone Map [Subsection C of 20.6.2.3106 NMAC]

- ☒ Attached - Most recent 100-year flood zone map developed by the federal emergency management administration (FEMA) documenting flood potential for the facility.

Describe any engineered measures used for flood protection.

4. Additional Information

Describe any additional relevant information.

Supplemental Instructions

Please note: Discharge Permits are required for a wide range of facilities that process, treat, store and/or dispose of wastewater, sludge, septage, leachate, contaminated soils, mine tailings, industrial waste, mine ore, waste rock, or other similar materials. For the purposes of this application form, the term “discharge” applies to any of these materials whether they are actually discharged or whether they represent only a potential discharge that could occur due to factors such as poor maintenance, improper installation, equipment failure or accidents.

Part I.1 Facility Information and Type of Facility

The “Facility” may be identified as:

- a treatment facility, such as a municipal wastewater treatment plant;
- the source of the discharge, such as a subdivision, or waste rock pile;
- a disposal facility or operation, such as for sludge or septage;
- the discharge location or end user of reclaimed wastewater, such as a golf course or cement plant;
- a storage and/or processing facility with off-site disposal;
- a collection of facilities, such as numerous comfort stations at a state park; or
- a project or operation, such as a construction project or a system to distribute reclaimed wastewater throughout a city.

Examples of a variety of facility types are categorized below. Please note, “Domestic” waste contains human excreta or originates from typical residential plumbing fixtures.

Industrial Waste

- Manufacturing
- Power plant
- Military installation
- Vehicle/equipment wash
- Mortuary
- Hydrocarbon landfarm
- Ground water remediation
- Ethanol plant
- Asphalt plant
- Remediation Systems

Mining Waste

- tailing impoundment
- mine dewatering
- waste rock pile
- smelter slag
- in-situ leach
- leach piles
- pipelines
- collection ponds
- concentrator – other beneficiation

Domestic Waste

- Municipal wastewater treatment plant
- Septage disposal
- Sludge disposal
- Mobile home/RV park
- Campground/park
- School/educational facility
- Restaurant
- Subdivision/apartment complex
- Unincorporated community
- Lodging/resort/spa
- Residential facility
- Commercial/shopping complex
- Laundromat
- Facility using reclaimed domestic wastewater

Agricultural Waste

- Dairy
- Food processing
- Slaughter facility
- Nursery/greenhouse
- Manufacture/processing of agricultural chemicals
- Feedlot
- Livestock truck washout

This listing is only a guide, as there can be crossover between categories. For example, a golf course might use treated industrial wastewater for irrigation. The type of facility in that case is “golf course” and the type of waste is “industrial.” A mining operation may need a permit for its restroom and shower facilities. In that case, the type of facility is a “mining operation” and the type of discharge is “domestic waste.”

Part I.5: Facility Location

The following are examples of treatment, storage, and disposal components of a wastewater system that should be included in this part.

Treatment Methods

- Septic tank
- Grease interceptor
- Oil/water separator
- Manure separator
- Wetlands
- Lagoon (indicate whether aerated and type of liner)
- Trickling filter
- Activated sludge (extended air, SBR, etc.)
- Sand filter
- Membranes
- Sludge drying bed
- Disinfection (specify type)
 - chlorination

Disposal Methods

- Leachfield
- Infiltration gallery
- Evaporation lagoon (indicate type of liner)
- Evaporation tank
- Impoundment
- Discharge to waters of the US (NPDES permit required)
- Ongoing land application (specify type)
 - subsurface irrigation
 - sprinkler irrigation
 - flood irrigation
 - drip irrigation
 - surface spreading (solids)
 - surface injection (solids)

- UV/ozone
- Water treatment plant
- Injection Wells
- Temporary uses of reclaimed wastewater
- Ongoing use of reclaimed wastewater for:
 - Manufacturing construction or dust control

Storage Methods

- Above/below ground tank
- Storage lagoon (indicate type of liner)
- Holding tank
- Pit toilet
- Stockpile
- Tailing impoundment

Part II.1 Proposed Maximum Daily Discharge Volume

Your Discharge Permit will allow for the treatment, processing and/or discharge of up to a specified volume, generally, a maximum number of gallons per day. The flow at your facility on any given day must not exceed this “maximum discharge volume.” It is determined based on the expected contributions from the sources you identified Part II, 1, b, 1.

NMED will carefully review the basis of the maximum discharge volume you propose. Show all your calculations and assumptions.

Animal feeding operations must provide calculations based on the number of animals and water conservation practices in place.

Landfarms, disposal facilities, processing facilities typically identify the expected number of loads to be delivered.

For septic systems and wastewater treatment plants, the maximum discharge volume is also referred to as the “design flow.” It includes a peaking or safety factor to guard against back-ups and overflows.

Municipal wastewater treatment facilities should identify the population served, growth assumptions, and expected per capita usage considering any contributing industries.

On-site domestic wastewater treatment facilities should rely on published design flows such as those provided in the NMED Liquid Waste Regulations (20.7.3 NMAC), the Uniform Plumbing Code or the USEPA On-site Wastewater Treatment Systems Manual.

For existing facilities, the maximum discharge volume may be based on a record of measured flows if no changes are anticipated. At least two years of flow data must be submitted, and the highest monthly discharge volume must be multiplied by a peaking factor of 1.5.

NMED will verify that your proposed or existing facility can handle maximum discharge volume you propose.

Be specific in describing all sources. Consider the following examples:

- Municipalities – identify particular industries or specialized facilities contributing wastewater.
- RV Parks – identify showers, dump stations, laundromat, etc.

- Subdivisions – identify homes, apartments, commercial developments, water softener backwash, etc.
- Landfills or disposal facilities – specify type of materials accepted, e.g., residential septage, car wash grit trap waste, contaminated soils/water, treated municipal sludge, etc.
- Dairies – identify milking parlors, type of washdown used, sources of stormwater runoff, etc.
- Schools – identify cafeteria, gym, showers, etc.
- Truck stops – identify restaurant, showers, car wash, etc.
- Facilities receiving reclaimed wastewater – identify the treatment facility providing the reclaimed wastewater.
- Food processing and industrial facilities – describe the processes which produce the waste stream and chemicals used.
- Mines – identify processes including beneficiation, tailing, waste rock, leach facilities, pipelines, ponds, catchments, booster stations, in-situ leach facilities.

You do not need to include solid wastes, hazardous wastes or discharges being managed under other permits; however, these must be listed under Item C-7 in Part C of the application.

Part II.3: Flow Metering

You must provide a method for measuring the discharge volume (Section 20.6.2.3109.H.1 NMAC). At facilities with treatment or storage lagoons, it is necessary to measure both the volume entering the treatment system as well as the volume ultimately discharged.

If you land apply wastewater to more than one discharge location, you must be able to track the volume to each location.

If your facility is small and relies on gravity to carry wastewater to the treatment and disposal system, it may be acceptable to estimate the wastewater flow. This can be done by metering water usage and deducting the volume of water used for fresh-water irrigation, swimming pools, evaporative cooling, livestock watering or other uses that do not result in wastewater flowing to the treatment system.

Part II.4: Discharge Quality

Untreated wastewater entering a treatment facility (also referred to as “influent”) must be characterized so that the treatment process can be evaluated. It is not necessary to provide influent quality for systems providing minimal treatment prior to discharge or disposal, such as systems relying on crop uptake for treatment (e.g., dairies), septic tank – leachfield systems, storage/processing facilities or evaporative systems. The final quality of the waste or wastewater disposed of or discharged must be characterized for all facilities.

For most agricultural and domestic facilities, the contaminants of concern include nitrate as nitrogen (NO₃-N), total Kjeldahl nitrogen (TKN), total dissolved solids (TDS), and chloride (Cl). For domestic facilities with advanced treatment, additional contaminants include total suspended solids (TSS), biochemical oxygen demand (BOD₅), and fecal coliform bacteria. Contaminants of concern at industrial and mining sites include pH, metals, and organic compounds. List all that apply.

Part II.E: Ground Water Monitoring

The depth to ground water beneath your facility and/or discharge site must be provided. This is true even if your facility or operation is intended to have no discharge. Discharge Permits are required for “no-discharge” lagoons, storage tanks, etc. because of the potential for a discharge to occur due to factors such as improper installation, poor maintenance, equipment failure or accidents.

The best way to determine the depth to water is to measure it in an on-site or nearby monitoring well. If a monitoring well is not available, the measurement may be from a water supply well. If there is a well but it is not possible to access it for a measurement, you could refer to the well log for that well and/or others in the vicinity. Well log information is available on the website of the State Engineer’s office:

<http://www.ose.state.nm.us/>.

Be aware that water levels have dropped in many areas of the state, so more recent well logs in those areas are more reliable.

There may be a significant discrepancy in the depth to water in different wells, even when falling water levels is not a factor. One reason for this is that a water supply well may rely on a deep aquifer rather than water in the “first” or most shallow aquifer. Discharge Permits are intended to protect all ground water, so it is important to report the shallowest depth in the vicinity of your site.

The total dissolved solids (TDS) concentration of the ground water prior to discharge must be provided. As explained for the depth to water, this is true even if your facility or operation is intended to have no discharge. The TDS value provides a general indication of the quality of the ground water that could be affected by your operation.

The best way to obtain a pre-discharge TDS concentration is to sample an on-site or nearby well before your facility begins operating. It is better to sample a shallow rather than a deep well, if possible. It may be that a neighboring facility has existing analytical data for its Discharge Permit. (If so, be sure to obtain data from a non-impacted well.)

If there are no wells in your vicinity or it is not possible to sample them, you may find general TDS concentrations in reports available from sources such as a university, the State Engineer’s Office (<http://www.ose.state.nm.us/>) or the US Geological Survey (<http://nm.water.usgs.gov/>).

If you are renewing or modifying your Discharge Permit, you may refer to the TDS concentration previously determined if there was a sound basis for it. Monitoring data or other information obtained since the permit was issued, however, may warrant listing a different value.

Part II.E.4: Past Ground Water Monitoring Results

A complete list of ground water standards can be found in Section 20.6.2.3103 NMAC. The standards for contaminants most frequently monitored under Discharge Permits are as follows:

Nitrate-nitrogen (NO ₃ -N).....	10 mg/L
Chloride	250 mg/L
Total dissolved solids (TDS)...	1000 mg/L
Sulfate (SO ₄).....	600 mg/L
pH	between 6 and 9

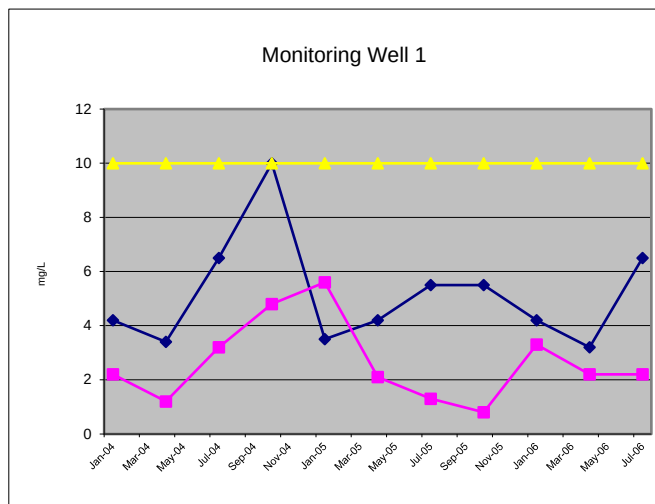
There is no ground water standard for total Kjeldahl nitrogen (TKN). Because TKN converts readily to nitrate as it moves through the vadose zone, however, concentrations approaching or exceeding 10 mg/L are of concern.

Additional parameters typically apply at mining or industrial facilities.

Some ground waters in the state have TDS or chloride concentrations that naturally exceed these standards. In that case, the standard is the naturally occurring level. You must provide documentation of such elevated natural conditions, such as analytical results from a non-impacted well.

An example table and graph follow:

Date	Monitoring Well 1	
	NO3-N	TKN
Jan-04	4.2	2.2
Apr-04	3.4	1.2
Jul-04	6.5	3.2
Oct-04	10	4.8
Jan-05	3.5	5.6
Apr-05	4.2	2.1
Jul-05	5.5	1.3
Oct-05	5.5	0.8
Jan-06	4.2	3.3
Apr-06	3.2	2.2
Jul-06	6.5	2.2





Michelle Lujan Grisham
Governor

Howie C. Morales
Lieutenant Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Ground Water Quality Bureau

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James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

September 30, 2019

Michael Sheppard
BL Santa Fe, LLC
112 W. San Francisco Street, Suite 310
Santa Fe, NM 87501

RE: Discharge Permit Renewal and Modification, DP-75, Bishop's Lodge

Dear Mr. Sheppard:

The New Mexico Environment Department (NMED) issues the enclosed Discharge Permit Renewal and Modification, DP-75, to BL Santa Fe LLC (permittee) pursuant to the New Mexico Water Quality Act and the New Mexico Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

A draft permit dated April 28, 2019 was sent to you and was also made available to the public for a 30-day comment period. NMED did not receive any comments on the draft permit.

An invoice for the Discharge Permit Fee of \$2,300.00 is being sent under separate cover.

NMED advises you to submit an application for renewal or renewal/modification at least 180 days prior to the end of the Discharge Permit term in order to avoid a lapse in permit coverage which could result in enforcement action.

If you have any questions, please contact Jason Herman at (505) 827-2713. Thank you for your cooperation during the application review process.

Sincerely,

Michelle Hunter, Chief
Ground Water Quality Bureau

MH:JH

Michael Sheppard
September 30, 2019
Page 2 of 2

Encl: Discharge Permit Renewal and Modification, DP-75
Discharge Permit Summary
Table of 20.6.2.3103 Standards for Ground Water
Ground Water Discharge Permit Monitoring Well Construction and Abandonment
Conditions, Revision 1.1, March 2011

cc: Robert Italiano, District Manager, NMED District II
John Romero, Office of the State Engineer
Anne Keller, DWB, UOCP



Michelle Lujan Grisham
Governor

Howie C. Morales
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Deputy Secretary

**GROUND WATER QUALITY BUREAU (GWQB)
DISCHARGE PERMIT, RENEWAL and MODIFICATION
Issued under 20.6.2 NMAC**

Facility Name: Bishop's Lodge
GWQB Discharge Permit Number: DP-75
GWQB TEMPO AI Number: 2871

Permittee Name/Responsible Party: BL Santa Fe LLC
Mailing Address: 112 W. San Francisco Street Suite 310
Santa Fe, NM 87501

Facility Contact: Michael Shepard, Owner
Facility Contact Telephone Number: (505) 515-1850
Facility Location: 1297 Bishop's Lodge Road
Santa Fe, NM

County: Santa Fe

Permitting Action: Renewal and Modification

Permit Effective Date: September 30, 2019
Permit Expiration Date: September 29, 2024

NMED Permit Contact: Jason Herman
NMED Contact Telephone Number: (505) 827-2713
E-mail Address: Jason.herman@state.nm.us

MICHELLE HUNTER
Chief, Ground Water Quality Bureau
New Mexico Environment Department

Date

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GROUND WATER DISCHARGE PERMIT RENEWAL and MODIFICATION

Bishop's Lodge, DP-75

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), DP-75, to BL Santa Fe LLC (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from Bishop's Lodge (facility) into ground and surface water so as to protect such water for present and potential future use as domestic and agricultural water supply and other uses and to protect public health. In issuing this Discharge Permit, NMED has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been met. Pursuant to Section 20.6.2.3104 NMAC, it is the responsibility of the permittee to comply with the terms and conditions of this Discharge Permit; failure may result in an enforcement action(s) by NMED (20.6.2.1220 NMAC).

The activities that produce the discharge, the location of the discharge, and the quantity, quality and flow characteristics of the discharge are briefly described as follows.

Up to 14,760 gallons per day (gpd) of domestic wastewater is received and treated using a mechanical treatment plant and MetaReactor retrofit unit. Treated wastewater is discharged to two leachfields for disposal. The modification consists of a change in the location of the discharge and significant modification to the mechanical treatment plant. The change in location includes the removal of the concrete lined ponds and synthetically lined wetlands and the installation of a new leachfield for disposal. The discharge contains water contaminants that may be elevated above the standards of Section 20.6.2.3103 NMAC. The facility is located at 1297 Bishop's Lodge Road, approximately 3 miles southeast of Tesuque, in Sections 5 and 6, Township 17N, Range 10E, Santa Fe County. Groundwater most likely to be affected is at a depth of approximately 23 feet and has a total dissolved solids concentration of approximately 300 milligrams per liter.

The original Discharge Permit was issued on July 11, 1979 and subsequently renewed and/or modified on December 6, 2004, February 19, 1999, January 18, 1994, April 10, 1989 and February 20, 1984. The application (i.e., discharge plan) consists of the materials submitted by Ana Berry on behalf of the permittee dated July 2, 2018 and materials contained in the administrative record prior to issuance of this Discharge Permit. The discharge shall be managed in accordance with all conditions and requirements of this Discharge Permit.

Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a discharge permit modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated, or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality and more stringent

requirements to protect groundwater quality may be required by NMED. The permittee may be required to implement abatement of water pollution and remediate groundwater quality.

Issuance of this Discharge Permit does not relieve the permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

The following acronyms and abbreviations may be used in this Discharge Permit.

Abbreviation	Explanation	Abbreviation	Explanation
BOD ₅	biochemical oxygen demand (5-day)	NMED	New Mexico Environment Department
CFR	Code of Federal Regulations	NMSA	New Mexico Statutes Annotated
CFU	Colony Forming Unit	NO ₃ -N	nitrate-nitrogen
Cl	chloride	NTU	nephelometric turbidity units
EPA	United States Environmental Protection Agency	TDS	total dissolved solids
gpd	gallons per day	TKN	total Kjeldahl nitrogen
LAA	land application area	total nitrogen	= TKN + NO ₃ -N
LADS	land application data sheet(s)	TRC	total residual chlorine
mg/L	milligrams per liter	TSS	total suspended solids
mL	milliliters	WQA	New Mexico Water Quality Act
MPN	Most Probable Number	WQCC	Water Quality Control Commission
NMAC	New Mexico Administrative Code	WWTF	Wastewater Treatment Facility

II. FINDINGS

In issuing this Discharge Permit, NMED finds the following.

1. The permittee is discharging effluent or leachate from the facility so that such effluent or leachate may move directly or indirectly into groundwater within the meaning of Section 20.6.2.3104 NMAC.
2. The permittee is discharging effluent or leachate from the facility so that such effluent or leachate may move into groundwater of the State of New Mexico that has an existing concentration of 10,000 mg/L or less of TDS within the meaning of Subsection A of 20.6.2.3101 NMAC.
3. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

III. AUTHORIZATION TO DISCHARGE

Pursuant to 20.6.2.3104 NMAC it is the responsibility of the permittee to ensure that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein.

The permittee is authorized to receive and treat up to 14,760 gpd of domestic wastewater using a mechanical treatment plant and MetaReactor retrofit modification unit. The permittee is authorized to discharge treated wastewater to two leachfields for disposal.

IV. CONDITIONS

NMED issues this Discharge Permit for the discharge of water contaminants subject to the following conditions.

A. OPERATIONAL PLAN

#	Terms and Conditions
1.	The permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 2 and 4 NMAC. [Subsection C of 20.6.2.3109 NMAC]
2.	The permittee shall operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated. [20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]

Operational Actions with Implementation Deadlines

#	Terms and Conditions
3.	Within 120 days following the effective date of this Discharge Permit (by January 28, 2020), the permittee shall install a new grease interceptor designed in accordance with the New Mexico Plumbing Code, 14.8.2 NMAC to accommodate the wastewater discharged from the kitchen. A schematic of the installed grease interceptor shall be submitted to NMED within 30 days of completion. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
4.	Within 180 days following the effective date of this Discharge Permit (by March 28, 2020), the permittee shall submit to NMED an up-to-date scaled map(s) of the entire wastewater treatment facility. The map(s) shall be developed using information obtained from a survey of the entire wastewater treatment facility. The map(s) shall be drawn to a scale such that all necessary information is plainly shown and labeled. The map shall include the following elements:

#	Terms and Conditions
	• a graphical scale; • a north arrow; • the effective date of the map; • all components of the wastewater treatment and disposal system; • all groundwater monitoring wells; • all flow measurement devices; • all wastewater sampling locations. The survey shall be performed to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and shall be in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). A survey elevation shall be established with a permanent marking indicating the point of survey. The completed survey shall bear the seal and signature of a licensed New Mexico professional surveyor (pursuant to New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority). Any element that cannot be directly shown due to its location inside of existing structures, or because it is buried without surface identification, shall be on the map in a schematic format and identified as such. [Subsection C of 20.6.2.3106 NMAC, Subsection A of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]

Operating Conditions

#	Terms and Conditions
5.	Treated wastewater discharged to the leachfields shall not exceed the following discharge limit. Total Nitrogen: 10 mg/L [Subsection C of 20.6.2.3109 NMAC]
6.	The permittee shall control access to the wastewater treatment facility. The access controls shall be constructed in a manner which prevents access by the general public and animals. Access controls shall be maintained throughout the term of this Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
7.	The permittee shall maintain signs indicating that the wastewater at the facility is not potable. Signs shall be posted at the facility entrance and other areas where there is

#	Terms and Conditions
	potential for public contact with wastewater. All signs shall be printed in English and Spanish and shall remain visible and legible for the term of this Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
8.	The permittee shall visually inspect the area above each leachfield (disposal system) semi-annually to ensure proper maintenance. Any conditions that indicate damage to a disposal system shall be corrected. Such conditions include, but are not limited to erosion damage, animal activity/damage, woody shrubs, or evidence of seepage. The permittee shall keep a log of the inspection findings and repairs. The log shall be made available to NMED upon request. In the event of a failure of a disposal system, the permittee shall enact the contingency plan set forth in this Discharge Permit. [Subsections A and D of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
9.	The permittee shall properly manage all solids generated by the treatment system to maintain effective operation by removing solids as necessary in accordance with accepted process control methods. Solids removed from the treatment process shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. The permittee shall maintain manifests for all solids transported from the treatment facility for off-site disposal. The manifests shall identify the date, volume of solids removed and method of disposal. Records of treatment system solids disposal, including the volume of solids removed and copies of all manifests for the previous calendar year, shall be submitted to NMED annually in the monitoring reports due by August 1st each year.. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
10.	The permittee shall inspect the grease interceptor on a monthly basis and remove accumulated grease and settled solids as needed to prevent them from exiting the unit. The permittee shall maintain a record of grease/solids removal and disposal, including date, volume of grease/solids removed, and method of disposal and make them available to NMED upon request. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
11.	The permittee shall utilize operators, certified by the State of New Mexico at the appropriate level pursuant to 20.7.4 NMAC, to operate the wastewater collection, treatment and disposal systems. The operations and maintenance of all or any part of the wastewater system shall be performed by, or under the direct supervision of, a certified operator.

#	Terms and Conditions
	[Subsection C of 20.6.2.3109 NMAC, 20.7.4 NMAC]

B. MONITORING AND REPORTING

#	Terms and Conditions
12.	The permittee shall conduct the following monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
13.	METHODOLOGY – Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC. [Subsection B of 20.6.2.3107 NMAC]
14.	Quarterly monitoring shall be performed during the following periods and reports submitted to NMED as follows: • January 1st through March 31st – due by May 1st; • April 1st through June 30th – due by August 1st; • July 1st through September 30th – due by November 1st; and • October 1st through December 31st – due by February 1st. [Subsection A of 20.6.2.3107 NMAC]

Monitoring Actions with Implementation Deadlines

#	Terms and Conditions
15.	Within 60 days following the effective date of this Discharge Permit (by November 29, 2019), the permittee shall submit a written monitoring well location proposal for review and approval by NMED. The proposal shall designate the locations of the monitoring wells required to be installed by Condition #16 of this Discharge Permit. The proposal shall include, at a minimum, the following information. - A map showing the proposed location of the monitoring wells relative to the boundary of the source it is intended to monitor. - A written description of the specific location proposed for each monitoring well including the distance (in feet) and direction of the monitoring well from the edge of the source it is intended to monitor. Examples include: 35 feet north-northwest of the northern berm of the synthetically lined impoundment; 45 feet due south of the leachfield; 30 feet southeast of the re-use area 150 degrees from north.

#	Terms and Conditions
	c) A statement describing the groundwater flow direction beneath the facility and documentation and/or data supporting the determination. All monitoring well locations shall be approved by NMED prior to installation. [Subsection A of 20.6.2.3107 NMAC]
16.	Within 120 days of the effective date of this Discharge Permit (by January 28, 2020), the permittee shall install the following new monitoring wells. a) One monitoring well (MW-1) located hydrologically upgradient of the facility. b) One monitoring well (MW-2) located 20 to 50 feet hydrologically downgradient of the old leachfield. c) One monitoring well (MW-3) located 20 to 50 feet hydrologically downgradient of the new leachfield. The wells shall be completed in accordance with the attachment titled, <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011 or alternative methods submitted for approval. Well construction and lithologic logs shall be submitted to NMED within 30 days of well completion. [Subsection A of 20.6.2.3107 NMAC]
17.	Following the installation of the monitoring wells required by this Discharge Permit, the permittee shall sample groundwater in the wells and analyze the samples for TKN, NO₃-N, TDS and Cl. Groundwater sample collection, preservation, transport and analysis shall be performed according to the following procedure. a) Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest hundredth of a foot. b) Purge three well volumes of water from the well prior to sample collection. c) Obtain samples from the well for analysis. d) Properly prepare, preserve and transport samples. e) Analyze samples in accordance with the methods authorized in this Discharge Permit. Well completion report (including the Office of the State Engineer permit), depth-to-most-shallow groundwater measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED within 45 days of the installation of the monitoring wells. [Subsection A of 20.6.2.3107 NMAC]

#	Terms and Conditions
18.	Within 150 days following the effective date of this Discharge Permit (by February 27, 2020), the permittee shall survey all wells approved by NMED for Discharge Permit monitoring purposes to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and elevation to the nearest hundredth of a foot or shall be in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). A survey elevation shall be established at the top-of-casing, with a permanent marking indicating the point of survey. The survey shall bear the seal and signature of a licensed New Mexico professional surveyor (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority). Depth-to-most-shallow groundwater shall be measured to the nearest hundredth of a foot in all surveyed wells and referenced to mean sea level, and the data shall be used to develop a groundwater elevation contour map showing the location of all monitoring wells and the direction and gradient of groundwater flow at the facility. The data and groundwater elevation contour map shall be submitted to NMED within 30 days of survey completion. [Subsection A of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]

Ground Water Monitoring Conditions

#	Terms and Conditions
19.	The permittee shall perform quarterly groundwater sampling in the following monitoring wells and analyze the samples for TKN, NO₃-N, TDS and Cl. - MW-1, intended to be located hydrologically upgradient of the facility. - MW-2, intended to be located hydrologically downgradient of the old leachfield. - MW-3, intended to be located hydrologically downgradient of the new leachfield. Groundwater sample collection, preservation, transport and analysis shall be performed according to the following procedure. - Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest hundredth of a foot. - Purge three well volumes of water from the well prior to sample collection. - Obtain samples from the well for analysis. - Properly prepare, preserve and transport samples. - Analyze samples in accordance with the methods authorized in this Discharge Permit. Depth-to-most-shallow groundwater measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC]

#	Terms and Conditions
20.	The permittee shall develop a groundwater elevation contour map on a quarterly basis using the top of casing elevation data from the monitoring well survey and quarterly depth-to-most-shallow groundwater measurements, referenced to mean sea level, obtained from the groundwater monitoring wells required by this Discharge Permit. The groundwater elevation contour map shall depict the groundwater flow direction based on the groundwater elevation contours. Groundwater elevations between monitoring well locations shall be estimated using common interpolation methods. A contour interval appropriate to the data shall be used, but the interval shall, in no case, be greater than two feet. Groundwater elevation contour maps shall depict the groundwater flow direction, using arrows, based on the orientation of the groundwater elevation contours, and the location and identification of each monitoring well and contaminant source. The groundwater elevation contour map shall be submitted to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC]
21.	NMED shall have the option to perform downhole inspections of all monitoring wells identified in this Discharge Permit. NMED shall establish the inspection date and provide at least a 60-day notice to the permittee by certified mail. The permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of sediment agitated from pump removal. [Subsections A and D of 20.6.2.3107 NMAC]

Facility Monitoring Conditions

#	Terms and Conditions
22.	The permittee shall measure the monthly volume of treated wastewater discharged from the treatment system to the leachfields. The permittee shall obtain readings from a totalizing flow meter located in the blower room on a monthly basis and calculate the monthly and average daily discharge volume. The monthly meter readings and calculated monthly and average daily discharge volumes shall be submitted to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
23.	All flow meters shall be capable of having their accuracy verified under actual working (field) conditions. A field verification method shall be developed for each flow meter and that method shall be used to check the accuracy of each respective meter. Field calibrations shall be performed upon repair or replacement of a flow measurement device and, at a

#	Terms and Conditions
	minimum, once within 90 days of the effective date of this Discharge Permit (by December 29, 2019). Flow meters shall be calibrated to within plus or minus 10 percent of actual flow, as measured under field conditions. Field calibrations shall be performed by an individual knowledgeable in flow measurement and in the installation/operation of the particular device in use. A flow meter calibration report shall be prepared for each flow measurement device at the frequency calibration is required. The flow meter calibration report shall include the following information. - The location and meter identification. - The method of flow meter field calibration employed. - The measured accuracy of each flow meter prior to adjustment indicating the positive or negative offset as a percentage of actual flow as determined by an in-field calibration check. - The measured accuracy of each flow meter following adjustment, if necessary, indicating the positive or negative offset as a percentage of actual flow of the meter. - Any flow meter repairs made during the previous year or during field calibration. The permittee shall maintain records of flow meter calibration(s) at a location accessible for review by NMED during facility inspections. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
24.	The permittee shall visually inspect flow meters on a monthly basis for evidence of malfunction. If a visual inspection indicates a flow meter is not functioning as required by this Discharge Permit, the permittee shall repair or replace the meter within 30 days of discovery. For <i>repaired</i> meters, the permittee shall submit a report to NMED with the next monitoring report following the repair that includes a description of the malfunction; a statement verifying the repair; and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. For <i>replacement</i> meters, the permittee shall submit a report to NMED with the next monitoring report following the replacement that includes a design schematic for the device and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
25.	The permittee shall collect samples of treated wastewater from the discharge to the leachfields on a quarterly basis and analyze the samples for: - TKN; - NO₃-N; - TDS; and - Cl.

#	Terms and Conditions
	Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]

C. CONTINGENCY PLAN

#	Terms and Conditions
26.	In the event that groundwater monitoring indicates that a groundwater quality standard identified in Section 20.6.2.3103 NMAC is exceeded, the permittee shall collect a confirmatory sample from the monitoring well within 15 days of receipt of the initial sampling results to confirm the initial sampling results. Within 60 days of confirmation of groundwater contamination, the permittee shall submit to NMED a Corrective Action Plan that proposes, at a minimum, source control measures and an implementation schedule. The Plan shall be enacted as approved by NMED. Once invoked (whether during the term of this Discharge Permit, or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements), this condition shall apply until the permittee has fulfilled the requirements of this condition and groundwater monitoring confirms for a minimum of eight (8) consecutive quarterly samples that the standards of Section 20.6.2.3103 NMAC are not exceeded in groundwater. If the groundwater standard continues to be violated 180 days after the confirmation of groundwater contamination, the permittee may be required to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108 and Section 20.6.2.4112 NMAC. [Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]
27.	In the event that information available to NMED indicates that a well is not constructed in a manner consistent with the attachment titled <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011; contains insufficient water to effectively monitor groundwater quality; or is not completed in a manner that is protective of groundwater quality, the permittee shall install a replacement well(s) within 120 days following notification from NMED. The permittee shall survey the replacement monitoring well(s) within 150 days following notification from NMED.

#	Terms and Conditions
	Replacement well locations shall be approved by NMED prior to installation and completed in accordance with the attachment titled, <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011. The permittee shall submit construction and lithologic logs, survey data and a groundwater elevation contour map to NMED within 60 days following well completion. Upon completion of the replacement monitoring well, the monitoring well requiring replacement shall be properly plugged and abandoned. Well plugging, abandonment and documentation of the abandonment procedures shall be completed in accordance with the attachment titled, <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011, and all applicable local, state, and federal regulations. The well abandonment documentation shall be submitted to NMED within 60 days of completion of well plugging activities. [Subsection A of 20.6.2.3107 NMAC]
28.	In the event that groundwater flow information obtained pursuant to this Discharge Permit indicates that a monitoring well is not located hydrologically downgradient of the discharge location it is intended to monitor, the permittee shall install a replacement well within 120 days following notification from NMED. The permittee shall survey the replacement monitoring well within 150 days following notification from NMED. Replacement well locations shall be approved by NMED prior to installation and completed in accordance with the attachment titled, <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011. The permittee shall submit construction and lithologic logs, survey data and a groundwater elevation contour map within 30 days following well completion. [Subsection A of 20.6.2.3107 NMAC]
29.	In the event that analytical results of a quarterly treated wastewater sample indicate an exceedance of the total nitrogen discharge limit set in this Discharge Permit, the permittee shall collect and analyze a second confirmation sample within 48 hours of the receipt of the initial sampling results. In the event the second sample results indicate that the discharge limit is continuing to be exceeded, the following contingency plan shall be enacted. a) Within 7 days of the second sample analysis date indicating that the discharge limit is continuing to be exceeded, the permittee shall: i) notify NMED that the contingency plan is being enacted; and ii) submit a copy of the first and second analytical results indicating an exceedance to NMED. b) The permittee shall increase the frequency of total nitrogen wastewater sampling and analysis of treated wastewater to once per month.

#	Terms and Conditions
	c) The permittee shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational procedures. d) The permittee shall conduct a physical inspection of the treatment system to detect abnormalities. Any abnormalities discovered shall be corrected. A report detailing the corrections made shall be submitted to NMED within 30 days of correction. e) In the event that any analytical results from monthly wastewater sampling indicate an exceedance of the total nitrogen discharge limit, the permittee shall propose to modify operational procedures and/or upgrade the treatment process to achieve the total nitrogen limit by submitting a Corrective Action Plan to NMED for approval. The Plan shall include a schedule for completion of corrective actions and shall be submitted within 90 days of the second sample analysis date indicating that the discharge limit is continuing to be exceeded. The permittee shall initiate implementation of the Plan following approval by NMED. When analytical results from three consecutive months of wastewater sampling do not exceed the discharge limit, the permittee is authorized to return to a quarterly monitoring frequency. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
30.	In the event that an inspection of a leachfield reveals failure, the following contingency plan shall be enacted. a) Within 24 hours following the discovered failure, the permittee shall: - notify NMED of the failure in accordance with the notification requirements described in the Contingency Plan for unauthorized discharges; and - restrict public access to the area. b) The permittee shall conduct a physical inspection of the treatment and disposal system to identify additional potential failures. c) The permittee shall propose actions to address the failure and methods of correction by submitting a Corrective Action Plan to NMED for approval within 15 days following the discovered failure. The Corrective Action Plan shall include a schedule for completion of corrective actions and the permittee shall initiate implementation of the Plan following approval by NMED. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
31.	In the event that a release (commonly known as a "spill") occurs that is not authorized under this Discharge Permit, the permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below. Within <u>24 hours</u> following discovery of the unauthorized discharge, the permittee shall verbally notify NMED and provide the following information.

#	Terms and Conditions
	a) The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility. b) The name and address of the facility. c) The date, time, location, and duration of the unauthorized discharge. d) The source and cause of unauthorized discharge. e) A description of the unauthorized discharge, including its estimated chemical composition. f) The estimated volume of the unauthorized discharge. g) Any actions taken to mitigate immediate damage from the unauthorized discharge. Within <u>one week</u> following discovery of the unauthorized discharge, the permittee shall submit written notification to NMED with the information listed above and any pertinent updates. Within <u>15 days</u> following discovery of the unauthorized discharge, the permittee shall submit a corrective action report/plan to NMED describing any corrective actions taken and/or to be taken relative to the unauthorized discharge that includes the following information. a) A description of proposed actions to mitigate damage from the unauthorized discharge. b) A description of proposed actions to prevent future unauthorized discharges of this nature. c) A schedule for completion of proposed actions. In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, the permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC. Nothing in this condition shall be construed as relieving the permittee of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC. [20.6.2.1203 NMAC]
32.	In the event that NMED or the permittee identifies any failures of the discharge plan or this Discharge Permit not specifically noted herein, NMED may require the permittee to submit a Corrective Action Plan and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a Discharge Permit modification to achieve compliance with 20.6.2 NMAC. [Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

D. CLOSURE PLAN

Closure Conditions with Implementation Deadlines

#	Terms and Conditions
33.	Within 120 days of the effective date of this Discharge Permit (by January 28, 2020), the permittee shall perform the following closure measures to the existing grease interceptor: a) Remove and plug all lines leading to the existing grease interceptor so that a discharge can no longer occur. b) Drain and/or evaporate all liquids from the grease interceptor and dispose of all sludge in accordance with all local, state, and federal (40 CFR Part 503) regulations. c) Remove or demolish the tanks and re-grade area with clean fill to blend with surface topography and prevent ponding. [Subsection A of 20.6.2.3107 NMAC]

Permanent Facility Closure Conditions

#	Terms and Conditions
34.	In the event the facility, or a component of the facility, is proposed to be permanently closed, the permittee shall perform the following closure measures. Within <u>90 days</u> of ceasing to discharge to the treatment system, the permittee shall complete the following closure measures. a) The line leading to the system shall be plugged so that a discharge can no longer occur. b) Wastewater in the system components shall be evaporated, or drained and disposed of in accordance with all local, state, and federal regulations. c) Solids removed from the treatment system shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The permittee shall maintain a record of all solids transported for off-site disposal. Within <u>180 days</u> of ceasing to discharge to the treatment system (or unit), the permittee shall complete the following closure measures. a) Remove all lines leading to and from the treatment system, or permanently plug them and abandon them in place. b) Remove or demolish all treatment system components, and re-grade area with suitable fill to blend with surface topography, promote positive drainage and prevent ponding. When all closure and post-closure requirements have been met, the permittee may submit a written request for termination of the Discharge Permit to NMED. [Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]

#	Terms and Conditions
35.	In the event the facility, or a component of the facility, is proposed to be permanently closed, upon ceasing discharge, the permittee shall perform closure measures. Within <u>90 days</u> of ceasing discharge to the leachfield systems (or closed system components), the permittee shall complete the following closure measures: - Plug all lines leading to and from the closed system(s) so that a discharge can no longer occur. - Wastewater, septage, and grease interceptor waste shall be pumped from the system components (e.g., septic tanks, grease trap/interceptors, lift stations, dosing chambers, distribution boxes) and it shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The permittee shall maintain a record of all wastes transported for off-site disposal. Within <u>180 days</u> of ceasing discharge to the leachfield systems (or closed system components), the permittee shall complete the following closure measures: - Remove all lines leading to and from the closed system(s) or permanently plug them and abandon them in place. - Remove or demolish all closed grease trap/interceptors, lift stations, dosing chambers, distribution boxes or other system(s) components (with the exception of leachfields) and re-grade the area with suitable fill to blend with surface topography to promote positive drainage and prevent ponding. The permittee shall continue groundwater monitoring until the requirements of this condition have been met and groundwater monitoring confirms for a minimum of two years of consecutive groundwater sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded. If monitoring results show that a groundwater quality standard in Section 20.6.2.3103 NMAC is exceeded or the total nitrogen concentration is greater than 10 mg/L in groundwater, the permittee shall implement the contingency plan required by this Discharge Permit. Following notification from NMED that post-closure monitoring may cease, the permittee shall plug and abandon the monitoring well(s) in accordance with the attachment titled, <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011. When all closure and post-closure requirements have been met, the permittee may submit a written request for termination of the Discharge Permit to NMED. [Subsection A of 20.6.2.3107 NMAC, 40 CFR Part 503]

E. GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
36.	RECORD KEEPING - The permittee shall maintain a written record of: • information and data used to complete the application for this Discharge Permit; • any releases (commonly known as “spills”) not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC; • the operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; • facility record drawings (plans and specifications) showing the actual construction of the facility and bear the seal and signature of a licensed New Mexico professional engineer; • copies of monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit; • the volume of wastewater or other wastes discharged pursuant to this Discharge Permit; • groundwater quality and wastewater quality data collected pursuant to this Discharge Permit; • copies of construction records (well log) for all groundwater monitoring wells required to be sampled pursuant to this Discharge Permit; • the maintenance, repair, replacement or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and • data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including: ○ the dates, location and times of sampling or field measurements; ○ the name and job title of the individuals who performed each sample collection or field measurement; ○ the sample analysis date of each sample ○ the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis; ○ the analytical technique or method used to analyze each sample or collect each field measurement; ○ the results of each analysis or field measurement, including raw data; ○ the results of any split, spiked, duplicate or repeat sample; and ○ a copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used. The written record shall be maintained by the permittee at a location accessible during a facility inspection by NMED for a period of at least five years from the date of application, report, collection or measurement and shall be made available to the department upon request. [Subsections A and D of 20.6.2.3107 NMAC]

#	Terms and Conditions
37.	INSPECTION and ENTRY – The permittee shall allow inspection by NMED of the facility and its operations that are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which are located any records required to be maintained by regulations of the federal government or the WQCC. The permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state or federal regulations. [Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]
38.	DUTY to PROVIDE INFORMATION - The permittee shall, upon NMED's request, allow for NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records. [Subsection D of 20.6.2.3107 NMAC]
39.	MODIFICATIONS and/or AMENDMENTS – In the event the permittee proposes a change to the facility or the facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the facility, the permittee shall notify NMED prior to implementing such changes. The permittee shall obtain approval (which may require modification of this Discharge Permit) by NMED prior to implementing such changes. [Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]
40.	PLANS and SPECIFICATIONS – In the event the permittee is proposing to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the permittee shall submit construction plans and specifications to NMED for the proposed system or process unit prior to the commencement of construction. In the event the permittee implements changes to the wastewater system authorized by this Discharge Permit that result in only a minor effect on the character of the discharge, the permittee shall report such changes (including the submission of record drawings, where applicable) as of January 1 and June 30 of each year to NMED.

#	Terms and Conditions
	[Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
41.	CIVIL PENALTIES - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]
42.	CRIMINAL PENALTIES – No person shall: • make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA; • falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or • fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation. Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. [20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]

#	Terms and Conditions
43.	COMPLIANCE with OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the permittee of the obligation to comply with any other applicable federal, state, and/or local laws, regulations, zoning requirements, nuisance ordinances, permits or orders. [NMSA 1978, § 74-6-5.L]
44.	RIGHT to APPEAL - The permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues to be raised and the relief sought. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review. [20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.O]
45.	TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this facility or any portion thereof, the permittee shall: • notify the proposed transferee in writing of the existence of this Discharge Permit; • include a copy of this Discharge Permit with the notice; and • deliver or send by certified mail to NMED a copy of the notification and proof that such notification has been received by the proposed transferee. Until both ownership and possession of the facility have been transferred to the transferee, the permittee shall continue to be responsible for any discharge from the facility. [20.6.2.3111 NMAC]
46.	PERMIT FEES - Payment of permit fees is due at the time of Discharge Permit approval. Permit fees shall be paid in a single payment or shall be paid in equal installments on a yearly basis over the term of the Discharge Permit. Single payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date. Initial installment payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date; subsequent installment payments shall be remitted to NMED no later than the anniversary of the Discharge Permit effective date. Permit fees are associated with <u>issuance</u> of this Discharge Permit. Nothing in this Discharge Permit shall be construed as relieving the permittee of the obligation to pay all permit fees assessed by NMED. A permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date. [Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Facility Information

Facility Name Bishops's Lodge
Discharge Permit Number DP-75
Legally Responsible Party Michael Shepard, Owner
BL Santa Fe LLC
112 W. San Francisco Street Suite 310
Santa Fe, NM 87501
(770) 709-8816

Treatment, Disposal and Site Information

Primary Waste Type Domestic
Facility Type Hotel/Condominiums

Treatment Methods

Type	Designation	Description & Comments
Grease Interceptor	Grease Interceptor	1,000-gallon steel with screen. To be plugged and abandoned.
Grease Interceptor	New Grease Interceptor	New interceptor required to be installed to replace non-functional existing equipment.
Primary Treatment	Headworks of WWTP	Concrete box and screen with Muffin Monster grinder.
Secondary Treatment	Package Plant	Package plant consisting of 15,000-gallon equalization tank, 30,000-gallon aeration tank, 6,000-gallon gravity clarifier, 3,000-gallon mixing tank.
Tertiary Treatment	MetaReactor	15,000 gpd retrofit treatment system for denitrification

Discharge Locations

Type	Designation	Description & Comments
Infiltration Gallery	Old Leachfield	110'x114' infiltration gallery with an estimated 9,000 gpd capacity.
Infiltration Gallery	New Leachfield	Recently constructed leachfield for disposal of up to 5,760 gpd.

Flow Metering Locations

Type	Designation	Description & Comments
Totalizing Flow Meter	Effluent Flow Meter	Greyline Instrument DFM5 Doppler Flow Meter

Ground Water Monitoring Locations

Type	Designation	Description & Comments
Monitoring Well	MW-1	Required to be installed by this permit. Intended to be located up gradient of the facility.
Monitoring Well	MW-2	Required to be installed by this permit. Intended to be located downgradient of the old leachfield.



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Monitoring Well	MW-3	Required to be installed by this permit. Intended to be located downgradient of the new leachfield.

Depth-to-Ground Water 23 feet
Total Dissolved Solids (TDS) 300 mg/L

Permit Information

Original Permit Issued July 11, 1979
Permit Renewal and/or Modification February 20, 1984
Permit Renewal and/or Modification April 10, 1989
Permit Renewal and/or Modification January 18, 1994
Permit Renewal and/or Modification February 19, 1999
Permit Renewal and/or Modification December 6, 2004
Permit Renewal February 14, 2011

Current Action	Renewal and Modification
Application Received	July 2, 2018
Public Notice Published	August 23, 2019
Permit Issued (Effective Date)	September 30, 2019
Permitted Discharge Volume	14,760 gallons per day

NMED Contact Information

Mailing Address	Ground Water Quality Bureau P.O. Box 5469 Santa Fe, New Mexico 87502-5469
GWQB Telephone Number	(505) 827-2900
NMED Lead Staff	Jason Herman
Lead Staff Telephone Number	(505) 827-2713
Lead Staff Email	Jason.herman@state.nm.us



New Mexico Environment Department

Ground Water Quality Bureau

20.6.2.3103 STANDARDS FOR GROUND WATER

This table lists the numeric ground water standards in 20.6.2.3103 NMAC, effective as of December 21, 2018. It does not list the “toxic pollutants” for which Subsection A of 20.6.2.3103 NMAC establishes a narrative standard. The list of “toxic pollutants” can be found in Subsection T of 20.6.2.7 NMAC. The standards with an asterisk (*) take effect on July 1, 2020 for past and current water discharges occurring as of July 1, 2017. For full details, please refer to the Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

Contaminant (Abbreviation) (CAS Number)	Standard
Numerical Standards (mg/l unless otherwise noted)	
Antimony (Sb) (CAS 7440-36-0)	0.006
Arsenic (As) (CAS 7440-38-2)	0.01*
Barium (Ba) (CAS 7440-39-3)	2.0
Beryllium (Be) (CAS 7440-41-7)	0.004
Cadmium (Cd) (CAS 7440-43-9)	0.005*
Chromium (Cr) (CAS 7440-47-3)	0.05
Cyanide (CN) (CAS 57-12-5)	0.2
Fluoride (F) (CAS 16984-48-8)	1.6
Lead (Pb) (CAS 7439-92-1)	0.015*
Total Mercury (Hg) (CAS 7439-97-6)	0.002
Nitrate (NO ₃ as N) (CAS 14797-55-8)	10.0
Nitrite (NO ₂ as N) (CAS 10102-44-0)	1.0
Selenium (Se) (CAS 7782-49-2)	0.05
Silver (Ag) (CAS 7440-224)	0.05
Thallium (Tl) (CAS 7440-28-0)	0.002
Uranium (U) (CAS 7440-61-1)	0.03
Radioactivity: Combined Radium-226 (CAS 13982-63-3) and Radium-228 (CAS 15262-20-1)	5 pCi/l*
Benzene (CAS 71-43-2)	0.005*
Polychlorinated biphenyls (PCB's) (CAS 1336-36-3)	0.0005*
Toluene (CAS 108-88-3)	1.0
Carbon Tetrachloride (CAS 56-23-5)	0.005*
1,2-dichloroethane (EDC) (CAS 107-06-2)	0.005*
1,1-dichloroethylene (1,1-DCE) (CAS 75-35-4)	0.007
tetrachloroethylene (PCE) (CAS 127-18-4)	0.005*
trichloroethylene (TCE) (CAS 79-01-6)	0.005*
ethylbenzene (CAS 100-41-4)	0.7*
total xylenes (CAS 1330-20-7)	0.62
methylene chloride (CAS 75-09-2)	0.005*
chloroform (CAS 67-66-3)	0.1
1,1-dichloroethane (CAS 75-34-3)	0.025
ethylene dibromide (EDB) (CAS 106-93-4)	0.00005*
1,1,1-trichloroethane (CAS 71-55-6)	0.2
1,1,2-trichloroethane (CAS 79-00-5)	0.005*
1,1,2,2-tetrachloroethane (CAS 79-34-5)	0.01
vinyl chloride (CAS 75-01-4)	0.002
PAHs: total naphthalene (CAS 91-20-3) plus monomethylnaphthalenes	0.03
benzo-a-pyrene (CAS 50-32-8)	0.0002*
cis-1,2-dichloroethene (CAS 156-59-2)	0.07
trans-1,2-dichloroethene (CAS 156-60-5)	0.1
1,2-dichloropropane (PDC) (CAS 78-87-5)	0.005

styrene (CAS 100-42-5)	0.1
1,2-dichlorobenzene (CAS 95-50-1)	0.6
1,4-dichlorobenzene (CAS 106-46-7)	0.075
1,2,4-trichlorobenzene (CAS 120-82-1)	0.07
pentachlorophenol (CAS 87-86-5)	0.001
atrazine (CAS 1912-24-9)	0.003
Other Standards for Domestic Water Supply	
Chloride (Cl) (CAS 16887-00-6)	250
Copper (Cu) (CAS 7440-50-80)	1.0
Iron (Fe) (CAS 7439-89-6)	1.0
Manganese (Mn) (CAS 7439-96-5)	0.2
Phenols	0.005
Sulfate (SO ₄) (CAS 14808-79-8)	600
Total Dissolved Solids (TDS)	1000
Zinc (Zn) (CAS 7440-66-6)	10
pH	6-9
Methyl tertiary-butyl ether (MTBE) (CAS 1634-04-4)	0.1
Standards for Irrigation Use	
Aluminum (Al) (CAS 7429-90-5)	5.0
Boron (B) (CAS 7440-42-8)	0.75
Cobalt (Co) (CAS 7440-48-4)	0.05
Molybdenum (Mo) (CAS 7439-98-7)	1.0
Nickel (Ni) (CAS 7440-02-0)	0.2

**NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER QUALITY BUREAU
MONITORING WELL CONSTRUCTION AND ABANDONMENT GUIDELINES**

Purpose: These guidelines identify minimum construction and abandonment details for installation of water table monitoring wells under ground water Discharge Permits issued by the NMED's Ground Water Quality Bureau (GWQB) and Abatement Plans approved by the GWQB. Proposed locations of monitoring wells required under Discharge Permits and Abatement Plans and requests to use alternate installation and/or construction methods for water table monitoring wells or other types of monitoring wells (e.g., deep monitoring wells for delineation of vertical extent of contaminants) must be submitted to the GWQB for approval prior to drilling and construction.

General Drilling Specifications:

1. All well drilling activities must be performed by an individual with a current and valid well driller license issued by the State of New Mexico in accordance with 19.27.4 NMAC. Use of drillers with environmental well drilling experience and expertise is highly recommended.
2. Drilling methods that allow for accurate determinations of water table locations must be employed. All drill bits, drill rods, and down-hole tools must be thoroughly cleaned immediately prior to the start of drilling. The borehole diameter must be drilled a minimum of 4 inches larger than the casing diameter to allow for the emplacement of sand and sealant.
3. After completion, the well should be allowed to stabilize for a minimum of 12 hours before development is initiated.
4. The well must be developed so that formation water flows freely through the screen and is not turbid, and all sediment and drilling disturbances are removed from the well.

Well Specifications (see attached monitoring well schematic):

5. Schedule 40 (or heavier) polyvinyl chloride (PVC) pipe, stainless steel pipe, carbon steel pipe, or pipe of an alternate appropriate material that has been approved for use by NMED must be used as casing. The casing must have an inside diameter not less than 2 inches. The casing material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. The casing material and thickness selected for use must have sufficient collapse strength to withstand the pressure exerted by grouts used as annular seals and thermal properties sufficient to withstand the heat generated by the hydration of cement-based grouts. Casing sections may be joined using welded, threaded, or mechanically locking joints; the method selected must provide sufficient joint strength for the specific well installation. The casing must extend from the top of the screen to at least one foot above ground surface. The top of the casing must be fitted with a removable cap, and the exposed casing must be protected by a locking steel well shroud. The shroud must be large enough in diameter to allow easy access for removal of the cap. Alternatively, monitoring wells may be completed below grade. In this case, the casing must extend from the top of the screen to 6 to 12 inches below the ground surface; the monitoring wells must be sealed with locking, expandable well plugs; a flush-mount, watertight well vault that is rated to withstand traffic loads must be emplaced around the wellhead; and the cover must be secured with at least one bolt. The vault cover must indicate that the wellhead of a monitoring well is contained within the vault.
6. A 20-foot section (maximum) of continuous-slot, machine slotted, or other manufactured PVC or stainless steel well screen or well screen of an alternate appropriate material that has been approved for use by NMED must be installed across the water table. Screens created by cutting slots into solid casing with saws or other tools must not be used. The screen material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. Screen sections may be joined using welded, threaded, or mechanically

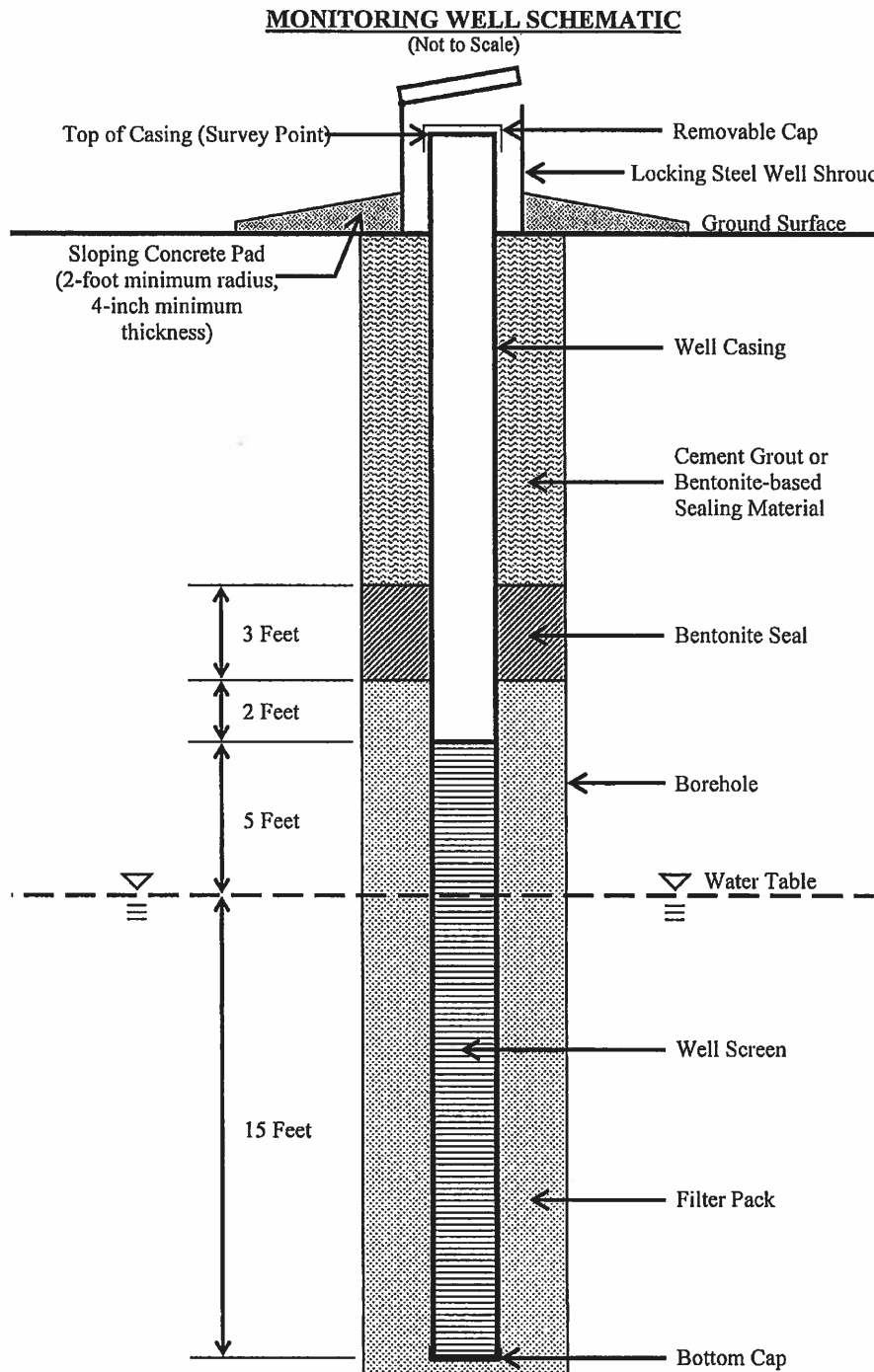
locking joints; the method selected must provide sufficient joint strength for the specific well installation and must not introduce constituents that may reasonably be considered contaminants of interest at the facility. A cap must be attached to the bottom of the well screen; sumps (i.e., casing attached to the bottom of a well screen) should not be installed. The bottom of the screen must be installed no more than 15 feet below the water table; the top of the well screen must be positioned not less than 5 feet above the water table. The well screen slots must be appropriately sized for the formation materials and should be selected to retain 90 percent of the filter pack. A slot size of 0.010 inches is generally adequate for most installations.

7. Casing and well screen must be centered in the borehole by placing centralizers near the top and bottom of the well screen.
8. A filter pack must be installed around the screen by filling the annular space from the bottom of the screen to 2 feet above the top of the screen with clean silica sand. The filter pack must be properly sized to prevent fine particles in the formation from entering the well; clean medium to coarse silica sand is generally adequate as filter pack material for 0.010-inch slotted well screen. For wells deeper than 30 feet, the sand must be emplaced by a tremmie pipe. The well should be surged or bailed to settle the filter pack and additional sand added, if necessary, before the bentonite seal is emplaced.
9. A bentonite seal must be constructed immediately above the filter pack by emplacing bentonite chips or pellets (3/8-inch in size or smaller) in a manner that prevents bridging of the chips/pellets in the annular space. The bentonite seal must be 3 feet in thickness and hydrated with clean water. Adequate time should be allowed for expansion of the bentonite seal before installation of the annular space seal.
10. The annular space above the bentonite seal must be sealed with cement grout or a bentonite-based sealing material acceptable to the State Engineer pursuant to 19.27.4 NMAC. A tremmie pipe must be used when placing sealing materials at depths greater than 20 feet below the ground surface. Annular space seals must extend from the top of the bentonite seal to the ground surface (for wells completed above grade) or to a level 3 to 6 inches below the top of casing (for wells completed below grade).
11. For monitoring wells finished above grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the shroud and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the wellhead. The installation of steel posts around the well shroud and wellhead is recommended for monitoring wells finished above grade to protect the wellhead from damage by vehicles or equipment. For monitoring wells finished below grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the well vault and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the well vault.

Abandonment:

12. Approval for abandonment of monitoring wells used for ground water monitoring in accordance with Discharge Permit and Abatement Plan requirements must be obtained from NMED prior to abandonment.
13. Well abandonment must be accomplished by removing the well casing and placing neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer for wells that encounter water pursuant to 19.27.4 NMAC from the bottom of the borehole to the ground surface using a tremmie pipe. If the casing cannot be removed, neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer must be placed in the well using a tremmie pipe from the bottom of the well to the ground surface.
14. After abandonment, written notification describing the well abandonment must be submitted to the NMED. Written notification of well abandonment must consist of a copy of the well plugging record submitted to the State Engineer in accordance with 19.27.4 NMAC, or alternate documentation containing the information to be provided in a well plugging record required by the State Engineer as specified in 19.27.4 NMAC.

Deviation from Monitoring Well Construction and Abandonment Requirements: Requests to construct water table monitoring wells or other types of monitoring wells for ground water monitoring under ground water Discharge Permits or Abatement Plans in a manner that deviates from the specified requirements must be submitted in writing to the GWQB. Each request must state the rationale for the proposed deviation from these requirements and provide detailed evidence supporting the request. The GWQB will approve or deny requests to deviate from these requirements in writing.





MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

PUBLIC NOTICE

Groundwater Discharge Permits Proposed for Approval September 20, 2024

Dear Interested Party,

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) hereby provides notice that the following Groundwater Discharge Permits have been proposed for approval. NMED will allow 30 days after the date of publication of this notice (or as otherwise provided below) for submittal of written comments and/or a request for a public hearing for a permitting action. You can add the comment period to your calendar through our Events Calendar located at <https://www.env.nm.gov/events-calendar/>. You can now submit your comments online using the Public Comment Portal located at <https://nmed.commentinput.com/>. Requests for public hearing shall be in writing and shall set forth the reasons why a hearing should be held. A hearing will be held if NMED determines that there is substantial public interest. After the administrative record for a permitting action is complete and all required information is available, NMED will approve, approve with conditions, or disapprove the Permit based on the administrative record.

NMED maintains a Public Involvement Plan (PIP) for each permitting action to plan for providing public participation opportunities and information that may be needed for the community to participate in a permitting process. PIPs may be viewed on-line at <https://www.env.nm.gov/public-notice/>, at the NMED field office nearest to the proposed permitted activity, or by contacting the NMED Permit Contact identified below. NMED also maintains facility-specific mailing lists for persons wishing to receive associated notices for a permitting action.

To learn more about a Discharge Permit and the permitting process, to be placed on a facility-specific mailing list, or to obtain a copy of a draft permit or PIP, please contact the NMED Permit Contact at the telephone number or address provided below. Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notice/> under the tab for the facility's county. Comments or a request for hearing regarding a draft permit should be addressed to the GWQB, PO Box 5469, Santa Fe, NM 87502-5469, or emailed to the NMED Permit Contact.

If you are a non-English speaker, do not speak English well, or if you have a disability, you may contact the NMED Permit Contact to request assistance, an interpreter, or an auxiliary aid in order to learn more about a

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Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469
Telephone (505) 827-2900 | www.env.nm.gov/gwqb/

NMED Exhibit 3

Discharge Permit or the permitting process, or to participate in activities associated with the permitting process. To the extent possible, NMED will arrange for requested interpretation services and accommodations or services for persons with disabilities. Telephone conversation assistance is available through Relay New Mexico at no charge for people who are deaf, hard of hearing, or have difficulty speaking on the phone, by calling 1-800-659-1779; Spanish: 1-800-327-1857; TTY users: 1-800-659-8331. Telephone interpretation assistance for persons that are a non-English speaker or do not speak English well is available at no charge when calling NMED.

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Parts 5 and 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, you may contact: Kate Cardenas, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at <https://www.env.nm.gov/general/environmental-justice-in-new-mexico/> to learn how and where to file a complaint of discrimination.

Enclosure: Groundwater Discharge Permits Proposed for Approval



Discharge Permit: DP-1886, Bien Nacido LLC

- County: Eddy | Closest City: Artesia
- Applicant: Athena Valdez, Owner, Bien Nacido LLC, PO Box 1458, Artesia, NM 88210.
- NMED Permit Contact: Lochlin Farrell, Geoscientist, Lochlin.Farrell@env.nm.gov or pps.general@env.nm.gov, Telephone: (505) 660-8061 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Carlsbad: 406 N. Guadalupe, Ste C, Carlsbad, NM 88220.
- Written comments or requests for a hearing for DP-1886 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1886, Bien Nacido LLC: Athena Valdez proposes to renewal and modify the Discharge Permit for the discharge of up to 19,600 gallons per day of domestic septage to a disposal system. Potential contaminants from this type of discharge include nitrogen compounds and organic compounds. The facility is located at 6149 Seven Rivers Highway, approximately 5 miles south of Artesia, in Section 20, Township 18 South, Range 26 East, Eddy County. Groundwater most likely to be affected is at a depth of approximately 150 feet and had a pre-discharge total dissolved solids concentration of 1,660 milligrams per liter.

Discharge Permit: DP-600, Alto Lakes Water and Sanitation District

- County: Lincoln | Closest City: Alto
- Applicant: Alto Lakes Water and Sanitation District Wastewater Facility, 214 Lake Shore Drive (PO Box 750), Alto, NM 88312.
- NMED Permit Contact: Kambray Townsend, Water Resource Professional, kambray.townsend@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-538-0497 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Alamogordo: 811 E. First St, Suite D, Alamogordo, NM 88310.
- Written comments or requests for a hearing for DP-600 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-600, Alto Lakes Water and Sanitation District Wastewater Facility: Alto Lakes Water and Sanitation District proposes to renew the Discharge Permit for the discharge of up to 30,000 gallons per day of domestic wastewater to a treatment and disposal system. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 1 Country Club Road, Alto, NM, in Sections 27, 34 and 35, Township 10 South, Range 13 East, Lincoln County. Groundwater most likely to be affected is at a depth of approximately 42 feet and had a pre-discharge total dissolved solids concentration of 1,130 milligrams per liter.



Discharge Permit: DP-1699, Fort Stanton Historic Site

- County: Lincoln | Closest City: Ft. Stanton
- Applicant: Matthew Barbour, Acting Director, New Mexico Historic Sites, 407 Galisteo St., Suite 264, Santa Fe, NM 87501
- NMED Permit Contact: Deborah Carpenter, Water Resource Professional, Deborah.Carpenter@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-531-7430 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Ruidoso: 1216 Mechem Drive, Bldg 2, Ruidoso, NM 88345.
- Written comments or requests for a hearing for DP-1699 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1699, Fort Stanton Historic Site: New Mexico Department of Cultural Affairs proposes to renew the Discharge Permit for the discharge of up to 2,000 gallons per day of domestic wastewater to a disposal system. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 108 Kit Carson Rd., Ft. Stanton, in Section 35, Township 09 South, Range 14 East, Lincoln County. Groundwater most likely to be affected is at a depth of approximately 223 feet and had a pre-discharge total dissolved solids concentration of 631 milligrams per liter.

Discharge Permit: DP-1757, Alamogordo Public Schools

- County: Otero | Closest City: Alamogordo
- Applicant: Alamogordo Public Schools, Judy Campbell, Construction and Maintenance Financial Specialist, P.O. Box 650, Alamogordo, NM 88310
- NMED Permit Contact: Andrew Romero, Water Resource Professional, AndrewC.Romero@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-660-8624 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Alamogordo: 811 E. First St, Suite D, Alamogordo, NM 88310.
- Written comments or requests for a hearing for DP-1757 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1757, Alamogordo Public Schools proposes to renew the Discharge Permit for the discharge of up to 500,000 gallons per day of reclaimed domestic wastewater to athletic fields. Potential contaminants from this type of discharge include nitrogen compounds. The facility and the discharge locations are located at McDowell Athletic Field on College Ave. and 15th St.; Alamogordo High School on Alaska Ave. And 1st St; Steinhoff Yucca Soccer Complex on Playa Azul and Santa Cruz Dr.; and Mountain View Middle School and Grady Fields at Playa Azul and Santa Cruz Drive, within Alamogordo, in Sections 17, 20 and 29, Township 16 South, Range 10 East, Otero County. Groundwater most likely to be affected is at a depth of approximately 150-200 feet and had a pre-discharge total dissolved solids concentration of 2,400 milligrams per liter.



Discharge Permit: DP-1864, Buena Vista Mobile Home Park

- County: Otero | Closest City: Alamogordo
- Applicant: Wesley R. Oberling, Owner, 34 Desert Willow, Alamogordo, NM 88310
- NMED Permit Contact: Lochlin Farrell, Geoscientist, Lochlin.Farrell@env.nm.gov or pps.general@env.nm.gov, Telephone: (505) 660-8061 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Alamogordo: 811 E. First St, Suite D, Alamogordo, NM 88310.
- Written comments or requests for a hearing for DP-1864 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1864, Buena Vista Mobile Home Park: Wesley R. Oberling proposes to renew the Discharge Permit for the discharge of up to 6,675 gallons per day of domestic wastewater to a treatment and disposal system. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 23 Desert Willow, Alamogordo, in Section 33, Township 16 South, Range 10 East, Otero County. Groundwater most likely to be affected is at a depth of approximately 390 feet and had a pre-discharge total dissolved solids concentration of 864 milligrams per liter.

Discharge Permit: DP-1258, Tucumcari Mountain Cheese Factory, Inc.

- County: Quay | Closest City: Tucumcari
- Applicant: Charles J. Krause, Tucumcari Mountain Cheese Factory, Inc., 823 East Main, Tucumcari, NM 88401.
- NMED Permit Contact: Amanda Otieno, Water Resource Professional, Amanda.Otieno@env.nm.gov or acs.general@env.nm.gov, Telephone: 505-819-1219 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Tucumcari: 113 W. Center, Tucumcari, NM 88401.
- Written comments or requests for a hearing for DP-1258 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1258: Tucumcari Mountain Cheese Factory, Inc., proposes to renew and modify the Discharge Permit for the discharge of up to 20,000 gallons per day of wastewater from a cheese processing facility. Potential contaminants from this type of discharge include nitrogen compounds. The facility and discharge locations are located at 823 East Main St., Tucumcari, in Section 13, Township 11 North, Range 30 East and Section 21, Township 11 North, Range 31 East, Quay County. Groundwater most likely to be affected is at a depth of approximately 12 feet and had total dissolved solids concentration of 1,135 milligrams per liter.



Discharge Permit: DP-1740, Black Mesa Winery

- County: Rio Arriba | Closest City: Velarde
- Applicant: Jerry Burd, Owner, PO Box 308 Velarde, NM 87582
- NMED Permit Contact: Amanda Otieno, Water Resource Professional, Amanda.Otieno@env.nm.gov or acs.general@env.nm.gov, Telephone: 505-819-1219 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Española: 712 La Joya Street, Española, NM 87532.
- Written comments or requests for a hearing for DP-1740 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1740, Black Mesa Winery: Jerry Burd proposes to renew and modify the Discharge Permit for the discharge of up to 200 gallons per day of wastewater from the production area of a dairy facility. Potential contaminants from this type of discharge include nitrogen compounds. The facility and discharge locations are located at 1502 Highway 68 Velarde, in Section 34, Township 23 North, Range 9 East, Rio Arriba County. Groundwater most likely to be affected is at a depth of approximately 17 feet and had a pre-discharge total dissolved solids concentration of 338 milligrams per liter.

Discharge Permit: DP-1784, New Mexico Highlands University

- County: San Miguel | Closest City: Las Vegas
- Applicant: New Mexico Highlands University, Sylvia Baca, PO Box 9000, Las Vegas, NM 87701
- NMED Permit Contact: Andrew Romero, Water Resource Professional, AndrewC.Romero@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-660-8624 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Las Vegas: 2538 Ridgerunner Road, Las Vegas, NM 87701.
- Written comments or requests for a hearing for DP-1784 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1784, New Mexico Highlands University proposes to renew the Discharge Permit for the discharge of up to 35,000 gallons per day of reclaimed domestic wastewater to landscaped areas and athletic fields. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 800 West National Avenue, in Las Vegas, in projected Sections 22 and 23, Township 16 North, Range 16 East, San Miguel County. Groundwater most likely to be affected is at a depth of approximately 7 feet and had a pre-discharge total dissolved solids concentration of 1,400 to 6,200 milligrams per liter.



Discharge Permit: DP-75, Bishop's Lodge Wastewater Treatment Facility

- County: Santa Fe | Closest City: Santa Fe
- Applicant: B L Santa Fe, LLC, Chris Kaplan, 7001 N. Scottsdale Road, Suite 2050, Scottsdale, AZ 85253.
- NMED Permit Contact: Jason Herman, Program Manager, Jason.Herman@env.nm.gov or pps.general@env.nm.gov, Telephone: 575-649-3871 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Santa Fe: 540 Camino Edward Ortiz, Santa Fe, NM 87507.
- Written comments or requests for a hearing for DP-75 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-75, Bishop's Lodge Wastewater Treatment Facility: B L Santa Fe, LLC proposes to renew and modify the Discharge Permit for the discharge of up to 30,000 gallons per day of domestic wastewater from treatment system to reuse areas and disposal system. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 1297 Bishop's Lodge Road, Santa Fe, in Sections 5 and 6, Township 17 North, Range 10 East, Santa Fe County. Groundwater most likely to be affected is at a depth of approximately 23 feet and had a pre-discharge total dissolved solids concentration of 300 milligrams per liter.

Discharge Permit: DP-328, Elephant Butte Lake State Park

- County: Sierra | Closest City: Elephant Butte
- Applicant: State Parks Division, EMNRD, 1220 South Saint Francis Drive, Santa Fe, NM 87505
- NMED Permit Contact: Gerald Knutson, Water Resource Professional, Gerald.Knutson@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-660-7189 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Las Cruces: 2301 Entrada Del Sol, Las Cruces, NM 88001.
- Written comments or requests for a hearing for DP-328 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-328, Elephant Butte Lake State Park: State Parks Division EMNRD proposes to renew the Discharge Permit for the discharge of up to 20,000 gallons per day of domestic wastewater to treatment and disposal systems. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 101 Highway 195, approximately one-mile northeast of Elephant Butte, in Sections 12 and 13, Township 13 South, Range 04 West, Sierra County. Groundwater most likely to be affected is at a depth of approximately 84 feet and had a pre-discharge total dissolved solids concentration of 784 milligrams per liter.



Discharge Permit: DP-1594, Sierra County Regional Wastewater Treatment Facility North Area

- County: Sierra |Closest City: Elephant Butte
- Applicant: City of Elephant Butte, Phillip Mortensen, Mayor, P.O. Box 1080, Elephant Butte, NM 87935
- NMED Permit Contact: Gerald Knutson, Water Resource Professional, Gerald.Knutson@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-660-7189 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Las Cruces: 2301 Entrada Del Sol, Las Cruces, NM 88001.
- Written comments or requests for a hearing for DP-1594 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1594, Sierra County Regional Wastewater Treatment Facility North Area: City of Elephant Butte proposes to renew the Discharge Permit for the discharge of up to 600,000 gallons per day of domestic wastewater to a treatment and disposal system. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 1001 Sunset Ridge Road, approximately 2.2 miles southwest of Elephant Butte, in Section 27, Township 13 South, Range 04 West, Sierra County. Groundwater most likely to be affected is at a depth of approximately 21 feet and had a pre-discharge total dissolved solids concentration of 379 milligrams per liter.

Discharge Permit: DP-1378, Ojo Caliente Mineral Springs

- County: Taos |Closest City: Ojo Caliente
- Applicant: Ojo Caliente Holdings, Inc., P.O. Box 68, Ojo Caliente, NM 87549.
- NMED Permit Contact: Deborah Carpenter, Water Resource Professional, Deborah.Carpenter@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-531-7430 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Taos: 145 Roy Road, Suite B, Taos, NM 87571.
- Written comments or requests for a hearing for DP-1378 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1378, Ojo Caliente Mineral Springs: Ojo Caliente Holdings, Inc. proposes to renew the Discharge Permit for the discharge of up to 30,000 gallons per day of domestic wastewater to a treatment and disposal system. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 50 Los Banos Drive, Ojo Caliente, NM, in Section 24 (projected), Township 24 North, Range 08 East, Taos County. Groundwater most likely to be affected is at a depth of approximately 5 feet and had a pre-discharge total dissolved solids concentration of 1,700 milligrams per liter.



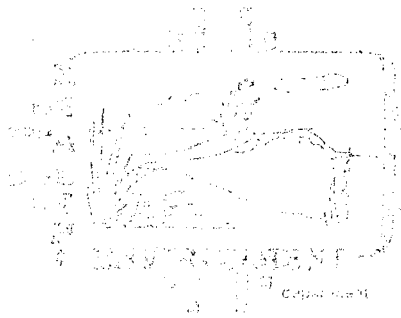
Discharge Permit: DP-1012, Special Waste Disposal, Inc.

- County: Torrance | Closest City: Mountainair
- Applicant: Cailyn Kilcup, Vice President, 5904 Florence Avenue NE, Albuquerque, NM 87113
- NMED Permit Contact: Kambray Townsend, Water Resource Professional, kambray.townsend@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-538-0497 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Los Lunas: 475 Courthouse Road SE Suite B, Los Lunas, NM 87031.
- Written comments or requests for a hearing for DP-1012 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-1012, Special Waste Disposal, Inc. proposes to renew the Discharge Permit for the remediation of up to 2,500 gallons of non-hazardous hydrocarbon-contaminated liquid and up to 48,600 cubic yards of non-hazardous hydrocarbon-contaminated soils at any one time. Potential contaminants from this type of discharge include organic compounds. The facility is located at 91 Liberty Valley Road, approximately 14 miles southeast of Mountainair, in Section 19, Township 02 North, Range 08 East, Torrance County. Groundwater most likely to be affected is at a depth of approximately 500 feet and had a pre-discharge total dissolved solids concentration of 1,830 milligrams per liter.

END OF PUBLIC NOTICE

To view this and other public notices issued by the Ground Water Quality Bureau on-line, go to:
<https://www.env.nm.gov/public-notices/>



ENVIRONMENTAL IMPROVEMENT DIVISION
OFFICE OF NEW MEXICO
P.O. BOX 918
SANTA FE, NEW MEXICO 87503

Bruce King
Governor

GEORGE A. OLNEY, JR.
SECRETARY OF THE ENVIRONMENT

OFFICE OF THE DIRECTOR

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 15, 1979

Mr. James R. Thorpe, Jr., Owner
Bishop's Lodge
P.O. Box 2367
Santa Fe, New Mexico 87501

Re: Discharge Plan Requirement for Domestic Sewage for Bishop's Lodge

Dear Mr. Thorpe:

Pursuant to New Mexico Water Quality Control Commission regulations, enclosed, you are hereby notified that a discharge plan as defined in Section 3-101.1 is required of you for your proposed discharge of treated domestic sewage from Bishop's Lodge to a land application site located at Bishop's Lodge, Bishop's Lodge Road, Santa Fe County, New Mexico.

This notification of discharge plan requirement is pursuant to sections 3-104 and 3-106.

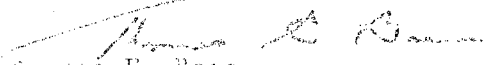
This Division has received information on the proposed facility submitted with your notice of intent to discharge. This Division will consider that information already submitted to be your discharge plan, as you indicated in your notice received on May 14, 1979, and we shall consider your discharge plan to be submitted as of that date. Public notice thereof will be issued as required in section 3-108, and the decision on plan approval will be made following the required 30-day comment period.

Permission is hereby granted to allow you to discharge without an approved discharge plan for a 120 day period, as you requested on May 14, 1979. The attached memorandum details some additional information that will be needed for our review.

The materials you have submitted are being forwarded to Mr. Paul McChaeis, District II Engineer, for his review.

If you have any questions, please do not hesitate to contact Ann M. Young at the above address and telephone.

Sincerely,


Thomas E. Baco,
Director

TEB:AM:jeb

cc: Neil Weber, EID District II Manager

NMED Exhibit 4

New Mexico Environmental Improvement Division
P. O. Box 968
Crown Building
Santa Fe, New Mexico 87503

September 14, 1973

Liquid Waste Disposal Regulations

Section 101. DEFINITIONS.--As used in the Liquid Waste Disposal Regulations:

A. "person" means any individual, partnership, firm, public or private corporation, association, trust, estate, political subdivision or agency, or any other legal entity or their legal representatives, agents or assigns;

B. "division" means the New Mexico Environmental Improvement Division;

C. "body of water" means all water including water situated wholly or partly within or bordering upon the State, whether surface or sub-surface, public or private;

D. "director" means the director of the division or his delegated representative;

E. "absorption field" means an area in which open joint or perforated piping is laid in gravel-packed trenches or excavations for the purpose of distributing the effluent discharged from a tank used as a part of an individual liquid waste disposal system for absorption into the soil;

F. "tank" means a watertight receptacle which receives liquid waste from the sanitary drainage system of a building and in which bacterial assimilation of organic matter takes place;

G. "septic tank system" means a tank which is designed and constructed to separate solids from the liquid waste and digest organic matter through a period of detention, together with an absorption field;

H. "aerobic disposal system" means a tank where air is introduced to the liquid waste by mechanical means, together with an absorption field. There must be satisfactory evidence, such as a National Sanitation

Foundation Certification of Performance, that the tank will operate efficiently and reliably;

I. "evapotranspiration system" means:

1. a tank which is designed and constructed to separate solids from the liquid waste and digest organic matter through a period of detention and which may have air introduced to the liquid waste by mechanical means; and

2. gravel-packed trenches or an excavation designed for the purpose of disposing of the entire flow of liquid waste from the tank by evaporation into the atmosphere or by transpiration by plants, or both;

J. "nutrient" means a substance, such as nitrate and phosphate, which is necessary for plant growth;

K. "high nutrient level" means an excessive level of nutrients which can potentially lead to algae blooms and plant overgrowth;

L. "liquid waste" means domestic or commercial wastewater containing human excreta or other water-carried waste;

M. "individual liquid waste disposal system" means a disposal system which receives 2,000 gallons or less of liquid waste per day and includes but is not limited to, septic tank systems, aerobic disposal systems, evapotranspiration systems and spray irrigation treatment systems;

N. "privy" means a privy or other non-water-carried disposal facility for human excreta;

O. "modify" means to change the method of liquid waste disposal; to enlarge the liquid waste disposal system; to alter the location of the absorption field or other major component; to substantially increase the amount of liquid waste received by the liquid waste disposal system; or to increase the amount of liquid waste received by the liquid waste disposal system to over 2,000 gallons per day; and

P. "watercourse" means any river, creek, arroyo, canyon, draw or wash, or any other channel having definite banks and bed with visible evidence of the occasional flow of water.

Section 102. REGISTRATION.--

A. Any person intending to install an individual liquid waste disposal system or to modify an existing individual liquid waste disposal system or privy must obtain a registration certificate for the system from the Division prior to the installation or modification;

B. Any person seeking a registration certificate shall do so by filing a written application with a Division field office. Application

forms may be obtained from the Division. Applicants shall:

1. state the applicant's name and mailing address;
2. state the date of the application;
3. describe the location of the property where the individual liquid waste disposal system is to be installed;
4. describe the characteristics of the soil where the system is to be installed, including soil depth, percolation rate, depth to seasonal high water table, slope and flooding potential;
5. describe the direction of expected ground water flow;
6. state the lot size of the parcel where the system will be installed;
7. state the kind and quantity of liquid waste the system will be receiving;
8. state the type of individual liquid waste disposal system to be used and its location on the parcel where it will be installed;
9. state the location of any bodies of water, watercourses and existing or proposed water wells and liquid waste disposal systems located on or within two hundred feet of the parcel where the system will be installed; and
10. contain such other relevant information as the Division may reasonably require.

C. Upon the receipt of the information required to be submitted by Subsection B of this section, the Division shall issue a registration certificate within five days of the date the application is completed. If the Division has reviewed the application and it appears that the applicant will not meet the requirements of Section 103 of the Liquid Waste Disposal Regulations, the Division shall so note on the certificate. The issuing of a registration certificate does not:

1. relieve the applicant from the responsibility of complying with all applicable provisions of the Liquid Waste Disposal Regulations; or
2. indicate approval by the Division of the method or location of liquid waste disposal.

D. Division field office shall maintain a file of all certificates issued. The file shall be open for public inspection.

Section 103. REQUIREMENTS FOR THE INSTALLATION AND USE OF INDIVIDUAL LIQUID WASTE DISPOSAL SYSTEMS.--

A. No person may dispose of liquid waste except into a disposal system or facility.

B. No person may use an individual liquid waste disposal system or privy which, by itself or in combination with other sources, is contaminating any drinking water supply, polluting or causing high nutrient levels in any body of water, degrading any recreational resource, creating a nuisance, or causing a hazard to public health.

C. No person shall install or have installed an individual liquid waste disposal system or privy after November 1, 1973, or use an individual liquid waste disposal system or privy installed after November 1, 1973, unless the system is located, operated and maintained so as not, by itself or in combination with other sources, to potentially contaminate any drinking water supply, potentially pollute or cause high nutrient levels in any body of water, potentially degrade any recreational resource, create a nuisance, or cause a potential hazard to public health.

D. No person shall install or have installed an individual liquid waste disposal system after November 1, 1973, or use an individual liquid waste disposal system installed after November 1, 1973, unless:

1. The absorption field and tank used as part of the system are located at least:

(a) one hundred feet from any domestic water well;

(b) two hundred feet from any well or surface water used as a public water supply; and

(c) one hundred feet from the high water elevation of a lake, reservoir or watercourse; and

2. for systems discharging one thousand gallons per day or less of liquid waste into the soil, the parcel of land upon which it will be installed conforms to the minimum lot size requirements contained in the following table:

<u>SOIL GROUPS</u>				
<u>SOIL CHARACTERISTICS</u>	A	B	C	D
	SLIGHT LIMITATIONS		MODERATE LIMITATIONS	SEVERE LIMITATIONS
1. SOIL DEPTH (DEPTH TO BEDROCK IN FEET)	MORE THAN 6 AND	MORE THAN 6 AND	4 - 6 OR	LESS THAN 4 OR
2. PERCOLATION RATE (RATE OF PERCOLATION OF WATER INTO SOIL IN MINUTES PER INCH)	0 - 15 AND	16 - 30 AND	31 - 60 OR	MORE THAN 60 OR
3. SEASONAL WATER TABLE (DEPTH TO SHALLOWEST WATER TABLE DURING THE YEAR IN FEET)	MORE THAN 12 AND	MORE THAN 12 AND	4 - 12 OR	LESS THAN 4 OR
4. SLOPE (INCLINE OF THE LAND SURFACE IN PERCENT)	0 - 8 AND	0 - 8 AND	8 - 25 OR	MORE THAN 25 OR
5. FLOODING POTENTIAL (OVERFLOW FREQUENCY IN YEARS)	NONE	NONE	NO MORE THAN 1 IN 25	MORE THAN 1 IN 25
<u>COMBINATIONS OF WATER & SEWER SYSTEMS</u>	<u>MINIMUM LOT SIZES FOR HOMESITES (ACRES)</u>			
COMMUNITY WATER ONSITE SEWAGE DISPOSAL	.50 ACRE	.75 ACRE	1.00 ACRE	NO ONSITE SEWAGE DISPOSAL INTO SOIL
ONSITE WATER ONSITE SEWAGE DISPOSAL	.75 ACRE	1.00 ACRE	1.25 ACRE	NO ONSITE SEWAGE DISPOSAL INTO SOIL

The minimum lot size required for the location of an individual liquid waste disposal system is determined by the most limiting soil group under which any soil characteristic falls.

(a) As used in the preceding table:

(1) "soil group A" means a soil which is best suited as media for an absorption field where there exists no flooding potential and which has all of the following characteristics: soil depth greater than six feet; percolation rate faster than sixteen minutes per inch; seasonal high water table more than twelve feet; and slope less than eight percent;

(2) "soil group B" means a soil which is well suited as media for an absorption field where there exists no flooding potential and which has all of the following characteristics: soil depth greater than six feet; percolation rate between sixteen and thirty minutes per inch; seasonal high water table more than twelve feet; and slope less than eight percent;

(3) "soil group C" means a soil which is marginally suited as media for absorption field use and which has any one of the following characteristics: soil depth between four and six feet; percolation rate between thirty-one and sixty minutes per inch; slope between eight and twenty-five percent; or located where a flooding potential exists no more than once in twenty-five years; and

(4) "soil group D" means a soil which is unsuited as media for absorption field use and which has any one of the following characteristics: soil depth less than four feet; percolation rate slower than sixty minutes per inch; seasonal high water table less than four feet; slope more than twenty-five percent; or located where a flooding potential exists more than once in twenty-five years; and

(b) For liquid waste disposal systems discharging more than one thousand gallons per day of liquid waste into the soil, the minimum lot size requirements contained in the preceding table shall be increased to accommodate:

(1) the area required for the location of the absorption field as specified in the New Mexico Plumbing Code and for the location of one unobstructed and uncovered replacement absorption field;

(2) the minimum distance requirement of one hundred feet from the absorption field and tank to any domestic water well; and

(3) the minimum distance requirement of two hundred feet from the absorption field and tank to any well or surface water used as a public water supply.

(c) Individual liquid waste disposal systems which discharge effluent into the soil may not be used if any soil characteristic falls in soil group D, unless a variance is obtained in accordance with Section 104 of the Liquid Waste Disposal Regulations.

(d) Septic tank systems may not be used if:

- (1) the soil depth is less than six feet;
- (2) the seasonal high water table is less than twelve feet; or
- (3) the percolation rate is faster than six minutes per inch and the seasonal high water table is less than twenty feet;

(e) Whenever possible, percolation rate shall be determined from United States Soil Conservation Service data or from other available soil classification and soil infiltration rate data.

E. No person may deviate from the requirements of this section unless a variance is obtained in accordance with Section 104 of the Liquid Waste Disposal Regulations.

Section 104. VARIANCES.--

A. Any person seeking a variance from the requirements contained in Section 103 of the Liquid Waste Disposal Regulations, shall do so by filing a written petition with the nearest field office of the Division. Petition forms may be obtained from the field offices.

B. Petitions shall:

1. state the petitioner's name and mailing address;
2. state the date of the petition;
3. describe the location of the property where the individual liquid waste disposal system is to be installed;
4. describe the characteristics of the soil where the system is to be installed, including soil depth, percolation rate, depth to seasonal water table, slope and flooding potential;
5. describe the expected direction of ground water flow;
6. state the requirement from which the variance is sought;
7. state the lot size of the parcel where the system will be installed;
8. state the kind and quantity of liquid waste the system will be receiving;
9. state the type of individual liquid waste disposal system to be used and its location on the parcel where it will be installed;

10. state the location of any bodies of water, water-courses and any existing and proposed water wells and liquid waste disposal systems located on or within two hundred feet of the parcel where the system will be installed;

11. state the period of time for which the variance is desired;

12. state why the petitioner believes the variance is justified;

13. be accompanied by any relevant documents, or material which the petitioner believes would support his petition; and

14. contain such other relevant information as the Division may reasonably require.

C. The Division shall deny the Variance petition if it appears that the individual liquid waste disposal system will be located, operated or maintained so as to potentially contaminate any drinking water supply, potentially pollute or cause high nutrient levels in any body of water, potentially degrade any recreational resource, create a nuisance, or cause a potential hazard to public health.

D. Within ten days following receipt of the variance petition, the Division field office shall either grant the variance, grant the variance subject to conditions, or deny the variance. The action taken by the field office shall be by written order, a copy of which shall be sent to the petitioner. Orders shall:

1. state the petitioner's name and address;

2. state the date the order is made;

3. describe the location of the property where the individual liquid waste disposal system was sought to be installed;

4. state the lot size of the parcel where the system was sought to be installed;

5. state the kind and quantity of liquid waste the system would be handling;

6. state the decision of the field office;

7. if a variance is granted, state the period of time for which it is granted and any conditions which may apply; and

8. state the reasons for the field office decision.

E. Division field office shall maintain a file of all orders issued. The file shall be open for public inspection. Orders shall be filed the same day they are issued.

F. If the petitioner or other interested person is dissatisfied with the action taken by the Division field office, he may request a hearing before the director of the Division. The request must be made in writing to the director within fifteen days after notice of the field office's action has been received by the petitioner. Unless a timely request for hearing is made, the decision of the field office shall be final.

G. If a timely request for hearing is made, the director shall hold a hearing within fifteen days after receipt of the request. The agency shall notify the petitioner and the person who requested the hearing by certified mail of the date, time and place of the hearing. In the hearing, the burden of proof shall be upon the person who requested the hearing.

H. Hearings shall be held at the office of the Division District environmental manager in the region where the petition was filed.

I. If the petitioner or the person requesting the hearing requests, the hearing shall be recorded at the cost of the person requesting that it be recorded. Transcript costs shall be paid by those persons requesting transcripts.

J. In hearings, the rules of civil procedure and the technical rules of evidence shall not apply, but the hearings shall be conducted so that all relevant views, arguments and testimony are amply and fairly presented without undue repetition. The director shall allow the Division, the petitioner and the person who requested the hearing to call and examine witnesses, to submit written and oral evidence and arguments, to introduce exhibits and to cross-examine persons who testify.

K. Based upon the evidence presented at the hearing, the director shall sustain, modify or reverse the action of the Division field office. The action taken shall be by written order within five days following the hearing. The order shall contain the same information as that required for the Division field office in Subsection D of this section. A copy of the order shall be sent to the petitioner and the person who requested the hearing.

STATE OF NEW MEXICO BEFORE THE SECRETARY OF THE
NEW MEXICO ENVIRONMENT DEPARTMENT

IN THE MATTER OF BL SANTA FE, LLC
RENEWAL AND MODIFICATION
DISCHARGE PERMIT APPLICATION
FOR DP-75

GWQB 24-69(P)

**BL Santa Fe, LLC's Response in Opposition to Protect Tesuque Inc.'s
Motion for Pre-Hearing Permit Denial and Memorandum in Support**

BL Santa Fe, LLC ("BL Santa Fe"), by and through its counsel, submits its Response in Opposition to Protect Tesuque Inc.'s ("PTI") Motion for Pre-hearing Permit Denial and Memorandum in Support ("Motion").¹ Quixotically and illogically, PTI requests that the Secretary apply the less prescriptive, less protective Liquid Waste Disposal and Treatment Regulations at Part 20.7.3—covering septic tanks, leach fields, and expressly excluding wastewater treatment plants receiving more than 5,000 gallons-per-day in liquid waste—to BL Santa Fe's application under the Ground and Surface Water Protection Regulations ("Water Protection Regulations") for its wastewater treatment plant that will receive and treat up to 30,000 gallons-per-day ("gpd") of wastewater and deny the draft permit ("Draft DP-75") before a hearing on it. *See Motion*, at pgs. 1-5.

PTI's Motion requires the Secretary to (1) ignore the statutory mandates of the Water Quality Act and its implementing Water Protection Regulations at Part 20.6.2; (2) act contrary to the *plain language* of the Liquid Waste Treatment and Disposal Regulations ("Liquid Waste

¹ In its Motion, PTI incorrectly identifies the applicant for the renewal/modification application for DP-75 and draft DP-75, issued on September 16, 2024, to be "Bishop's Lodge." *See Motion*, at pg. 1. The correct name for the applicant is "BL Santa Fe, LLC," as identified on both the application and draft DP-75 permit. *See September 16, 2024, New Mexico Environment Department, Draft Discharge Permit Renewal/Modification, DP-75 for BL Santa Fe, LLC's Wastewater Treatment Facility*, at pg.1.

Regulations”) *expressly excluding* off-site wastewater treatment plants that receive and treat more than 5,000 gpd—such as BL Santa Fe’s plant—from Part 20.7.3; and (3) apply the Liquid Waste Regulations in a manner that creates absurd results. *See* 20.7.3.2.A (“Part 20.7.3 NMAC applies to *on-site* liquid waste systems, and effluent from such systems, that receive 5,000 gallons or less per day, and that do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC”)(emphasis added); *see Leger v. Gerety*, 2019-NMCA-033, ¶ 17, 444 P.3d 1036 (where a statute is unambiguous, plain language governs); *see also City of Rio Rancho v. Logan*, 2008-NMCA-011, ¶ 18, 143 N.M. 281, 175 P.3d 949 (cannot construe regulations to create an absurd result).

Because PTI’s Motion requires a distorted application of the Water Quality Act, Water Protection Regulations, and Liquid Waste Regulations and because the New Mexico Environment Department – Groundwater Quality Bureau (“NMED-GWQB”) correctly applied the Water Quality Act and its implementing Water Protection Regulations in issuing the Draft DP-75, the Secretary should deny PTI’s Motion.

Factual Background

1. BL Santa Fe owns the historic Bishop’s Lodge (or “Lodge”), a bespoke hotel, spa, and retreat center located north of Santa Fe, New Mexico.
2. In addition to the historic hotel, there are single family homes and condominiums located next door to the Bishop’s Lodge, called the “Hills & Villas” subdivision.
3. The Lodge, and the Hills & Villas subdivision of houses, and condominiums generate “domestic liquid waste” within the meaning of Part 20.6.2.7.D, which is wastewater from “residential plumbing fixtures and activities, including, but not limited to, waste from toilets,

sinks, bath fixtures, clothes or dishwashing machines, and floor drains.” 20.6.2.7.D NMAC (Defining “domestic liquid waste”).

4. In 1979, Bishop’s Lodge obtained its first Ground Water Discharge Permit-75 (“DP-75”) under the New Mexico Water Quality Act and its implementing Water Protection Regulations at Part 20.6.2 for the treatment and discharge of treated effluent generated by the Lodge. *See* Draft DP-75, at pg. 1, attached as **Exhibit A** (Noting that Bishop’s Lodge obtained its first and original DP-75 on July 11, 1979). Later, DP-75 was modified to provide permit coverage for the treatment and discharge of treated wastewater generated by the Lodge, houses, and condominiums. *See* Exhibit A, at pgs. 1-2. Since 1979, Bishop’s Lodge has sought and obtained seven (7) subsequent DP-75 permit renewals, or renewals and modifications, respectively, including most recently in 2019 (“2019 DP-75”). *See id.*

5. BL Santa Fe’s 2019 DP-75 expired by operation of law in 2024—but was administratively continued by NMED prior to expiration—thereby requiring the current renewal. *See* March 28, 2024, Ground Water Discharge Permit Application, at pg. 1, attached as **Exhibit B**.

6. On March 28, 2024, BL Santa Fe submitted its Ground Water Discharge Permit Application (“Application”) to the NMED-GWQB for renewal and modification. *See* Exhibit B, at pg. 3. The Draft DP-75 is the only permit that has been publicly noticed and is in issue in this matter. *See* September 20, 2024, NMED-GWQB Public Notice of Groundwater Discharge Permits Proposed for Approval, at pg. 5 (Noticing only Draft DP-75 for public comment), attached as **Exhibit C**.

7. BL Santa Fe’s Application seeks permit coverage for two modifications to its 2019 DP-

75. The first modification seeks permit coverage for an entirely new, technologically advanced wastewater treatment plant (“Wastewater Treatment Plant” or “Treatment Plant”) that can receive and treat up to 30,000 gpd. *See* Exhibit A, at pg. 1. The Treatment Plant replaces the previously installed system for aggregating and treating wastewater from Bishop’s Lodge, and the Hills & Villas houses and condominiums. The 2019 DP-75 authorized the discharge to the ground of treated wastewater up to 14,760 gpd and, therefore, now requires a modification to receive and treat up to 30,000 gpd. *See* Exhibit A, at pg. 1 (“The [DP-75] modification consists of an increase in the authorized maximum daily discharge volume from 14,760 gpd to 30,000 gpd”). As described in detail below, after the wastewater is fully treated to meet or exceed all New Mexico water quality standards, one disposal option includes discharge of the treated wastewater to a low dose disposal field that is designed to receive up to 12 gpd per square foot. *See* Exhibit B, at pgs. 55-94; *see also infra* Exhibit G.

8. The second modification seeks to re-use reclaimed wastewater for irrigation of landscaping on-site at Bishop’s Lodge, in accordance with best water management practices in arid New Mexico. *See* Exhibit A, at pg. 1.

9. Third, BL Santa Fe seeks a straightforward renewal of the existing DP-75 to *continue* to discharge treated wastewater to the ground for disposal. *See* Exhibit A, at pg. 1 (emphasis added).

10. BL Santa Fe’s new Wastewater Treatment Plant for which it seeks DP-75 permit coverage provides a multiple-step treatment process, called a “treatment train,” for treatment of the domestic wastewater the Lodge and Hills & Villas generates. *See* Exhibit A, at pg. 1 (“The [Wastewater Treatment Plant] receives and treats domestic wastewater at a volume of up to 30,000 [] gpd using a [Side Stream] Membrane Bioreactor package treatment plant”). BL Santa

Fe's Treatment Plant treatment train is similar to, but more advanced than a typical treatment train used by a municipal wastewater treatment plant. *See* Exhibit A, at pg. 1.

11. Municipal wastewater treatment plants in the United States can have up to three treatment steps in their treatment train, identified as primary, secondary, and tertiary treatment; however tertiary treatment is not always required for municipal wastewater treatment plants. *See* May 1998, U.S. Env'tl. Prot. Agency, Wastewater Treatment Works The Basics, EPA 833-F-98-002, at pg. 1, attached as **Exhibit D**.

12. A municipal wastewater treatment plant's primary treatment removes large solids using a physical separation process such as screens or grit chambers. *Id.*, at pg. 2. Secondary treatment addresses organic loading. *Id.* If tertiary treatment occurs—which is not always required—then this final treatment step will involve advanced organics removal, advanced filtration, or disinfection and/or nutrient removal. *See* Activated Sludge Treatment Process and Membrane Bioreactor Treatment Process Diagrams, attached as **Exhibit E**; *cf* Septic Tank Diagram, attached as **Exhibit F** (Comparing treatment trains in Activated Sludge Treatment Process (municipal wastewater treatment plant), Membrane Bioreactor Treatment Process (BL Santa Fe's process), with septic tank process).

13. By comparison, BL Santa Fe's Wastewater Treatment Plant *always* completes tertiary treatment by utilizing an eight-or-nine-step treatment train to *fully treat its domestic wastewater to meet or exceed all applicable water quality standards before discharge*. *See* BL Santa Fe's Wastewater Treatment Process Flow Chart, at pg. 1, attached as **Exhibit G** (emphasis added).

14. As depicted in Exhibit G, BL Santa Fe's Wastewater Treatment Plant treatment train:

- a. Begins with two processes to remove solids, using both a (1) **Coarse Screen** to remove large objects, such as rags or plastics, and a (2) **Fine Screen** to filter out

fine solids down to approximately 1 to 1.5mm. For reference, the average grain of sand is about 1mm.²

- b. Next, wastewater is transferred into an (3) **Equalization Tank**, which ensures uniform mixing and uniform flow rates of wastewater for treatment. This tank can store liquids during periods of peak flows and allow them to be treated later.
- c. Following the equalization tank, wastewater is transported into a (4) **Pre-Anoxic Tank**, which removes any available nitrates (NO_3^-) by converting them to nitrogen gas (N_2). This initial bioreaction step (denitrification) prepares the effluent for more efficient organic materials processing in the following two steps.
- d. The wastewater is then transported to the (5) **Aerobic Tank**, which uses oxygen and bacteria to breakdown and treat ammonia and organic waste in the wastewater. This process (nitrification) converts ammonia (NH_3) to nitrite (NO_2^-) then to nitrate (NO_3^-) .
- e. Subsequently, the wastewater is transported into a (6) **Post-Anoxic Tank**, which through the denitrification process, treats out nitrates produced in the previous step by converting them into nitrogen gas, *i.e.*, the same gas that makes up ~78% of the Earth's atmosphere³. The nitrogen gas is vented, while the wastewater goes on to the next step in the treatment train.
- f. Penultimately, the wastewater is then processed through the (7) **Side Stream Membrane Bioreactor**, which uses ultrafiltration to remove smaller particles,

² See 2011 ICPI Workshop Whitepaper: "Weed Washer" What is a Micron? (Micron v/s Mesh), attached as **Exhibit I**, at pg. 1.

³ See National Oceanic and Atmospheric Administration, The Atmosphere: Introduction to the Atmosphere, available at <https://www.noaa.gov/jetstream/atmosphere> (last visited Feb. 18, 2025)(identifying nitrogen gas, N_2 as composing 78.084% of Earth's atmosphere), attached as **Exhibit H**.

including suspended solids, organic matter, pathogens, bacteria, viruses, and organic molecules. The ultrafiltration membrane filters to a diameter of 4/100 of a micron. For reference, a single human hair is about 50-100 microns in diameter and the unaided human eye cannot see anything smaller than 40 microns. *See supra* n.2.

- g. Eighth, wastewater to be discharged to ground for disposal through the **Low-Dose Disposal Field** or used on site for **Irrigation**, goes through treatment in the (8) **Ultraviolet Disinfection** chambers, which uses UV light to inactivate (damage DNA) disease causing microorganisms, viruses, spores, and cysts, including cholera, polio, typhoid, hepatitis, Cryptosporidium, and Giardia.
- h. Solid materials (sludge) are transported first to the (8) **Activated (Aerated) Sludge Digester**, an eighth treatment step, which breaks down any remaining organic waste in the sludge using oxygenation and microorganisms. Any liquids, *i.e.*, water from the Activated Sludge Digester, are transported to a ninth treatment step, the lined (9) **Reed Bed**, which acts as a water filtration system, similar to a natural wetlands process that utilizes beneficial organic processes to break down any remaining pollutants and contaminants. Any solids from the Aerated Sludge Digester are hauled off-site and disposed of in a landfill, any water in the Reed Bed is either evaporated or processed back to the equalization tank for treatment in the treatment train described above. *See Exhibit G.*

15. Accordingly, BL Santa Fe's Treatment Plant treatment train has multiple layers of redundancy. *See Exhibit G.* Additionally, BL Santa Fe does not utilize a liquid waste disposal system, such as a septic tank and leach field, within the scope of the Liquid Waste Regulations at

Part 20.7.3 for treatment of its wastewater. *See* Exhibit A, Application, at pgs. 1-94; *see also* Exhibit B, at pg.1.

16. Instead, BL Santa Fe’s wastewater is *fully treated* to meet or exceed all water quality standards *before* discharge to the ground for disposal in the low dose disposal field. *See* Exhibit A, at pg. 1 (emphasis added); *see also* Exhibit G. The discharge to the ground is for disposal only, not treatment; whereas septic tanks discharge below the ground in septic fields as their primary treatment method for wastewater. *See* Exhibit A, at pg. 1; *see also* Exhibit G.

17. PTI’s assertions that BL Santa Fe will be discharging “partially treated” wastewater in violation of the Liquid Waste Regulations lack any technical or evidentiary basis, are demonstrably false, and are belied by the record provided for in both BL Santa Fe’s Application and in the Draft DP-75. *See* Motion, at pg. 50 (“[T]he proposed NMED permit would authorize the discharge of 30,000 gpd of *partially treated effluent* to a single 2,500 square foot drain field with unsuitable soils and inadequate clearance to prevent hazards to public health or water contamination”)(emphasis added); *see also id.*, at pg. 1 (“[T]he NMED has ignored the governing Liquid Waste Disposal and Treatment Regulations [] set forth in 20.7.3.201(B) and these regulations apply to the Resort’s proposed discharge plan”); *but see* Exhibit A, at pgs. 1-5 (identifying Treatment Plant and corresponding numeric and narrative water quality standards that apply to BL Santa Fe wastewater discharges); *see also* Exhibit B, at pgs. 1-94; *see also* Exhibit G, at pg. 1.

18. In fact, BL Santa Fe’s wastewater discharge meet or exceed the applicable groundwater quality standards prescribed in 20.6.2.3103.A-D. NMAC, which includes human health standards. *See* Exhibit G; *see also* 20.6.6.3104 NMAC (prohibiting discharge of effluent to ground or surface water, except where discharge meets water quality standards at 20.6.2.3103

and complies with discharge permit conditions); *see also* Exhibit A, at pgs. 3, 5 (authorizing discharge of treated effluent because it meets the water quality standards in the Water Quality Regulations); *see* Motion, at pg. 50 (Falsely alleging BL Santa Fe’s wastewater is “partially treated” and endangers human health and water quality)(emphasis added).

19. Moreover, once the aforementioned, multi-step treatment train is complete, BL Santa Fe’s wastewater meets the Class 1A reclaimed domestic wastewater standards. *See* Exhibit A, at pg. 1 (Authorizing “Class 1A reclaimed domestic wastewater discharges” to irrigated acreage for reuse and for disposal in low dose system).

20. Class 1A wastewater is “the highest quality reclaimed wastewater” under New Mexico regulations. *See* January 2007, NMED Ground Water Quality Bureau Guidance: Above Ground Use of Reclaimed Domestic Wastewater, at pg. 1, attached as **Exhibit J**.

21. Class 1A reclaimed wastewater is so thoroughly treated that (1) it “does not require restrictions on public access and exposure” and (2) can be used for the irrigation of food crops, provided such water is not sprayed onto crops; although, BL Santa Fe does not intend to use its Class 1A reclaimed wastewater for irrigation of food crops. *See* July 3, 2022, EPA, Summary of New Mexico’s Water Reuse Guideline or Regulation for Agriculture, at pg. 3, attached as **Exhibit K**; *see also* Exhibit I, at Table 1 (emphasis added).

22. Draft DP-75, furthermore, contains strict quarterly groundwater quality monitoring, sampling, and reporting requirements to ensure continued compliance with all New Mexico water quality standards and permit conditions. *See* Exhibit A, at pg. 12 (“The Permittee shall perform monitoring and other Permit required actions during [the prescribed periods] and shall submit quarterly reports to NMED”). All such sampling must occur after the last step in treatment *before* discharge to the ground for disposal. *See id.* (emphasis added).

23. Draft DP-75 imposes numerical limits for (1) TKN; (2) NO₃-N; (3) TDS; and (4) Cl⁴, the most common contaminants found in domestic wastewater. *See id.*, at pgs. 3-4. Further, in reporting these quarterly sampling results to NMED-GWB, BL Santa Fe must also include the (i) QA/QC summary and (ii) Chain of Custody from the independent, third-party analytical laboratory, thereby, ensuring accuracy and traceability of all results. *See Exhibit A*, at pg. 20.

24. In addition to the mandatory quarterly monitoring, sampling, and reporting on TKN, NO₃-N, TDS, and Cl, during irrigation session, BL Santa Fe must also sample its wastewater weekly for *e.coli* and biweekly for bio-oxygen demand, respectively, and report all analytical results to the NMED-GWB. *See Exhibit A*, at pgs. 12-13.

25. As a further backstop, BL Santa Fe maintains three (3) monitoring wells enumerated as MW1, MW2, and MW3. *See Exhibit A*, at pgs. 2, 14, 16. MW1 is upgradient of the Treatment Plant to sample and analyze for background water quality upgradient of the Treatment Plant. *See Bishop's Lodge Facility Map – DP #75*, attached as **Exhibit L**. MW2 and MW3 and are downgradient of the low dose disposal area, all of which ensure discharges to the ground are not effecting downgradient groundwater quality. *See id.*

26. In fact, on February 1, 2025, BL Santa Fe submitted its most recent 4th Quarter Monitoring Report for DP-75 (hereafter, “4Q Monitoring Report”) to the NMED-GWB. The Eurofins’ Analytical Report, included in the 4Q Monitoring Report, demonstrates that (1) TKN; (2) NO₃-N; (3) TDS; and (4) Cl, were all well-within the applicable numerical groundwater quality standards in 20.6.2.3103 or entirely non-detect. *See* October 11, 2024, Eurofins Albuquerque, DP-75 Q4-2024 Monitoring Report, attached as **Exhibit M**. In other words, BL

⁴ (1) TKN = Total Kjeldahl Nitrogen; (2) NO₃-N = Nitrate; (3) TDS = Total Dissolved Solids; and (4) Cl = Chloride.

Santa Fe does not just say its Treatment Plant protects groundwater quality, its analytical data objectively demonstrates as much. *See id.*

27. Although PTI wrongly asserts otherwise, the Draft DP-75 mandates that BL Santa Fe utilize promulgated, standardized wastewater analytical methods for its quarterly sampling and reporting to the NMED-GWQB. *See* Exhibit B, at pg. 12 (“Permittee shall use sampling and analytical techniques that conform to the references listed in Subsection B of 20.6.2.3107 NMAC); *see also* 20.6.2.3107.B(1)-(6) NMAC (Dictating approved, standardized methods, such as various promulgated EPA methods, for all sampling and analysis); *but see* Motion, at pg. 15 (falsely claiming that the Draft DP-75 fails to require any specific methods for sampling and analysis compliance reporting).

28. Taken together, the treatment train described above, with its multiple treatment redundancies, and BL Santa Fe’s monitoring and reporting requirements ensures that the Draft DP-75 protects human health, the environment, and groundwater quality in New Mexico. *See supra* ¶¶ 14-28.

Argument

I. The NMED properly issued the Draft DP-75 and the Secretary should deny PTI’s spurious Motion.

a. The New Mexico Water Quality Act and its implementing Water Protection Regulations govern BL Santa Fe’s discharge of *treated* wastewater to the ground for disposal.

1. Scope and Applicability of New Mexico Water Quality Act

The New Mexico Water Quality Act (“Water Quality Act”), NMSA 1978, §§ 74-6-1 to 74-6-17, established the Water Quality Control Commission (“WQCC”) and empowered the WQCC to “adopt water quality standards for surface and ground waters of the state based on credible scientific data and other evidence appropriate under the Water Quality Act.” NMSA

1978, §74-6-4(D)(1967). Further, “any such standards shall at a minimum protect the public health or welfare, and enhance water quality.” *Id.* Consequently, protection of water quality, human health, and the environment are the technical basis underlying both the Water Quality Act and the WQCC’s implementing regulations.

Additionally and in furtherance of its mandate to protect water quality, human health, and the environment, the Water Quality Act commanded the WQCC to adopt regulations “to govern the disposal of septage and sludge.” §74-6-4(E). In particular, “[t]he regulations governing the disposal of septage and sludge may include the use of tracking and permitting systems or other reasonable means necessary to assure that the septage and sludge are designated for disposal in, and arrive at, disposal facilities other than facilities on the premises where the septage and sludge is generated, for which a permit or other authorization has been issued pursuant to the . . . Water Quality Act.” §74-6-4(E)(emphasis added).

Likewise and even more specifically, the Water Quality Act mandated that the WQCC “adopt regulations to require the filing of . . . proposed plans and specifications for the construction and operation of new sewer systems, treatment works or sewerage systems or extensions, modifications of or additions to new or existing sewer systems” including such systems “intended to serve a subdivision,” such as the Hills & Villas. §74-6-4(I)(emphasis added). Plainly, the Water Quality Act and its implementing regulations govern not only the permitting, but also the construction and operation of wastewater treatment and “disposal facilities,” including the concomitant wastewater discharges from such wastewater treatment facilities.

2. The Water Quality Act Implementing Regulations

To fulfill these dual regulatory charges to (1) protect water quality, human health, and the environment, and (2) govern the construction and operation of wastewater treatment facilities and discharges from these facilities, the WQCC enacted the Water Protection Regulations at Part 20.6.2. *See* 20.6.2 NMAC (Entitled “Ground and Surface Water Protection”). Section 3104—entitled “Discharge Permit Required”—of the Water Protection Regulations states as follows: “no person shall cause or allow effluent . . . to discharge so that it may move directly or indirectly into groundwater unless [s]he is discharging pursuant to a discharge permit issued by the secretary.” 20.6.2.3104. In other words, wastewater discharges from “sewage and sludge disposal facilities,” *i.e.*, wastewater treatment plants, that “may move directly or indirectly into groundwater” are strictly prohibited “unless” the discharger first obtains a groundwater discharge permit from the NMED-GWB pursuant to the Water Quality Act and its implementing Part 20.6.2 regulations. *See id.*; *see also* 20.6.2.7.D(9)(Defining “domestic liquid waste” subject to 20.6.2 wastewater regulations as “human excreta and water-carried waste from typical residential plumbing fixtures and activities, including, but not limited to, waste from sinks, bath fixtures, clothes, or dishwashing machines and floor drains”).

To obtain the requisite Section 3104 wastewater discharge permit, a proposed discharger must submit a detailed application that meets *all* the twelve (12) technical bases enumerated in Section 3106. *See* 20.6.2.3106.A-G NMAC (Identifying technical information required to be included in all discharge permit applications); *see also* 20.6.2.3106.D (“A proposed discharger plan shall set forth in detail the methods or techniques the discharger proposed to use . . . to ensure compliance with this part” and prescribing technical requirements for quantity, quality, and flow characteristics of wastewater discharges; detailed information on the location of

discharges and all receiving ground and surface water bodies and their respective water quality; “depth to and [total dissolved solids] TDS concentrations of the ground water that is most likely to be affected by any discharge”; “depth to and lithological description of the rock at base of the alluvium below the discharge site”; amongst additional other mandated technical information).

Importantly, one of the enumerated technical bases in 3106 requires that the discharge applicant “demonstrate that the discharge permit will not result in concentrations in excess of the [numerical and narrative] standards of 20.6.2.3013 NMAC at any place of withdrawal of water for present or reasonably foreseeable future use.” 20.6.2.3106.D(7)(emphasis added). Absent a demonstration that the proposed discharge will not exceed the established numerical and narrative groundwater quality standards in 3103, the Secretary may not grant the requested discharge permit. *See id.*; *see also* 20.6.2.3103.A-D (emphasis added). Such prohibition exists because the 3103 numerical maximum contaminant levels (“MCLs”) and narrative standards for each of the identified contaminants were adopted based on “credible scientific data and other evidence appropriate under the Water Quality Act” that these standards are protective of water quality, human health, and the environment. *See* §74-6-4(D); *see also* 20.6.2.3103 (Imposing MCLs for human health standards; toxic pollutants; domestic water supply; and irrigation use).

Section 3107 then imposes strict monitoring, sampling, and reporting requirements to ensure that all discharges and any issued discharge permit not only initially but also *continues* to comply with the Water Protection Regulations, including the numeric and narrative water quality standards in Section 3103. *See* 20.6.2.3107.A.-E NMAC (Requiring “installation, use, and maintenance of effluent monitoring devices”; vadose zone monitoring; treatment plant contingency plans; treatment plant closure plans; designated, routine compliance sampling and analysis of regulated contaminants; and mandating that all compliance sampling be conducted

utilizing promulgated, standardized sampling methods, such as promulgated EPA wastewater methods; amongst other requirements). Taken together, the Water Quality Act and its implementing regulations regulate discharges from “septage and sewage disposal facilities,” *aka* wastewater treatment plants, by permit and do so to protect water quality, human health, and the environment.

3. BL Santa Fe’s Wastewater Treatment Plant is squarely within the “septage and sewage facilities” contemplated in the Water Quality Act and regulated under the Water Protection Regulations.

The Lodge, and the Hills & Villas subdivision homes and condominiums generate “septage and sludge,” *i.e.*, domestic liquid waste or domestic wastewater, from “residential plumbing fixtures and activities, including, but not limited to, waste from toilets, sinks, bath fixtures, clothes or dishwashing machines and floor drains” as defined in and subject to the Water Protection Regulations in Part 20.6.2. *See supra* ¶ 3; *see also* 20.6.2.7.D(9)(Defining “liquid domestic waste” and making the same subject to regulations in Part 20.6.2). This domestic wastewater is then conveyed into BL Santa Fe’s, “septage and sludge disposal facility,” *i.e.*, Wastewater Treatment Plant, within the meaning of the Water Quality Act, for treatment and subsequently, disposal. *See* §74-6-4(E)(Mandating adoption of implementing regulations that govern “septage and sludge disposal facilit[ies]”).

BL Santa Fe’s advanced Wastewater Treatment Plant—described in detail above—currently receives and treats up to 14,760 gpd of domestic wastewater pursuant to its Water Protection Regulations DP-75, which has been in place since 1979. *See supra* ¶ 8. After treatment in its Wastewater Treatment Plant, BL Santa Fe’s “domestic liquid waste” is fully treated because it meets or exceeds all applicable Section 3103 water quality standards and may, therefore, be discharged to the ground for disposal in the low dose disposal field in compliance

with both Sections 3103 and 3104 of the Water Protection Regulations. *See supra* ¶¶ 23, 30; *see also* 20.6.2.3103 (“No person shall cause or allow effluent . . . to discharge so that it may move directly or indirectly into groundwater unless [s]he is discharging pursuant to a discharge permit issued by the secretary”); *accord* 20.6.2.3104. Consequently, BL Santa Fe’s Wastewater Treatment Plant is the exact “septage and sludge disposal facility” contemplated by and within the scope of the Water Quality Act and its regulations at Part 20.6.2. *See* §74-6-4(E); *see also* 20.6.2.3104.

Similarly, BL Santa Fe disposing of its fully treated “effluent” (wastewater) by disposal to the ground in its low dose disposal field or for re-use in irrigation is the exact type of discharge that may move “directly or indirectly into groundwater” and is, therefore, subject to the Section 3104 discharge-permit mandate and Section 3103 groundwater anti-degradation numerical and narrative water quality standards. *See supra* ¶ 20; *see also* 20.6.2.3104; *see also* 20.6.2.3103. Likewise, the Draft DP-75 permit modifications for the “construction and operation of the” advanced Treatment Plant to “modify” or “add” a newer sewage system, including “to serve a subdivision” such as the Hills & Villas subdivision are expressly provided for in Section 74-6-4(I) of the Water Quality Act and attendant regulations. *See* § 74-5-4(I)(Requiring WQCC to enact regulations that govern the construction, operation, and upgrade of sewage “treatment works or sewage systems or extensions, modifications of or additions to new or existing sewer systems . . . including those intended to serve a subdivision”). It follows that BL Santa Fe’s discharges are subject to and governed by the Water Quality Act and Water Protection Regulations and that the NMED-GWQB properly issued the Draft DP-75.

PTI concedes that the Water Quality Act, “protects water quality standards for surface and ground waters, and [its implementing] regulations [are meant] to prevent and abate water

pollution and govern the disposal and septage of sludge” but illogically concludes that the Water Quality Act and its implementing regulations are inapplicable and BL Santa Fe must, instead seek a permit under the less protective Liquid Waste Regulations. *See* Motion, at pg. 6 (emphasis added). As the basis for its conclusion that the Water Quality Act and its regulations are inapplicable, PTI cites to Section 74-6-12(B) of the Water Quality Act. *See id.* Section 74-6-12(B) provides:

The Water Quality Act does not apply to any activity or condition subject to the authority of the environmental improvement board pursuant to the Hazardous Waste Act [Chapter 74, Article 4 NMSA 1978], the Ground Water Protection Act [Chapter 74, Article 6B NMSA 1978] or the Solid Waste Act [74-9-1 to 74-9-43 NMSA 1978] except to abate water pollution or to control the disposal or use of septage and sludge. *Id.* (emphasis added).

Under the plain language of Section 74-6-12(B), the Water Quality Act and its implementing Water Protection Regulations apply to activities “to control the disposal or use of septage and sludge.” *Id.*; *see also Cook v. Anding*, 2008-NMSC-035, ¶ 7, 144 N.M. 400, 188 P.3d 1151 (Tribunal must look and give effect to plain language in statute). DP-75 plainly regulates the “control” and “disposal of septage and sludge”—*e.g.*, the aggregation of domestic wastewater from the Lodge, homes, and condominiums to ensure it arrives at the proper treatment facility; proper treatment of the domestic liquid waste to meet/exceed all applicable water quality standards before discharge; and treatment and disposal of sludge (solids)—under Section 74-6-12 and is, therefore, not only subject to the Water Quality Act and its Water Protection Regulations, but also within the regulatory purview of the NMED-GWQB. *See* § 74-6-12(B). Indeed, any reading of Section 74-6-12(B) to the contrary would be an absurd construction of this statutory provision. *See Leger*, 2019-NMCA-033, ¶ 27 (Cannot construe statute to create absurd result, particularly where statute is unambiguous on its face).

4. BL Santa Fe’s discharges are fully treated to meet or exceed the applicable Section 3103 water quality standards, protect human health, and the environment, and PTI’s claims otherwise are meritless.

As discussed above, the Water Protection Regulations prohibit the NMED-GWB from granting BL Santa Fe’s Draft DP-75 discharge permit unless the permitted wastewater discharge meets or exceeds the applicable Section 3103 narrative and numeric water quality standards. *See* 20.6.2.3106 (Applications for discharge permit must include technical information that “demonstrate that the discharge permit will not result in concentrations of the standards of 20.6.2.3103 NMAC”); *see also* 20.6.2.3103 (mandating applicable narrative and numeric groundwater quality standards specifically for human health, domestic water supply, and irrigation uses); *see also* 20.6.2.3104 (prohibiting issuance of discharge permits except in accordance with Water Quality Act, including all water quality standards).

The Draft DP-75 not only imposes numeric MCLs for (1) TKN; (2) NO₃-N; (3) TDS; and (4) Cl, but also mandates objective, demonstrative compliance through the required quarterly monitoring, sampling, and reporting requirements for the applicable 3103 constituents. *See supra* ¶¶ 27-29; *see also* Exhibit B, at pg. 12 (Draft DP-75 permit conditions). The Eurofins Analytical Report for BL Santa Fe’s 4Q Monitoring Report—the first required reporting period—unequivocally demonstrates that BL Santa Fe’s wastewater constituents were well-within the applicable 3103 water quality standards—*i.e.*, standards that protect human health, the environment, and water quality—and, in several circumstances, were completely non-detect. *See* Exhibit L. In fact, the wastewater is so thoroughly treated it constitutes “Class 1A reclaimed domestic wastewater”—“the highest quality reclaimed wastewater” under New Mexico law—which does not require restrictions on public access and exposure and could be used to irrigate food crops. *See supra* ¶¶ 24-26; *see also* Exhibit I, at pg. 1.

PTI's allegations that the Draft DP-75 violates the "fundamental safeguards" designed to protect human health and prevent water contamination are belied both by the law and the facts. *See* Motion, at pgs. 47-51 (Falsely alleging that applying the Water Quality Act and Water Protection Regulations, rather than Liquid Waste Regulations to BL Santa Fe's treated wastewater discharges has endangered human health and the environment); *but see* 20.6.2.3103 (imposing numerical and narrative water quality standards and requiring permittees to, at a minimum, meet applicable standards for all discharges); *see also* 20.6.2.3104; *see supra* ¶¶ 27-29; *accord* Exhibit L. PTI's contentions of such alleged endangerment contain not a single citation to the factual, evidentiary record and are based on nothing more than pure conjecture and meant to obfuscate. *See* Motion, at pgs. 47-51 (Citing to no documentary evidence whatsoever for its contentions).

The NMED-GWB correctly applied the Water Quality and Water Protection Regulations and issued the Draft DP-75, which comports with all requirements to protect human health, the environment, and water quality.

II. The Liquid Waste Regulations expressly do not apply to Wastewater Treatment Plants—such as BL Santa Fe's—that receive more than 5,000 gpd and require a discharge permit under the Water Quality Act and Water Protection Regulations.

a. The scope of the Liquid Waste Regulations at Part 20.7.3

"Part 20.7.3 applies to on-site liquid waste systems and effluent from such systems that receive 5,000 gallons or less liquid waste per day, and that do not generate discharges that require a discharge [permit] pursuant to 20.6.2." 20.7.2.3.A NMAC (Entitled "Scope" and enumerating the same for the Liquid Waste Regulations)(emphasis added). "On-site liquid waste system" is further defined in Part 20.7.3 as "a liquid waste system located on the lot where the liquid waste is generated." 20.7.3.7.O(3). Although not defined in Part 20.7.3, the common

understanding of “receive” is “to have delivered” and “to take into possession of.”⁵ See Random House Unabridged Dictionary (2d Ed.); see also *Levario v. Ysidro Villareal Labor Agency*, 1995-NMCA-133, ¶ 11, 906 P.2d 266 (When a word in statute is left undefined, it must be read according to its common meaning). Thus, Part 20.7.3 applies to those liquid wastes that are (1) treated on the same lot on which they are generated and (2) where 5,000 gpd or less in liquid waste is delivered into the liquid waste treatment system. See 20.7.2.3.A. If—on the other hand—the liquid waste is either (1) generated and treated on different sites or (2) the liquid waste treatment system has more than 5,000 gpd of liquid waste delivered into it, the Liquid Waste Regulations are inapplicable. See 20.7.2.3.A (emphasis added).

In the present matter, PTI conveniently side-steps that Part 20.7.3.A—*by its plain language*—excludes BL Santa Fe’s 30,000 gpd, “offsite” Treatment Plant from regulation under the Liquid Waste Regulations. See generally, Motion at pgs. 1-60; but see 20.7.3.A; see *supra* ¶¶ 7, 10; see also Exhibit A, at pg. 1. It is undisputed that BL Santa Fe aggregates liquid waste from lots where it is generated and then conveys the waste to a different lot for treatment. See Motion, at pg. 4 (Admitting BL Santa Fe will “collect[] and aggregate[e] 30,000 gpd from 84 generators and then piping those waste downhill to a single treatment plant”); see *supra* ¶¶ 1-3 (Describing various different locations that generate the liquid waste, and the aggregation of such waste for treatment at a third location, the BL Santa Fe Wastewater Treatment Plant). Because BL Santa Fe’s liquid waste is generated and treated at different locations, BL Santa Fe’s Treatment Plant is expressly not an “on-site liquid waste system” within the meaning of Part 20.7.3.A. See *id.*; see also Exhibit A, at pg. 1.

⁵ Random House Unabridged Dictionary (2d Ed.), available at <https://www.dictionary.com/> (last visited Feb. 24, 2025).

It is also undisputed that BL Santa Fe’s Wastewater Treatment Plant will “receive”—within the meaning of Part 20.7.3.A—and treat up to 30,000 gpd of liquid waste for treatment. *See* Motion, at pg. 4; *see* Exhibit A, at pg. 1; *see also supra* ¶ 7. Thus, BL Santa Fe’s Wastewater Treatment Plant will “receive” vastly more than the 5,000 gpd “receipt” limitation in Part 20.7.3.A. *See* 20.7.3.A (plain language excluding treatment plants that receive more than 5,000 gpd from Liquid Waste Regulations). As such, the Liquid Waste Regulations at Part 20.7.3 are clearly inapplicable to BL Santa Fe’s Wastewater Treatment Plant. *See id.*; *see also* 20.7.3.A.

Despite such a clear exclusion under Part 20.7.3.A, PTI’s Motion attempts to contort the plain language of Part 20.7.3.A, alleging that the scope of the Liquid Waste Regulations are intended to (1) “rate-limit” all liquid waste treatment systems in New Mexico to receive no more than 5,000 gpd and (2) if more than 5,000 gpd is to be received into the liquid waste treatment system, then multiple liquid waste treatment systems “must” be installed “on-site.” *See* Motion, at pgs. 43-44 (Citing to 20.7.3.A and 20.7.3.302(C) for preposterous claim that Liquid Waste Regulations absolutely require installation of multiple on-site liquid waste systems).

First, it is black letter New Mexico law that where a regulation—like Part 20.7.3.A—is unambiguous the plain language of the regulation governs. *Leger*, 2019-NMCA-033, ¶ 17 (Where a statute is unambiguous, plain language governs). Part 20.7.3.A absolutely contains no such “rate-limit” mandating all liquid waste treatment systems in New Mexico to a maximum treatment capacity of no more than 5,000 gpd. *See* Part 20.7.3.A. Indeed, if such rate-limit on treatment capacity applied, then the municipal wastewater treatments for Santa Fe, the Albuquerque Bernalillo County Water Utility Authority, Espanola, and Los Alamos—all of which receive more than 1,000,000 gpd of liquid waste for treatment—would be in violation of Part 20.7.3.A. *See* Motion, at pgs. 43-44. Such a reading of Part 20.7.3.A is not only contrary to

the unambiguous language of the regulation but also creates an absurd result, whereby the wastewater treatments for most of the State’s largest cities would be in violation of Part 20.7.3.A for receiving more than 1,000,000 gpd of liquid waste and treating the same at a singular treatment plant. *See id.* The Secretary must decline to apply Part 20.7.3.A in a manner that creates this absurd result. *See City of Rio Rancho*, 2008-NMCA-011, ¶ 18 (Cannot construe regulations to create an absurd result). Likewise, PTI’s imaginary “rate-limit” language would require the Secretary to read *into* the regulation language that does not appear anywhere in Part 20.7.3.A, in violation of the most fundamental tenets of statutory and regulatory interpretation. *See One Black 2006 Jeep*, 2012-NMCA-027, ¶13, 286 P.3d 1223 (Cannot read language into statute that does not appear in the statute).

Second, PTI’s contention that if more than 5,000 gpd is to be received and treated in a given liquid waste system then 20.7.3.302(C) mandates the installation of multiple systems is similarly preposterous. *See Motion*, at pgs. 44-45. Part 20.7.3.302(C) provides, “[m]ultiple liquid waste systems, each with an actual design flow of 5,000 [gpd] or less, may be permitted by the department.” 20.7.3.302(C)(emphasis added). According to Part 20.7.3.7.M(4), “may”—when used in the Liquid Waste Regulations, including Part 20.7.3.302(C)—means “discretionary, permissive, or allowed.” 20.7.3.7.M(4) NMAC; *cf* 20.7.3.7.S(11) NMAC (“Shall” in Liquid Waste Regulations means, “mandatory”); *accord Romero v. Tafoya*, 2023-NMCA-024, ¶ 9, 527 P.3d 641 (“May” in statute indicates discretionary, optional action, in contrast to “shall and must, which express a duty, obligation, [or] requirement”). Part 20.7.3.302(C)—which clearly utilizes the term “may”—contains no such requirement to install multiple liquid waste treatment systems to treat more than 5,000 gpd. *See* 20.7.3.7.M(4); *accord Romero*, 2023-NMCA-024, ¶ 9. Rather, there exists an “option” to install multiple different treatment systems, provided, however, that

the given liquid waste treatment system is first determined to be within the scope of the regulations under Part 20.7.3.A. *See* 20.7.3.7.M(4); *accord Romero*, 2023-NMCA-024, ¶ 9.

Third, BL Santa Fe’s Wastewater Treatment Plant “generate[s] discharges that require a discharge [permit] pursuant to 20.6.2.” 20.7.2.3.A. BL Santa Fe, therefore, sought renewal and modification of its DP-75, pursuant to the Water Quality Act and its implementing Water Protection Regulations, as analyzed above. *See supra* I.a. PTI’s Motion, nevertheless, contains a meandering diatribe about the wholly inapplicable subsections of the Liquid Waste Regulations at 20.7.3.201 and 20.7.3.302 that the Draft DP-75 purportedly violates. *See Motion*, at pgs. 15-25. But the Liquid Waste Regulations are wholly inapplicable to BL Santa Fe’s Wastewater Treatment Plant and Draft DP-75, and the Draft DP-75, therefore, cannot logically or legally be in violation of Parts 20.7.3.201 or 20.7.3.302 of the inapplicable Liquid Waste Regulations. *See supra* I.a., II.a.

b. PTI incorrectly and ironically advocates to apply the less restrictive, less protective Liquid Waste Regulations, instead of the more prescriptive, more protective Water Protection Regulations.

Despite claiming to be concerned with human health, the environment, and water quality, PTI asserts that the less restrictive Liquid Disposal Waste Regulations—rather than the more prescriptive Water Quality Act and its implementing Water Protection Regulations—should apply to BL Santa Fe’s Wastewater Treatment Plant, concomitant discharges, and permitting. *See Motion*, at pgs. 15-60 (emphasis added). To be sure, the Liquid Waste Regulations governing (1) the minimum/maximum area of disposal; (2) clearance; and (3) setbacks are neither prescriptive water quality regulations nor do they prevent the discharge “any contaminant,” as PTI contends. *See Motion*, at pgs. 7-13 (alleging Section 74-1-3(C) of Environmental Improvement Act (“EIA”) and implementing Liquid Waste Regulations prohibits discharge of

“any contaminant,” are more protective of human health and the environment and should, therefore, be applied).

Instead, the Liquid Waste Regulations impose (1) the minimum/maximum area of disposal; (2) clearance; and (3) setbacks at Parts 20.7.3.201, 20.7.3.301, and 20.7.3.302 because the liquid waste systems—such as septic tanks and leach fields—addressed in these Parts of 20.7.3 discharge untreated wastewater below the ground, which creates nitrogen loading issues if there is an insufficient area for disposal, clearance, and setbacks. *See* 20.7.3.301.F (Permitting waiver of disposal area, clearance, and setback components of Liquid Waste Regulations only “where groundwater is not at risk from nitrogen loading from on-site waste disposal systems”). Ergo, the EIA and Liquid Waste Regulations do not prohibit the discharge of “any contaminant,” they merely ensure proper soil loading of contaminants when contaminants are discharged. *See id.*; *see* Motion, at pg. 13.

Moreover, as discussed above, PTI insists that BL Santa Fe should have to install multiple liquid waste treatment systems—*e.g.*, septic tanks and leach fields—at Bishop’s Lodge and that multiple septic tank and leach fields appropriately spaced would be more protective than BL Santa Fe’s advanced Wastewater Treatment Plant and disposal of fully treated wastewater to the ground in the low dose disposal field. *See supra* II.a; *see also* Motion, at pgs. 44-45. However, according to former U.S. Environmental Protection Agency (“EPA”) Region 6 Administrator and former Secretary of the New Mexico Environment Department, Ron Curry (“Secretary Curry”), “septic tanks in the state of New Mexico are our biggest source of groundwater pollution.” *See* Curry, Ron, “How Water Quality Affects Planning,” New Mexico Water Planning Conference (Nov. 2023), at pg. 54, attached as **Exhibit N**.

Secretary Curry goes on to describe the Liquid Waste Regulations as both “all over the map” and ineffective at preventing contamination of groundwater in New Mexico. *See id.*, at pg. 55. Moreover, Secretary Curry estimates that “half of th[e] septic tanks in New Mexico,” approximately 110,000 or more, are installed incorrectly and, thus, contaminate groundwater. *See id.*, at pg. 53-54. Again, PTI’s claims that the Liquid Waste Disposal Regulations are more protective of human health, the environment, and water quality, are belied by not only the law, but also by the facts. *See Motion*, at pgs. 15-25; *see Exhibit M*, at pgs. 53-55.

Finally, the prescriptive constituent MCLs in 20.6.2.3103 of the Water Protection Regulations are more protective of human health, the environment, and water quality because Section 3103 requires treatment to the identified MCL standards, at a minimum, before any discharge to the ground. *See 20.6.2.3103.A-D*. The Liquid Waste Regulations require no more than primary treatment and do not impose any numerical MCLs on discharge of contaminants. *Cf 20.7.3.304.A-C* (Merely prohibiting the “introduction” of “hazardous wastes, solvents, fertilizers, and livestock wastes” into “on-site liquid waste systems”)(emphasis added).

Furthermore, the Liquid Waste Regulations—unlike the Water Protection Regulations and BL Santa Fe’s Draft DP-75—impose no sampling, monitoring, or reporting requirements whatsoever regarding the quality or quantity of discharged contaminants. *See generally 20.7.3* (emphasis added). So, while the Liquid Waste Regulations may prohibit the receipt and discharge of “hazardous wastes, solvents, fertilizers, and livestock wastes,” there exists no sampling, monitoring, and reporting requirements to verify that such harmful wastes are not in fact being introduced into the system and, correspondingly, into the groundwater and the environment. *See generally 20.7.3* (Including no sampling, monitoring, and reporting requirements). On the other hand, both the Water Protection Regulations and BL Santa Fe’s

Draft DP-75 impose strict sampling, monitoring, and reporting requirements to objectively demonstrate continued compliance with the regulations and protection of human health, the environment, and water quality. *See supra* ¶¶ 26-30.

As analyzed above, the Liquid Waste Regulations on their face do not apply to BL Santa Fe's Wastewater Treatment Plant and corresponding Draft DP-75. Moreover, and importantly, the Water Quality Act and its implementing Water Protection Regulations were properly applied, and are both legally, and in practice, more protective of human health, the environment, and water quality.

c. BL Santa Fe's 20.1.4.400 NMAC "Hearing Procedures" burden applies at a hearing on the Draft DP-75 and is, therefore, not yet ripe.

Part 20.1.4.400.A(1) NMAC, of the NMED Permit Procedures, entitled, "Hearing Procedures," imposes on an applicant a burden to demonstrate that the "permit, license, or variance should be issued and not denied." *Id.* However, by the plain language of 20.1.4.400, such burden applies at a hearing. *See id.* Because no such hearing has yet occurred in this matter, no such burden has yet been imposed on BL Santa Fe. *See id.* It follows, that BL Santa Fe's Draft DP-75 cannot be denied at this stage—as PTI alleges in its Motion—for failing to meet a burden, which is not yet ripe. *See Motion*, at pg. 40.

Importantly, PTI also conveniently disregards the additional language in Part 20.1.4.400.A(1), "[a]ny person who contends that a permit condition is inadequate, improper, invalid, or who proposes to include a permit condition shall have the burden of going forward to present an affirmative case on the challenged condition." *Id.* Consequently, it is not BL Santa Fe *alone* who will carry a burden at the appropriate time, that is, at the scheduled May 2025, hearing. *See id.* Rather, PTI will need to carry its 20.1.4.400.A(1) burden at that time.

Conclusion

The law and science—not conjecture and scare tactics⁶—must guide this matter. The NMED-GWQB properly applied the Water Quality Act and Water Protection Regulations to issue the Draft DP-75 to BL Santa Fe for its fully treated discharges of wastewater that meet or exceed all applicable New Mexico water quality standards in Section 3103. As discussed above, BL Santa Fe’s Wastewater Treatment Plant that receives and treats up to 30,000 gpd and concomitant discharges are squarely within the definition of wastewater treatment facilities and discharges covered by and subject to both the Water Quality Act and the Water Protection Regulations.

On the other hand, the Liquid Waste Regulations expressly exclude BL Santa Fe’s Wastewater Treatment Plant and discharges from regulation under Part 20.7.3. No amount of contortion or distortion of the regulatory language excluding BL Santa Fe’s Treatment Plant and discharges from the less protective, less prescriptive, less protective Liquid Waste Regulations can bring these matters within the purview of Part 20.7.3. PTI’s Motion asserting that the NMED-GWQB improperly applied the Water Quality Act and Water Protection Regulations lacks any merit in law or in fact and should properly be denied.

WHEREFORE, BL Santa Fe, LLC respectfully requests that the Secretary (1) deny PTI’s Motion; (2) proceed with the currently scheduled May 19, 2025 hearing; and (3) grant BL Santa Fe, LLC other such relief as is just and proper.

⁶ See January 12, 2025, Santa Fe New Mexican Letter from Protect Tesuque member Rusty Day to Santa Fe New Mexican, entitled, “Enforce the laws – criminal and environmental,” attached as **Exhibit O** (Baselessly claiming that NMED-GWQB acted criminally by issuing Draft DP-75 and is disregarding environmental laws to endanger human health, the environment, and water quality).

Respectfully submitted,

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ATTORNEYS FOR BL SANTA FE, LLC

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing Response in Opposition to Protect Tesuque Inc.'s Motion for Pre-Hearing Permit Denial and Memorandum in Support was e-mailed to the following on March 3, 2025:

Christal Weatherly Assistant General Counsel New Mexico Environment Department Christal.weatherly@env.nm.gov <i>Attorney for NMED</i>	Jason Herman Ground Water Quality Bureau Jason.Herman@env.nm.gov
Thomas M. Hnasko David A. Lynn P.O. Box 2068 Santa Fe, NM 87504-2068 (505) 982-4554 thnasko@hinklelawfirm.com dlynn@hinklelawfirm.com <i>Attorneys for Protect Tesuque, Inc.</i>	Felicia Orth felicia.l.orth@gmail.com <i>Madam Hearing Officer</i>
Chris Kaplan chris@junipercapital.com <i>Applicant</i>	Pamela Jones Pamela.jones@env.nm.gov <i>Hearing Clerk</i>
Nicholas R. Maxwell P.O. Box 1064 Hobbs, NM 88240 Inspector@sunshineaudit.com <i>Individually</i>	[Intentionally Left Blank]

By:  _____



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

September 16, 2024

Chris Kaplan, Director
B L Santa Fe, LLC
7001 N. Scottsdale Road, Suite 2050
Scottsdale, Arizona 85253

RE: Draft Discharge Permit Renewal/Modification, DP-75, Bishop's Lodge Wastewater Treatment Facility

Dear Chris Kaplan:

The New Mexico Environment Department (NMED) hereby provides notice to B L Santa Fe, LLC of the proposed approval of Ground Water Discharge Permit Renewal and Modification, DP-75, (copy enclosed), pursuant to Subsection H of 20.6.2.3108 NMAC. NMED will publish notice of the availability of the draft Discharge Permit in the near future for public review and comment and will forward a copy of that notice to you.

Prior to making a final ruling on the proposed Discharge Permit, NMED will allow 30 days from the date the public notice is published in the newspaper for any interested party, including the Discharge Permit applicant, i.e., yourself, to submit written comments and/or a request a public hearing. A hearing request shall set forth the reasons why a hearing is requested. NMED will hold a hearing in response to a timely hearing request if the NMED Secretary determines there is substantial public interest in the proposed Discharge Permit.

Please review the enclosed draft Discharge Permit carefully. Please be aware that this Discharge Permit may contain conditions that require the permittee to implement operational, monitoring or closure actions by a specified deadline.

Please submit written comments or a request for hearing to my attention at the address below, via email to jason.herman@env.nm.gov or to pps.general@env.nm.gov, or directly into the NMED Public Comment Portal at <https://nmed.commentinput.com/comment/search>. If NMED does not receive written comments or a request for hearing during the public comment period, the draft Discharge Permit will become final.

Thank you for your cooperation during the review process. Feel free to contact me with any questions at (575) 649-3871.

Sincerely,

**Jason
Herman**

Jason Herman, Program Manager

Digitally signed by
Jason Herman
Date: 2024.09.16
11:23:47 -06'00'

**EXHIBIT
A**

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469
Telephone (505) 827-2900 | www.env.nm.gov/gwqb/

Chris Kaplan

September 16, 2024

Page 2 of 2

Encl: Draft Discharge Permit Renewal and Modification, DP-75

cc: Gary Lee, Lee & Company LLC, gary.lee@lee-engineers.com
Jay Lazarus, Glorieta Geoscience, jay.lazarus@gza.com



NEW MEXICO
ENVIRONMENT DEPARTMENT
Ground Water Quality Bureau
1190 Saint Francis Drive / PO Box 5469
Santa Fe, NM 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov



Draft: September 16, 2024

GROUND WATER QUALITY BUREAU
DISCHARGE PERMIT
Issued under 20.6.2 NMAC

Facility Name: Bishop's Lodge Wastewater Treatment Facility
Discharge Permit Number: DP-75
Facility Location: 1297 Bishop's Lodge Road
Santa Fe, NM

County: Santa Fe

Permittee: B L Santa Fe, LLC
Mailing Address: Chris Kaplan, Director
7001 N Scottsdale Road, Suite 2050
Scottsdale, AZ 85253

Facility Contact: Chris Kaplan, Director
Telephone Number/Email: (480) 840-8413 / chris@junipercapital.com

Permitting Action: Renewal and Modification
Permit Issuance Date: DATE
Permit Expiration Date: DATE

NMED Permit Contact: Jason Herman
Telephone Number/Email: 575-649-3871 / jason.herman@env.nm.gov or
505-827-2900 / pps.general@env.nm.gov

JUSTIN D. BALL
Chief, Ground Water Quality Bureau
New Mexico Environment Department

Date

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ATTACHMENTS

Discharge Permit Summary
New Mexico Environment Department Ground Water Quality Bureau Monitoring Well
Construction and Abandonment Guidelines, Revision 1.1, March 2011 (Monitoring
Well Guidance)

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this groundwater discharge permit Renewal and Modification (Discharge Permit or DP-75) to B L Santa Fe, LLC (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from Bishop's Lodge Wastewater Treatment Facility (Facility) in order to protect groundwater and those segments of surface water gaining from groundwater inflow for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health. It is NMED's determination in issuing this Discharge Permit that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. The Permittee is responsible for complying with the terms and conditions of this Discharge Permit pursuant to Section 20.6.2.3104 NMAC; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

Described below are the activities that produce the discharge, the location of the discharge, and the quantity, quality, and flow characteristics.

The Facility receives and treats domestic wastewater at a volume of up to 30,000 gallons per day (gpd) using a Membrane Bioreactor package treatment plant. Class 1A reclaimed domestic wastewater discharges to an irrigation system totaling approximately five acres and from a standpipe for temporary purposes. In addition, treated wastewater discharges to a subsurface low-pressure dosed disposal field. The Facility discharges wastewater treatment plant sludge to a synthetically lined reed bed for treatment and stabilization.

The Discharge Permit modification consists of an increase in the authorized maximum daily discharge volume from 14,760 gpd to 30,000 gpd and the addition of above ground irrigation utilizing reclaimed wastewater as a discharge method and location.

Discharge Permit Location Information:

Physical Address	1297 Bishop's Lodge Road
Nearest Town/City	Santa Fe
Section, Township, Range	5 and 6, 17 north, 10 east
County	Santa Fe
Depth to Groundwater	23 feet below ground surface
Pre-Discharge TDS	300 mg/L

Discharge Permit Issuance History:

Original Permit Issuance	July 11, 1979

Permit Renewal and Modification	February 20, 1984
Permit Renewal and Modification	April 10, 1989
Permit Renewal	January 18, 1994
Permit Renewal and Modification	February 19, 1999
Permit Renewal	December 6, 2004
Permit Renewal	February 14, 2011
Permit Renewal and Modification	September 30, 2019

The application (i.e., discharge plan) associated with this Discharge Permit consists of the materials submitted by the Permittee dated April 4, 2024, and materials contained in the administrative record prior to issuance of this Discharge Permit.

The Permittee shall manage the discharge in accordance with all conditions and requirements of this Discharge Permit.

NMED reserves the right to require a Discharge Permit modification in the event NMED determines that the Permittee is or may be violating, or is likely to violate in the future, the requirements of 20.6.2 NMAC or the standards of Section 20.6.2.3103 NMAC. NMED reserves this right pursuant to Section 20.6.2.3109 NMAC. An NMED requirement to modify the Discharge Permit may result from a determination by the department that structural controls and/or management practices approved under this Discharge Permit are insufficiently protective of groundwater quality and human health. NMED reserves the right to require the Permittee to implement abatement of water pollution and remediate groundwater quality.

NMED issuance of this Discharge Permit does not relieve the Permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

This Discharge Permit may use the following acronyms and abbreviations.

Abbreviation	Explanation		Abbreviation	Explanation
BOD ₅	biochemical oxygen demand (5-day)		NMED	New Mexico Environment Department
CAP	Corrective Action Plan		NMSA	New Mexico Statutes Annotated
CFR	Code of Federal Regulations		NO ₃ -N	nitrate-nitrogen
CFU	colony forming unit		NTU	nephelometric turbidity units
Cl	chloride		QA/QC	Quality Assurance/Quality Control
EPA	United States Environmental Protection Agency		TDS	total dissolved solids
Gpd	gallons per day		TKN	total Kjeldahl nitrogen
LAA	land application area		total nitrogen	= TKN + NO ₃ -N

Abbreviation	Explanation		Abbreviation	Explanation
LADS	Land Application Data Sheet(s)		TRC	total residual chlorine
mg/L	milligrams per liter		TSS	total suspended solids
mL	milliliters		WQA	New Mexico Water Quality Act
MPN	most probable number		WQCC	Water Quality Control Commission
NMAC	New Mexico Administrative Code		WWTF	Wastewater Treatment Facility

II. FINDINGS

In issuing this Discharge Permit, NMED finds the following.

1. The Permittee is discharging effluent or leachate from the Facility so that such effluent or leachate may move into groundwater of the State of New Mexico that has an existing concentration of 10,000 mg/L or less of TDS, within the meaning of Subsection A of 20.6.2.3101 NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant.
2. The Permittee is discharging effluent or leachate from the Facility directly or indirectly into groundwater pursuant to this Discharge Permit and Sections 20.6.2.3000 through 20.6.2.3114 NMAC.
3. The discharge from this Facility has the potential to contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC and is not subject to the exemption at Subsection 20.6.2.3105 NMAC.

III. AUTHORIZATION TO DISCHARGE

The Permittee is responsible for ensuring that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein pursuant to 20.6.2.3104 NMAC.

This Discharge Permit authorizes the Permittee to receive and treat domestic wastewater up to 30,000 gpd using a Membrane Bioreactor package plant. This Discharge Permit authorizes the Permittee to discharge Class 1A reclaimed domestic wastewater to irrigation system totaling five acres and from a standpipe for temporary purposes. In addition, this Discharge Permit authorizes the Permittee to discharge treated wastewater to a subsurface low-pressure dosed disposal field. This Discharge Permit also authorizes the Permittee to discharge wastewater treatment plant sludge to a synthetically lined reed bed for treatment and stabilization.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection D of 20.6.2.3109 NMAC]

IV. CONDITIONS

NMED issues this Discharge Permit for the discharge of water contaminants subject to the following conditions.

A. OPERATIONAL PLAN

#	Terms and Conditions
1.	The Permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 2 and 4 NMAC. [Subsection C of 20.6.2.3109 NMAC]
2.	The Permittee shall operate in a manner that does not violate standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC. [20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]

Operational Actions with Implementation Deadlines

#	Terms and Conditions
3.	A minimum of 90 days prior to construction of the new low-pressure dosed disposal field, the Permittee shall submit final construction plans and specifications for NMED's review of the proposed disposal field. The construction plans and specifications shall bear the seal and signature of a licensed New Mexico professional engineer (pursuant to New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) and shall include the supporting design calculations. The submitted documentation shall include the following elements. a) Wastewater system component(s) design, e.g., lift stations, valves, transfer lines, process units and associated details. b) The infrastructure necessary to discharge wastewater to a subsurface low-pressure dosed disposal field. c) Flow meter design detail - Flow meters to measure the volume of wastewater discharged from the package plant low-pressure dosed disposal field. d) Specifications for all equipment, materials and installation procedures the Permittee will use in the construction of the wastewater system. Prior to constructing the low-pressure dosed disposal field and its associated components, the Permittee shall obtain written verification from NMED that the plans and specifications meet the requirements of this Discharge Permit.

#	Terms and Conditions
	[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
4.	Within 30 days of completing construction of the upgraded package plant and low-pressure dosed disposal field, the Permittee shall submit record drawings to NMED that bear the seal and signature of a licensed New Mexico professional engineer (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) for the constructed upgraded package plant and leachfield. [Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3109 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
5.	Five business days prior to discharging from the upgraded Facility, the Permittee shall submit written notification to NMED stating the date the discharge is to commence. [Subsection A of 20.6.2.3107 NMAC, Subsection H of 20.6.2.3109 NMAC]
6.	Within 30 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall post signs in English and Spanish at all reuse areas. The Permittee shall post signs at the entrance to reuse areas and at other locations where public exposure to reclaimed domestic wastewater may occur. The signs shall state: NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR. The Permittee may submit alternate wording and/or graphics to NMED for approval. Documentation of sign installation shall consist of a narrative statement describing the number and location of the signs and date-stamped photographs. The Permittee shall submit the documentation to NMED in the next required periodic monitoring report. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
7.	Prior to utilizing the former package plant as an aerobic sludge digester, the Permittee shall have the unit evaluated and inspected by a licensed New Mexico professional engineer (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) and shall submit a report with the findings and recommendations to NMED regarding the structural integrity of the unit and its ability for the Permittee to utilize it as an aerobic digester. [Subsection A of 20.6.2.3107 NMAC]
8.	Within 120 days following the submission of the licensed New Mexico professional engineer's report, the Permittee shall submit a plan to NMED for approval for repair or

#	Terms and Conditions
	replacement of the former package plant, if deemed necessary for the intended purpose of converting it into an aerobic digester. The Permittee shall only utilize the former package plant as an aerobic digester once all necessary repairs or replacement are complete. [Subsections A of 20.6.2.3107 NMAC]

Operating Conditions

#	Terms and Conditions																		
9.	The Permittee shall ensure that treated wastewater discharged from the effluent sampling port following the UV disinfection unit does not exceed the following discharge limit. Total Nitrogen: 10 mg/L [Subsection C of 20.6.2.3109 NMAC]																		
10.	The Permittee shall ensure that Class 1A reclaimed domestic wastewater discharged from the effluent sampling port following the UV disinfection unit does not exceed the following discharge limits. <table><tr><th>Test</th><th>30-day Average</th><th>Maximum</th></tr><tr><td>Total Nitrogen</td><td>n/a</td><td>10 mg/L</td></tr><tr><td>E. coli bacteria</td><td>3 CFU or MPN/100 mL</td><td>15 CFU or MPN/100 mL</td></tr><tr><td>BOD₅</td><td>10 mg/L</td><td>15 mg/L</td></tr><tr><td>Turbidity</td><td>3 NTU</td><td>5 NTU</td></tr><tr><td>UV Transmissivity</td><td>Monitor Only</td><td>Monitor Only</td></tr></table> [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]	Test	30-day Average	Maximum	Total Nitrogen	n/a	10 mg/L	E. coli bacteria	3 CFU or MPN/100 mL	15 CFU or MPN/100 mL	BOD ₅	10 mg/L	15 mg/L	Turbidity	3 NTU	5 NTU	UV Transmissivity	Monitor Only	Monitor Only
Test	30-day Average	Maximum																	
Total Nitrogen	n/a	10 mg/L																	
E. coli bacteria	3 CFU or MPN/100 mL	15 CFU or MPN/100 mL																	
BOD ₅	10 mg/L	15 mg/L																	
Turbidity	3 NTU	5 NTU																	
UV Transmissivity	Monitor Only	Monitor Only																	
11.	The Permittee shall ensure adherence to the following general requirements for above-ground use of reclaimed domestic wastewater. a) The Permittee shall install and maintain signs in English and Spanish at all reuse areas such that they are visible and legible for the term of this Discharge Permit. The Permittee shall post signs at the entrance to reuse areas and at other locations where public exposure to reclaimed domestic wastewater may occur. The signs shall state:																		

#	Terms and Conditions
	NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR. The Permittee may submit alternate wording and/or graphics to NMED for approval. b) Reclaimed domestic wastewater systems shall have no direct or indirect cross connections with public water systems or irrigation wells pursuant to the latest revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NMAC). c) Above-ground use of reclaimed domestic wastewater shall not result in excessive ponding of wastewater and shall not exceed the water consumptive needs of the crop. The Permittee shall not discharge reclaimed domestic wastewater at times when the reuse area is saturated or frozen. d) The Permittee shall confine discharge of reclaimed domestic wastewater to the reuse area. e) The Permittee shall not discharge reclaimed domestic wastewater to crops used for human consumption. f) Water supply wells within 200 feet of a reuse area shall have adequate wellhead construction pursuant to 19.27.4 NMAC. g) Existing and accessible portions of the reclaimed domestic wastewater distribution system (with the exception of application equipment such as sprinklers or pivots) shall be colored purple or clearly labeled as being part of a reclaimed domestic wastewater distribution system. Piping, valves, outlets, and other plumbing fixtures shall be purple pursuant to the latest revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NMAC) to differentiate piping or fixtures used to convey reclaimed wastewater from those intended for potable or other uses. h) Valves, outlets, and sprinkler heads used in reclaimed wastewater systems shall be accessible only to authorized personnel. The Permittee shall demonstrate adherence to these requirements by submitting documentation consisting of narrative statements and date-stamped photographs as appropriate. The Permittee shall submit the documentation to NMED once during the term of this Discharge Permit in the next required periodic monitoring report after the issuance of the Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1–78, § 74-6–5.D]
12.	The Permittee shall meet the following setbacks, access restrictions and equipment requirements for spray irrigation using Class 1A reclaimed domestic wastewater. a) No required setback between any dwellings or occupied establishments and the edge of the reuse area.

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	b) Postpone irrigation using reclaimed domestic wastewater at times when windy conditions may result in drift of reclaimed wastewater outside the reuse area. c) No required access control. d) Limit spray irrigation system to low trajectory spray nozzles. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1–78, § 74–5.D]
13.	The Permittee shall meet the following requirements for the temporary above-ground use of reclaimed domestic wastewater. a) Restrict access to the reclaimed domestic wastewater distribution system (standpipe). Transfer of reclaimed domestic wastewater to other users shall only be done by the Permittee or its designee. The Permittee shall prohibit public access to the reclaimed domestic wastewater system. b) Notify all recipients of reclaimed domestic wastewater for temporary uses in writing of the following. i. Reclaimed domestic wastewater is approved only for construction activities; soil compaction; mixing of mortars, slurries or cement; dust control on roads and construction sites; animal watering; and irrigation of non-food crops. ii. Reclaimed domestic wastewater shall be discharged by gravity flow or under low pressure in a manner that minimizes misting and does not result in excessive standing or ponding of wastewater. iii. If the discharge method results in misting, the area(s) receiving the reclaimed domestic wastewater must be 100 feet from areas accessible to the public. iv. The area receiving the discharge must be 300 feet from potable water supply wells. v. Transport vehicles and storage tanks containing reclaimed domestic wastewater shall have signs, in English and Spanish, identifying the contents as non-potable water and advising against consumption. vi. The user shall not apply of reclaimed domestic wastewater at times when the receiving area is saturated or frozen. The Permittee shall maintain a log of all recipients of reclaimed domestic wastewater and shall provide the log to NMED upon request. [20.6.2.3109 NMAC]
14.	The Permittee shall institute a backflow prevention method to protect wells and public water supply systems from contamination by reclaimed domestic wastewater prior to discharging to the reuse area. Backflow prevention shall be achieved by a total disconnect (physical air gap separation between the discharge pipe and the liquid surface at least twice the diameter of the discharge pipe), or by a reduced pressure principal

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	backflow prevention assembly (RP) installed on the line between the fresh water supply wells or public water supply and the reclaimed domestic wastewater delivery system. The Permittee shall maintain backflow prevention at all times. The Permittee shall have RP devices inspected and tested by a certified backflow prevention assembly tester at the time of installation, repair or relocation and at least on an annual basis thereafter. The backflow prevention assembly tester shall have successfully completed a 40-hour backflow prevention course based on the University of Southern California's Backflow Prevention Standards and Test Procedures, and obtained certification demonstrating completion. The Permittee shall have all malfunctioning RP devices repaired or replaced within 30 days of discovery. The Permittee shall cease using supply lines associated with the RP device until repair or replacement is complete. The Permittee shall maintain copies of the inspection and maintenance records and test results for each RP device associated with the backflow prevention program at a location available for inspection by NMED. [Subsection C of 20.6.2.3109 NMAC]
15.	The Permittee shall maintain fences around the Facility to restrict access by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing and locking gates. The Permittee shall maintain the fences to serve the stated purpose throughout the term of this Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
16.	The Permittee shall maintain signs indicating that the wastewater at the Facility is not potable. The Permittee shall post signs at the Facility entrance and other areas where there is potential for public contact with wastewater. The Permittee shall print signs in English and Spanish and shall ensure the signs remain visible and legible for the term of this Discharge Permit. [Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
17.	The Permittee shall maintain the reed bed liner to avoid conditions that could affect the liner or the structural integrity of the impoundment. Characterization of such conditions may include the following: • erosion damage; • animal burrows or other damage; • the presence of vegetation including any other aquatic plants other than reeds, weeds, woody shrubs or trees growing within five feet of the top inside edge of a sub-

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	grade impoundment, within five feet of the toe of the outside berm of an above-grade impoundment, or within the impoundment itself; • the presence of large debris or large quantities of debris in the impoundment; • evidence of seepage; or • evidence of berm subsidence. The Permittee shall routinely control vegetation growing around the impoundment by mechanical removal that is protective of the impoundment liner. The Permittee shall visually inspect the impoundment and surrounding berms on a monthly basis to ensure proper maintenance. In the event that inspection reveals any evidence of damage that threatens the structural integrity of an impoundment berm or liner, or that may result in an unauthorized discharge, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit. The Permittee shall create and maintain a log of all impoundment inspections which describes the date of the inspection, any findings and repairs and the name of the person responsible for the inspection. The Permittee shall make the log available to NMED upon request. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
18.	The Permittee shall visually inspect the area above the low-pressure dosed disposal field (disposal system) semi-annually to ensure proper maintenance. The Permittee shall correct any conditions that indicate damage to the disposal system. The Permittee shall ensure conditions corrected include erosion damage, animal activity/damage, woody shrubs, evidence of seepage, or any other condition indicating damage. The Permittee shall keep a log of the inspections that includes a date of the inspection, any findings and repairs, and the name of the inspector. The Permittee shall make the log available to NMED upon request. In the event of a failure of the disposal system, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit. [Subsections A and D of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
19.	The Permittee shall properly manage all solids generated by the treatment system to maintain effective operation of the system by removing solids as necessary and in accordance with associated equipment manufacturer's specifications. If the Permittee disposes of solids offsite, the Permittee shall contain, transport, and dispose of all solids

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	removed from the treatment process in accordance with all local, state, and federal regulations. The Permittee shall maintain manifests for all solids transported from the treatment Facility for off-site disposal. The manifests shall identify the name of the hauler, the date of off-site shipment, the volume of solids removed, the disposal method, and disposal location. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
20.	The Permittee shall inspect the grease interceptor on a monthly basis and remove accumulated grease and settled solids as needed to prevent them from exiting the unit. The Permittee shall create and maintain a log of all grease interceptor inspections which describes all findings, repairs, removals, the date of the inspection, and the name of the person responsible for the inspection. The Permittee shall make the log available to NMED upon request. The Permittee shall maintain a record of grease/solids removal and disposal, including date, volume of grease/solids removed, disposal method and disposal location. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
21.	The Permittee shall inspect and clean the lift station(s) as needed to prevent pump failure. The Permittee shall maintain a record of lift station inspections, repairs, and cleanings. The Permittee shall make the record available to NMED upon request. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
22.	The Permittee shall utilize operators, certified by the State of New Mexico at the appropriate level pursuant to 20.7.4 NMAC, to operate the wastewater collection, treatment, and disposal systems. A certified operator or a direct supervisee of a certified operator shall perform the operations and maintenance of all or any part of the wastewater system. The Permittee shall notify the NMED within 24 hours if at any time the Permittee no longer has a certified operator maintaining the system. [Subsection C of 20.6.2.3109 NMAC, 20.7.4 NMAC]

B. MONITORING AND REPORTING

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23.	The Permittee shall conduct the monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
24.	METHODOLOGY – Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC. [Subsection B of 20.6.2.3107 NMAC]

Due Dates for Monitoring Reports

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25.	Quarterly monitoring - The Permittee shall perform monitoring and other Permit required actions during the following periods and shall submit quarterly reports to NMED by the following due dates: • January 1st through March 31st – due by May 1st; • April 1st through June 30th – due by August 1st; • July 1st through September 30th – due by November 1st; and • October 1st through December 31st – due by February 1st. [Subsection A of 20.6.2.3107 NMAC]

Monitoring Actions with Implementation Deadlines

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26.	Within 90 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall install the following flow meters. a) One totalizing flow installed on the discharge line from the treatment system to the low-pressure dosed disposal field to measure the volume of treated wastewater discharged to the low-pressure dosed disposal field. b) One totalizing flow meter installed on the discharge line from the treatment system to the reuse area to measure the volume of reclaimed domestic wastewater discharged to the reuse area. c) One totalizing flow meter installed on the discharge line from the aerobic digester to

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	the reed bed to measure the volume of wastewater treatment plant sludge discharged to the reed bed. d) One totalizing flow meter on the standpipe to measure the volume of reclaimed wastewater discharged for temporary purposes. The Permittee shall submit confirmation of meter installation, type, calibration, and locations within 30 days of completed installations. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
27.	Within 60 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall submit a written groundwater monitoring well location proposal for NMED review and approval. The proposal shall designate the installation locations of the monitoring well required by this Discharge Permit. The proposal shall include, at a minimum, the following information. a) A map showing the proposed location of the monitoring well in relation to the boundary of the source it is intended to monitor. b) A written description of the specific location proposed for the monitoring well including the distance (in feet) and direction of the monitoring well from the edge of the source it is intended to monitor and the latitude and longitude coordinates for each well in decimal format. Examples include: 35 feet north-northwest of the northern berm of the synthetically lined impoundment and 35.898306 and -107.281519; 45 feet due south of the leachfield and 35.898306 and -107.281519; and 30 feet southeast of the reuse area and 35.898306 and -107.281519. c) A statement describing the groundwater flow direction beneath the Facility, and documentation and/or data supporting the determination. The Permittee must have NMED's approval of all monitoring well locations prior to their installation. [Subsection A of 20.6.2.3107 NMAC]
28.	Within 120 days of the issuance date of this Discharge Permit (by DATE), the Permittee shall install the following new monitoring well. One monitoring well (MW-4) located 20 to 50 feet hydrologically downgradient of the low-pressure dosed disposal field. The Permittee shall complete the well in accordance with the attached Monitoring Well Guidance.

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	Unless otherwise noted in this Discharge Permit, the requirement to install a monitoring well downgradient of a source is <u>not</u> contingent upon construction of the Facility, or discharge of wastewater from the Facility. [Subsection A of 20.6.2.3107 NMAC]
29.	Within 150 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall perform a professional survey of all new groundwater monitoring wells approved by NMED for Discharge Permit monitoring purposes. The survey shall be tied or referenced to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and elevation to the nearest one-hundredth of a foot or shall be in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). The survey shall bear the seal and signature of a licensed New Mexico professional surveyor (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority). The Permittee shall utilize the survey to establish an elevation at the top-of-casing, with a permanent marking indicating the point of elevation. The Permittee shall measure the depth-to-most-shallow groundwater to the nearest one-hundredth of a foot in all surveyed wells [and referenced to mean sea level], and the data shall be used to develop a groundwater elevation contour, i.e., potentiometric surface, map showing the location of all monitoring wells and the direction and gradient of groundwater flow in the uppermost aquifer below the Facility. The Permittee shall submit the data and groundwater elevation contour map to NMED within 30 days of survey completion. [Subsection A of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
30.	Within 150 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall verify the construction and condition of existing groundwater monitoring wells MW-1, MW-2, and MW-3 by conducting downhole video inspections of the wells. The Permittee shall employ a third party to conduct the downhole video inspection. The Permittee shall notify NMED at least seven days prior to the scheduled video inspection to allow NMED personnel the opportunity to be on-site for the inspection. The third party shall make a video recording of the monitoring well inspection using a downhole camera and perform the inspection in accordance with the following requirements. a) Prior to well inspection with a downhole camera, the Permittee shall measure the depth-to-most-shallow groundwater from the top of well casing to the nearest 0.01

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	feet using an electronic water level indicator consisting of dual conductor wire encased in a cable or tape graduated to 0.01 feet, a probe attached to the end of the conductor wire, and a visual or audible indicator. Care shall be taken when obtaining this measurement so as to not disturb sediments in the well. b) If the Permittee plans to collect a groundwater sample during the inspection event, the third party shall inspect the monitoring well using a downhole camera prior to sampling the well to maximize visibility. c) The third party shall zero the totalizing depth reading or record a value other than zero as an initial reading prior to well inspection with a downhole camera, at the top of the well casing. d) All measurements and totalizing readings (except for depth-to-most-shallow groundwater) shall be obtained to the nearest 0.1 feet. The Permittee is authorized to use downhole cameras that use a measurement system other than 0.1-foot increments; however, the Permittee shall report the direct measurement/reading obtained and the calculated conversion in 0.1 feet on the written log. e) Obtain all measurements and totalizing readings at the top of the well casing. f) The downhole camera shall be lowered into the monitoring well at a consistent speed that allows for clear video capture and does not disturb sediments in the well. g) Lowering of the downhole camera shall be paused long enough to clearly identify totalizing readings at the following points: depth-to-most-shallow groundwater; depth of the top of the screened interval; depth of the bottom of screened interval; and the bottom of the well. Within 60 days following the date of the well inspection, the Permittee shall submit written and video monitoring well camera logs for every monitoring well viewed with a downhole camera. The logs shall include the following information. a) The written monitoring well camera log shall include the following general information: Facility name; Discharge Permit identification number; Permittee's name; monitoring well identification; date and time of the monitoring well camera inspection; location of the monitoring well relative to a source or Facility landmark; camera manufacturer and model; names of camera operator and any technical assistants; diameter of the casing (in inches); and a description of the physical condition of the well's concrete pad, shroud, casing and screened interval. The written log shall include measurements of distance from top of the well casing to the surface of the concrete pad; height from ground surface to the top of the concrete pad; and depth-to-most-shallow groundwater. The written log shall also include totalizing readings obtained from the downhole camera including the initial reading at the top of the well casing; depth-to-most-shallow groundwater using the borehole camera; depth of the top of the screened interval; depth of the bottom of screened interval; and the bottom of the well (total depth). The length of the screened interval

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	shall be calculated by subtracting the depth of the top of the screened interval from the depth of the bottom of screened interval and recorded on the log. b) The video monitoring well camera log shall display the Facility name; Discharge Permit identification number; Permittee's name; monitoring well identification; date and time of the monitoring well camera inspection; and the totalizing readings required in item "g)", above. The Permittee shall submit the video to NMED in Motion Picture Experts Group (MPEG) video format on a compact disc (CD) or digital versatile disc (DVD). [Subsection A of 20.6.2.3107 NMAC]

Groundwater Monitoring Conditions

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31.	The Permittee shall perform quarterly groundwater sampling in the following groundwater monitoring wells and analyze the samples for TKN, NO₃-N, TDS, and Cl. a) MW-1, located hydrologically upgradient of the Facility and approximately 65 feet west of the main resort entrance in the center of the traffic circle (35.730384°, -105.910889°). b) MW-2, located hydrologically downgradient of the old leachfield and approximately 170 feet northwest of the WWTP (35.732250°, -105.911827°). c) MW-3, located hydrologically downgradient of the new leachfield and approximately 130 feet west of the WWTP (35.731621°, -105.912052°). d) MW-4, located hydrologically downgradient of the low-pressure dosed disposal field. The Permittee shall perform groundwater sample collection, preservation, transport, and analysis according to the following procedures. a) Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest one-hundredth of a foot. b) Purge three well volumes of water from the well prior to sample collection. c) Obtain samples from the well for analysis. d) Properly prepare, preserve, and transport samples. e) Analyze samples in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the depth-to-most-shallow groundwater measurements and the laboratory analytical data results including the laboratory QA/QC summary report and Chain of Custody for each well, and a Facility layout map showing the location and number of each well to NMED in the quarterly monitoring reports.

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	[Subsection A of 20.6.2.3107 NMAC]
32.	The Permittee shall develop a groundwater elevation contour map, i.e., potentiometric surface map, on a quarterly basis using the top of casing elevation data from the monitoring well survey and the most recent depth-to-most-shallow groundwater measurements, referenced to mean sea level, obtained during the groundwater sampling required by this Discharge Permit. The groundwater elevation contour map shall depict the groundwater flow direction based on the groundwater elevation contours. The Permittee shall estimate groundwater elevations between monitoring well locations using common interpolation methods. The Permittee shall use a contour interval appropriate to the data but shall not be greater than two feet. Groundwater elevation contour maps shall use arrows to depict the groundwater flow direction based on the orientation of the groundwater elevation contours and shall locate and identify each monitoring well and contaminant source. The Permittee shall submit to NMED a groundwater elevation contour map in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC]
33.	NMED shall have the option to perform downhole inspections of all groundwater monitoring wells identified in this Discharge Permit. NMED shall establish the inspection date and notify the Permittee. The Permittee shall remove any existing dedicated pumps at least 48 hours prior to NMED inspection to allow adequate settling time of sediment agitated from pump removal. Should the Permittee decide to install a pump in a monitoring well without a dedicated pump, the Permittee shall notify NMED at least 90 days prior to pump installation so that NMED can schedule a downhole well inspection(s) prior to pump placement. [Subsections A and D of 20.6.2.3107 NMAC]

Facility Monitoring Conditions

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34.	The Permittee shall on a monthly basis measure the volume of treated wastewater discharged from the treatment system to the low-pressure dosed disposal field during the period.

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	To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located on the discharge line to the disposal field on a monthly basis and calculate the monthly and average daily discharge volume. The Permittee shall submit the calendar monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
35.	The Permittee shall on a monthly basis measure the volume discharged to <i>each</i> zone within the reuse area using a totalizing flow meter. The meter shall be located on the transfer line between the treatment system and the reuse area. The Permittee shall maintain a log that records the date that discharges occur to <i>each</i> zone and the monthly totalizing meter readings and units of measurement. The Permittee shall use the log to calculate the total calendar monthly volume of reclaimed domestic wastewater discharged to <i>each</i> zone. The Permittee shall submit a copy of the log to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
36.	The Permittee shall on a monthly basis measure the volume of wastewater treatment plant sludge discharged from the aerobic digester to the reed bed during the period. To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located on the discharge line from the aerobic digester to the reed bed on a monthly basis and calculate the monthly and average daily discharge volume. The Permittee shall submit the calendar monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
37.	The Permittee shall on a monthly basis measure the volume of reclaimed domestic wastewater discharged from the standpipe for temporary purposes during the period. To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located on the discharge line from the standpipe on a monthly basis and calculate the monthly and average daily discharge volume.

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	The Permittee shall submit the calendar monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
38.	All flow meters shall be capable of having their accuracy verified under working (i.e., real-time in-the-field) conditions. The Permittee shall develop a field verification method for each flow meter and shall utilize that method to check the accuracy of each respective meter. The Permittee shall perform field calibrations, at a minimum, within 90 days of the issuance date of this Discharge Permit (by DATE), and then every other year thereafter. The Permittee shall also perform field calibrations upon repair or replacement of a flow measurement device. The Permittee shall calibrate each flow meter to its manufacturer's recommended specification which shall be no less accurate than plus or minus 10 percent of actual flow, as measured under field conditions. An individual knowledgeable in flow measurement shall perform field calibration and the installation/operation of the device in use. The Permittee shall prepare a flow meter calibration report for each flow measurement device calibration event. The flow meter calibration report shall include the following information. - The location and meter identification. - The method of flow meter field calibration employed. - The measured accuracy of each flow meter prior to adjustment indicating the positive or negative offset as a percentage of actual flow as determined by an in-field calibration check. - The measured accuracy of each flow meter following adjustment, if necessary, indicating the positive or negative offset as a percentage of actual flow of the meter. - Any flow meter repairs made during the previous year or during field calibration. - The name of the individual performing the calibration and the date of the calibration. The Permittee shall maintain records of flow meter calibration(s) at a location accessible for review by NMED during Facility inspections. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
39.	The Permittee shall visually inspect flow meters on a monthly basis for evidence of malfunction. The Permittee shall maintain a log of the inspections that includes a date of the inspection, findings and repairs, and the name of the inspector. The Permittee shall make the log available to NMED upon request.

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	If a visual inspection indicates a flow meter is not functioning as required by this Discharge Permit, the Permittee shall repair or replace the meter within 30 days of discovery. For <i>repaired</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the repair that includes a description of the malfunction; a statement verifying the repair; and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. For <i>replacement</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the replacement that includes a design schematic for the device and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
40.	The Permittee shall collect samples of treated wastewater from the effluent sampling port following the UV disinfection unit on a quarterly basis and analyze the samples for: • TKN; • NO₃-N; • TDS; and • Cl. The Permittee shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the subsequent quarterly monitoring report. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
41.	During any week that the discharge of reclaimed domestic wastewater occurs, the Permittee shall perform the following analyses on the wastewater samples collected at the effluent sampling port following the UV disinfection unit using the following sampling method and frequency: • Fecal coliform or E. coli bacteria: grab sample at peak daily flow once per week; • BOD₅: six-hour composite sample once per two weeks; • Turbidity: continuously monitor reclaimed domestic wastewater for turbidity after the final treatment process and while discharging; record the average and maximum turbidity values for each calendar month; and • UV transmissivity values: record whenever collecting bacteria samples. The Permittee shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the laboratory analytical data results, including the QA/QC

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	summary and Chain of Custody, monthly average and maximum turbidity values, and a copy of the log of UV transmissivity values to NMED in the subsequent quarterly monitoring report. [Subsection A of 20.6.2.3107 NMAC, Subsections B, C and H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]
42.	The Permittee shall submit records of solids disposal, including the volume of solids removed and copies of all manifests for the previous calendar year, to NMED annually in the monitoring report due by August 1 st each year. [Subsection A of 20.6.2.3107 NMAC]

C. CONTINGENCY PLAN

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43.	In the event that groundwater monitoring indicates that groundwater exceeds a standard identified in Section 20.6.2.3103 NMAC, the Permittee shall collect a confirmatory sample from the monitoring well within 15 days of receipt of the initial sampling results to confirm the initial sampling results. Within 60 days of confirmation of groundwater contamination, the Permittee shall submit to NMED a Corrective Action Plan (CAP) that proposes, at a minimum, contaminant source control measures and an implementation schedule. The Permittee shall implement the CAP as approved by NMED. This condition shall apply until the Permittee completes groundwater monitoring for a minimum of eight (8) consecutive quarterly samples demonstrating groundwater does not exceed the standards of Section 20.6.2.3103 NMAC. Violation of the groundwater standard beyond 180 days after the confirmation of groundwater contamination may cause NMED to require the Permittee to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108 and Section 20.6.2.4112 NMAC. [20.6.2.3103 NMAC, Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

#	Terms and Conditions
44.	In the event that information available to NMED indicates that a well is not constructed in a manner consistent with the attached Monitoring Well Guidance, contains insufficient water to effectively monitor groundwater quality, or is otherwise not completed in a manner that is protective of groundwater quality, the Permittee shall install a replacement well(s) within 120 days following notification from NMED. The Permittee shall survey the replacement monitoring well(s) within 30 days following well completion. The Permittee shall install replacement well(s) at locations approved by NMED prior to installation and shall complete replacement well(s) in accordance with the attached Monitoring Well Guidance. The Permittee shall submit well construction and lithologic logs, survey data and a groundwater elevation contour map to NMED within 60 days following well completion. The Permittee shall properly plug and abandon monitoring well(s) requiring replacement upon completion of the replacement monitoring well(s). The Permittee shall complete the well plugging and abandonment, and shall document the abandonment procedures, in accordance with the attached Monitoring Well Guidance and all applicable local, state, and federal regulations. The Permittee shall submit a copy of the well abandonment documentation to NMED within 60 days following the replacement well(s) completion. [Subsection A of 20.6.2.3107 NMAC]
45.	In the event that groundwater flow information obtained pursuant to this Discharge Permit indicates that a monitoring well is not appropriately located, e.g., hydrologically downgradient of the discharge location it is intended to monitor, the Permittee shall install a replacement well within 120 days following notification from NMED. The Permittee shall survey the replacement monitoring well within 30 days following well completion. The Permittee shall install the replacement well at the location approved by NMED prior to installation and shall complete the replacement well in accordance with the attached Monitoring Well Guidance. The Permittee shall submit construction and lithologic logs, survey data and a groundwater elevation contour map within 60 days following well completion. The Permittee shall properly plug and abandon a monitoring well requiring replacement upon completion of the replacement monitoring well. The Permittee shall complete the well plugging and abandonment, and shall document the abandonment procedures, in accordance with the attached Monitoring Well Guidance and all applicable local, state,

#	Terms and Conditions
	and federal regulations. The Permittee shall submit a copy of the well abandonment documentation to NMED within 60 days following the replacement well completion. [Subsection A of 20.6.2.3107 NMAC]
46.	In the event that the Facility exceeds the authorized discharge volume set in this Discharge Permit, the Permittee shall initiate the following Contingency Plan. <u>Contingency Plan</u> a) Notify NMED within seven days of the discovery of the discharge volume exceedance that the Facility exceeded the authorized discharge volume. b) The Permittee shall conduct a physical inspection of the discharge system, i.e., inflow and infiltration issues, collection system failures, etc., and the discharge meter to detect abnormalities and report the findings to NMED within 30 days of the discovery of the discharge volume exceedance. The Permittee shall correct any abnormalities detected with NMED's concurrence. c) If the Permittee does not detect any abnormalities and with NMED's concurrence, the Permittee shall submit a discharge permit modification for the increase in discharge quantity to NMED within 90 days of the discovery of the discharge volume exceedance. The discharge permit modification must include demonstration that the volume increase is sufficient for the design capacity or plans and specifications to upgrade the system to accommodate the discharge volume increase. [Subsection A of 20.6.2.3107 NMAC]
47.	In the event that analytical results of a treated wastewater sample indicate an exceedance of the total nitrogen discharge limit set in this Discharge Permit, the Permittee shall collect and submit for analysis a second sample within 48 hours of the receipt of the initial sampling results. In the event the second sample results indicate an exceedance of the discharge limit, the Permittee shall implement the following contingencies. a) Within 7 days of the second sample analysis date indicating exceedance of the discharge limit, the Permittee shall: i) notify NMED that the Permittee is implementing the Contingency Plan; and ii) submit a copy of the first and second analytical results indicating an exceedance to NMED. b) The Permittee shall increase the frequency of total nitrogen wastewater sampling and analysis of treated wastewater to once per month. c) The Permittee shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational

#	Terms and Conditions
	procedures. d) The Permittee shall conduct a physical inspection of the treatment system to detect abnormalities. The Permittee shall correct any abnormalities discovered. The Permittee shall submit a report to NMED detailing the corrections within 30 days of correction. e) In the event that any analytical results from monthly wastewater sampling indicate an exceedance of the total nitrogen discharge limit, the Permittee shall submit a CAP to NMED for approval proposing to modify operational procedures and/or upgrade the treatment process to achieve the total nitrogen limit. The Permittee shall submit the CAP including a schedule for completion of corrective actions and within 90 days of receipt of the analytical results of the second sample indicating that the discharge continues to exceed the limit. The Permittee shall initiate implementation of the CAP following approval by NMED. When analytical results from three consecutive months of wastewater sampling do not exceed the discharge limit, the Permittee may request NMED authorize a return to a quarterly monitoring frequency. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
48.	In the event that analytical results of a reclaimed domestic wastewater sample exceed any of the maximum discharge limits for BOD₅, turbidity, or E. coli bacteria set by this Discharge Permit, the Permittee shall collect and submit for analysis a second sample within 24 hours after becoming aware of the exceedance. In the event the second sample results confirm the exceedance of the maximum discharge limits, the Permittee shall implement the Contingency Plan below. In the event that analytical results of a reclaimed domestic wastewater sample exceed any of the 30-day average discharge limits for BOD₅, turbidity, or E. coli bacteria set by this Discharge Permit (i.e., confirmed exceedance), the Permittee shall implement the Contingency Plan below. <u>Contingency Plan</u> a) Within 24 hours of becoming aware of a confirmed exceedance (as identified above), the Permittee shall: - notify NMED that the Permittee is implementing the Contingency Plan; and - submit copies of the recent analytical results indicating the exceedance(s) to NMED. b) The Permittee shall immediately cease discharging reclaimed domestic wastewater to the reuse area(s) if the E. coli bacteria maximum limit is exceeded.

#	Terms and Conditions
	c) The Permittee shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational procedures. d) The Permittee shall conduct a physical inspection of the treatment system to detect abnormalities and shall correct any abnormalities discovered. The Permittee shall submit a report detailing the corrections made to NMED within 30 days following correction. When the analytical results from samples of reclaimed domestic wastewater, sampled as required by this Discharge Permit, no longer indicate an exceedance of the maximum discharge limits for fecal coliform or E. coli bacteria, the Permittee may resume discharging reclaimed domestic wastewater to the reuse area(s) with NMED approval. If a Facility is required to implement the Contingency Plan more than two times in a 12-month period, the Permittee shall propose to modify operational procedures and upgrade the treatment process to achieve consistent compliance with the maximum and 30-day average discharge limits by submitting a Corrective Action Plan (CAP) for NMED approval within 60 days following receipt of the analytical results confirming the exceedance. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions and identification of alternative disposal locations/methods. The Permittee shall initiate implementation of the CAP following approval by NMED. NMED may require the Permittee to complete approved corrective actions prior to recommencing discharge to the reuse area(s). NMED may require, prior to recommencing discharge to the reuse area(s), additional sampling of any stored reclaimed domestic wastewater. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
49.	In the event that an inspection reveals significant damage has occurred or is likely to affect the structural integrity of the reed bed or liner or their ability to contain contaminants, the Permittee shall propose the repair or replacement by submitting a CAP to NMED for approval. The Permittee shall submit the CAP to NMED within 30 days after discovery of the damage or following notification from NMED that significant damage is evident. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall initiate implementation of the CAP following approval by NMED. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]

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50.	In the event that the Permittee identifies failure of the low-pressure dosed disposal field, such as surfacing wastewater, the Permittee shall implement the following Contingency Plan. a) Within 24 hours following the discovered failure, the Permittee shall: i) Notify NMED of the failure in accordance with the notification requirements described in the Contingency Plan for unauthorized discharges; and ii) Restrict public access to the area. b) The Permittee shall conduct a physical inspection of the treatment and disposal system to identify additional potential failures and record them in the inspection log. c) The Permittee shall propose actions to address the failure and methods of correction by submitting a CAP to NMED for approval within 15 days following the discovered failure. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall initiate implementation of the CAP following NMED approval. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
51.	In the event that a release occurs that is not authorized under this Discharge Permit (commonly known as a “spill”), the Permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below. A release is defined as such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property. Within <u>24 hours</u> following discovery of the unauthorized discharge, the Permittee shall verbally notify NMED and provide the following information. a) The name, address, and telephone number of the person or persons in charge of the Facility, as well as of the owner and/or operator of the Facility. b) The name and address of the Facility. c) The date, time, location, and duration of the unauthorized discharge. d) The source and cause of unauthorized discharge. e) A description of the unauthorized discharge, including its estimated chemical composition. f) The estimated volume of the unauthorized discharge. g) Any actions taken to mitigate immediate damage from the unauthorized discharge. Within <u>one week</u> following discovery of the unauthorized discharge, the Permittee shall submit written notification to NMED providing the information listed above and any pertinent updates.

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	Within <u>15 days</u> following discovery of the unauthorized discharge, the Permittee shall submit a CAP to NMED describing any corrective actions previously taken and corrective actions to be taken relative to the unauthorized discharge. The CAP shall include the following information. a) A description of proposed actions to mitigate damage from the unauthorized discharge. b) A description of proposed actions to prevent future unauthorized discharges of this nature. c) A schedule for completion of proposed actions. In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, NMED may require the Permittee to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC. The Permittee shall not construe anything in this condition as relieving them of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC. [20.6.2.1203 NMAC]
52.	In the event that NMED or the Permittee identifies any failures of the discharge plan, i.e., the application, or this Discharge Permit not specifically noted herein, NMED may require the Permittee to submit a CAP and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a discharge permit modification to achieve compliance with 20.6.2 NMAC. [Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

D. CLOSURE PLAN

Closure Actions with Implementation Deadlines

#	Terms and Conditions
53.	Within 150 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall perform the following closure measures on the two leachfields at the Facility. a) Wastewater shall be pumped from the system components (e.g., dosing chambers,

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	distribution boxes) and it shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The Permittee shall maintain a record of all wastes transported for off-site disposal. b) Remove all lines leading to and from the leachfields or permanently plug them and abandon them in place. c) Remove or demolish all closed dosing chambers, distribution boxes or other system components (with the exception of leachfields) and re-grade the area with suitable fill to blend with surface topography to promote positive drainage and prevent ponding. The Permittee shall continue groundwater monitoring of MW-2 until the Permittee meets the requirements of this condition and groundwater monitoring confirms for a minimum of eight consecutive quarterly groundwater sampling events that groundwater does not exceed the standards of Section 20.6.2.3103 NMAC. This period is referred to as "post-closure." If at any time monitoring results show an exceedance of a groundwater quality standard in Section 20.6.2.3103 NMAC or the total nitrogen concentration is greater than 10 mg/L in groundwater, the Permittee shall implement the Contingency Plan required by this Discharge Permit. Following notification from NMED that the Permittee may cease post-closure monitoring of MW-2, the Permittee shall plug and abandon MW-2 in accordance with the attached Monitoring Well Guidance. [Subsection A of 20.6.2.3107 NMAC, 40 CFR Part 503]

Permanent Facility Closure Conditions

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54.	The Permittee shall perform the following closure measures in the event the Facility, or a component of the Facility, is proposed to be permanently closed. Within <u>90 days</u> of ceasing to discharge to the treatment system, the Permittee shall complete the following closure measures. a) Plug the line leading to the system so that a discharge can no longer occur. b) Evaporate wastewater in the system components, or drain and dispose of in accordance with all local, state, and federal regulations, or discharged from the system to the reuse area as authorized by this Discharge Permit. The discharge of

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	accumulated solids (sludge) to the reuse area is prohibited. c) Contain, transport, and dispose of solids removed from the treatment system in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The Permittee shall maintain a record of all solids transported for off-site disposal. Within <u>180 days</u> of ceasing to discharge to the treatment system (or unit), the Permittee shall complete the following closure measures. a) Remove all lines leading to and from the treatment system, or permanently plug and abandon them in place. b) Remove or demolish all treatment system components, and re-grade the area with suitable fill to blend with surface topography, promote positive drainage and prevent ponding. c) Perforate or remove the reed bed liner; fill the impoundment with suitable fill; and re-grade the impoundment site to blend with surface topography, promote positive drainage and prevent ponding. The Permittee shall continue groundwater monitoring until the Permittee meets the requirements of this condition and groundwater monitoring confirms for a minimum of eight consecutive quarterly groundwater sampling events that groundwater does not exceed the standards of Section 20.6.2.3103 NMAC. This period is referred to as "post-closure." If at any time monitoring results show an exceedance of a groundwater quality standard in Section 20.6.2.3103 NMAC, the Permittee shall implement the Contingency Plan required by this Discharge Permit. Following notification from NMED that the Permittee may cease post-closure monitoring, the Permittee shall plug and abandon the monitoring well(s) in accordance with the attached Monitoring Well Guidance. When the Permittee has met all closure and post-closure requirements and verified appropriate actions with date stamped photographic evidence or an associated NMED inspection, the Permittee may submit to NMED a written request, including photographic evidence, for termination of the Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]

E. GENERAL TERMS AND CONDITIONS

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55.	RECORD KEEPING - The Permittee shall maintain a written record of the following: • Information and data used to complete the application for this Discharge Permit; • Information, data, and documents demonstrating completion of closure activities; • Any releases (commonly known as “spills”) not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC; • The operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; • Facility record drawings (plans and specifications) showing the actual construction of the Facility and bear the seal and signature of a licensed New Mexico professional engineer; • Copies of logs, inspection reports, and monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit; • The volume of wastewater or other wastes discharged pursuant to this Discharge Permit; • Groundwater quality and wastewater quality data collected pursuant to this Discharge Permit; • Copies of construction records (well log) for all sampled groundwater monitoring wells pursuant to this Discharge Permit; • The maintenance, repair, replacement or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and • Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including: ○ the dates, location and times of sampling or field measurements; ○ the name and job title of the individuals who performed each sample collection or field measurement; ○ the sample analysis date of each sample; ○ the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis; ○ the analytical technique or method used to analyze each sample or collect each field measurement; ○ the results of each analysis or field measurement, including raw data; ○ the results of any split, spiked, duplicate or repeat sample; and ○ a copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used.

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	The Permittee shall maintain the written record at a location accessible to NMED during a Facility inspection for a minimum of five years. The Permittee shall make the record available to NMED upon request. [Subsections A and D of 20.6.2.3107 NMAC]
56.	SUBMITTALS – The Permittee shall submit both a paper copy and an electronic copy of all notification and reporting documents required by this Discharge Permit, e.g., monitoring reports. The Permittee shall submit paper and electronic documents to the NMED Permit Contact identified on the Permit cover page. [Subsection A of 20.6.2.3107 NMAC]
57.	INSPECTION and ENTRY – The Permittee shall allow NMED to inspect the Facility and its operations that are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which any maintained records required by this Discharge Permit, the regulations of the federal government, or the WQCC are located. The Permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations. No person shall construe anything in this Discharge Permit as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state or federal regulations. [Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]
58.	DUTY to PROVIDE INFORMATION - The Permittee shall, upon NMED's request, allow for NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records. [Subsection D of 20.6.2.3107 NMAC]
59.	MODIFICATIONS and/or AMENDMENTS – In the event the Permittee proposes a change to the Facility or the Facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the Facility, the Permittee shall notify NMED prior to implementing such changes. The Permittee shall obtain NMED's approval

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	(which may require modification of this Discharge Permit) prior to implementing such changes. [Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]
60.	PLANS and SPECIFICATIONS – In the event the Permittee proposes to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittee shall submit construction plans and specifications of the proposed system or process unit to NMED for approval prior to the commencement of construction. In the event the Permittee implements changes to the wastewater system authorized by this Discharge Permit that result in only a minor effect on the character of the discharge, the Permittee shall report such changes (including the submission of record drawings where applicable) to NMED prior to implementation. [Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
61.	CIVIL PENALTIES - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]
62.	CRIMINAL PENALTIES – No person shall: • Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or maintained under the WQA; • Falsify, tamper with or render inaccurate any monitoring device, method or record maintained under the WQA; or

#	Terms and Conditions
	Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation. Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. [20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]
63.	COMPLIANCE with OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with any other applicable federal, state, and/or local laws, regulations, zoning requirements, nuisance ordinances, permits or orders. [NMSA 1978, § 74-6-5.L]
64.	RIGHT to APPEAL - The Permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues raised and the relief sought. Unless the Permittee files a timely petition for review, the decision of NMED shall be final and not subject to judicial review. [20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.O]
65.	TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this Facility or any portion thereof, the Permittee shall: - Notify the proposed transferee in writing of the existence of this Discharge Permit; - Include a copy of this Discharge Permit with the notice; and - Deliver or send by certified mail to NMED a copy of the notification and proof that the proposed transferee has received such notification.

#	Terms and Conditions
	The Permittee shall continue to be responsible for any discharge from the Facility, until both ownership and possession of the Facility have been transferred to the transferee. [20.6.2.3111 NMAC]
66.	PERMIT FEES – The Permittee shall be aware that the payment of permit fees is due at the time of Discharge Permit approval. The Permittee may pay the permit fees in a single payment or they may pay the fee in equal installments on a yearly basis over the term of the Discharge Permit. The Permittee shall remit single payments to NMED no later than 30 days after the Discharge Permit issuance date. The Permittee shall remit initial installment payments to NMED no later than 30 days after the Discharge Permit issuance date; with subsequent installment payments remitted to NMED no later than the anniversary of the Discharge Permit issuance date. Permit fees are associated with <u>issuance</u> of this Discharge Permit. No person shall construe anything in this Discharge Permit as relieving the Permittee of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the Facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. NMED shall suspend or terminate an approved Discharge Permit if the Permittee fails to remit an installment payment by its due date. [Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Facility Information

Facility Name Bishop's Lodge Wastewater Treatment Facility
Discharge Permit Number DP-75
Legally Responsible Party Chris Kaplan, Director
B L Santa Fe, LLC
7001 N. Scottsdale Road, Suite 2050
Scottsdale, AZ 85253
(480) 840-8413

Treatment, Disposal and Site Information

Primary Waste Type Domestic
Facility Type Hotel/Condominiums/Residential

Treatment Methods

Type	Designation	Description & Comments
Grease Interceptor	Grease Interceptor	3,000-gallon grease interceptor model GT-3000 manufactured by Park USA
Wastewater Treatment System	MBR Package Plant	Package plant consisting of an equalization basin, pre-anoxic basin, aeration basin, post-anoxic basin, ultra-filter membranes, and UV disinfection
Digester	Aerobic Digester	Retrofitted former package plant to be used as an aerobic sludge digester

Discharge Locations

Type	Designation	Description & Comments
Infiltration Gallery	Old Leachfield	110'x114' infiltration gallery with an estimated 9,000 gpd capacity. To be abandoned
Infiltration Gallery	New Leachfield	10,959 gpd disposal capacity. To be abandoned
Infiltration Gallery	Low-Pressure Dosed Disposal Field	To be constructed. 2,500 square feet. 11 laterals, 50 feet per lateral
Sludge Storage	Reed Bed	Synthetically lined impoundment to be used as a reed bed for sludge stabilization
Reuse Area	Irrigation Areas	Approximately 5 acres of sprinkler irrigation areas: North Lawn/Parking, Northeast Lawn, Southeast Hillside, and West Horse Pasture
Standpipe	Standpipe	Standpipe from the 3,000-gallon wet well following UV disinfection for the discharge of reclaimed domestic wastewater for temporary purposes
Tank	Effluent Storage Tank	Effluent storage for sequencing of irrigation periods



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Flow Metering Locations

Type	Designation	Description & Comments
Totalizing Flow Meter	Disposal Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume discharged to the low-pressure dosed disposal field
Totalizing Flow Meter	Irrigation Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume discharged to the reuse areas
Totalizing Flow Meter	Sludge Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume of WWTP sludge discharged to the reed bed
Totalizing Flow Meter	Standpipe Meter	Totalizing flow meter to be installed per this Discharge Permit to measure the volume of reclaimed domestic wastewater discharged from the standpipe for temporary purposes

Ground Water Monitoring Locations

Type	Designation	Description & Comments
Monitoring Well	MW-1	Located hydrologically upgradient of the Facility and approximately 65 feet west of the main resort entrance in the center of the traffic circle (35.730384°, -105.910889°)
Monitoring Well	MW-2	Located hydrologically downgradient of the old leachfield and approximately 170 feet northwest of the WWTP (35.732250°, -105.911827°)
Monitoring Well	MW-3	Located hydrologically downgradient of the new leachfield and approximately 130 feet west of the WWTP (35.731621°, -105.912052°)
Monitoring Well	MW-4	Located hydrologically downgradient of the low-pressure dosed disposal field. To be installed during this Discharge Permit term

Depth-to-Ground Water 23 feet
Total Dissolved Solids (TDS) 300 mg/L

Permit Information

Original Permit Issued	July 11, 1979
Permit Renewal and Modification	February 20, 1984
Permit Renewal and Modification	April 10, 1989
Permit Renewal	January 18, 1994
Permit Renewal and Modification	February 19, 1999
Permit Renewal	December 6, 2004
Permit Renewal	February 14, 2011
Permit Renewal and Modification	September 30, 2019

Current Action

Renewal and Modification



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Application Received	July 2, 2018
Public Notice Published	[not yet published]
Permit Issued (Issuance Date)	[issuance date]
Permitted Discharge Volume	30,000 gallons per day

NMED Contact Information

Mailing Address	Ground Water Quality Bureau P.O. Box 5469 Santa Fe, New Mexico 87502-5469
GWQB Telephone Number	(505) 827-2900
NMED Lead Staff	Jason Herman
Lead Staff Telephone Number	(505) 827-2713
Lead Staff Email	Jason.herman@env.nm.gov or pps.general@env.nm.gov

**NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER QUALITY BUREAU
MONITORING WELL CONSTRUCTION AND ABANDONMENT GUIDELINES**

Purpose: These guidelines identify minimum construction and abandonment details for installation of water table monitoring wells under groundwater Discharge Permits issued by the NMED's Ground Water Quality Bureau (GWQB) and Abatement Plans approved by the GWQB. Proposed locations of monitoring wells required under Discharge Permits and Abatement Plans and requests to use alternate installation and/or construction methods for water table monitoring wells or other types of monitoring wells (e.g., deep monitoring wells for delineation of vertical extent of contaminants) must be submitted to the GWQB for approval prior to drilling and construction.

General Drilling Specifications:

1. All well drilling activities must be performed by an individual with a current and valid well driller license issued by the State of New Mexico in accordance with 19.27.4 NMAC. Use of drillers with environmental well drilling experience and expertise is highly recommended.
2. Drilling methods that allow for accurate determinations of water table locations must be employed. All drill bits, drill rods, and down-hole tools must be thoroughly cleaned immediately prior to the start of drilling. The borehole diameter must be drilled a minimum of 4 inches larger than the casing diameter to allow for the emplacement of sand and sealant.
3. After completion, the well should be allowed to stabilize for a minimum of 12 hours before development is initiated.
4. The well must be developed so that formation water flows freely through the screen and is not turbid, and all sediment and drilling disturbances are removed from the well.

Well Specifications (see attached monitoring well schematic):

5. Schedule 40 (or heavier) polyvinyl chloride (PVC) pipe, stainless steel pipe, carbon steel pipe, or pipe of an alternate appropriate material that has been approved for use by NMED must be used as casing. The casing must have an inside diameter not less than 2 inches. The casing material selected for use must be compatible with the anticipated chemistry of the groundwater and appropriate for the contaminants of interest at the facility. The casing material and thickness selected for use must have sufficient collapse strength to withstand the pressure exerted by grouts used as annular seals and thermal properties sufficient to withstand the heat generated by the hydration of cement-based grouts. Casing sections may be joined using welded, threaded, or mechanically locking joints; the method selected must provide sufficient joint strength for the specific well installation. The casing must extend from the top of the screen to at least one foot above ground surface. The top of the casing must be fitted with a removable cap, and the exposed casing must be protected by a locking steel well shroud. The shroud must be large enough in diameter to allow easy access for removal of the cap. Alternatively, monitoring wells may be completed below grade. In this case, the casing must extend from the top of the screen to 6 to 12 inches below the ground surface; the monitoring wells must be sealed with locking, expandable well plugs; a flush-mount, watertight well vault that is rated to withstand traffic loads must be emplaced around the wellhead; and the cover must be secured with at least one bolt. The vault cover must indicate that the wellhead of a monitoring well is contained within the vault.
6. A 20-foot section (maximum) of continuous-slot, machine slotted, or other manufactured PVC or stainless steel well screen or well screen of an alternate appropriate material that has been approved for use by NMED must be installed across the water table. Screens created by cutting slots into solid casing with saws or other tools must not be used. The screen material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. Screen sections may be joined using welded, threaded, or mechanically

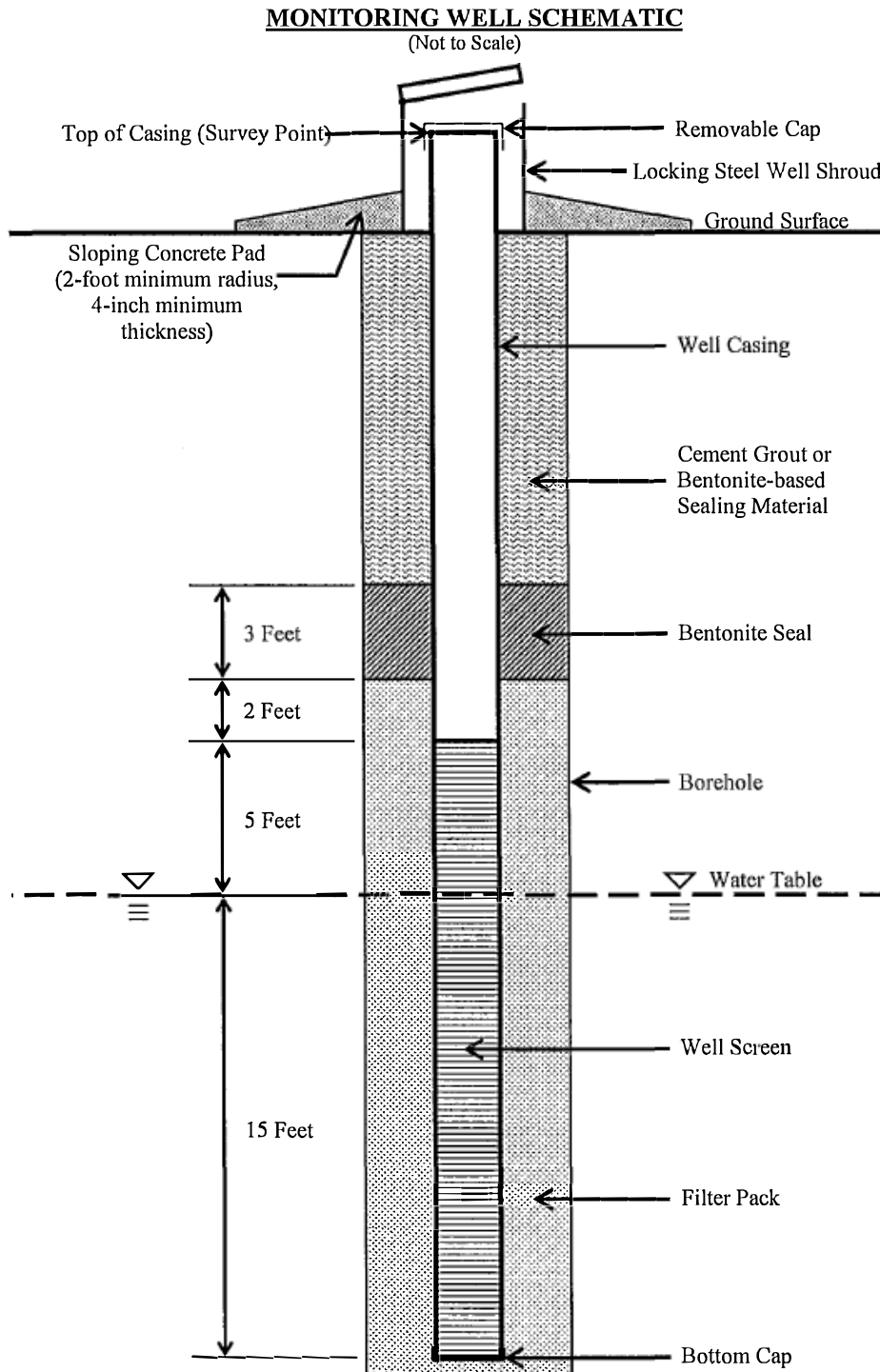
locking joints; the method selected must provide sufficient joint strength for the specific well installation and must not introduce constituents that may reasonably be considered contaminants of interest at the facility. A cap must be attached to the bottom of the well screen; sumps (i.e., casing attached to the bottom of a well screen) should not be installed. The bottom of the screen must be installed no more than 15 feet below the water table; the top of the well screen must be positioned not less than 5 feet above the water table. The well screen slots must be appropriately sized for the formation materials and should be selected to retain 90 percent of the filter pack. A slot size of 0.010 inches is generally adequate for most installations.

7. Casing and well screen must be centered in the borehole by placing centralizers near the top and bottom of the well screen.
8. A filter pack must be installed around the screen by filling the annular space from the bottom of the screen to 2 feet above the top of the screen with clean silica sand. The filter pack must be properly sized to prevent fine particles in the formation from entering the well; clean medium to coarse silica sand is generally adequate as filter pack material for 0.010-inch slotted well screen. For wells deeper than 30 feet, the sand must be emplaced by a tremmie pipe. The well should be surged or bailed to settle the filter pack and additional sand added, if necessary, before the bentonite seal is emplaced.
9. A bentonite seal must be constructed immediately above the filter pack by emplacing bentonite chips or pellets (3/8-inch in size or smaller) in a manner that prevents bridging of the chips/pellets in the annular space. The bentonite seal must be 3 feet in thickness and hydrated with clean water. Adequate time should be allowed for expansion of the bentonite seal before installation of the annular space seal.
10. The annular space above the bentonite seal must be sealed with cement grout or a bentonite-based sealing material acceptable to the State Engineer pursuant to 19.27.4 NMAC. A tremmie pipe must be used when placing sealing materials at depths greater than 20 feet below the ground surface. Annular space seals must extend from the top of the bentonite seal to the ground surface (for wells completed above grade) or to a level 3 to 6 inches below the top of casing (for wells completed below grade).
11. For monitoring wells finished above grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the shroud and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the wellhead. The installation of steel posts around the well shroud and wellhead is recommended for monitoring wells finished above grade to protect the wellhead from damage by vehicles or equipment. For monitoring wells finished below grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the well vault and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the well vault.

Abandonment:

12. Approval for abandonment of monitoring wells used for ground water monitoring in accordance with Discharge Permit and Abatement Plan requirements must be obtained from NMED prior to abandonment.
13. Well abandonment must be accomplished by removing the well casing and placing neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer for wells that encounter water pursuant to 19.27.4 NMAC from the bottom of the borehole to the ground surface using a tremmie pipe. If the casing cannot be removed, neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer must be placed in the well using a tremmie pipe from the bottom of the well to the ground surface.
14. After abandonment, written notification describing the well abandonment must be submitted to the NMED. Written notification of well abandonment must consist of a copy of the well plugging record submitted to the State Engineer in accordance with 19.27.4 NMAC, or alternate documentation containing the information to be provided in a well plugging record required by the State Engineer as specified in 19.27.4 NMAC.

Deviation from Monitoring Well Construction and Abandonment Requirements: Requests to construct water table monitoring wells or other types of monitoring wells for groundwater monitoring under groundwater Discharge Permits or Abatement Plans in a manner that deviates from the specified requirements must be submitted in writing to the GWQB. Each request must state the rationale for the proposed deviation from these requirements and provide detailed evidence supporting the request. The GWQB will approve or deny requests to deviate from these requirements in writing.





NEW MEXICO ENVIRONMENT
DEPARTMENT
GROUND WATER QUALITY BUREAU
GROUND WATER DISCHARGE PERMIT
APPLICATION



Instructions for completing the application are included in the form itself and in the Supplemental Instructions found at the back of the application. You may fill out the application manually, or a Microsoft Word version may be downloaded from www.env.nm.gov (Ground Water Quality) and filled out electronically. Timely processing of this application is contingent upon the technical completeness of the submission. Failure to provide all of the information pursuant to Section 20.6.2.3106 NMAC, following notice of technical deficiency, may result in denial of the application.

**Send two complete paper copies AND one electronic copy of this application,
with the filing fee to:**

Program Manager
Ground Water Pollution Prevention Section
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502

Introduction

Facility Name: Bishops Lodge

For Existing Discharge Permits:

DP Number: DP 75
Expiration Date: 9-29-2024

Type of Discharge *(check one):*

- ☒ Domestic
☐ Industrial
☐ Agricultural
☐ Mining

GWQB – Date of Receipt
(Department use only)

Type of Application *(check appropriate box)*

- ☐ New – new facility
☐ New – existing (unpermitted) facility
☐ Renewal only
☐ Modification only
 "modification" includes a change in the location of a discharge, and/or increase in the quantity of the discharge, and/or a change in the quality of the discharge.
☒ Renewal and Modification

**EXHIBIT
B**

If this application is to *modify* or *renew and modify* a Discharge Permit, what is the reason for modification of the Discharge Permit? Describe the proposed changes that would result in modification, meaning a change in the location of a discharge, and/or an increase in the quantity of the discharge, and/or a change in the quality of the discharge.

The permit is to be modified to reflect the following:

1. An increase in discharge to 30,000 gpd and water quality to a class 1A effluent
2. A change in treatment plant to a new MBR treatment process with UV disinfection
3. Option to irrigate on Bishops Lodge property

Fees Included with Application

All applicants are required to submit a **\$100 Application Filing Fee**. An additional fee will be assessed prior to permit issuance. Permit fees are listed in section 20.6.2.3114 NMAC. **Make checks payable to: NMED-Ground Water Quality Bureau**

Application Checklist

The following checklist has been provided to assist in ensuring that the application is complete prior to submission (*check all that apply*):

☒	Part I. Administrative Completeness ☒ \$100 Application Filing Fee ☒ A. General Information ☒ B. Public Notice Information ☒ C. Public Notice Preparation
☒	Part II. Technical Completeness ☒ A. Discharge Volume and Description ☒ B. Identification and Physical Description of Facility ☒ C. Flow Metering ☒ D. Ground Water Monitoring ☒ E. Engineering and Surveying (electronic copies) ☒ F. Land Application Area
☒	Part III. Site-Specific Proposals
☒	Part IV. Electronic (PDF) format of Maps and Logs is required (additional paper copies of maps and logs are optional and may be requested by the Department if required for review) ☒ A. Surface Soil Survey and Vadose Zone Geology ☒ B. Location Map ☒ C. Flood Zone Map

Copies of Application

An applicant applying for a Discharge Permit shall submit **two paper copies of the signed application, and an electronic copy of the signed application including all supporting documentation**, to the address listed below.

- ☒ Two paper copies – completed and signed
- ☒ Electronic copy in portable document format (PDF) of the signed application and all supporting documentation (designs, maps, logs), on the following media (*choose one*):
 - ☒ Compact disc (CD)/DVD
 - ☐ Flash drive

Send application and fees to the following address:

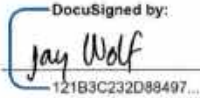
Program Manager
Ground Water Pollution Prevention Section
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502

Applicant's Signature

Signature must be that of the person listed as the legally responsible party on this application (Part I, 2a).

I, the applicant, attest under penalty of law to the truth of the information and supporting documentation contained in this application for a Ground Water Discharge Permit.

Signature:

DocuSigned by:

121B3C232D88497...

Date: 3/28/2024

Printed Name:

jay wolf

Title:

AS

Part I. Administrative Completeness

General Information

1. Facility Information

See Supplemental Instructions to determine what constitutes a "facility." The physical address must be provided. If the facility does not have an address, the location can be described by road intersections, mile posts, or landmarks, as appropriate. See Supplemental Instructions for additional information.

Facility Name	Bishop's Lodge
Discharge Permit #	DP-75
Physical Address	1297 Bishop's Lodge Road
County	Santa Fe
Type of Facility	Hotel, Condos and Residences
Driving Directions	From Santa Fe Plaza drive north on Washington which becomes Bishop's Lodge Road. Turn right at the sign for the lodge.

2. Contact Information

a) Applicant Information The applicant is the person or entity (e.g., corporation, partnership, organization, *municipality*, etc.) legally responsible for the discharge and for complying with the terms of the Discharge Permit. If the applicant is an entity, then the name and title of a contact person must be provided. This application must be signed by the applicant or contact person named here.

Applicant Name	B L Santa Fe, LLC	Title				
Mailing Address	7001 N Scottsdale Road Suite 2050					
	City	Scottsdale	State	AZ	Zip	85253
Contact Person	Chris Kaplan	Title				
Contact Information	Office Number	480-861-7188	Fax Number			
	Cell Number		E-mail			

b) Facility Operator/Manager Information Provide the contact information for the facility operator or manager below. If the facility is required to have an operator certified by the State of New Mexico, please include the certification level of the operator named here.

Name		Title				
Mailing Address						
	City		State		Zip	
Contact Information	Office Number		Fax Number			
	Cell Number		E-mail			
	Cell Number		E-mail			
Certification Level						

(if applicable)

c) Consultant's Information (if applicable) If the consultant is a company or organization, then the name and title of a contact person must be provided here.

Company Name (1)	Lee & Company LLC				
Company Contact	Gary M. Lee PE				
Mailing Address	1612 East Elm Street				
	City	Harrisonville	State	Missouri	Zip 64701
Contact Information	Office Number	816-805-3546	Fax Number	NA	
	Cell Number	816-805-3546	E-mail	gary.lee@lee-engineers.com	

Company Name (2)					
Company Contact					
Mailing Address					
	City		State		Zip
Contact Information	Office Number		Fax Number		
	Cell Number		E-mail		

d) Permit Contact Information (if applicable) If someone other than the contacts listed above is a primary contact for this application and/or facility, list here.

Name			Title		
Mailing Address					
	City		State		Zip
Contact Information	Office Number		Fax Number		
	Cell Number		E-mail		
Facility Affiliation					

3. Ownership and Real Property Agreements [20.6.2.7HH NMAC]

The applicant owns (check as appropriate):

- ☒ The facility
- ☒ All discharge sites
- ☐ Some discharge sites

If someone other than the applicant owns the facility or any of the discharge sites, provide ownership information below. For any portion of the facility where the applicant is not the owner of record, the applicant shall submit a copy of any lease agreement or other agreement which authorizes the use of the real property for the duration of the term of the requested permit (typically five years). Lease prices or other prices may be redacted.

- If more than one person has ownership interest, or a partnership exists, list all persons with an ownership interest.
- If a corporate entity holds an ownership interest, provide the name of the corporate entity and the entity's registered agent as filed with the New Mexico Public Regulation Commission.

Name _____ Title _____
 Mailing Address _____
 City _____ State _____ Zip _____
 Contact Office Number _____ Fax Number _____
 Information Cell Number _____ E-mail _____
 Owns ☐ The facility ☐ A discharge site
☐ Attached – lease (or other authorized use) agreement

Name _____ Title _____
 Mailing Address _____
 City _____ State _____ Zip _____
 Contact Office Number _____ Fax Number _____
 Information Cell Number _____ E-mail _____
 Owns ☐ The facility ☐ A discharge site
☐ Attached – lease (or other authorized use) agreement

4. Public Notice Information

a) Proposed Maximum Daily Discharge Volume: 30,000 gallons per day

Note: Use the information from Part II.A.2 following its completion.

b) Depth-to-Most-Shallow Ground Water: 23 feet

Note: Use the information from Part II.A.2 following its completion.

c) Pre-Discharge Total Dissolved Solids Concentration in Ground Water

[Subsection C of 20.6.2.3106 NMAC]

Provide the concentration of total dissolved solids (TDS) in ground water prior to discharging from the facility. *Note: This information is likely the same as that submitted in the first application for a Discharge Permit for this facility.*

- Pre-discharge TDS concentration in ground water: 300 mg/L (ppm)
☐ Attached – Copy of laboratory analysis report (if available)
- From what source was the sample collected (e.g., upgradient monitoring well, on-site supply well, nearest well within a one-mile radius of the facility)?

5. Facility Location

In the table below, describe the location for the entire facility by listing the Township, Range, and Section, and/or latitude and longitude for the locations of all components of the processing, treatment, storage, and/or disposal system. See Supplemental Instructions for additional information. [Paragraph (2) and (5) of Subsection C of 20.6.2.3106 NMAC]

Component ¹ ID	Township	Range	Section(s)	Latitude	Longitude
WWTP	17N	10E	5&6		

6. Processing, Treatment, Storage, and Disposal System

Briefly describe how wastewater, sludge, etc. is processed, treated, stored, and/or disposed of at your facility. Include each component listed in the table above.

The existing WWTP is being replaced with the following:

1. Influent lift station
2. Fine Screen
3. Nitrification Denitrification
4. Membrane Bioreactor
5. Ultra Violet Disinfection
6. Option to Irrigate or Discharge to Surface (NPDES permit pending)
7. Sludge holding and sludge reed bed

7. Public Notice Preparation [20.6.2.3108 NMAC]

Once NMED has determined that your application is administratively complete, you must complete the applicant's public notice requirements of Section 20.6.2.3108 NMAC. Language for notifications will be mailed to you with an administratively complete determination. Note: Guidance and instructions for completion of applicant's public notice can also be found at the following link:

¹ Components include: septic tanks, impoundments, treatment systems, irrigation sites, leachfields, monitoring wells, mine stockpiles, etc. Additional examples are listed in the Supplemental Instructions. Each component should have a unique ID, for example septic tank-1, monitoring well-3, etc.

<https://www.env.nm.gov/gwb/NMED-GWQB-PublicNotice.htm>. The information requested below will be used by NMED to approve or reject the proposed public notice newspaper and signage posting locations in accordance with Subsection A of 20.6.2.3108 NMAC. Note: Other requirements of Section 20.6.2.3108 NMAC not listed here, such as certified mailings to nearby landowners, may also apply.

a) Public Notice Posting Locations

Select the type of application you are submitting and provide the requested information. Language to be used in the required notifications will be included in the administratively complete packet.

☒ **Renewal Application**

1. Following receipt of an administrative completeness determination from NMED, the applicant is required to provide public notice of this application by placing a 2 inch by 3 inch display ad (classified or legal sections are not acceptable) in a newspaper of general circulation in the location of the proposed discharge. Indicate the newspaper in which you intend to place the ad. [Subsection C of 20.6.2.3108 NMAC]

Newspaper: Santa Fe New Mexican

☐ **New Application, Modification Application, or Renewal with Modification Application**

1. Following receipt of an administrative completeness determination from NMED, the applicant is required to provide public notice of this application by placing a display ad (classified or legal sections are not acceptable) in a newspaper of general circulation in the location of the proposed discharge. Indicate the newspaper in which you intend to place the ad. [Paragraph (4) of Subsection B of 20.6.2.3108 NMAC]

Newspaper: _____

2. Following receipt of an administrative completeness determination from NMED, the applicant is required to post a sign(s) (2 feet x 3 feet in size) for 30 days in a location conspicuous to the public at or near the facility. One sign must be posted for each 640 contiguous acres or less. NMED may require additional postings for facilities of more than 640 acres or when the discharge site(s) is not located on contiguous properties. Indicate the location(s) where you intend to display the sign(s). [Paragraph (1) of Subsection B of 20.6.2.3108 NMAC]

Note: Conspicuous location means a location where the sign is visible and legible to the public and the public has access (e.g., at facility entrance on public road).

- o Is the entire facility (including all components and discharge sites) contained within **less than** 640 acres, and is the acreage contiguous?

- ☒ Yes - Indicate a sign location below.
- ☐ No - Indicate **two** sign locations below.

Sign Location(s): Near North Gate entrance to lodge and houses

3. Following receipt of an administrative completeness determination from NMED, the applicant is required to post an additional notice (a flyer 8.5" X 11" or larger) for 30 days at an off-site location conspicuous to the public (e.g., public library). Indicate the location where you intend to display the flyer. [Paragraph (1) of Subsection B of 20.6.2.3108 NMAC]

Note: The U.S. Postal Service no longer allows the posting of flyers in post offices.

Flyer Location:

Library near plaza and/or Tesuque Village Market

b) Mailing Instructions

a) The administrative completeness determination letter, including public notice instructions, should be sent to:

☒ Applicant

☒ Consultant

Part II. Technical Completeness

1. Discharge Volume and Description

a. Date of Initial Discharge at the Facility [Subsections A and B of 20.6.2.3106 NMAC]

Date of Initial Discharge: 1983

b. Determination of Maximum Daily Discharge Volume [Subsection C of 20.6.2.3106 NMAC]

See Supplemental Instructions for more information.

1. Proposed maximum daily discharge volume: 30,000 gallons per day.

(Note: Use this volume to complete Part I.4.a (Public Notice).

- Describe the methods and calculations used to determine this volume. Acceptable methods are described in the Supplemental Instructions. If you are relying on metered flows, attach a two-year record of meter readings.

1. Evaluation by Lee & Company (See report)
2. Meter readings

- Describe what generates the wastewater, sludge, or other discharges processed and/or disposed of at your facility. Identify all sources (e.g., RV spaces, mobile homes, shower facilities, laundromat, restaurant, backwash systems, septage haulers, contaminated media, etc.). See Supplemental Instructions.

1. Single Family Housing
2. Condominiums
3. Hotel Rooms
4. Meeting Rooms
5. Restaurant
6. Spa

2. **Identify other wastewater or stormwater discharges at the facility** not described in this application and indicate what other permits apply to them. Examples include discharges from small septic systems covered by Liquid Waste Permits, discharges to surface waters under a NPDES permit, a discharge covered by a separate Discharge Permit, etc. Be sure these other discharge locations are identified on the site map required in item Part II.B.1.

Other Discharges	Permit Number
None	N/A

2. Identification and Physical Description of Facility

[Subsection C of 20.6.2.3106 NMAC]

a. Scaled Map

Provide a clear and legible scaled electronic map of the components of your proposed system and relevant surrounding features, indicating the location of all the following features present at the site:

- overall facility layout
- treatment units
- lagoons
- tanks
- sumps
- land application fields
- domestic wastewater re-use areas
- pits
- stockpiles
- leachfields
- sludge drying beds
- fences
- roads
- buildings
- supply wells
- monitoring wells
- extraction/injection wells
- arroyos
- nearby water bodies such as ponds or canals
- property boundaries
- other permitted discharges
- required setbacks
- north arrow

b. Description of Components

Provide descriptive details of all components of your processing, treatment, storage, and/or disposal system. Include all components listed in the table of Part I.5.

Component	Status ¹	Date of installation or construction (mm/dd/yyyy)	Description (construction material, liner type, irrigation method, capacity, dimensions, area, model number, etc.)
Pump Station	Proposed	05/15/2024	Reinforced Concrete Wet Well , 45 gpm submersible pump, vertical auger screen on inlet
Equalization Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 20'x8'x10'swl
Pre-Anoxic Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 14'x8'x10'swl
Aeration Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 27'x8'3"x10'swl
Post-Anoxic Basin	Proposed	05/15/2024	Below Grade Reinforced Concrete with exterior water proofing, 7'x8'3"x10'swl
Ultra-filter Membranes	Proposed	05/15/2024	6 - Zeeweed 500S Modules (See attachment for more details)
Ultraviolet Light Disinfection	Proposed	05/15/2024	Two UV -Hallett, 1000W Units
Conversion of Existing Aeration Basin to Aerobic Sludge Digester	Proposed	05/15/2024	See Process Tanks
Conversion of Existing Emergency Holding Pond to a Sludge Reed Bed	Proposed	05/15/2024	See Attached Drawing

¹ Status = **proposed**; **existing in use**; **existing not in use**, but proposed for use; **abandoned** without closure, not proposed for use; or **closed**

Component	Status ¹	Date of installation or construction (mm/dd/yyyy)	Description (construction material, liner type, irrigation method, capacity, dimensions, area, model number, etc.)
Collection System	Existing	1980-2009	Some Old Clay Tile mostly PVC
Headworks	Existing	2000	Concrete Box and Screen with Muffin Monster
All Others			See Attachment

3. Flow Metering

Describe the facility's flow metering system. See Supplemental Instructions for more information.

Meter ID ¹	Proposed or Existing?	Influent or Effluent?	Location Description	Flow Type ²	Meter Type ³	Supporting Documents Attached
Greyline DFM5 Doppler Flow Meter	Existing To be Abandoned	Effluent	Inside Existing Blower Room	Pressure	Closed Pipe	No
TAG 0702	Proposed	Effluent	Inside Newterra Structure	Pressure	MagneticInductive	See Attached Mechanical Package
TAG 0701	Proposed	Effluent	Inside Newterra Structure	Pressure	MagneticInductive	See Attached Mechanical Package

¹ Meter ID means the numbering or labeling system used to individually identify each meter (e.g., Meter-1, Irrigation Meter-1, etc.).

² Flow type - **gravity** flow or pressurized (**pumped**) flow

³ Meter type - **open channel** such as a weir or flume, or a **closed-pipe** velocity meter such as an electromagnetic meter

4. Discharge Quality

Indicate the expected quality of the discharge (wastewater, leachate, sludge, etc.) that is generated, stored, treated, processed and/or discharged at your facility.

Note: Not all facilities need to characterize influent quality. See Supplemental Instructions for additional guidance.

Contaminants	Contaminants	
	Incoming (Influent)	Final (Effluent)
Nitrate as Nitrogen (NO ₃ -N, mg/L) ¹	40-60	Less than 5
Total Kjeldahl Nitrogen (TKN, mg/L) ¹	60	Less than 5
Total Dissolved Solids (TDS, mg/L) ¹	300	300
Chloride (Cl, mg/L) ¹	40	40
Total Suspended Solids (TSS, mg/L) ²	375	Less than 1
Biochemical Oxygen Demand (BOD, mg/L) ²	200	Less than 5
Fecal Coliform Bacteria (CFU/100 mL) ²	?	2.2MPN/100 ml
pH ³	7.5	7.5
Metals (attach list) ³	See Attached	No Change
Organic Compounds (attach list) ³		

1. Include for all domestic systems.
2. Include for domestic systems that use an advanced treatment process.
3. Include for industrial or mining systems if these are contaminants of concern. If metals or organic compounds are present in the discharge, attach a list of influent and effluent concentrations for each metal/organic compound.

5. Ground Water Monitoring

Discharge Permits typically require that ground water samples be collected quarterly from properly constructed monitoring wells located downgradient from discharge locations. The samples must be analyzed for contaminants of concern. For most domestic and agricultural Discharge Permits, the typical contaminants of concern are total Kjeldahl nitrogen (TKN), nitrate-nitrogen (NO₃-N), total dissolved solids (TDS), and chloride (Cl). For most industrial Discharge Permits, typical contaminants of concern are volatile and semi-volatile organic compounds (VOC's), polynuclear aromatic hydrocarbons (PAH's), polychlorinated biphenyls (PCB's), metals, and radionuclides. See Supplemental Instructions for additional information.

a. Depth-to-Most-Shallow Ground Water [Subsection C of 20.6.2.3106 NMAC]

1. Facilities with on-site monitoring wells

Provide the depth-to-most-shallow ground water from the most recent ground water levels obtained from monitoring wells at the facility. Depth-to-ground water shall be measured to the nearest 0.01 feet using standard methods and techniques [Subsection B of 20.6.2.3107 NMAC].

Depth-to-ground water is: 23 feet dry season 8 to 12 snow melt feet

Note: Use this depth to complete Part I.4.b (Public Notice).

2. Facilities *without* on-site monitoring wells

If a facility does not have a monitoring well intersecting most-shallow ground water, provide depth-to-most-shallow ground water for all wells on file located within one mile of the boundary of the facility. This information can be obtained from the Office of the State Engineer (<http://www.ose.state.nm.us>).

Depth-to-ground water is: _____ feet

Note: Use the range of depths from these records to complete Part I.4.b (Public Notice).

- ☐ Attached – Records from the Office of the State Engineer, including the following:
- location of each well by latitude/longitude and township, range, and section
 - use of each well
 - depth to ground water in each well
 - total depth of each well

b. Ground Water Flow Direction [Subsection C of 20.6.2.3106 NMAC]

1. Facilities with *three or more* on-site monitoring wells

Provide ground water flow direction beneath the facility on a ground water elevation contour map. The ground water elevation contour map shall be developed based upon the most recent ground water levels and survey data obtained from on-site monitoring wells.

Flow Direction _____

- ☐ Included – Ground water contour map from on-site monitoring wells
- ☐ Included – Monitoring well survey
- ☐ No survey has been conducted
- ☐ Survey previously submitted on _____ (date)

2. Facilities with *less than three* on-site monitoring wells

If a facility does not have at least three monitoring wells intersecting most-shallow ground water, provide ground water flow direction based upon either the most recent regional water level data or published hydrogeologic information. Attach the sources of information used to determine ground water flow direction. *Select all that apply.*

- ☒ Ground water flow direction of the most-shallow ground water beneath the facility based upon the *most recent regional water level data* is NW.
-- Reference: New Mexico Bureau of Geology and Mineral References (attach relevant portions)
- ☐ Attached - Survey data from nearby monitoring wells and a *ground water elevation contour map* indicating the direction of ground water flow.

- ☒ Ground water flow direction of the most-shallow ground water beneath the facility based upon *published hydrogeologic information* is NW.

-- Reference: New Mexico Bureau of Geology and Mineral Resources (attach relevant portions)

c. Monitoring Well Construction and Identification [Subsection C of 20.6.2.3106 NMAC; Subsection A of 20.6.2.3107 NMAC]

1. For existing monitoring wells

Submit construction logs for all existing, on-site monitoring wells, which indicate the date of installation and well driller.

- ☐ Included - Construction logs for each existing monitoring well.
- ☒ Previously Submitted
Date _____

2. For all monitoring wells - Identify proposed and existing monitoring well (MW) locations.

MW ID ¹	Proposed or Existing?	Location Description ² AND Latitude and Longitude	Screen Interval (ft)	Depth to Water
	Existing	35-43-49 N; 105-54-39W		
	Existing	35-43-56 N; 105-54-42 W		

¹ MW ID (Monitoring Well ID) is the numbering or labeling system used to identify a MW (e.g., MW-1, MW-2, etc.).

² Example: 60 feet south of the top inside edge of the berm of Wastewater Impoundment-1

d. Past Ground Water Monitoring Results

This item applies only to existing facilities seeking renewal and/or modification of a Discharge Permit that required ground water monitoring. See Supplemental Instructions for additional information.

1. Attach a graph or table showing all analytical results from ground water monitoring.

e. Engineering and Surveying

Proposed New Structures or Improvements to Existing Structures

Include electronic plans and specifications for any *proposed* new structures or improvements to existing structures. All final plans and specifications must bear the stamp of a New Mexico licensed Professional Engineer.

- Proposed plans and specifications included (*Select all that apply*)
 - ☒ Included for new structure(s)
 - ☐ Included for improvements to an existing structure
 - ☐ No proposals for new or improved structures

f. Land Application Area Information

For facilities proposing to apply reclaimed or treated wastewater to a land application area, provide calculations showing that nitrogen loading does not exceed 200 lbs/acre/year or that the amount of total nitrogen in the combined application of wastewater and fertilizer does not exceed by more than 25% the amount reasonably expected to be taken up by the crop(s) and removed by harvesting in any 12-month period. Forms to assist in these calculations can be found at:

<https://www.env.nm.gov/gwb/FORMS/NewMexicoEnvironmentDepartment-GroundWaterQualityBureau-Forms.htm>.

- ☒ Attached – Nitrogen loading calculations

Part III. Additional Proposals and Conditions (if applicable)

In the space provided, propose revisions or additions to the standard Discharge Permit requirements. If you propose any revisions or additions, also provide the rational for your proposal.

Please see the attached letter

Part IV. Maps and Logs to be Attached

1. Surface Soil Survey and Vadose Zone Geology

[Subsection C of 20.6.2.3106 NMAC]

- ☒ Attached - Most recent regional soil survey map and associated descriptions identifying surface soil type(s).
- ☐ Attached - Lithologic logs for all existing on-site monitoring wells (if available).

2. Topographic Map [Subsection C of 20.6.2.3106 NMAC]

- ☒ Attached - Location map with topographic surface contours identifying all of the following features located within a one-mile radius of the facility:
 - watercourses
 - lakebeds
 - sinkholes
 - playa lakes
 - springs (springs used to provide water for human consumption shall be so denoted)
 - wells supplying water for a public water system
 - private domestic water wells
 - irrigation supply wells
 - ditch irrigation systems
 - acequias
 - irrigation canals
 - drains

3. Flood Zone Map [Subsection C of 20.6.2.3106 NMAC]

- ☒ Attached - Most recent 100-year flood zone map developed by the federal emergency management administration (FEMA) documenting flood potential for the facility.

Describe any engineered measures used for flood protection.

4. Additional Information

Describe any additional relevant information.

Supplemental Instructions

Please note: Discharge Permits are required for a wide range of facilities that process, treat, store and/or dispose of wastewater, sludge, septage, leachate, contaminated soils, mine tailings, industrial waste, mine ore, waste rock, or other similar materials. For the purposes of this application form, the term “discharge” applies to any of these materials whether they are actually discharged or whether they represent only a potential discharge that could occur due to factors such as poor maintenance, improper installation, equipment failure or accidents.

Part I.1 Facility Information and Type of Facility

The “Facility” may be identified as:

- a treatment facility, such as a municipal wastewater treatment plant;
- the source of the discharge, such as a subdivision, or waste rock pile;
- a disposal facility or operation, such as for sludge or septage;
- the discharge location or end user of reclaimed wastewater, such as a golf course or cement plant;
- a storage and/or processing facility with off-site disposal;
- a collection of facilities, such as numerous comfort stations at a state park; or
- a project or operation, such as a construction project or a system to distribute reclaimed wastewater throughout a city.

Examples of a variety of facility types are categorized below. Please note, “Domestic” waste contains human excreta or originates from typical residential plumbing fixtures.

Industrial Waste

- Manufacturing
- Power plant
- Military installation
- Vehicle/equipment wash
- Mortuary
- Hydrocarbon landfarm
- Ground water remediation
- Ethanol plant
- Asphalt plant
- Remediation Systems

Mining Waste

- tailing impoundment
- mine dewatering
- waste rock pile
- smelter slag
- in-situ leach
- leach piles
- pipelines
- collection ponds
- concentrator – other beneficiation

Domestic Waste

- Municipal wastewater treatment plant
- Septage disposal
- Sludge disposal
- Mobile home/RV park
- Campground/park
- School/educational facility
- Restaurant
- Subdivision/apartment complex
- Unincorporated community
- Lodging/resort/spa
- Residential facility
- Commercial/shopping complex
- Laundromat
- Facility using reclaimed domestic wastewater

Agricultural Waste

- Dairy
- Food processing
- Slaughter facility
- Nursery/greenhouse
- Manufacture/processing of agricultural chemicals
- Feedlot
- Livestock truck washout

This listing is only a guide, as there can be crossover between categories. For example, a golf course might use treated industrial wastewater for irrigation. The type of facility in that case is “golf course” and the type of waste is “industrial.” A mining operation may need a permit for its restroom and shower facilities. In that case, the type of facility is a “mining operation” and the type of discharge is “domestic waste.”

Part I.5: Facility Location

The following are examples of treatment, storage, and disposal components of a wastewater system that should be included in this part.

Treatment Methods

- Septic tank
- Grease interceptor
- Oil/water separator
- Manure separator
- Wetlands
- Lagoon (indicate whether aerated and type of liner)
- Trickling filter
- Activated sludge (extended air, SBR, etc.)
- Sand filter
- Membranes
- Sludge drying bed
- Disinfection (specify type)
 - chlorination

Disposal Methods

- Leachfield
- Infiltration gallery
- Evaporation lagoon (indicate type of liner)
- Evaporation tank
- Impoundment
- Discharge to waters of the US (NPDES permit required)
- Ongoing land application (specify type)
 - subsurface irrigation
 - sprinkler irrigation
 - flood irrigation
 - drip irrigation
 - surface spreading (solids)
 - surface injection (solids)

- UV/ozone
- Water treatment plant
- Injection Wells
- Temporary uses of reclaimed wastewater
- Ongoing use of reclaimed wastewater for:
 - Manufacturing construction or dust control

Storage Methods

- Above/below ground tank
- Storage lagoon (indicate type of liner)
- Holding tank
- Pit toilet
- Stockpile
- Tailing impoundment

Part II.1 Proposed Maximum Daily Discharge Volume

Your Discharge Permit will allow for the treatment, processing and/or discharge of up to a specified volume, generally, a maximum number of gallons per day. The flow at your facility on any given day must not exceed this “maximum discharge volume.” It is determined based on the expected contributions from the sources you identified Part II, 1, b, 1.

NMED will carefully review the basis of the maximum discharge volume you propose. Show all your calculations and assumptions.

Animal feeding operations must provide calculations based on the number of animals and water conservation practices in place.

Landfarms, disposal facilities, processing facilities typically identify the expected number of loads to be delivered.

For septic systems and wastewater treatment plants, the maximum discharge volume is also referred to as the “design flow.” It includes a peaking or safety factor to guard against back-ups and overflows.

Municipal wastewater treatment facilities should identify the population served, growth assumptions, and expected per capita usage considering any contributing industries.

On-site domestic wastewater treatment facilities should rely on published design flows such as those provided in the NMED Liquid Waste Regulations (20.7.3 NMAC), the Uniform Plumbing Code or the USEPA On-site Wastewater Treatment Systems Manual.

For existing facilities, the maximum discharge volume may be based on a record of measured flows if no changes are anticipated. At least two years of flow data must be submitted, and the highest monthly discharge volume must be multiplied by a peaking factor of 1.5.

NMED will verify that your proposed or existing facility can handle maximum discharge volume you propose.

Be specific in describing all sources. Consider the following examples:

- Municipalities – identify particular industries or specialized facilities contributing wastewater.
- RV Parks – identify showers, dump stations, laundromat, etc.

- Subdivisions – identify homes, apartments, commercial developments, water softener backwash, etc.
- Landfills or disposal facilities – specify type of materials accepted, e.g., residential septage, car wash grit trap waste, contaminated soils/water, treated municipal sludge, etc.
- Dairies – identify milking parlors, type of washdown used, sources of stormwater runoff, etc.
- Schools – identify cafeteria, gym, showers, etc.
- Truck stops – identify restaurant, showers, car wash, etc.
- Facilities receiving reclaimed wastewater – identify the treatment facility providing the reclaimed wastewater.
- Food processing and industrial facilities – describe the processes which produce the waste stream and chemicals used.
- Mines – identify processes including beneficiation, tailing, waste rock, leach facilities, pipelines, ponds, catchments, booster stations, in-situ leach facilities.

You do not need to include solid wastes, hazardous wastes or discharges being managed under other permits; however, these must be listed under Item C-7 in Part C of the application.

Part II.3: Flow Metering

You must provide a method for measuring the discharge volume (Section 20.6.2.3109.H.1 NMAC). At facilities with treatment or storage lagoons, it is necessary to measure both the volume entering the treatment system as well as the volume ultimately discharged.

If you land apply wastewater to more than one discharge location, you must be able to track the volume to each location.

If your facility is small and relies on gravity to carry wastewater to the treatment and disposal system, it may be acceptable to estimate the wastewater flow. This can be done by metering water usage and deducting the volume of water used for fresh-water irrigation, swimming pools, evaporative cooling, livestock watering or other uses that do not result in wastewater flowing to the treatment system.

Part II.4: Discharge Quality

Untreated wastewater entering a treatment facility (also referred to as “influent”) must be characterized so that the treatment process can be evaluated. It is not necessary to provide influent quality for systems providing minimal treatment prior to discharge or disposal, such as systems relying on crop uptake for treatment (e.g., dairies), septic tank – leachfield systems, storage/processing facilities or evaporative systems. The final quality of the waste or wastewater disposed of or discharged must be characterized for all facilities.

For most agricultural and domestic facilities, the contaminants of concern include nitrate as nitrogen ($\text{NO}_3\text{-N}$), total Kjeldahl nitrogen (TKN), total dissolved solids (TDS), and chloride (Cl). For domestic facilities with advanced treatment, additional contaminants include total suspended solids (TSS), biochemical oxygen demand (BOD_5), and fecal coliform bacteria. Contaminants of concern at industrial and mining sites include pH, metals, and organic compounds. List all that apply.

Part II.E: Ground Water Monitoring

The depth to ground water beneath your facility and/or discharge site must be provided. This is true even if your facility or operation is intended to have no discharge. Discharge Permits are required for “no-discharge” lagoons, storage tanks, etc. because of the potential for a discharge to occur due to factors such as improper installation, poor maintenance, equipment failure or accidents.

The best way to determine the depth to water is to measure it in an on-site or nearby monitoring well. If a monitoring well is not available, the measurement may be from a water supply well. If there is a well but it is not possible to access it for a measurement, you could refer to the well log for that well and/or others in the vicinity. Well log information is available on the website of the State Engineer’s office:

<http://www.ose.state.nm.us/>.

Be aware that water levels have dropped in many areas of the state, so more recent well logs in those areas are more reliable.

There may be a significant discrepancy in the depth to water in different wells, even when falling water levels is not a factor. One reason for this is that a water supply well may rely on a deep aquifer rather than water in the “first” or most shallow aquifer. Discharge Permits are intended to protect all ground water, so it is important to report the shallowest depth in the vicinity of your site.

The total dissolved solids (TDS) concentration of the ground water prior to discharge must be provided. As explained for the depth to water, this is true even if your facility or operation is intended to have no discharge. The TDS value provides a general indication of the quality of the ground water that could be affected by your operation.

The best way to obtain a pre-discharge TDS concentration is to sample an on-site or nearby well before your facility begins operating. It is better to sample a shallow rather than a deep well, if possible. It may be that a neighboring facility has existing analytical data for its Discharge Permit. (If so, be sure to obtain data from a non-impacted well.)

If there are no wells in your vicinity or it is not possible to sample them, you may find general TDS concentrations in reports available from sources such as a university, the State Engineer’s Office (<http://www.ose.state.nm.us/>) or the US Geological Survey (<http://nm.water.usgs.gov/>).

If you are renewing or modifying your Discharge Permit, you may refer to the TDS concentration previously determined if there was a sound basis for it. Monitoring data or other information obtained since the permit was issued, however, may warrant listing a different value.

Part II.E.4: Past Ground Water Monitoring Results

A complete list of ground water standards can be found in Section 20.6.2.3103 NMAC. The standards for contaminants most frequently monitored under Discharge Permits are as follows:

Nitrate-nitrogen (NO ₃ -N).....	10 mg/L
Chloride	250 mg/L
Total dissolved solids (TDS)...	1000 mg/L
Sulfate (SO ₄)	600 mg/L
pH	between 6 and 9

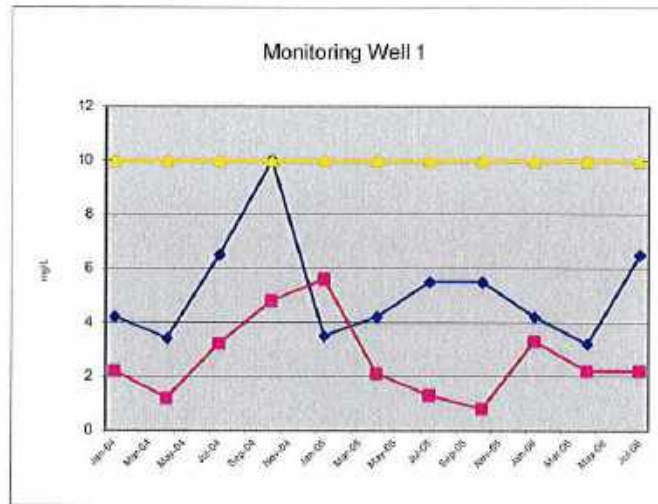
There is no ground water standard for total Kjeldahl nitrogen (TKN). Because TKN converts readily to nitrate as it moves through the vadose zone, however, concentrations approaching or exceeding 10 mg/L are of concern.

Additional parameters typically apply at mining or industrial facilities.

Some ground waters in the state have TDS or chloride concentrations that naturally exceed these standards. In that case, the standard is the naturally occurring level. You must provide documentation of such elevated natural conditions, such as analytical results from a non-impacted well.

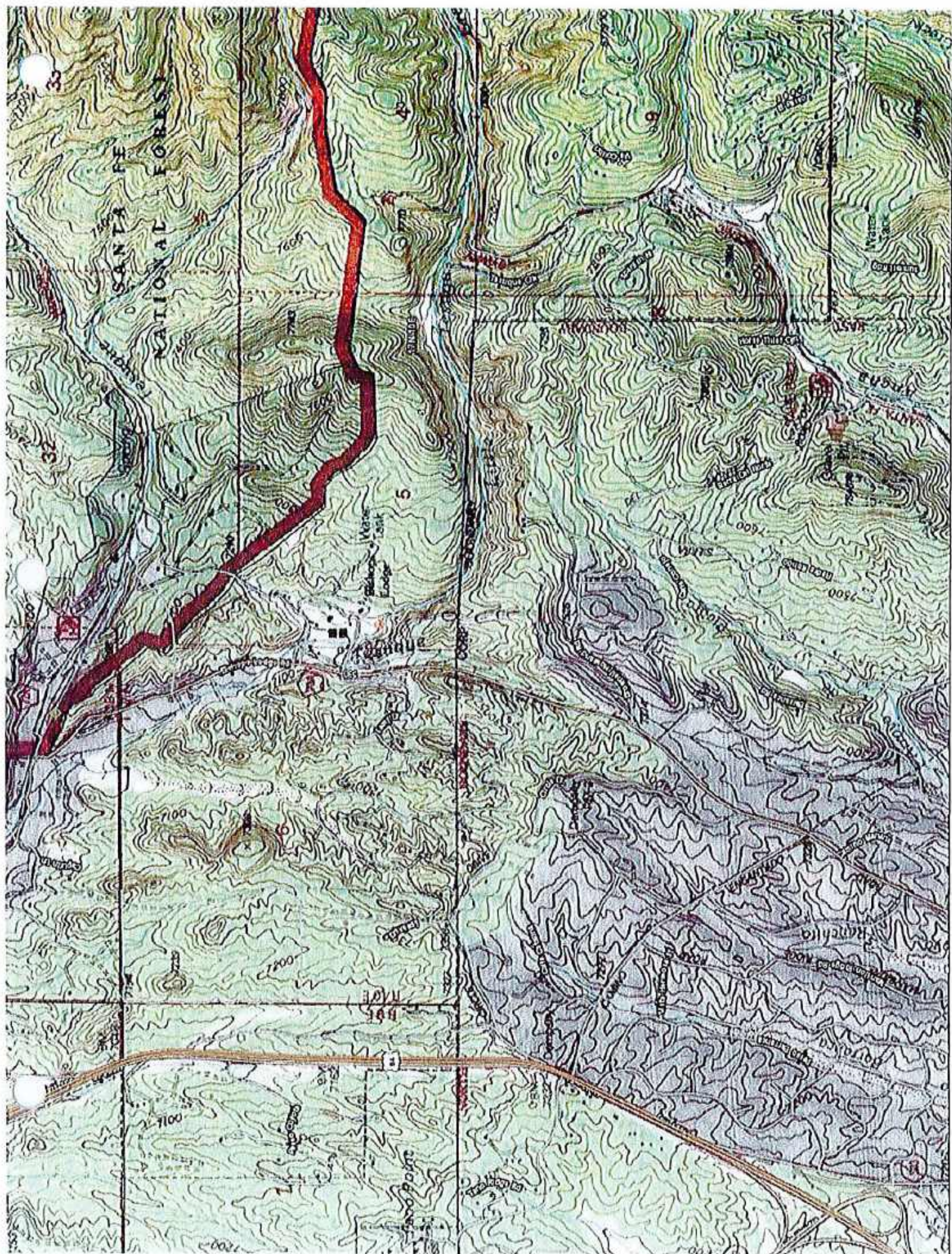
An example table and graph follow:

Date	Monitoring Well 1	
	NO3-N	TKN
Jan-04	4.2	2.2
Apr-04	3.4	1.2
Jul-04	6.5	3.2
Oct-04	10	4.8
Jan-05	3.5	5.6
Apr-05	4.2	2.1
Jul-05	5.5	1.3
Oct-05	5.5	0.8
Jan-06	4.2	3.3
Apr-06	3.2	2.2
Jul-06	6.5	2.2



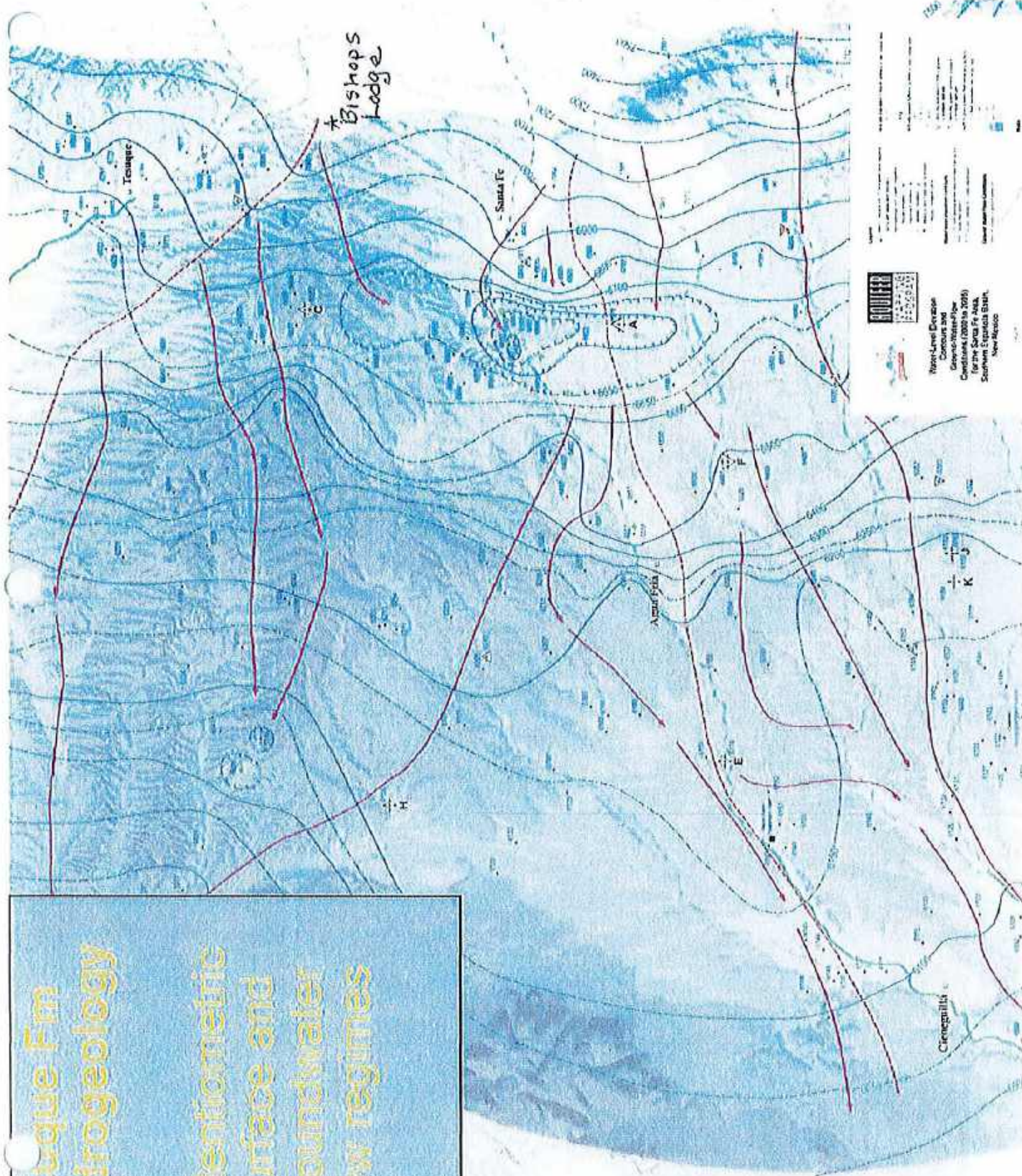
b. Description of Components Continued

Component	Status	Date of Installation or Construction (mm/dd/yy)	Description
EQ Tank	Existing In use	2000	Fiberglass, Buried. 15,000 gallon (To be abandoned 05/15/2024)
Process Tanks	Existing In use	1983	30,000 gallon aeration tank, 6,000 gallon gravity clarifier, 3,000 gallon mixing tank
Infiltration Gallery	Existing In use	2003	110' x 140' located under corral
Ponds and Waterfalls	Closed	1983	
Wetlands	Closed	2003	
Splitter/dosing loose tank	Existing In use	2018	6,000 gallon above ground (To be abandoned 05/15/2024)
Bag filter and disinfection	Closed	2020	
Infiltration Gallery	Existing In use	2018	To be abandoned 05/15/2024)
Storage Tank	Existing In use	2018	2000 gallon To be abandoned 05/15/2024)



Testaque Fm hydrogeology

Potentiometric
surface and
groundwater
flow regimes



Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 2306F69

Date Reported: 7/31/2023

CLIENT: Allen Environmental, LLC**Client Sample ID:** Final Effluent**Project:** BL Bishops Lodge**Collection Date:** 6/26/2023 1:45:00 PM**Lab ID:** 2306F69-001**Matrix:** AQUEOUS**Received Date:** 6/29/2023 1:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: METALS							Analyst: bcv
Arsenic	0.0013	0.00050		mg/L	1	7/6/2023 7:10:45 PM	75957
Copper	0.032	0.00050		mg/L	1	7/6/2023 7:10:45 PM	75957
Lead	ND	0.00050		mg/L	1	7/6/2023 7:10:45 PM	75957
Selenium	ND	0.0010		mg/L	1	7/6/2023 7:10:45 PM	75957
EPA METHOD 200.7: METALS							Analyst: JLF
Aluminum	0.12	0.020		mg/L	1	7/11/2023 12:56:14 PM	76071
Beryllium	ND	0.0020		mg/L	1	7/5/2023 5:18:41 PM	75957
Boron	0.096	0.040		mg/L	1	7/5/2023 5:18:41 PM	75957
Cadmium	ND	0.0020		mg/L	1	7/5/2023 5:18:41 PM	75957
Chromium	ND	0.0060		mg/L	1	7/6/2023 4:06:22 PM	75957
Cobalt	0.0070	0.0060		mg/L	1	7/5/2023 5:18:41 PM	75957
Molybdenum	ND	0.0080		mg/L	1	7/6/2023 4:06:22 PM	75957
Nickel	ND	0.010		mg/L	1	7/5/2023 5:18:41 PM	75957
Silver	ND	0.0050		mg/L	1	7/5/2023 5:18:41 PM	75957
Vanadium	ND	0.050		mg/L	1	7/5/2023 5:18:41 PM	75957
Zinc	0.070	0.010		mg/L	1	7/6/2023 4:06:22 PM	75957
EPA METHOD 245.1: MERCURY							Analyst: VP
Mercury	ND	0.00020		mg/L	1	7/6/2023 2:24:56 PM	75980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

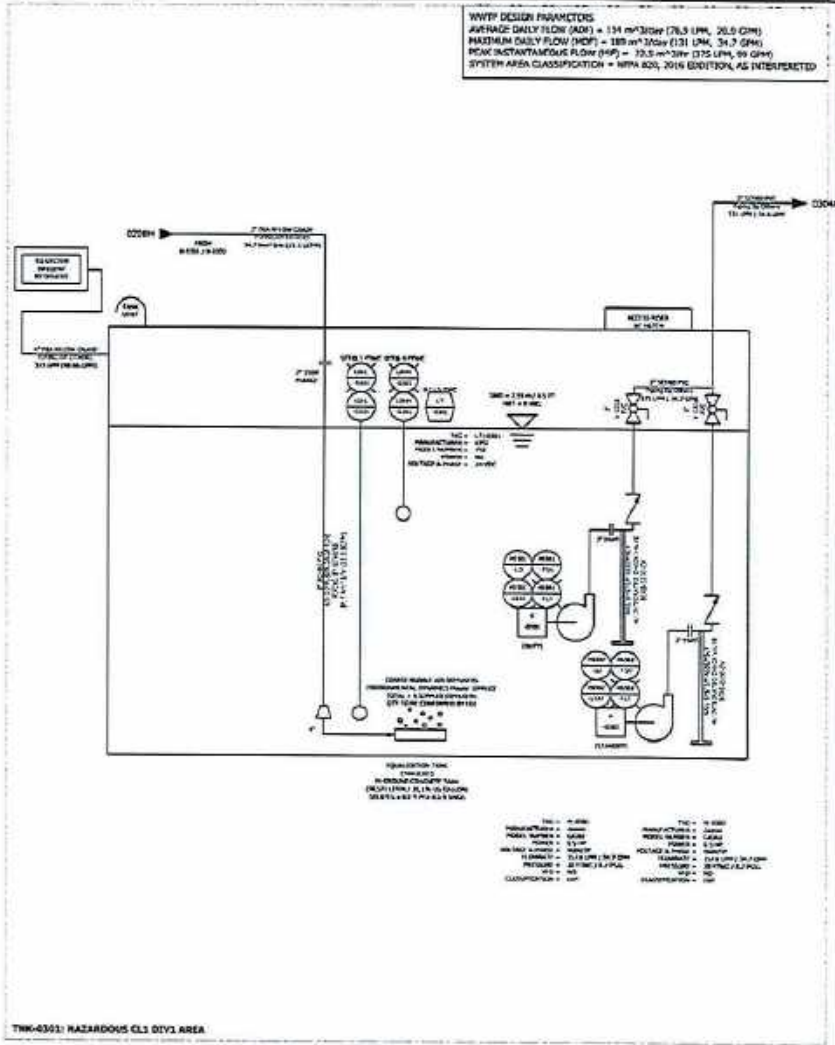
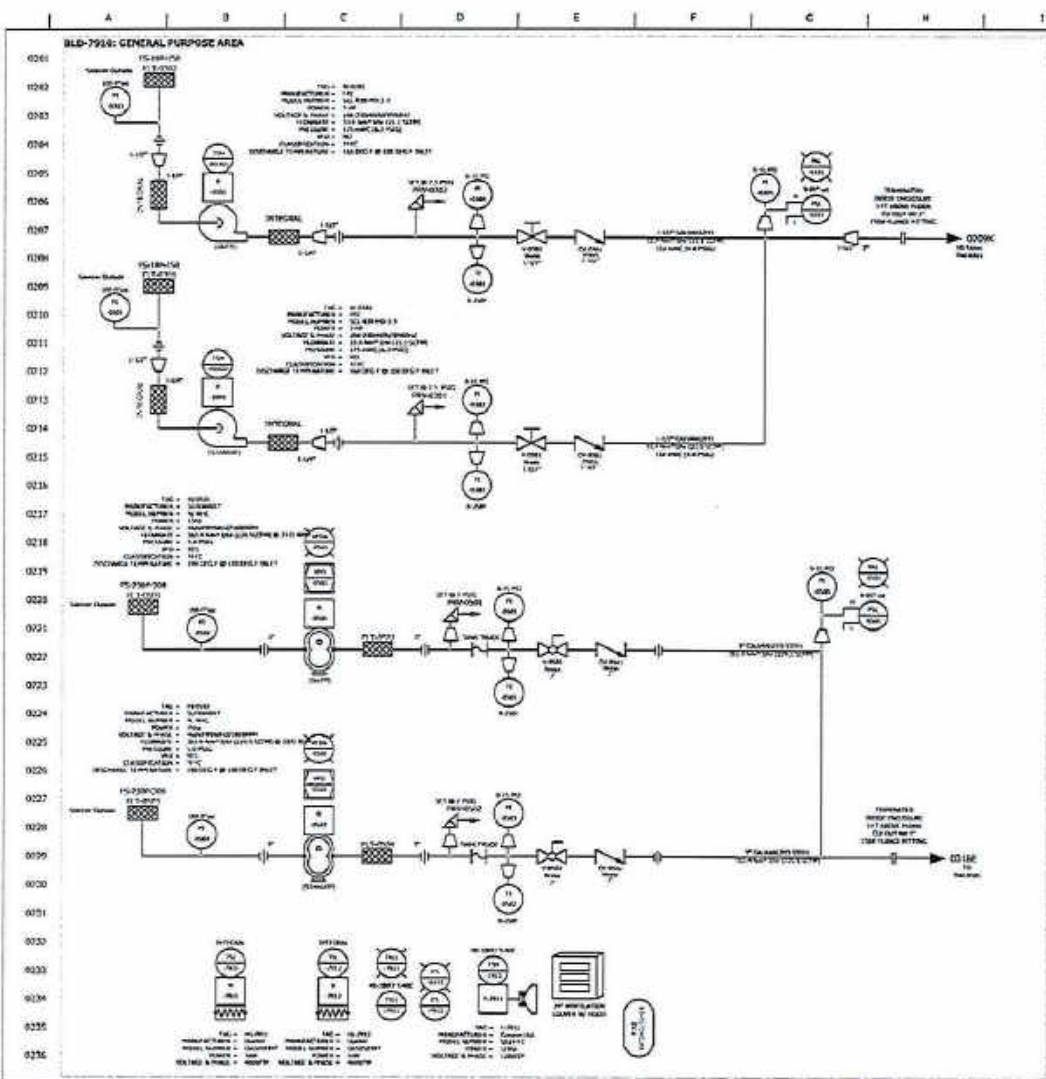
2207893

Bishop Lodge WWTP
BL Santa Fe, LLC



newterra®

MECHANICAL DRAWING PACKAGE



1001: Motor flow meters shall be installed in series with the flow line. To ensure that the flow line is not blocked, the flow line shall be installed in series with the flow line.

1002: First AP flow meters shall be installed in series with the flow line. To ensure that the flow line is not blocked, the flow line shall be installed in series with the flow line.

1003: Materials of valves and piping shall be as specified on the diagram.

1004: There are no special safety requirements outside of the normal standards unless specified on the diagram.

1005: Flexible hose is to be as specified on the diagram. If a flexible connection is required please consult Engineering to ensure selected hose is rated for the operating conditions.

1006: Do not use PVC pipe on air lines over 1 PSI.

1007: All female PVC threaded adapters must be non-ferrous female adapters.

1008: No disclaimer labels are to be on direct contact with water lines. Follow EN5550P.010

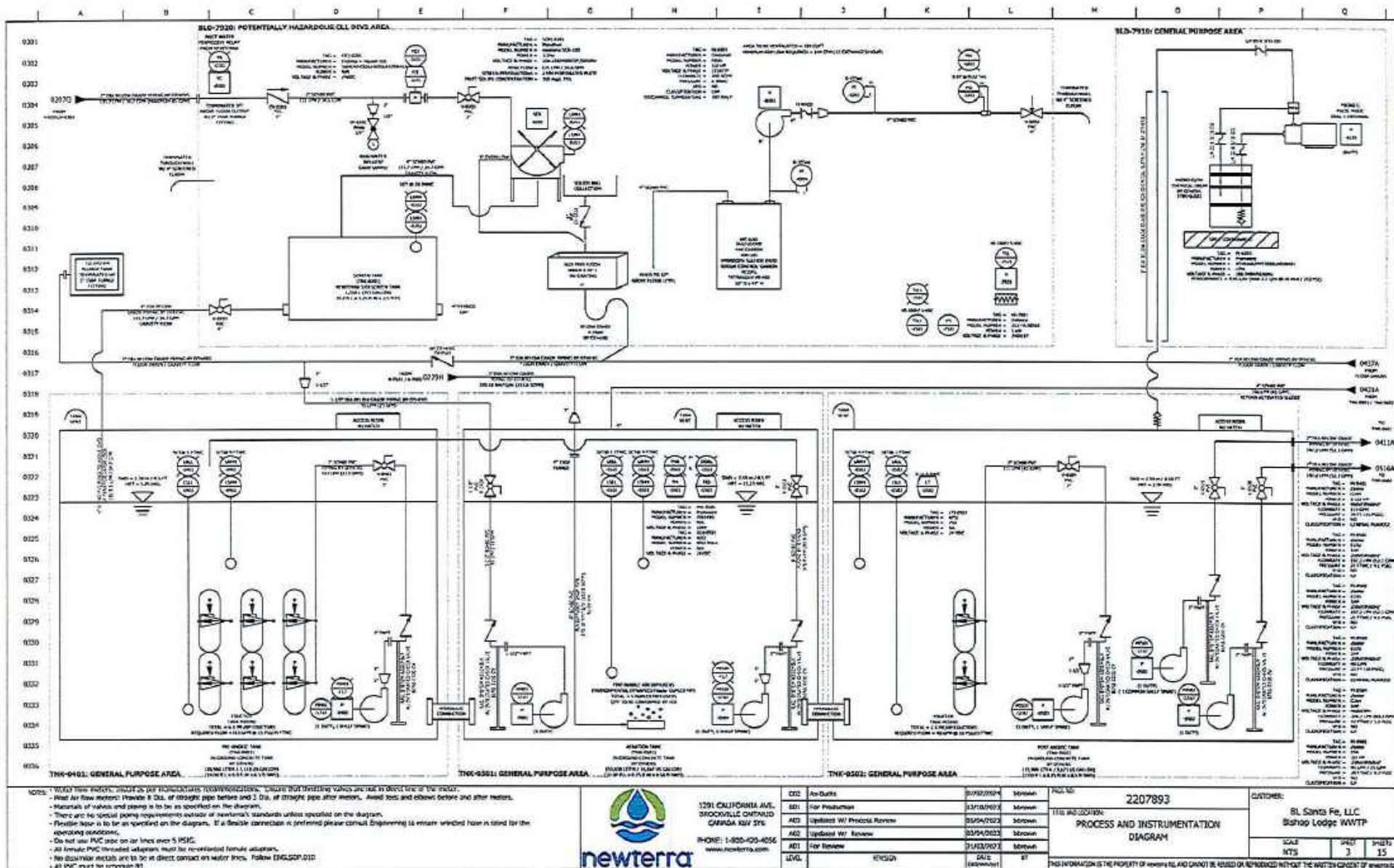
1009: All 1/2" pipe to be schedule 40.

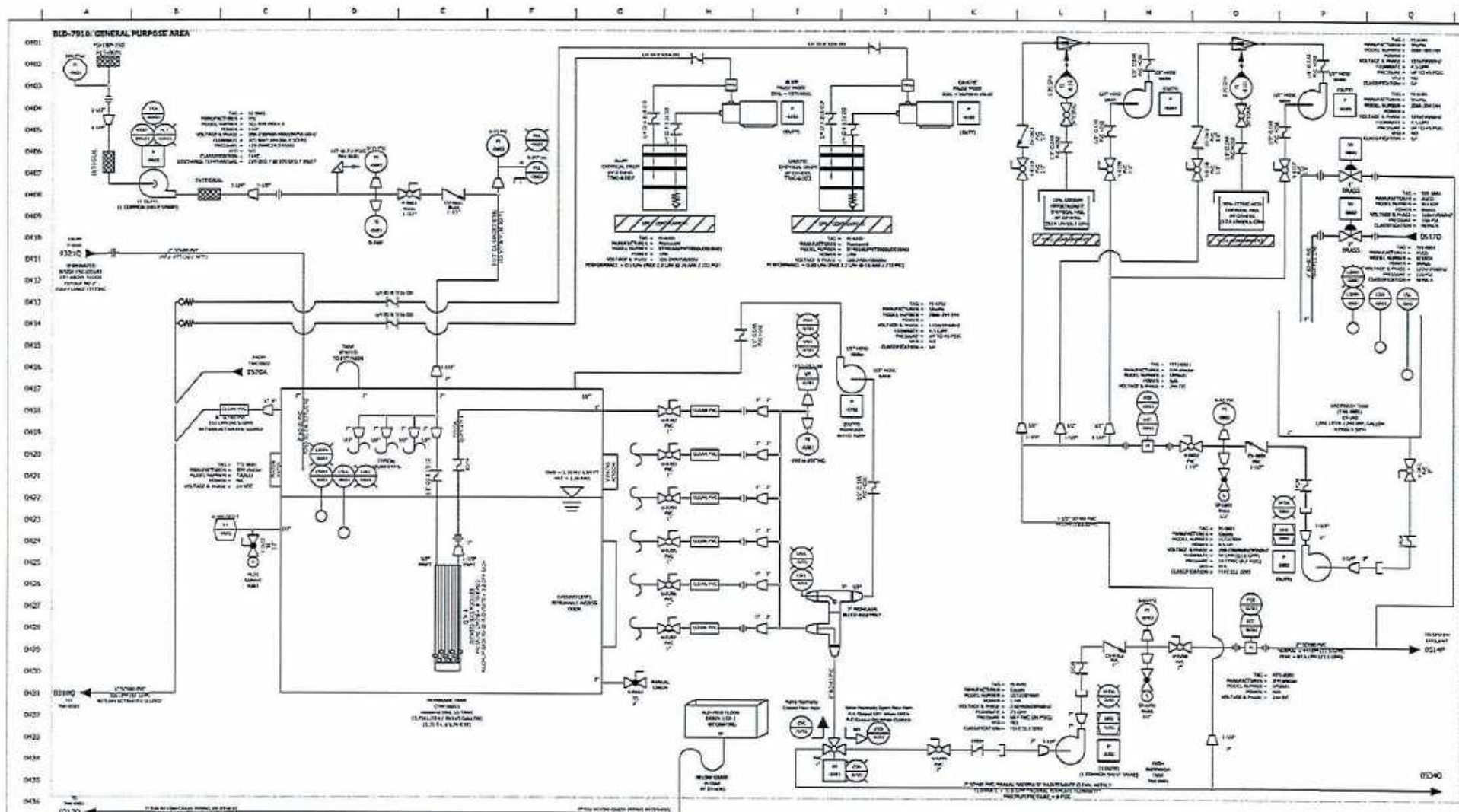
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CANADA N3V 5Y5

PHONE: 1-800-455-4056
WWW.NEWTERRA.COM

Q02	As-Is	01/02/2024	Shawna	AGE: 22	2207893	CUSTOMER:	DL Santa Fe, LLC Bishop Lodge WWTP
Q01	For Production	07/10/2023	Shawna	FILE AND QUOTE	PROCESS AND INSTRUMENTATION DIAGRAM	SCALE	SHEET 2
Q03	Updated W/ Process Review	03/04/2023	Shawna			NTS	SHEET 15
Q02	Updated W/ Review	03/04/2023	Shawna				
Q01	For Review	01/03/2023	Shawna				
LEVEL	DESIGN	DATE	08/08/2023	BY			

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- NOTES:
- 1. Water flow meters: Install as per manufacturer's recommendations. Location: One (1) meter before and one (1) meter after the meter.
 - 2. Flow air flow meters: Provide 8 Dia. of straight pipe before and 3 Dia. of straight pipe after meters. Avoid tees and elbows before and after meters.
 - 3. Materials of valves and piping is to be as specified on the diagram.
 - 4. There are no special piping requirements outside of Newterra's standards unless specified on the diagram.
 - 5. Flexible hose is to be as specified on the diagram. If a flexible connection is performed please consult Engineering to ensure selected hose is rated for the operating conditions.
 - 6. Do not use PVC pipe on air lines over 10 PSI.
 - 7. All female PVC threaded adapters must be as referenced female adapters.
 - 8. No disconnector valves are to be in direct contact on water lines. Follow SWS-001.010.
 - 9. All P&ID must be submitted to:

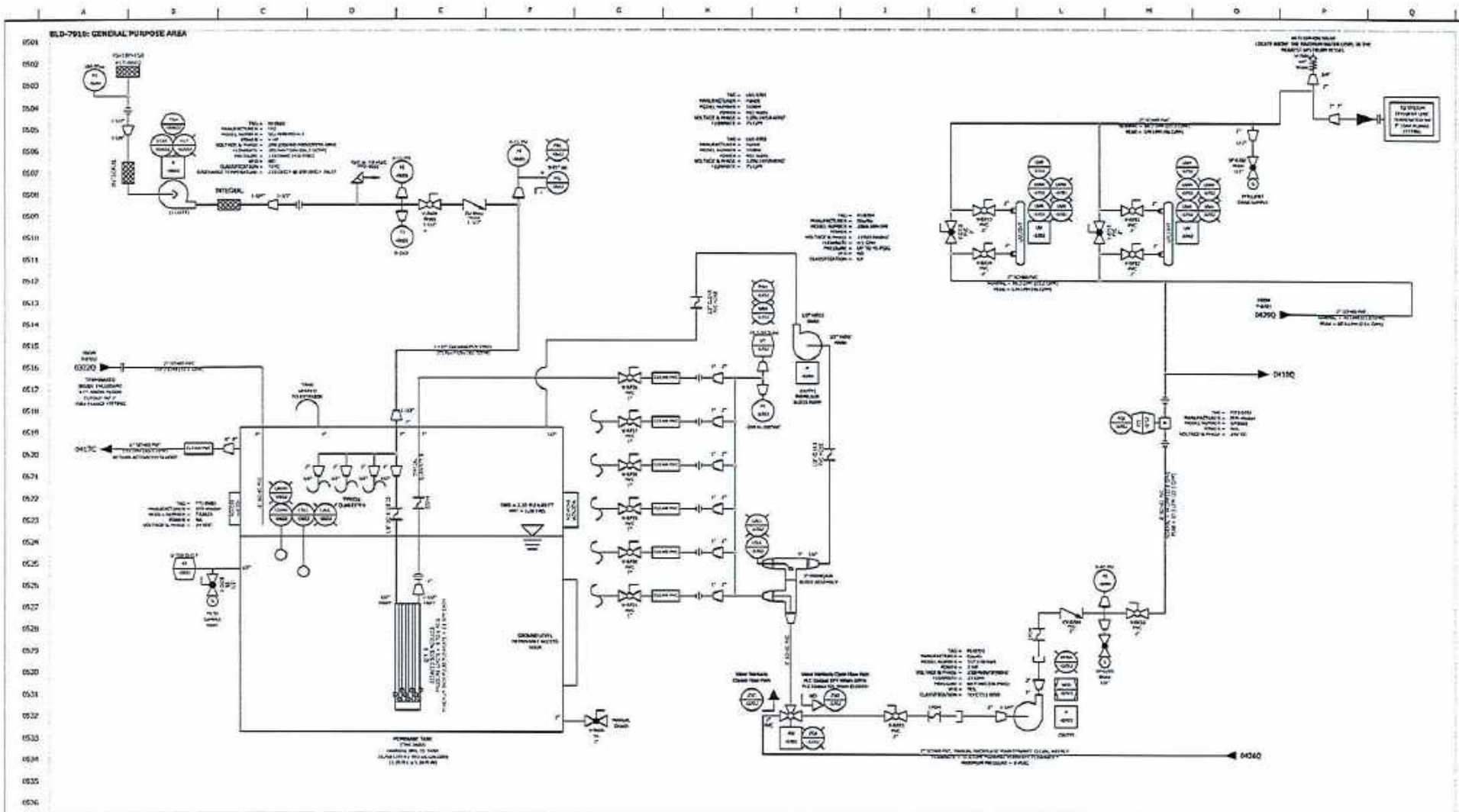


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REV	DESCRIPTION	DATE	BY
001	For Production	07/02/2017	MD
002	Updated by Process Review	07/18/2017	MD
003	Updated by Process Review	07/18/2017	MD
004	Updated by Process Review	07/18/2017	MD
005	For Review	07/18/2017	MD
006	For Review	07/18/2017	MD

PROJECT NO.	2207893	CLIENT	BL Santa Fe, LLC Bishop Lodge WWTP
TITLE AND LOCATION	PROCESS AND INSTRUMENTATION DIAGRAM	SCALE	N/A
		SHEET	4
		SHEET	15

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VALVES AND PIPING		EQUIPMENT		EQUIPMENT		EQUIPMENT		INSTRUMENTATION IDENTIFIERS				
								FIRST LETTERS		SUCCEEDING LETTERS		
								MEASURED/INITIATING VARIABLE	VARIABLE MODIFIER	READOUT/PASSIVE FUNCTION	OUTPUT/ACTIVE FUNCTION	FUNCTION MODIFIER
BALL VALVE -	NO NC	 AIR STRIPPER OIL WATER SEPARATOR VAPOR/LIQUID, SEAL FLUID SEPARATOR BAG FILTER CARBON VESSEL OXIDIZER PRODUCT STORAGE DRUM, TANK STANDARD, CONICAL BOTTOM TANK		 CLOSED TOP TANK OPEN TOP TANK OPEN TOP TANK WITH LID AIR DIFFUSER ASSEMBLY STRAINER/FILTER MEMBRANE CASSETTE NO CLOG SPRAYER ASSEMBLY ULTRA VIOLET LIGHT ROTARY SCREEN FILTER PRESS		 CENTRIFUGAL PUMP - PROGRESSIVE-CAVITY PUMP - CHEMICAL-INJECTION PUMP - CENTRIFUGAL, REGENERATIVE BLOWER - POSITIVE-DISPLACEMENT BLOWER - ROTARY-CLAW BLOWER - LINEAR BLOWER - LIQUID-RING PUMP - ROTARY-VANE COMPRESSOR - RECIPROCATING COMPRESSOR - PASSIVE COOLING FINS - HEAT EXCHANGER - EDUCTOR - MAGNETIC FLOW METER - AVERAGING PITOT TUBE - VENTURI - ROTOMETER - WATER FLOW METER -		 - INDICATING INSTRUMENT - DIGITAL INPUT TO CONTROL PANEL - DIGITAL INPUT CAUSING ALARM - DIGITAL INPUT CAUSING SYSTEM SHUTDOWN ALARM - ANALOG INPUT TO CONTROL PANEL - ANALOG OUTPUT FROM CONTROL PANEL		AS - AIR STRIPPER BLD - BUILDING, TRAILER, OR SKID FLT - FILTER VESSEL LPC - LIQUID-PHASE CARBON VESSEL MFD - MANIFOLD OWS - OIL/WATER SEPARATOR OX - OXIDIZER PST - PRODUCT STORAGE TANK SGS - SEAL OIL SEPARATOR SWS - SEAL WATER SEPARATOR TNR - TANK VLS - VAPOR/LIQUID SEPARATOR VPC - VAPOR-PHASE CARBON VESSEL		
GATE VALVE -								A ANALYSIS		ALARM		
GLOBE VALVE -								B BURNER, COMBUSTION				
NEEDLE VALVE -								C CYCLE	CONTROL		CONTROL	CLOSE
SLIDE VALVE -								D DIFFERENCE, DIFFERENTIAL				DEVIATION
SOLENOID VALVE -								E VOLTAGE		SENSOR, PRIMARY ELEMENT		
BUTTERFLY VALVE -								F FLOW, FLOW RATE	RATIO			
SWING CHECK VALVE -								G GAS (LEL)		GLASS, GAUGE, VIEWING DEVICE		
WAFFER CHECK VALVE -								H HAND			HAND	HIGH
SPRING CHECK VALVE -								I CURRENT		INDICATE		
WYE STRAINER -								J POWER		SCAN		
SAMPLE PORT -								K TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
PRESSURE RELIEF VALVE -								L LEVEL		LIGHT		LOW
VACUUM RELIEF VALVE -								M MONITOR			MOTORIZED	MIDDLE, INTERMED
CAMLOCK CONNECTION -								N				
FLEXIBLE CONNECTION -								O		ORIFICE, RESTRICTION (POINT/TEST/CONNECT)	PNEUMATIC	OPEN
FLANGED CONNECTION -								P PRESSURE				
REDUCER -								Q QUANTITY	INTEGRATE, TOTALIZE	INTEGRATE TOTALIZE		RUN
UNION -								R RADIATION		RECORD		STOP
ADSORBENT FILTER -								S SPEED, FREQUENCY	SAFETY		SWITCH, SOLENOID	
COALESCING FILTER -								T TEMPERATURE			TRANSMIT	
PARTICULATE FILTER -								U MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	
FILTER, SILENCER -								V VIBRATION, MECHANICAL ANALYSIS, VACUUM			VALVE, DAMPER, LOUVER	
PRESSURE REGULATOR -								W WEIGHT, FORCE		WELL, PROBE		
REGULATOR W/ FILTER -								X UNCLASSIFIED	X-AXIS	ACCESSORY DEVICES, UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
								Y RUN/STATE, PRESENCE	Y-AXIS		AUXILIARY DEVICES	
								Z POSITION, DIMENSION	Z-AXIS, SAFETY INSTRUMENTED SYSTEM		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	



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001	As-Built	07/02/03	drawn	FILE NO	2207893	CUSTOMER	SL Santa Fe, LLC Bishop Lodge WWTP
R01	For Production	12/02/03	drawn	TEST SPECIFICATION	LEGEND	SCALE	1:1
R03	Updated W/ Process Change	05/04/03	drawn			DATE	15
R02	Updated W/ Revision	03/04/03	drawn				
R01	For Review	21/03/03	drawn				
001	SAF	07					

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BLD-7910: GENERAL PURPOSE AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
6	10184	Dwyer	1823-80	Pressure, Switch, 9-85" wc, Nema 1	PSLJ-0301, PSLJ-0501, PSLJ-0601, PSLJ-0602
6	10411	Indumart	J100"-DWC	Gauge, Vacuum, 100-0"wc, SS Case, Dry Fill, 1/4" NPT, Indumart, J100"-DW...	PIJ-0301, PIJ-0303, PIJ-0502, PIJ-0504, PIJ-0601, PIJ-0604
2	10515	Canarm Ltd.	CN TF115-001	Temperature, Switch, Thermostat, 40-100F/ 5-40C, Building Fans and Fan Pa...	TSHJ-7911, TSLJ-7911
4	10538	Unified Valve Group, Custom	10538	Valve, Manual, Ball, Brass Body, Teflon Seal, 1/2", NPT, 150#, 596 PSI WOG	SP-0701, SP-0702, SP-0703, SP-0801
6	10902	Kunkle	0337-H***	Valve, Manual, Relief, Pressure, Kunkle, Bronze Body, 2", set @	PRV-0301, PRV-0302, PRV-0501, PRV-0502, PRV-0601, PRV-0602
1	11352	Custom		Valve, Manual, Check, Spring, Brass Body, 3/4"	V-7001
2	11518	Sutorbilt	4L-RHC	Blower, Rotary Lobe, Shaft Dia: 0.875, GAC LDP	BJ-0501, BJ-0502
2	12244	ASCO	8210G4	Valve, Actuated, Solenoid, 2 Way, ASCO, 1", 150 psi, Nema4, UL, NC, 120/60...	SVJ-0801, SVJ-0802
1	12952	Canarm Ltd.	SD24-F1	Fan, Building, 24", 1/3hp, 1075rpm, 120V, 1ph, TEFC, S24-F1	F-7911
2	13331	Custom		Valve, Manual, Ball, SS Body, Teflon Seal, 2", Threaded	V-0603, V-0606
2	14435	Pinacle Stainless Steel	14435	Valve, Manual, Ball, SS Body, Teflon Seal, 1/2"	V-0602, V-0605
10	16196	Indumart	P16T2-FG-15	Gauge, Pressure, 0-15 PSI, Bottom Mount, 2-1/2" Dial, SS Case, Brass Intern...	PIJ-0302, PIJ-0304, PIJ-0305, PIJ-0501, PIJ-0503, PIJ-0505, PIJ-0602, PIJ-0603, PIJ-0605, PIJ-0606
3	16203	Indumart	P16T2-FG-60	Gauge, Pressure, 0-60 PSI, Bottom Mount, 2-1/2" Dial, SS Case, Brass Intern...	PIJ-0702, PIJ-0704, PIJ-0801
2	18878	Teco		Motor, Teco, 254T, 15hp, 1800rpm, 208-230/460V, 3ph, CSA/UR, TEFC CL 1 ...	BJ-0501, BJ-0502
4	19279	Warrick	PY2CW4000MYEL40W	Level, Switch, Mech Float, Narrow Angle, N.C., YEL Length, N/C, Yellow float	LSHHJ-0601, LSHHJ-0602, LSHHJ-0801
6	21552	Custom		Level, Switch, Tether Weight, Cast Iron	LSHJ-0801, LSHHJ-0801, LSLJ-0801
1	21766	Prominent	7902593	pH, Transmitter, pH tuff tip electrode, 7902593	PHJ-0501
2	22346	Custom		Valve, Manual, Check, Swing, PVC Body, 1/2", Clear	CV-0802, CV-0803
2	26008	Indumart	P32T2	Gauge, Combination, -200 to 200"WC, Bottom Mount, 2-1/2" Dial, SS Case, ...	PIJ-0701, PIJ-0703
2	27229	Ouellet	OAS05034T	Heater, Forced Air, Ouellet, 5kW, 460V, 3 Phase, Includes T-Stat	HJ-7911, HJ-7912
2	27810	IFM Efector	PG2409	Pressure, Transmitter, -14.5-14.5 psi, 4-20mA	VTJ-0701, VTJ-0702
4	27811	IFM Efector	EVC002	Flow, Meter, Connector, 4 Wire Mirco DC connector, Cable 5m, 22AWG	TTJ-0601, TTJ-0602, VTJ-0701, VTJ-0702

NOTES:



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CD	As-Built	07/02/2024	Storven
BD	For Production	12/16/2022	Storven
AD	Updated by: Process Review	05/04/2022	Storven
AD	Updated by: Review	08/04/2022	Storven
AD	For Review	11/02/2022	Storven
LSR	As-Built	GATE	BT

PROJECT NO.	2207893
TITLE AND LOCATION	BILL OF MATERIAL - P&ID PAGE 1/9

DESIGNED BY	BL Santa Fe, LLC Bishop Lodge WWTP
SCALE	NTS
SHEET	9
TOTAL SHEETS	15

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-> BLD-7910: GENERAL PURPOSE AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
2	27825	IFM Efector		Flow, Meter, Parts, Adapter IFM SM600, G1/2 BSPP to 1/2" NPT SS	VTJ-0701, VTJ-0702
1	27936	Prominent	7781499	pH, Transmitter, 4-20mA, Dulcometer pH or ORP	PHJ-0501
2	29734	Custom		Valve, Manual, Check, PVC Body, 1/2", True Union Ball, GF- 562 Series with ...	CV-0701, CV-0703
2	35517	Dwyer	RMB-83D-SSV	Meter, Flow, Water, Dwyer, RMB-83D-SSV, 0-20 GPH, 1/4"FNPT, SS Needle ...	FIJ-6101, FIJ-6102
3	37018	Prominent	BT481602PVT2000UD010A...	Pump, Metering, Prominent, Beta 4, BT481602PVT2000UD010A01, 2.2L/Hr, ...	PJ-6101, PJ-6102, PJ-6103
1	37661	Custom	K15-015VS	Valve, Manual, Ball, PVC, 1-1/2", True-Union, Soc Ends, c/w FPM [Viton] O-R...	V-0802
11	37662	Afflu-O	K15-020VS	Valve, Manual, Ball, PVC, 2", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0701, V-0708, V-0709, V-0710, V-0711, V-0712, V-0713, V-0714, V-0722, V-0723, V-0801
4	37665	Afflu-O	K15-005VS	Valve, Manual, Ball, PVC, 1/2", True-Union, Soc & FNPT Ends, c/w FPM [Vit...	V-6107, V-6108, V-6109, V-6110
12	37667	Afflu-O	K15-010VS	Valve, Manual, Ball, PVC, 1", True-Union, Soc & FNPT Ends, c/w FPM [Viton] ...	V-0702, V-0703, V-0704, V-0705, V-0706, V-0707, V-0716, V-0717, V-0718, V-0719, V-0720, V-0721
4	40624	FPZ	SCL R30-MD-3-3	Blower, Regenerative, FPZ, 3 HP, SCL R30-MD-3-3, 208-230/460V, 3 Phase	BJ-0301, BJ-0302
2	41081	IFM efector	TA2633	Transmitter, Temperature, 0-300°F, 4-20mA	TTJ-0601, TTJ-0602
5	43074	IFM Effector, IFM Effector	EVC003	Cable, Connector, IFM efector 4 wire Mircos DC cordset, 10m, 22AWG, M12 F...	FITJ-0701, FITJ-0702, FITJ-0801, LSLJ-0701, LSLJ-0702
3	43617	IFM efector	E40234	Flow Meter, IFM Effector, Ground Clamp, for units with M12 connector	FITJ-0701, FITJ-0702, FITJ-0801
1	44446	Spears	S1720C15	Valve, Manual, Check, Swing, PVC, 1-1/2", Clear, Socket, EPDM, True Union, ...	CV-0801
2	44448	Spears	S1720C20	Valve, Manual, Check, Swing, PVC, 2", Clear, Socket, EPDM, True Union, Spe...	CV-0702, CV-0704
1	44512	IFM efector	SM9601	Flow Meter, IFM Effector, SM9601, Magnetic-Inductive, 0-80 GPM, 24VDC, 4-2...	FITJ-0801
2	45170	IFM efector	UT0022	Transmitter, Temperature, Thermowell, UT0022	TTJ-0601, TTJ-0602
2	45315	FPZ	SCL R40-MD-4-3	Blower, Regenerative, FPZ, 4 HP, SCL R40-MD-4-3, 208-230/460-400V, 60/5...	BJ-0601, BJ-0602
2	45829	Ginice	GQ-004	Valve, Actuated, Ball, PVC, 2", 3 WAY, 24 V DC, GINICE GQ-004, Afflu-O Val...	AVJ-0701, AVJ-0702
2	46169	Hallett	1000W	UV, Hallett, 1000W, 2" MNPT, 120V/1P/50-60HZ	UVJ-0701, UVJ-0702
2	46420	Goulds	1ST1E9E4W9	Pump, Centrifugal, Goulds, NPE, 1ST1E9E4W9, 1hp, 3ph, 208-230/460V, TEP...	PJ-0701, PJ-0703
2	47279	IFM Effector	LMC500	Switch, Level, Capacitive Sensor, IFM, LMC500, 1/2"NPT, 24VDC, NO/NC, M1...	LSLJ-0701, LSLJ-0702

NOTES:



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CO2	As-Built	07/02/2024	Monson
BD1	For Production	12/29/2023	Monson
ADD	Updated 301 Process Diagram	05/04/2023	Monson
ADD	Updated 301 Review	03/04/2023	Monson
ADD	For Review	21/03/2023	Monson
DATE	REVISION	DATE	BY

PAGE NO	2207893
TITLE AND LOCATION	BILL OF MATERIAL - P&ID
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CUSTOMER:		
BL Santa Fe, LLC Bishop Lodge WWTP		
SCALE	SHEET	SHEET
NTS	10	15

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-> BLD-7910: GENERAL PURPOSE AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
2	47295	IFM efector	SM2501	Flow Meter, IFM Efector, SM2501, Magnetic-Inductive, 0-160 GPM, 24VDC, 4...	FITJ-0701, FITJ-0702
1	48266	Prominent	7901793	pH Probe Coax Cable, SN6F x SN6M, 50ft	PHJ-0501
1	48335	Goulds	1ST2C9D4	Pump, Centrifugal, Goulds, NPE, 1ST2C9D4, 0.5hp, 3ph, 208-230/460V, TEP...	PI-0801
4	60550	Shurflo	2088-394-144	Pump, Diaphragm, Motor Driven, Shurflo, 2088-394-144, 115VAC, 60hz, 3.0 ...	PI-0702, PI-0704, PI-6104, PI-6105
6	M1267	Western Gauge and Instruments	WL31205	Gauge, Temperature, 0-250F, 3" Dial, 4" Stem, 1/2" NPT, Western Gauge an...	TIJ-0301, TIJ-0302, TIJ-0501, TIJ-0502, TIJ-0601, TIJ-0602
6	M1343	Warrick	MBLU40WPB20W4000	Level, Switch, Mech Float, Narrow Angle, N.O., Blue	LSHJ-0801, LSLJ-0801, LSLJ-0601, LSLJ-0602
4	M1406	Solberg	FS-18P-150	Filter, Air, Silencer, Solberg, 1.5"	FLT-0301, FLT-0302, FLT-0601, FLT-0602
2	M1489	Solberg	FS-230P-300	Filter, Air, Silencer, Solberg, 3"	FLT-0501, FLT-0503
2	M1524	Custom		Valve, Manual, Check, Swing, Brass Body, 3"	CV-0501, CV-0502
2	P1066	Custom		Valve, Manual, Ball, Brass Body, Teflon Seal, 1-1/2", NPT, 150#, 598 PSI W...	V-0601, V-0604
2	P1104	Custom		Valve, Manual, Ball, Brass Body, Teflon Seal, 3", NPT, 150#, 600 PSI WOG	V-0501, V-0502
4	P1214	Custom		Valve, Manual, Check, Swing, Brass Body, 1-1/2"	CV-0301, CV-0302, CV-0601, CV-0602
2	P1222	Custom		Valve, Manual, Gate, Brass Body, 1-1/2"	V-0301, V-0302

10/13



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CEO	Av-Ruths	07/02/2024	Mon	2207893
BO	For Production	12/18/2023	Mon	
AO	Updated W/ Proposed Review	05/04/2023	Mon	
AO	Updated W/ Review	03/04/2023	Mon	
AO	For Review	21/03/2023	Mon	
DATE	REVISION	DATE	BY	

PROJECT	2207893
TITLE	11/10/2023
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CUSTOMER	BL Santa Fe, LLC Bishop Lodge WWTP
SCALE	NTS
SHEET	11
SHEET	15

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BLD-7920: POTENTIALLY HAZARDOUS CL1 DIV2 AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
2	10515	Canarm Ltd.	CN TF115-001	Temperature, Switch, Thermostat, 40-100F/ 5-40C, Building Fans and Fan Pa...	TSLJ-7921, TSUJ-7921
1	10538	Custom		Valve, Manual, Ball, Brass Body, Teflon Seal, 1/2", NPT, 150#, 596 PSI WOG	SP-0201
1	11388	Furneco	2010	Gauge, Differential Pressure, 0-10"wc, Side Mount, 4-3/4" Dial, Aluminum Cb...	PIJ-0201
1	11683	Custom		Valve, Manual, Gate, Knife, PVC Body, 4", Soc	V-0202
1	19279	Warrick	PY2CW4000	Level, Switch, Mech Float, Narrow Angle, N.C., YEL Length, N/C, Yellow float	LSHHJ-0202
1	21552	Custom		Level, Switch, Tether Weight, Cast Iron	LSHHJ-0202
1	22539	Dwyer	1823-00	Pressure, Switch, 0.07 to 0.22 "wc, Nema 1	PSLJ-0201
1	33737	Flowline	LU10-1405	Switch, Level, Ultrasonic, Flowline, LU10-1405	LSHHJ-0201
1	37662	Afflu-O	K15-020VS	Valve, Manual, Ball, PVC, 2", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0201
1	37664	Custom	K15-040VS	Valve, Manual, Ball, PVC, 4", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0203
1	37731	Cincinnati	PB9A	Blower, Centrifugal, 0.5 HP, 3450 rpm, 115V/1P/60Hz, TEXP, Aluminum whe...	BJ-0201
1	44447	Spears	S1720C10	Valve, Manual, Check, Swing, PVC, 1", Clear, Socket, EPDM, True Union, Spe...	CV-0202
1	44589	Indeeco	233-FA-00563	Heater, Forced Air, 233 Series, Indeeco, 5 kW, 240V, 1 Phase, EXP, 1/4 HP F...	HJ-7921
1	48734	Marathon		Motor, Marathon, TEFC, 1/2 HP, 208-230/460V/3P/60, XPF Inverter Duty, 56...	SCRJ-0201
1	60253	Endress + Hauser Ltd.	5W4C40-C6DLHA00DUA120A...	Flow meter, Endress, Promag W 400 1.5", 4-20mA and Pulse Totalizer, 24VD...	FITJ-0201

NOTES



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Q22	As-Built	01/02/2024	Sharon
Q20	For Production	12/18/2023	Sharon
Q23	Updated W/ Phases Review	05/04/2023	Sharon
Q20	Updated W/ Review	03/04/2023	Sharon
Q21	For Review	21/02/2022	Sharon
Q24	REVISION	DATE	BY

PROJECT	2207893
TITLE AND LOCATION	BILL OF MATERIAL - P&ID
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CUSTOMER	BL Santa Fe, LLC
	Bishop Lodge WWTP
SCALE	NTS
DATE	12
BY	15

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BLD-7920: POTENTIALLY HAZARDOUS CL1 DIV2 AREA; SCREEN ROOM

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
1	11388	Dwyer	2010	Gauge, Differential Pressure, 0-10"wc, Side Mount, 4-3/4" Dial, Aluminum Ca...	PI[-0204
1	12272	Furneco	A-368	Gauge, Part: Bracket, Furneco, Magnehelic, A-368, Surface mounting plate, ...	PI[-0204
1	14435	Pinacle Stainless Steel	14435	Valve, Manual, Ball, SS Body, Teflon Seal, 1/2"	V-0209
1	17293	Tetrasolv Filtration	VR-400	Filter, Vessel, Carbon, Air, VR-400, no media	VPC-0201
1	37742	Solberg	STS-400C	Filter, Liquid Separator, Solberg, 4" FNPT, 500SCFM, 1/2" Drain	FLT-0202

NOTES:



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002	As-Built	07/02/2004	Minor
800	For Production	11/18/2003	Minor
800	Updated W/ Process Review	05/04/2003	Minor
800	Updated W/ Review	03/04/2003	Minor
800	For Review	01/18/2003	Minor
1000	DESIGN	DATE	BY

PAGE NO.	2207893
TITLE AND LOCATION	BILL OF MATERIAL - P&ID PAGE 5/9

CUSTOMER:	BL Santa Fe, LLC Dishap Lodge WWTP
NAME	NTS
SHEET	13
SHALL	15

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TNK-0301: HAZARDOUS CL1 DIV1 AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
2	19279	Warrick	PY2CW4000	Level, Switch, Mech Float, Narrow Angle, N.C., YEL Length, N/C, Yellow float	LSHH -0301
4	21552	Custom		Level, Switch, Tether Weight, Cast Iron	LSHH -0301, LSLL -0301
2	37662	Afflu-O	K15-020VS	Valve, Manual, Ball, PVC, 2", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0305, V-0306
4	39716	Zoeller	GX282	Pump, Centrifugal, Sump, Zoeller, GX282, 0.5 HP, 460V/3P, 20' cord	P -0301, P -0302
1	46890	KPSI	750S14D4C005.000000.000...	Pressure, Transmitter, 0-11.5 ftWC, 4-20mA, KPSI 750 Series, 25 ft Cable	LT -0301
2	M1343	Warrick	PB20W4000	Level, Switch, Mech Float, Narrow Angle, N.O., Blue	LSLL -0301

NOTES:



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Q07	As-Built	07/02/2024	Stinson
S01	For Production	12/10/2023	Stinson
A03	Updated W/ Process Review	05/04/2023	Stinson
A02	Updated W/ Review	03/04/2023	Stinson
A01	For Review	11/13/2022	Stinson
LEVEL	REVISED	DATE (DD/MM/YY)	BY

PROJECT	2207893
TITLE AND LOCATION	BILL OF MATERIAL - P&ID PAGE 6/9

CUSTOMER:			
BL Santa Fe, LLC Bishop Lodge WWTP			
SCALE	SHEET	SHEET	
NTS	14	15	

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TNK-0401: GENERAL PURPOSE AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
1	19279	Warrick	PY2CW4000	Level, Switch, Mech Float, Narrow Angle, N.C., YEL Length, N/C, Yellow float	LSHHJ-0401
2	21552	Custom		Level, Switch, Tether Weight, Cast Iron	LSHHJ-0401, LSLIJ-0401
1	37663	Custom	K15-030V5	Valve, Manual, Ball, PVC, 3", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0401
1	46658	Zoeller	G294	Pump, Centrifugal, Sump, Zoeller, G294, cCSAus, 1-1/2HP, 460V/3P, 2"FNPT	PI-0401
1	M1343	Warrick	PB20W4000	Level, Switch, Mech Float, Narrow Angle, N.O., Blue	LSLLJ-0401

NOTES:



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CD	As-Built	07/02/2024	Monson
B01	For Production	12/18/2022	Monson
A03	Updated Wt Process Review	25/04/2023	Monson
A02	Updated Wt Review	23/04/2023	Monson
A01	For Review	21/03/2023	Monson
EP01	REVISION	06/02/2024	BT

PRL#	2207893
TITLE AND LOCATION	BILL OF MATERIAL - PAJD PAGE 7/9

CUSTOMER:		
BL Santa Fe, LLC Bishop Lodge WWTP		
Scale NTS	Sheet 15	Sheet 15

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TNK-0501: GENERAL PURPOSE AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
1	19279	Warrick	PY2CW4000	Level, Switch, Mech Float, Narrow Angle, N.C., YEL Length, N/C, Yellow float	LSHHJ-0501
2	21552	Custom		Level, Switch, Tether Weight, Cast Iron	LSHHJ-0501, LSLLI-0501
1	27325	RDO	RDO Pro-x	O2, Transmitter, Optical, Pro-x, 10m cable	DOJ-0501
1	37661	Custom	K15-015VS	Valve, Manual, Ball, PVC, 1-1/2", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0904
1	37663	Custom	K15-030VS	Valve, Manual, Ball, PVC, 3", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0503
1	43038	Zoeller	E98	Pump, Centrifugal, Sump, Zoeller, E98, 1/2 HP, 230 V/ 1P, Non-Automatic, 1-...	PI-0901
1	60667	Zoeller	G284	Pump, Sump, Zoeller 8A294, cCSAus, 1hp, 460V/3Ph/60Hz, 2.6A, 2" NPT Dis...	PI-0504
1	M1343	Warrick	PB20W4000	Level, Switch, Mech Float, Narrow Angle, N.O., Blue	LSLLI-0501

NOTES:



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000	As-Built	07/22/2024	Edmund
001	For Production	12/16/2023	Edmund
002	Updated W/ Process Change	05/04/2023	Edmund
003	Updated W/ Review	03/04/2023	Edmund
004	For Revision	03/03/2023	Edmund
005	REVISED	04/04/2023	31

2207893
112 REV 001000
BILL OF MATERIAL - P&ID
PAGE 8/9

CUSTOMER:	BL Santa Fe, LLC
	Bishop Lodge WWTP
SCALE:	NTS
SHEET:	16
TOTAL:	15

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TNK-0502: GENERAL PURPOSE AREA

Quantity	APES Number	Manufacturer	Part Number	Description	TAG
1	19279	Warrick	PV2CW4000	Level, Switch, Mech Float, Narrow Angle, N.C., YEL Length, N/C, Yellow float	LSHHI-0502
2	21552	Custom		Level, Switch, Tether Weight, Cast Iron	LSHHI-0502, LSLLI-0502
3	37662	Afflu-O	K15-020VS	Valve, Manual, Ball, PVC, 2", True-Union, Soc Ends, c/w FPM [Viton] O-Rings...	V-0504, V-0505, V-0506
3	41245	Zoeller	E270	Pump, Centrifugal, Sump, Zoeller, E270, 1hp, 230V/1P, Non-Automatic, 2"FN...	PI-0501, PI-0502, PI-0503
1	46890	KPSI	750S14D4C005.000000.000...	Pressure, Transmitter, 0-11.5 ftWC, 4-20mA, KPSI 750 Series, 25 ft Cable	LTJ-0502
1	M1343	Warrick	PB20W4000	Level, Switch, Mech Float, Narrow Angle, N.O., Blue	LSLLI-0502

NOTES



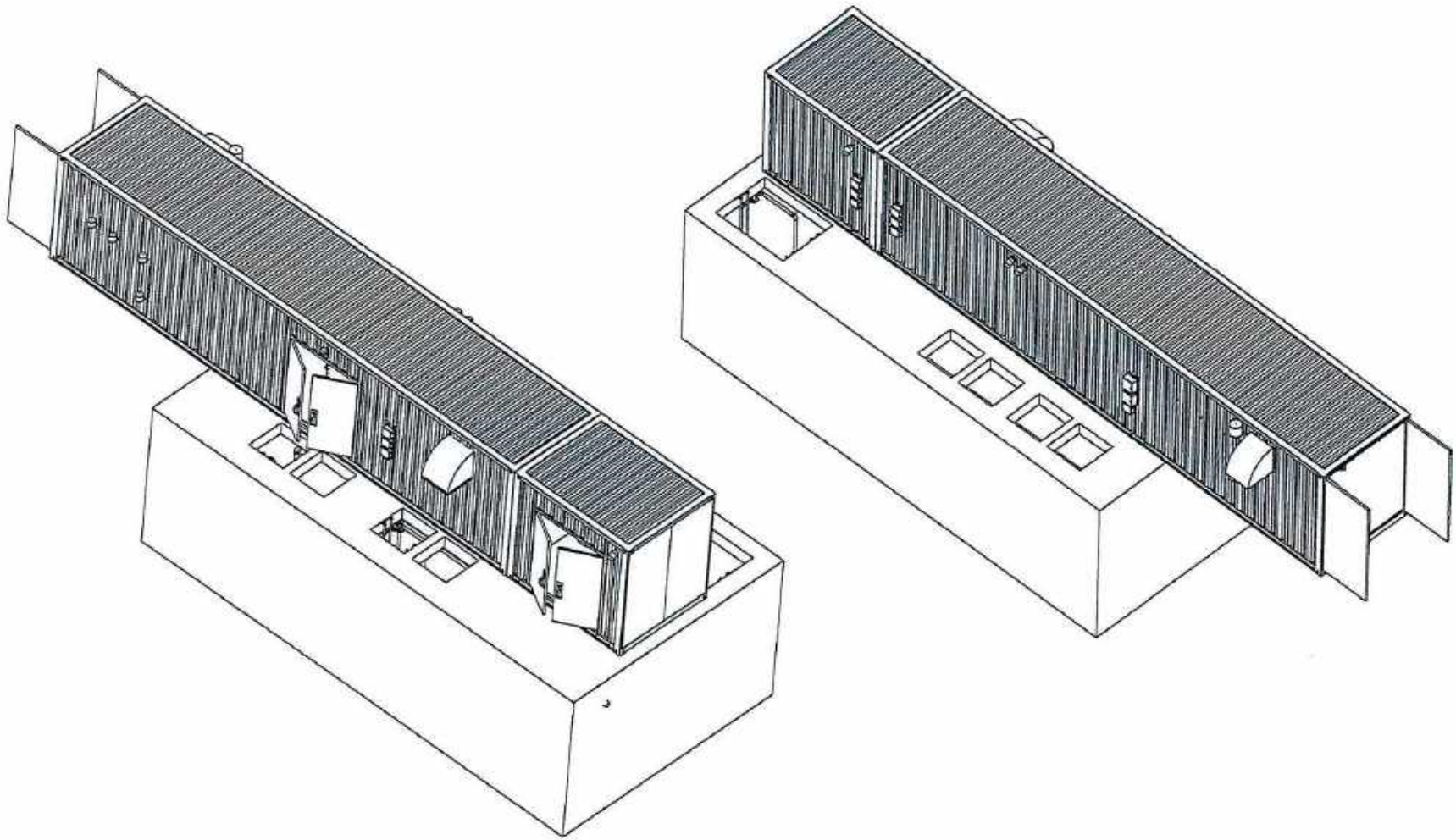
1291 CALIFORNIA AVE.
BROOKVILLE ONTARIO
CANADA K0V 5Y6
PHONE: 1-800-420-4056
www.newterra.com

CD	In-Field	07/02/2024	Approved
SD	For Production	12/19/2023	Approved
AD	Updated W/ Process Review	05/04/2023	Approved
ADD	Updated W/ Review	03/06/2023	Approved
AD	For Review	01/02/2023	Approved
LEVEL	REVISED	03/12/2022	BT

PROJECT NO.	2207893
TITLE AND LOCATION	BILL OF MATERIAL - PSJD PAGE 9/9

CUSTOMER	BL Santa Fe, LLC Bishop Lodge WWTP
DATE	NTS
SHEET	17
TOTAL	15

THIS INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA LLC



DATE: As Built				SYSTEM NAME: System Layout		PROJECT NUMBER: 2207893	
LEVEL: C-01	DESIGNED BY: OM	DESIGNED DATE: Feb 07/24	APPROVED BY: [Signature]	APPROVED DATE: [Signature]	PROJECT TITLE: Bishop Ledge, NM	REVISION: 01	DATE: MAY 30, 2023
THE INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA.						DESIGNED BY: OM	SHEET 1 OF 5
PROJECT: Lee & Company, LLC							

Civil Construction Notes:

- Install grating between building fans and outside louvers.
- Thermal insulation on walls and ceiling, Spray Foam
- Door color to be: White
- Exterior color to be: White
- Interior floor to be: Marine Grade Plywood
- Interior floor to be painted: Gator Guard
- Exterior floor to be insulated with 3" of Spray Foam.

Mechanical Notes:

- Locate cooling thermostat in the warmest location at ceiling level.
- Locate heating thermostat at floor level.
- Maximum width for shipping is 102". This includes all connections that protrude through the sides of the enclosure.

Commissioning Notes:

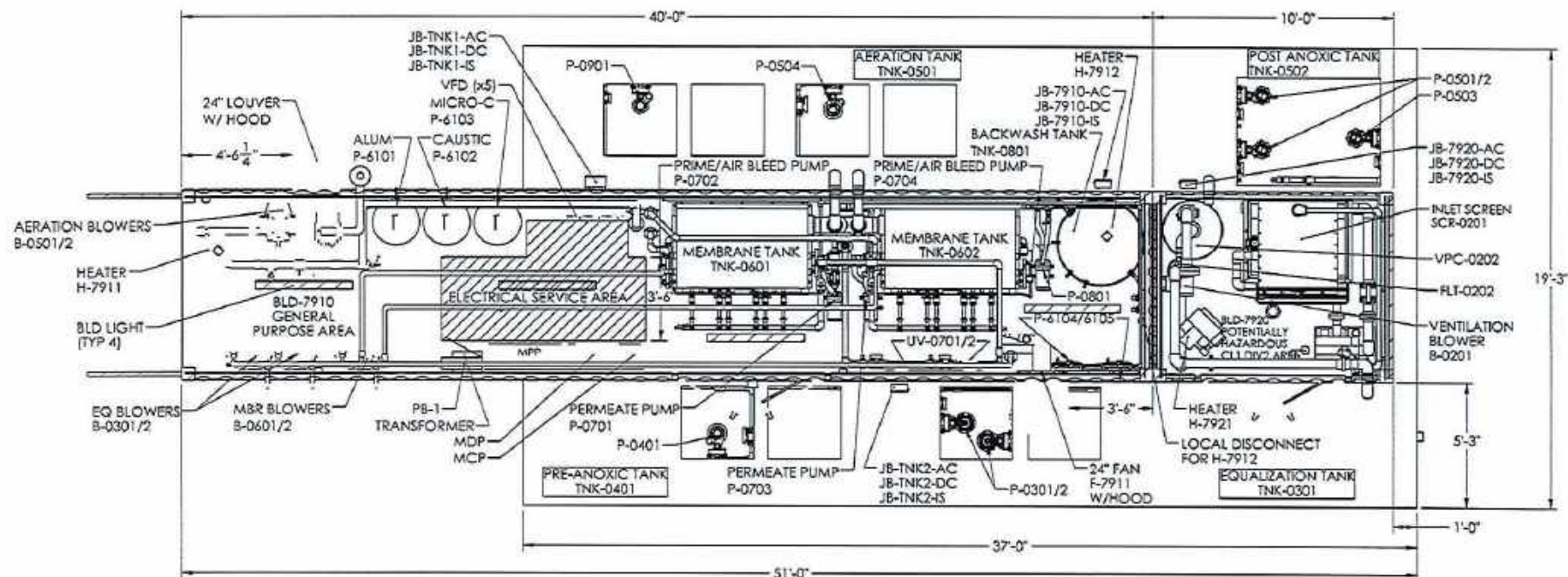
- Fan and louver hoods need to be installed on site. System cannot ship with hoods attached.
- Some flow meters will be shipped with unions in the process piping loosened to ensure meters are not damaged during shipment.
- Building need to be shimmed on site with 1/2" x 3" w steel flat bar to allow doors to open freely.
- Please have shimming material ready during building installation.
- newterra recommends pad be at least 12" larger than enclosure in all directions.
- Local codes may require alternate dimensions.

newterra Standard System Labels:

- Flow direction labels
- Air line labels
- Water line labels
- Air/Water line labels
- Hot surface labels (lines >= 140°F)
- Hearing protection labels
- Warning label: This machine is automatically controlled
- Arc flash warning label

ISO CONTAINER WALL CONSTRUCTION

- 73L STUDS ON 4" CENTERS
- HOLLOW WALL CONSTRUCTION
- SPRAY FOAM INSULATION
- OUTER CONTAINER SHEET (STEEL CORRUGATED)
- ONE LAYER 1/2" WOOD PAINTED WHITE



System Weight:

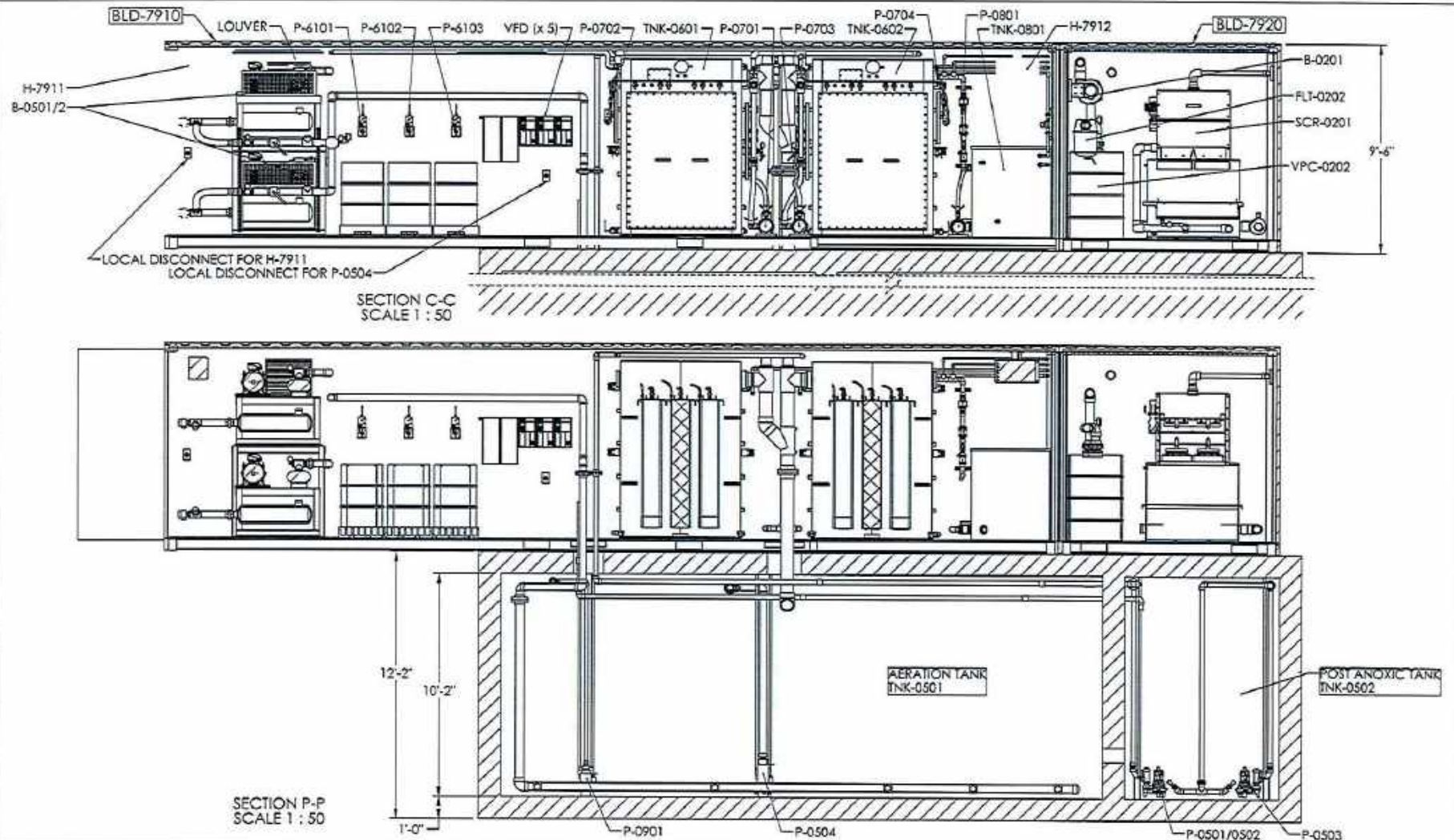
newterra can provide upon request an estimated weight of the system. Although every effort is made to ensure this estimate is representative of the final system weight, newterra cannot guarantee this weight and it is the responsibility of the client to ensure adequately sized equipment is utilized for offloading and final placement of the system. A final system weight will be available at time of loading of newterra and will be provided at time of shipment.



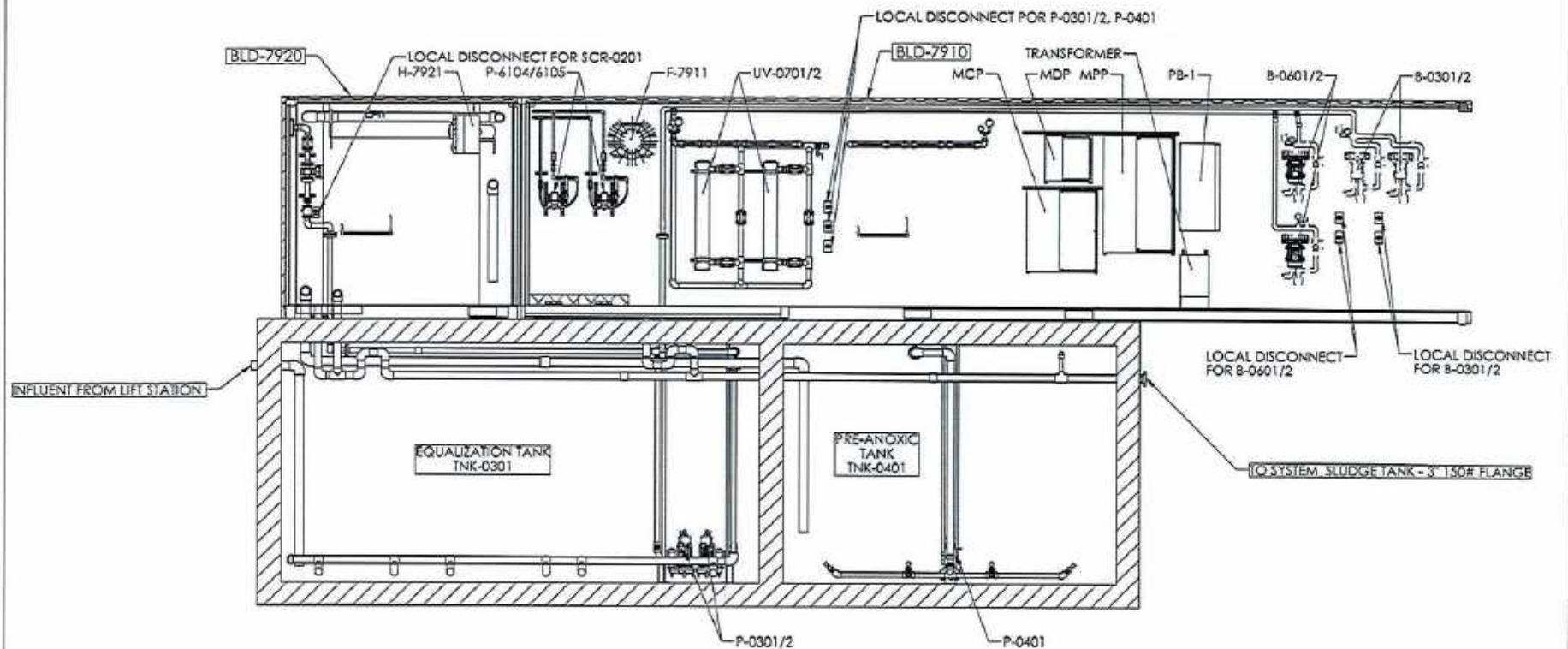
As Built				System Layout		Revision History	
Drawn by:	Checked by:	Approved by:	Project No.:	Project Name:	Revision No.:	Revision Date:	Revision Description:
C-01	QM	Feb 07/24		Bishop Lodge, NM	2207893		
THIS INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA.				Customer:	Revision:	Revision Date:	Revision Description:
				Lee & Company, LLC	QM	May 30, 2023	
				SHEET 2 OF 8			



As Built					System Layout		Drawing Number	
LEVEL	OWNER	DATE	APPROVED BY	APPROVED DATE	DRAWING TITLE	PROJECT NUMBER		
C-01	AMEREN	Feb 07/24			Bishop Lodge, NM	2207893		
THIS INFORMATION IS THE PROPERTY OF NEWTERIA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERIA.					Customer		DATE	
					Lee & Company, LLC		Mar 30, 2023	
							SHEET 3 OF 8	



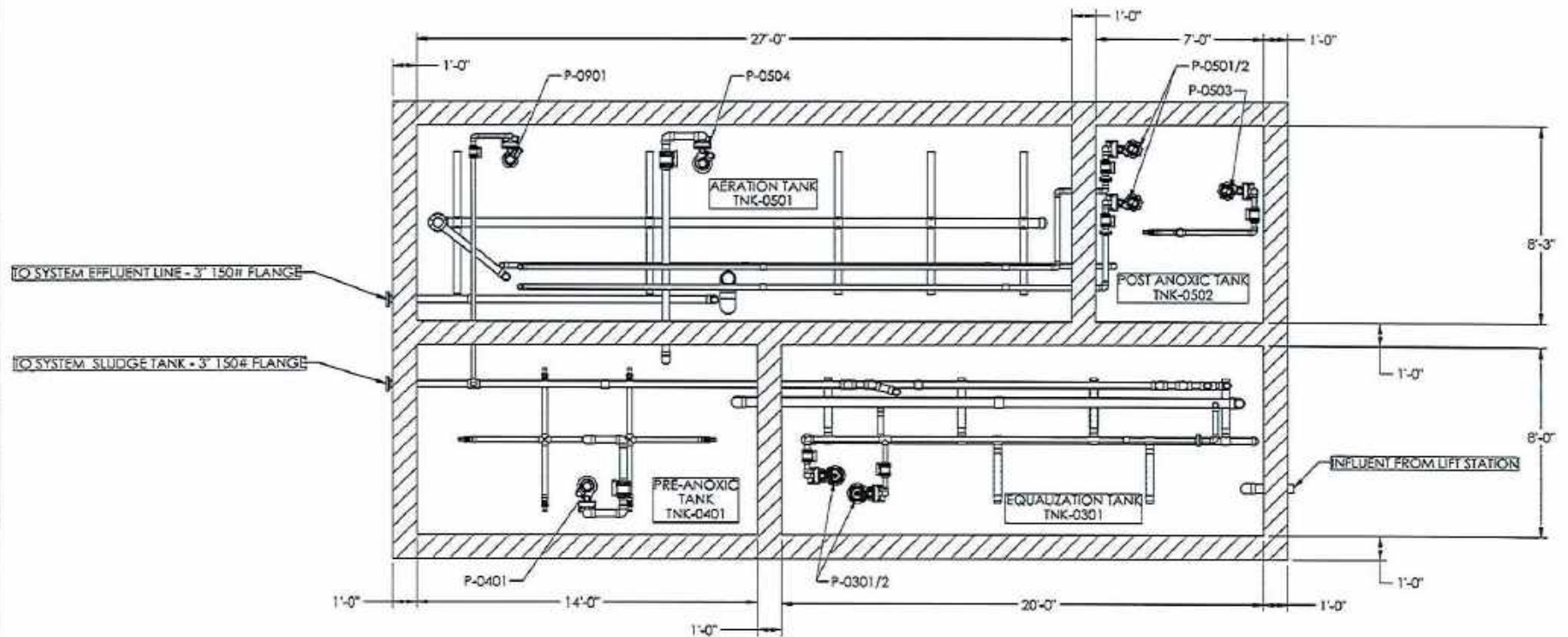
As Built				System Layout		PROJECT NUMBER
REVISION	REVISION	REVISION	APPROVED BY	APPROVED DATE	PROJECT NAME	2207893
C-01	OM	Feb 07/24			Bishop Lodge, NM	
THIS INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA.					DESIGNED BY	OM
					DATE	May 30, 2023
					DESIGNED BY	Lee & Company, LLC
					SHEET 4 OF 8	



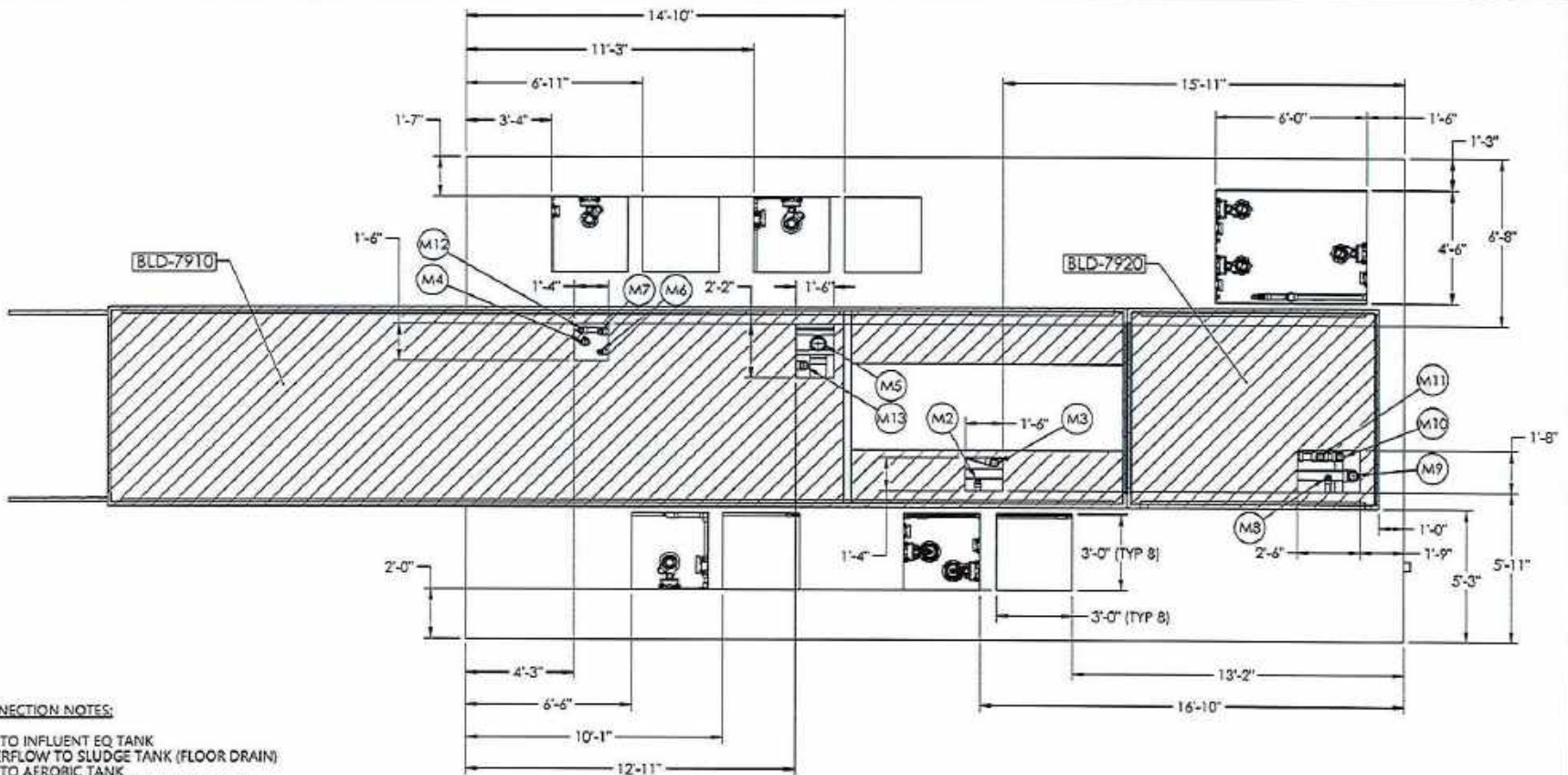
SECTION D-D
(ROTATED 180°)
SCALE 1 : 50



As Built				System Layout	
DESIGNED BY C-01	DESIGNED BY QM	DESIGNED BY Feb 07/24	APPROVED BY	PROJECT NAME Bishop Lodge, NM	PROJECT NUMBER 2207893
THIS INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA.				CUSTOMER Lee & Company, LLC	DATE Mar 30, 2023
				SHEET 3 OF 8	



DATE				AS BUILT		REVISION NO.	SYSTEM LAYOUT	PROJECT NUMBER
DATE	DESIGN	REVISION	DATE	APPROVED BY	DATE	PROJECT NO.	Bishop Lodge, NM	2207893
0-01	OM	Feb 07/24						
THIS INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA.						REVISION	OM	
						DATE	Mar 30, 2023	
						PROJECT	Lee & Company, LLC	SHEET 6 OF 8



PIPING CONNECTION NOTES:

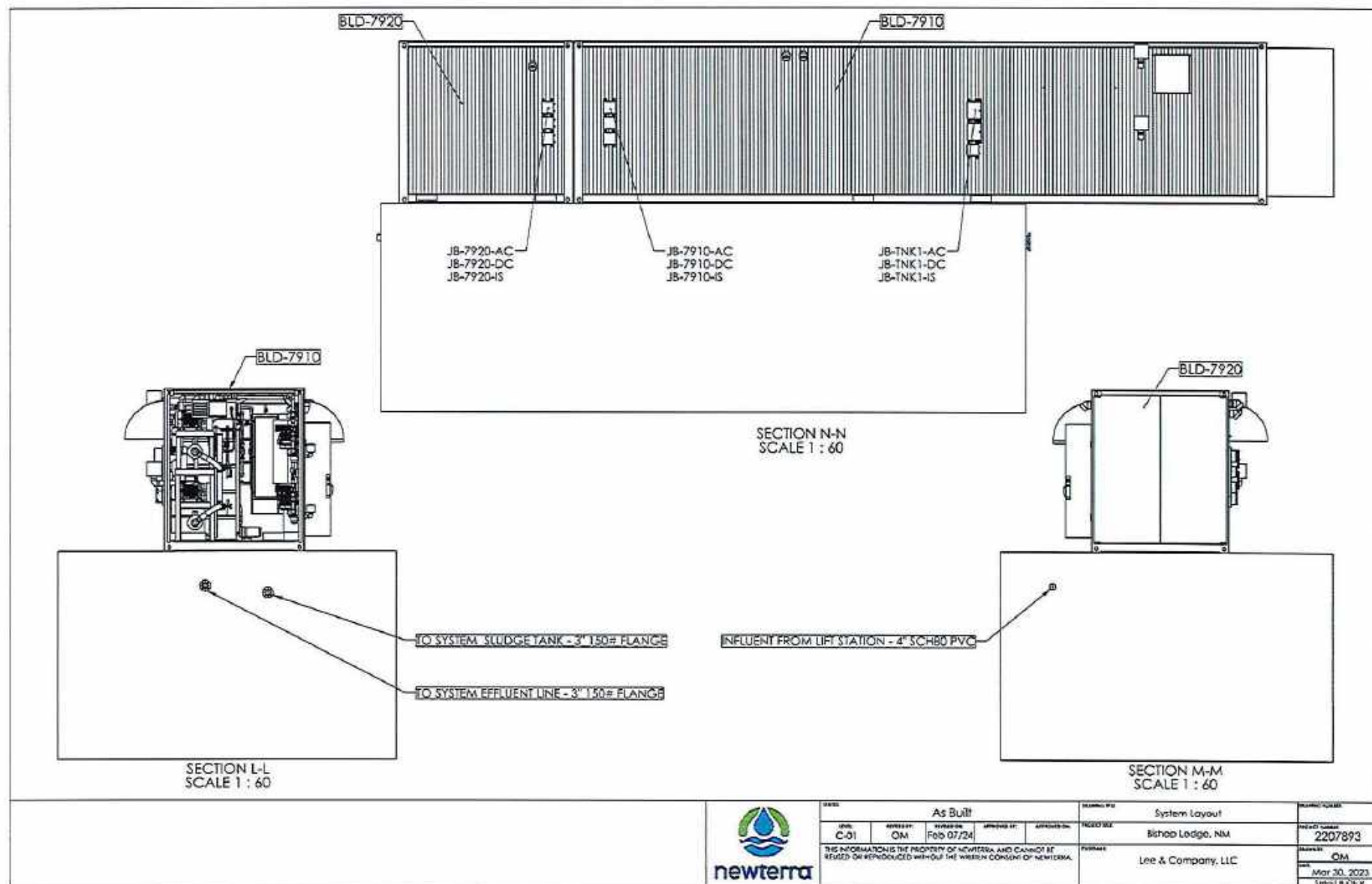
M1 = N/A
 M2 = 2" AIR TO INFLUENT EQ TANK
 M3 = 3" OVERFLOW TO SLUDGE TANK (FLOOR DRAIN)
 M4 = 3" AIR TO AEROBIC TANK
 M5 = 6" MBR TANK OVERFLOW TO AEROBIC TANK
 M6 = 2" FROM POSTANOXIC PUMP #1 TO MBR TANK #1
 M7 = 2" FROM POSTANOXIC PUMP #2 TO MBR TANK #2
 M8 = 2" FROM INFLUENT EQ PUMP TO BARSCREEN
 M9 = 4" FROM SCREEN TO PRE-ANOXIC
 M10 = 3" OVERFLOW TO SLUDGE TANK (FLOOR DRAIN)
 M11 = 3" OVERFLOW TO SLUDGE TANK (SCREEN OVERFLOW)
 M12 = 2" CHEMICAL SLEEVE PIPE TO POST ANOXIC
 M13 = 3" SYSTEM EFFLUENT

NOTE: ALL PIPING SCH80 PVC UNLESS NOTED OTHERWISE

SECTION F-F
SCALE 1 : 50



DATA				REVISION	DATE
As Built				System Layout	
DESIGN	REVIEWED BY	REVIEWED ON	APPROVED BY	PROJECT NAME	PROJECT NUMBER
C-01	QM	Feb 07/24		Bishop Lodge, NM	2207893
THIS INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REPRODUCED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA.				DESIGNED BY	DATE
				Lee & Company, LLC	QM
					Mar 30, 2023
					SHEET 7 OF 8



DATE: As Built					DESIGNED BY: System Layout	PROJECT NUMBER: 2207893
APP'D: C-01	APPROVED BY: OM	DATE: Feb 07/24	APPROVED BY:	APPROVED BY:	PROJECT SITE: Bishop Lodge, NM	PROJECT: OM
THIS INFORMATION IS THE PROPERTY OF NEWTERRA AND CANNOT BE REUSED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF NEWTERRA.					PREPARED BY: Lee & Company, LLC	DATE: Mar 30, 2023
					SHEET 1 OF 1	

BISHOPS LODGE WASTEWATER TREATMENT PLANT IMPROVEMENTS



Bishop's Lodge, Auberge Resorts Collection,
1297 Bishops Lodge Rd, Santa Fe, NM 87506

PRIMARY CONTACT
GARY LEE PE, BCEE
816-805-3546

- ☐ PRELIMINARY PLANS
☒ PERMIT SET
☐ PLANS CONFORMING TO
CONSTRUCTION RECORDS



PERMIT SET
ISSUED 3/2/2023

GAS: NEW MEXICO GAS Co.
(888) 664-2726
ELECTRIC: PNM RESOURCES
(505) 438-6958
WATER / SEWER
(505) 992-9870

HOSPITAL: CHRISTUS ST. VINCENT REGIONAL HOSPITAL
(505) 913-3361
POLICE: SANTA FE POLICE DEPARTMENT
NON-EMERGENCY
(505) 428-3710
CITY HALL:
(505) 955-6509
FIRE DEPT:
(505) 955-3110



ENGINEER'S SEAL

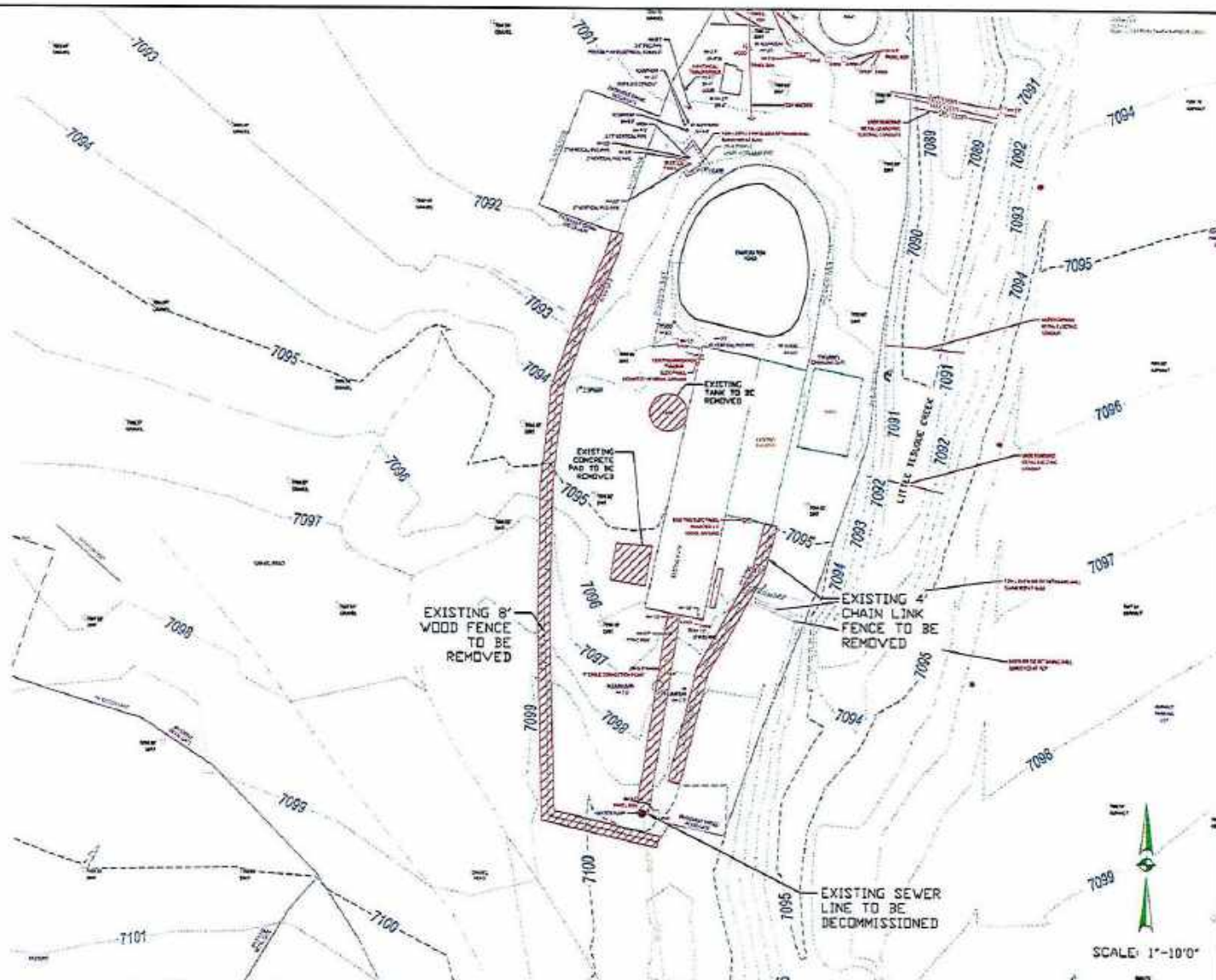


3/2/2023

[illegible]



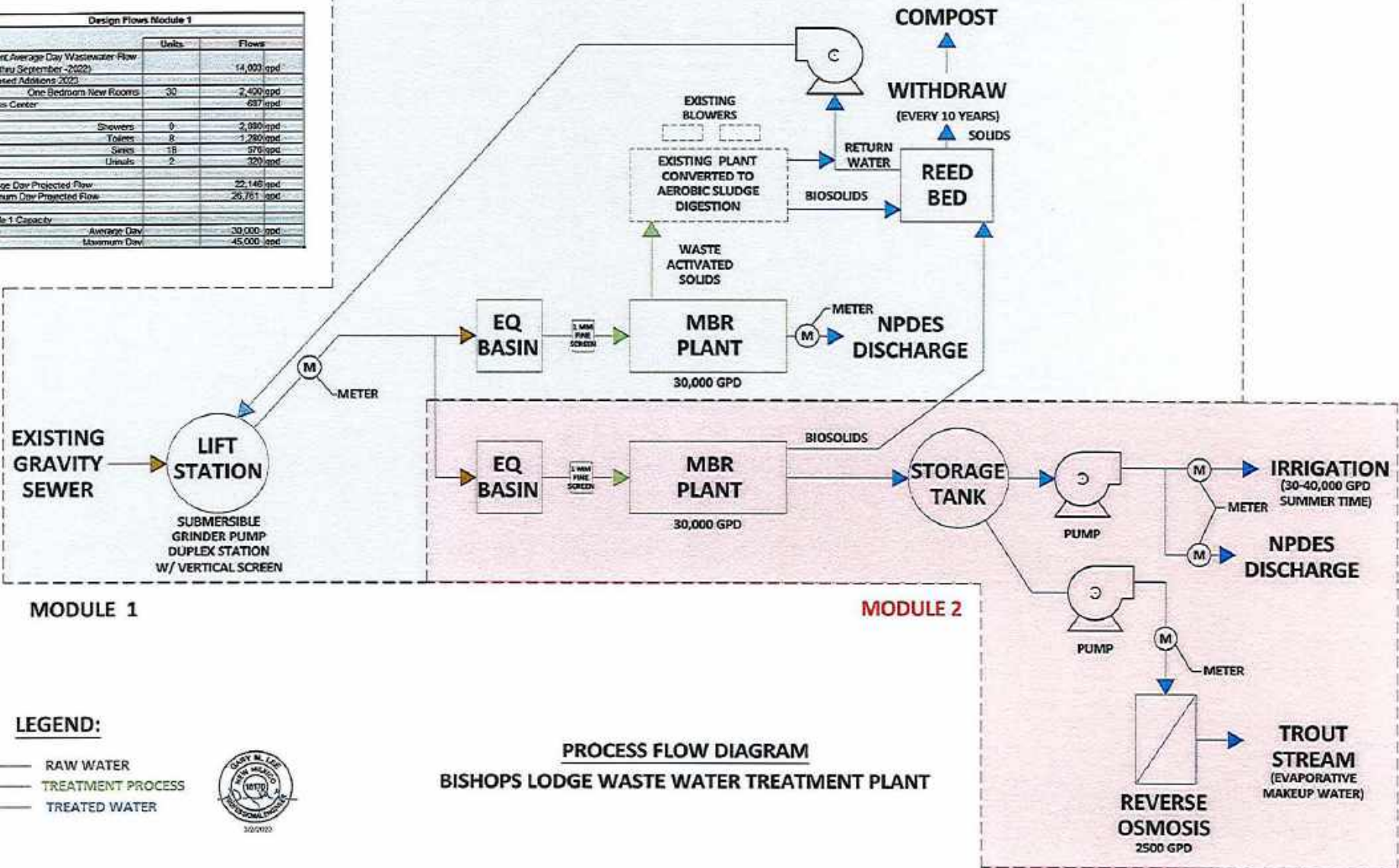
REVISIONS Date _____ By _____ Description _____ Date _____ By _____ Description _____ Date _____ By _____ Description _____			DATE <u>11/20/2012</u> DRAW <u>003</u> LEE & COMPANY, LLC 1812 E. 6th St, HARRISONVILLE, MISSOURI PHONE: (816) 805-3248 E-MAIL: lee@lee-engineers.com			SHEET <u>BISHOPS LODGE</u> BISHOPS LODGE SANTA FE, NEW MEXICO REWORKING			PROJECT NO. <u>003-7027-1</u>		SHEET NO. <u>C-12</u>	

[illegible]

SCALE: 1"=10'0"

DESIGN Date: 1/28/2003 Drawn: J.M.L. Title: EXISTING SITE DEMOLITION PLAN Scale: AS SHOWN Author: J.M.L. Checker: J.M.L. Approver: J.M.L.		PROJECT NO. 000-0000-1		SHEET NO. C-02	

Design Flows Module 1		
	Units	Flows
Current Average Day Wastewater Flow (May thru September -2022)		14,000 gpd
Proposed Additions 2023		
One Bedroom New Rooms	30	2,400 gpd
Fitness Center		637 gpd
Spa		
Shower	0	2,000 gpd
Toilet	8	1,280 gpd
Sink	18	370 gpd
Urinal	2	320 gpd
Average Day Projected Flow		22,145 gpd
Maximum Day Projected Flow		26,761 gpd
Module 1 Capacity		
Average Day		30,000 gpd
Maximum Day		45,000 gpd



REVISIONS			DATE: FEBRUARY, 2023		BY: J.C.S.		CHECKED: G.M.L.		APPROVED: G.M.L.		PROJECT NO. 005-2023-1		SHEET NO. PFD-01	
NO.	BY	DESCRIPTION	DATE	FIELD	NO.	DATE	NO.	DATE	NO.	DATE	NO.	NO.	NO.	NO.

LEE & COMPANY, LLC
1813 E. 13th ST. HAWTHORNE, MISSOURI
PHONE: (314) 305-3348 E-MAIL: GLENN@LEE-ENGINEERS.COM

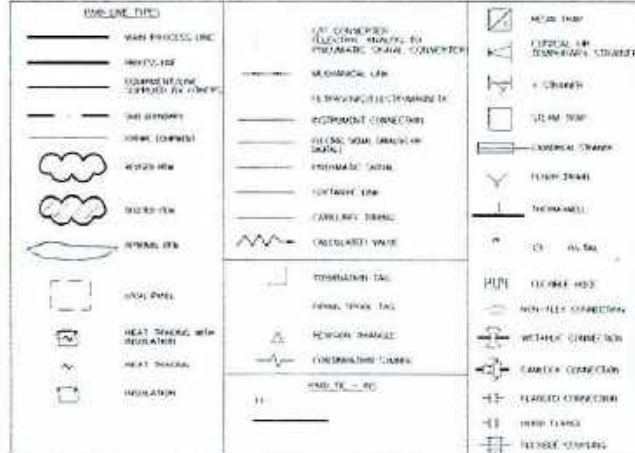
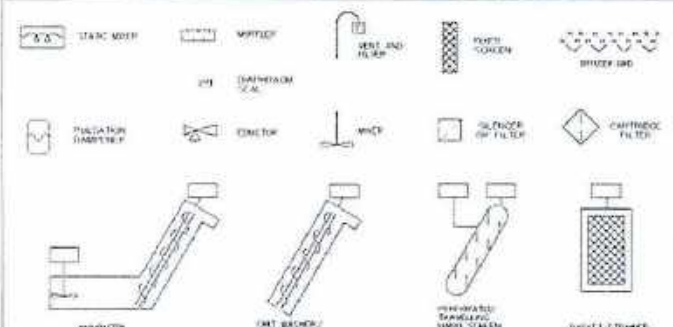
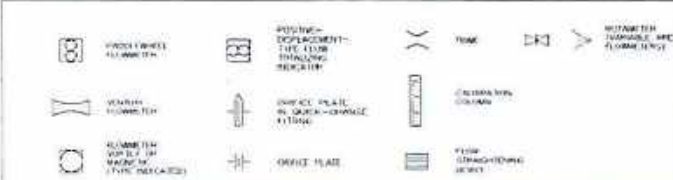
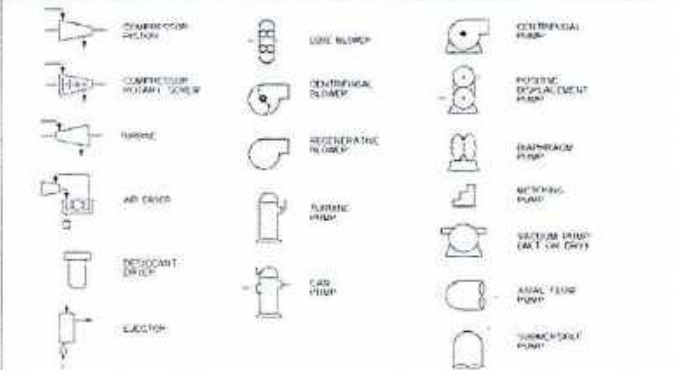
BISHOPS LODGE
NEW MEXICO

BISHOPS LODGE
PROCESS FLOW DIAGRAM

PROJECT NO. 005-2023-1

SHEET NO. PFD-01

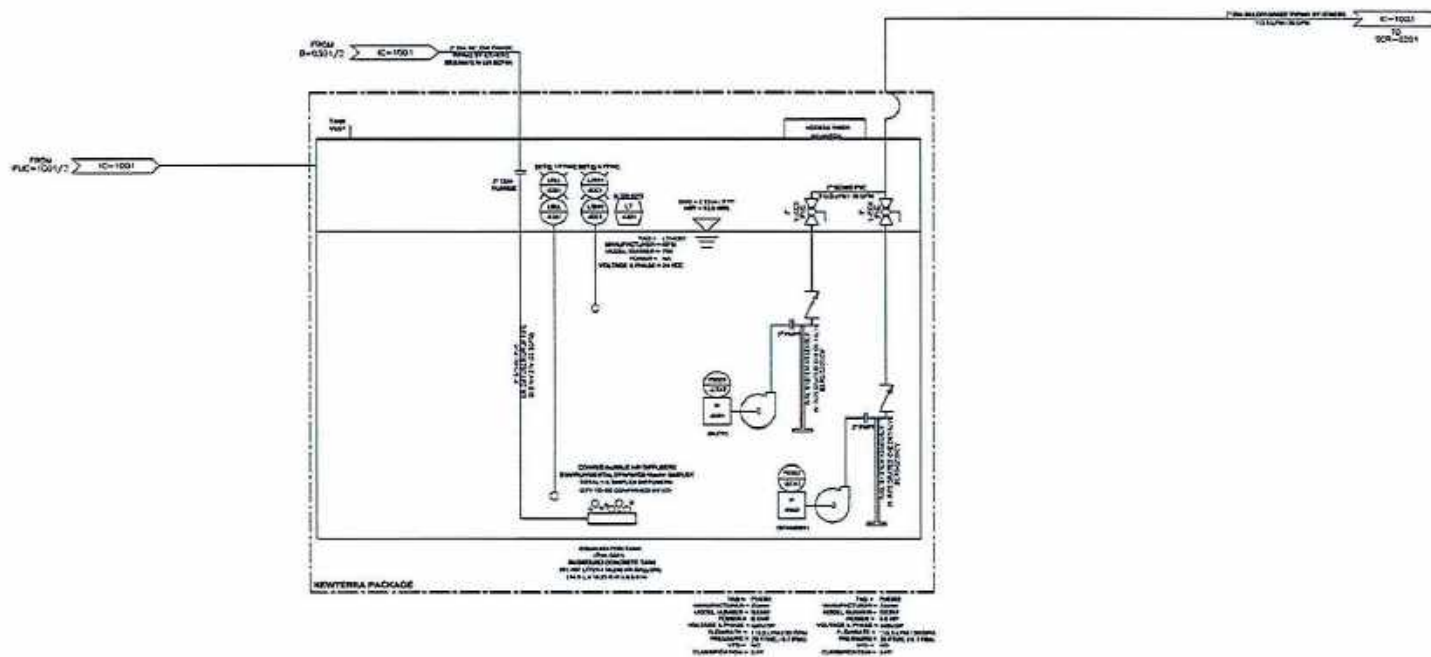
	OPEN
	PRESSURE CONTROL VALVE
	RELIEF VALVE
	CHECK VALVE
	FLOW CONTROL VALVE
	PRESSURE REDUCING VALVE
	PRESSURE COMPENSATING VALVE
	PRESSURE RELIEF VALVE
	FLOW CONTROL VALVE
	CHECK VALVE
	PRESSURE CONTROL VALVE



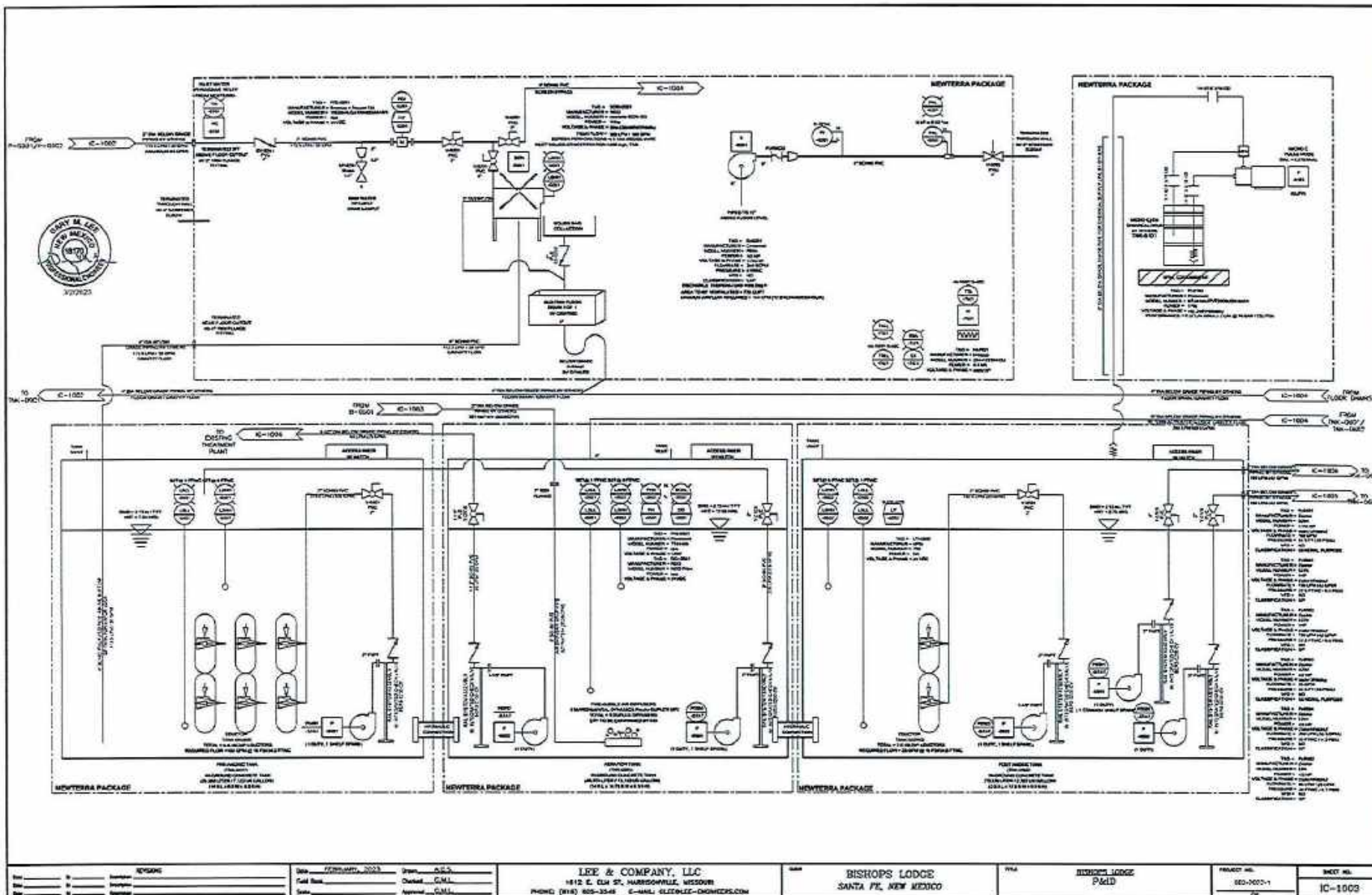
GENERAL INSTRUMENT AND FUNCTION SYMBOLS					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	ELECTRICAL CONNECTION POINT		FIELD INDICATOR		ALARM
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	INSTRUMENT				

10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1	



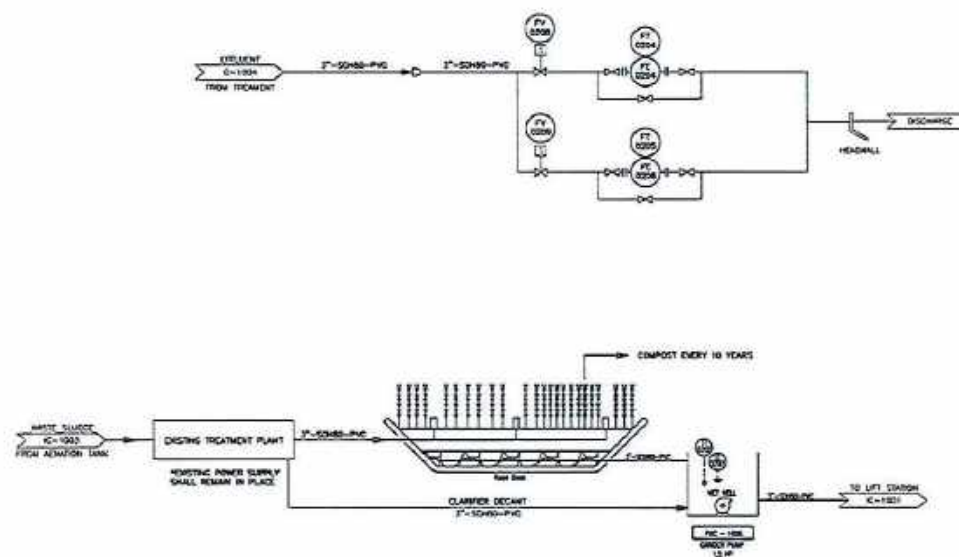


REVISIONS No. _____ By _____ Description _____ Date _____ By _____ Description _____ Date _____ By _____ Description _____	Date: <u>FEBRUARY, 2002</u> Draw: <u>A.G.S.</u> Fuel Size: _____ Checked: <u>S.V.L.</u> Scale: _____ Approved: <u>S.V.L.</u>	LEE & COMPANY, LLC 1812 E. CLAY ST., HARRISONVILLE, MISSOURI PHONE: (816) 895-1048 E-MAIL: BLS@LEE-CO.COM	SHEET: <u>BISHOPS LODGE</u> <u>SANTA FE, NEW MEXICO</u>	TITLE: <u>BISHOPS LODGE</u> <u>PAID</u>	PROJECT NO.: <u>005-2002-1</u> SHEET NO.: <u>10</u>	SHEET NO.: <u>IC-1002</u>





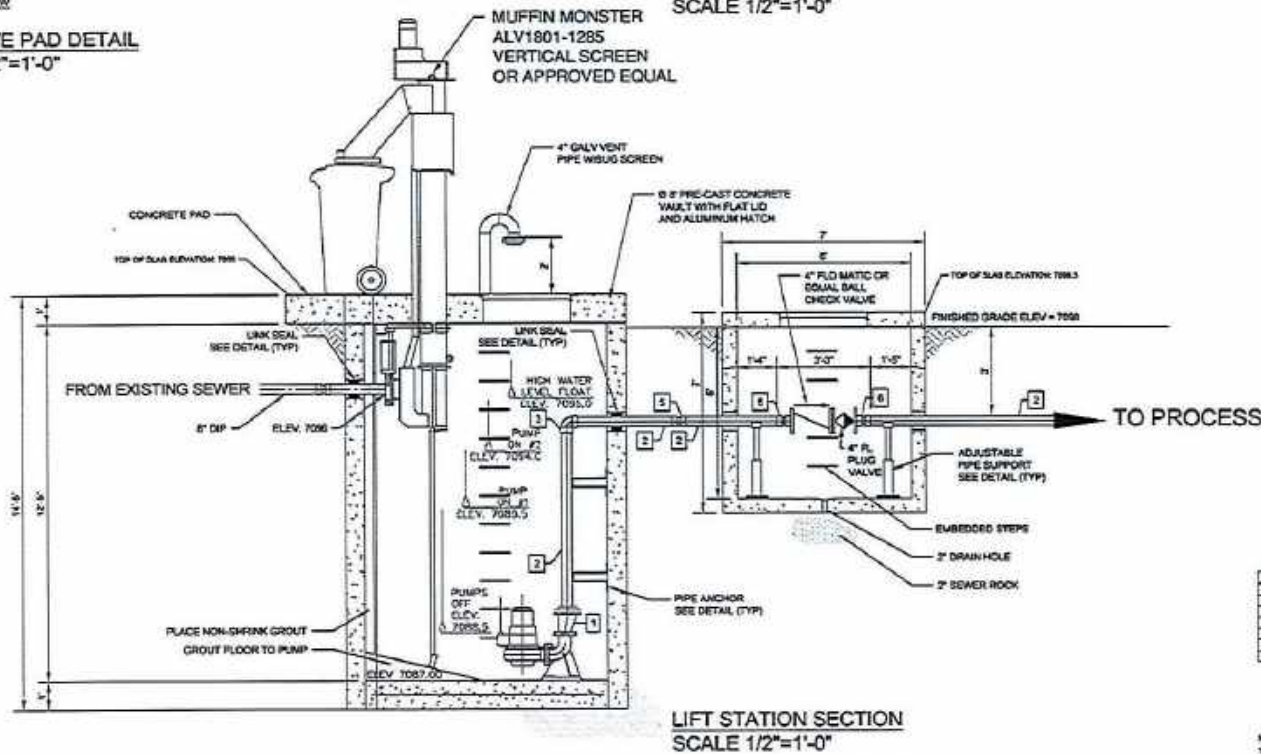
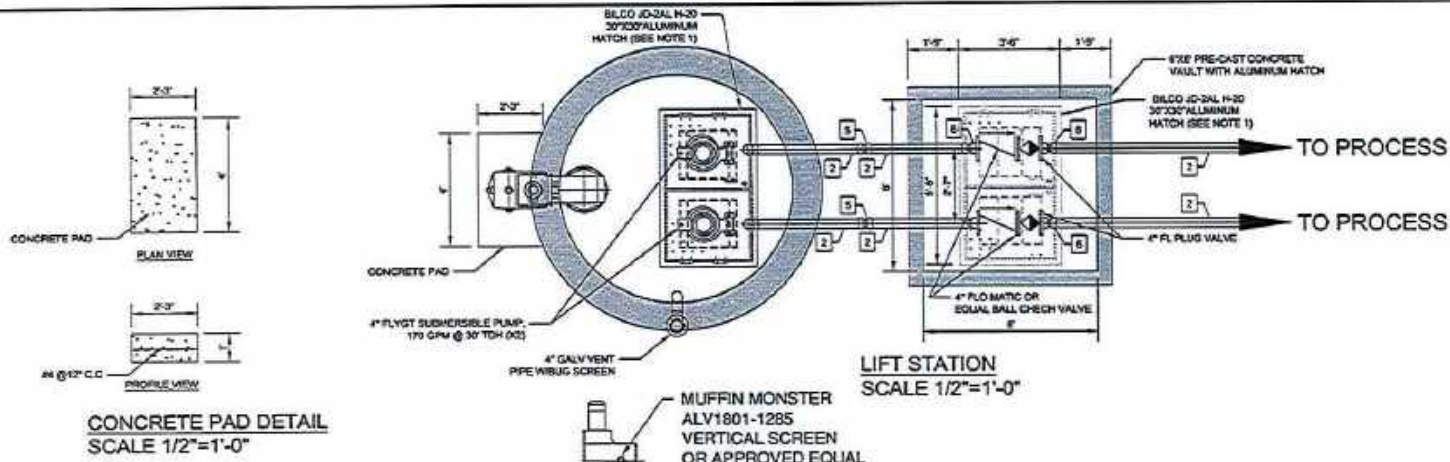
10-1005



REVISIONS Date: FEBRUARY 2003 By: J.C.S. Drawn: G.M.L. Checked: G.M.L. Scale: Approved: G.M.L.				LEE & COMPANY, LLC 1812 E. 5TH ST., HARRISONVILLE, MISSOURI PHONE: (816) 665-3546 E-MAIL: SLUDGER@LEE-ENGINEERS.COM		BISHOPS LODGE SANTA FE, NEW MEXICO		PROJECT NO. 900-1001-1		SHEET NO. 1C-1006	
						FILE BISHOPS LODGE P&ID		24			



REVISIONS Date _____ By _____ Description _____ Date _____ By _____ Description _____ Date _____ By _____ Description _____				Date <u>FEBRUARY, 2022</u> Drawn <u>A.U.S.</u> Title <u>Site Plan</u> Checked <u>S.M.J.</u> Scale _____ Approved <u>S.M.J.</u>		LEE & COMPANY, LLC 1612 E. Elm St., HARRISONVILLE, MISSOURI PHONE (314) 855-3548 E-MAIL: GLENN@LEE-ENGINEERS.COM		PROJECT NO. <u>BISHOPS LODGE</u> SHEET NO. <u>5-01</u>	

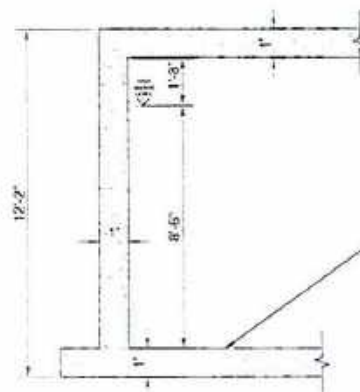
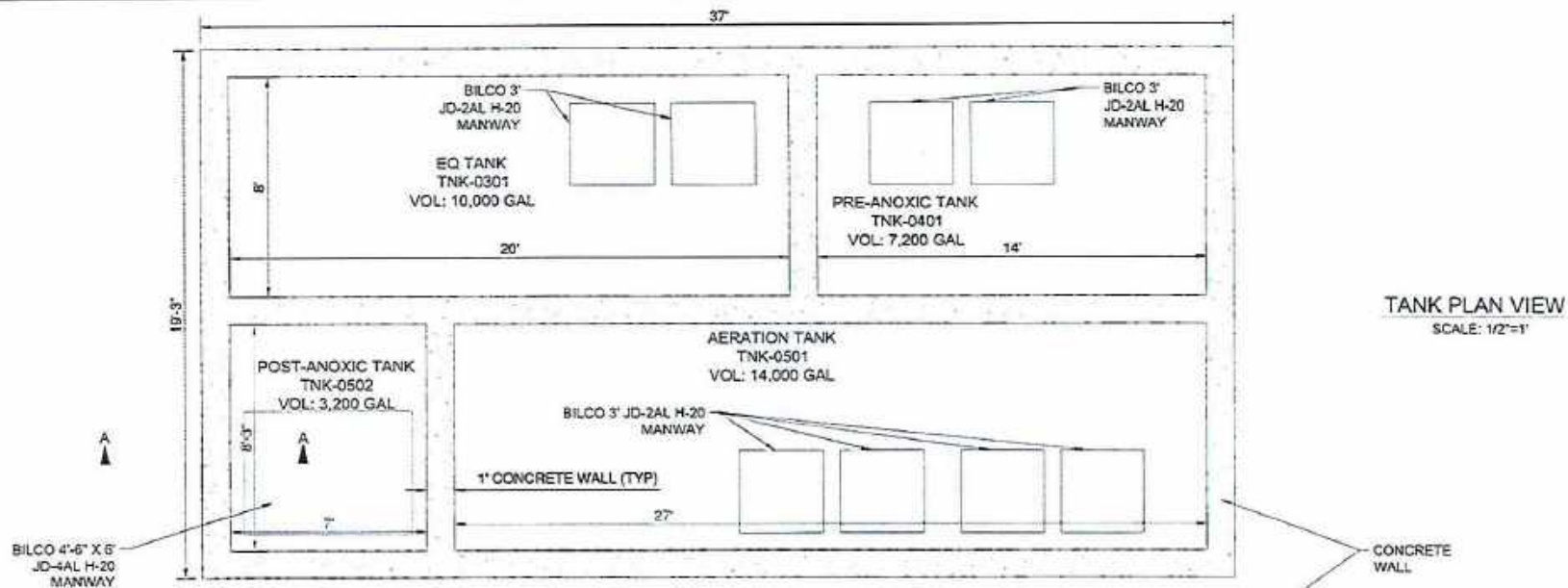


NO.	DESCRIPTION	QTY	UNIT	MATERIAL
1	4" FLO MATIC (1000000000)	2	FLG	0.10
2	4" F. PLUG VALVE	2	FLG	0.10
3	4" FLO MATIC	2	FLG	0.10
4	4" F. PLUG VALVE	2	FLG	0.10
5	4" FLO MATIC	2	FLG	0.10
6	4" F. PLUG VALVE	2	FLG	0.10

NOTES:
1- PROVIDE LOCKING DEVICE ON ALL ALUMINUM HATCHES



DESIGNED BY	DATE	APPROVED BY	PROJECT NAME	SHEET NO.
LEE & COMPANY, LLC	FEBRUARY, 2023	G.M.L.	BISHOPS LODGE LIFT STATION	8-14
1812 E. 6TH ST. HARRISONVILLE, MISSOURI				
PHONE: (816) 895-3546 E-MAIL: GLENN@LEE-ENGINEERS.COM				



REVISIONS			DATE: 12/2/2013		BY: GML
NO.	BY	DESCRIPTION	DATE	BY	DESCRIPTION
1	BY	12/2/2013	12/2/2013	12/2/2013	12/2/2013
2	BY	12/2/2013	12/2/2013	12/2/2013	12/2/2013
3	BY	12/2/2013	12/2/2013	12/2/2013	12/2/2013

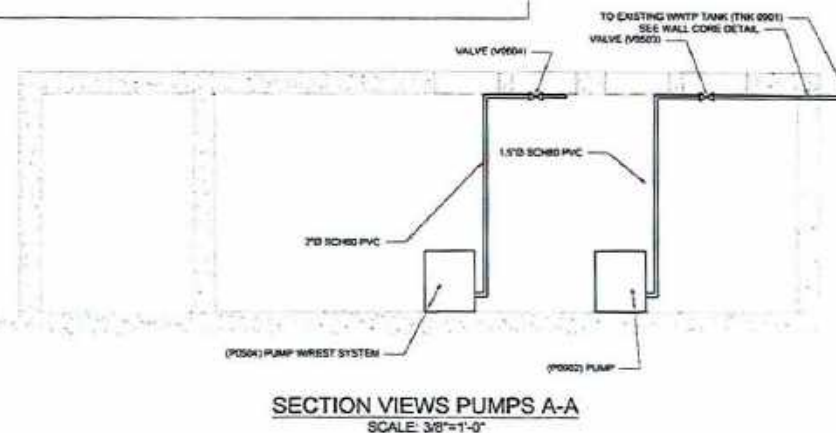
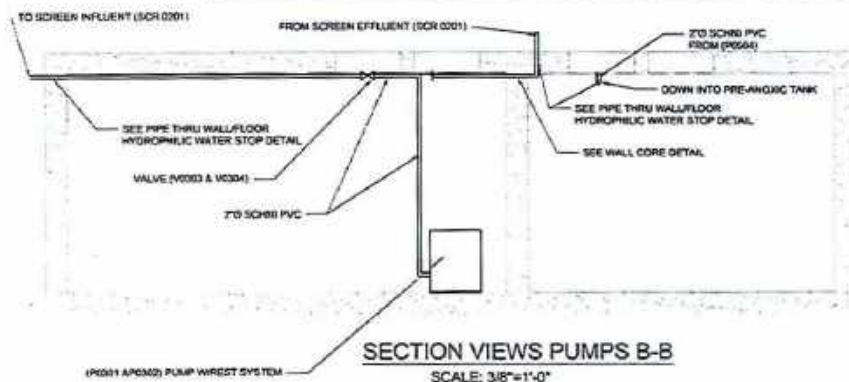
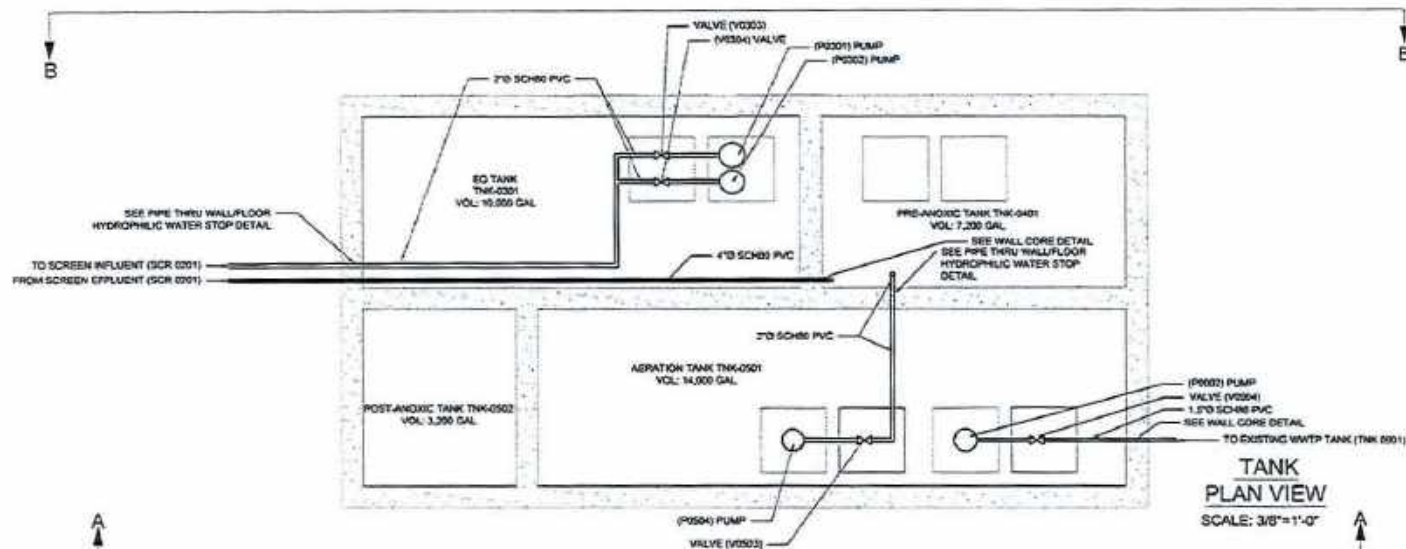
LEE & COMPANY, LLC
1612 E. CLAY ST., HARRISONVILLE, MISSOURI
PHONE: (816) 895-3346 E-MAIL: GLENN@LEE-ENGINEERS.COM

BISHOP'S LODGE
NEW MEXICO

BISHOP'S LODGE
TANK PLAN VIEW

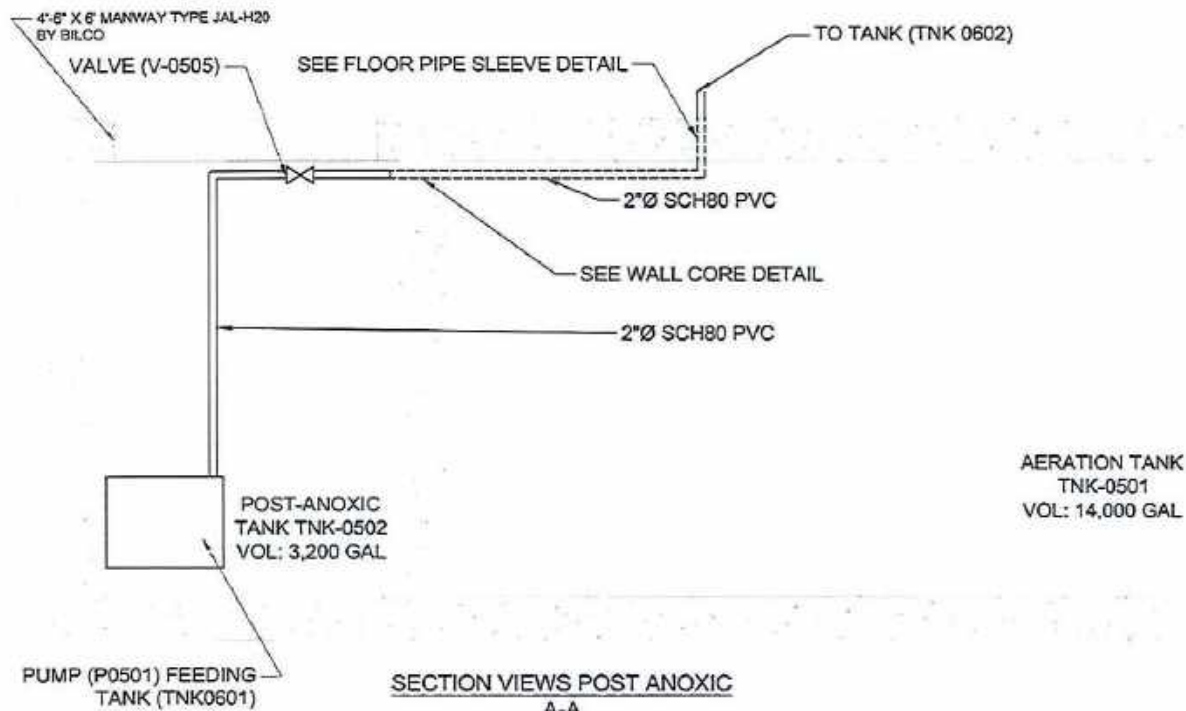
PROJECT NO.
001-12022-1

SHEET NO.
3-05



NOTE: WATER HEIGHT 7'
NOTE: ALL INTERNAL PIPING, VALVES
AND PUMPS PROVIDED BY NEWTERRA EQUIPMENT PROVIDER

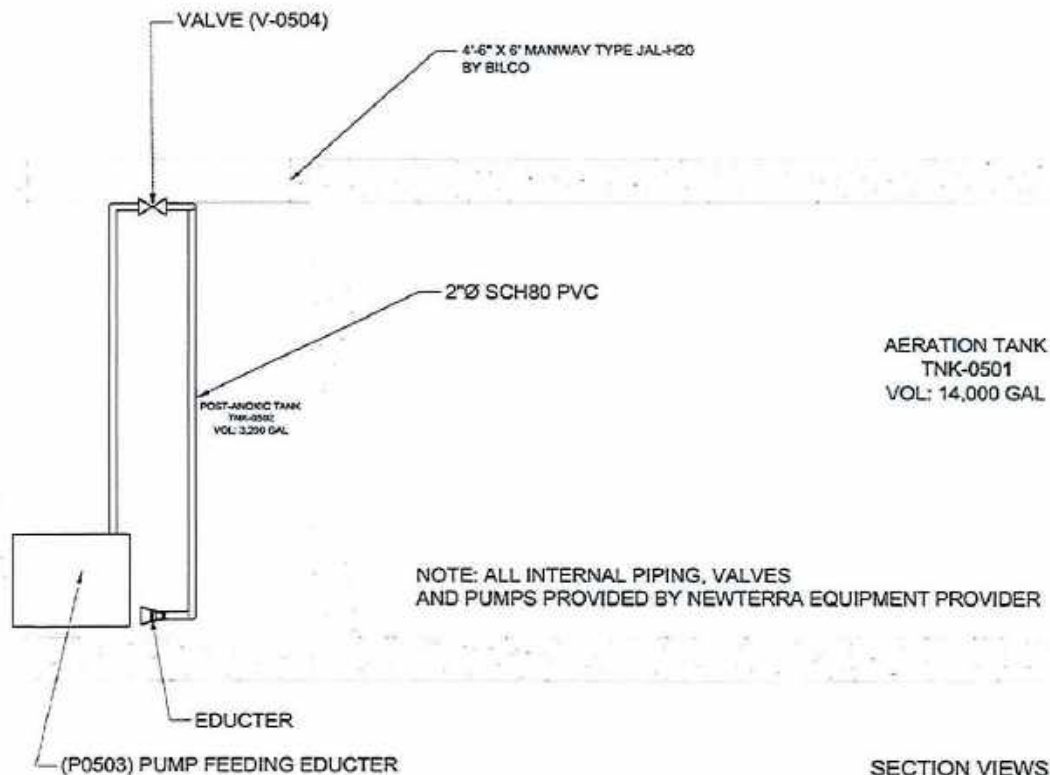
DESIGNED BY: [] CHECKED BY: [] DATE: []	DATE: 11/15/2023 FIRM: [] SCALE: []	LEE & COMPANY, LLC 1412 E. LAM ST., HARRISONVILLE, MISSOURI PHONE: (816) 895-1546 E-MAIL: GLENN@LEE-CHANDLER.COM	BISHOP'S LODGE NEW KIDDOO	BISHOP'S LODGE PUMP AND SCREEN HOUSE LAYOUT	PROJECT NO.: [] SHEET NO.: 0-04



NOTE: ALL INTERNAL PIPING, VALVES
AND PUMPS PROVIDED BY NEWTERRA EQUIPMENT PROVIDER



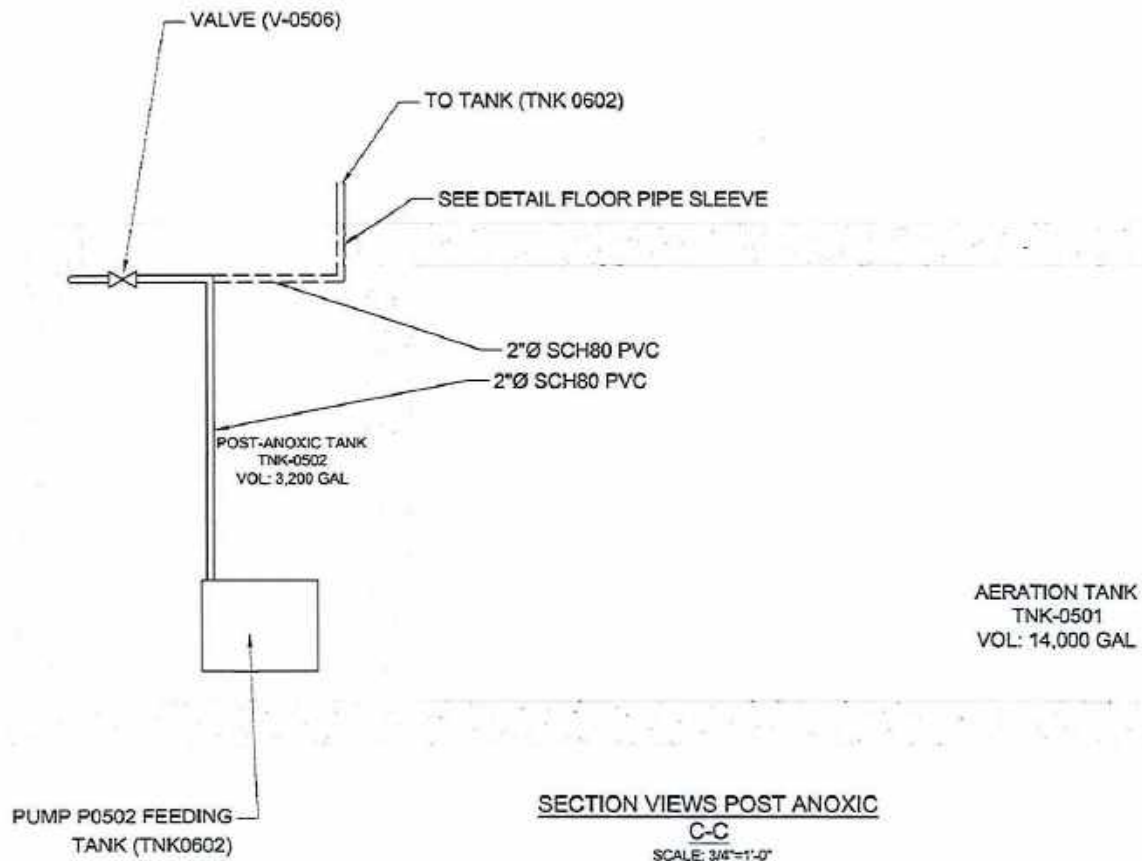
REVISIONS: No. _____ Description _____ Date _____ By _____ Date _____ By _____	DATE: 11/09/2023 FILE NAME: _____ DRAWN: _____ CHECKED: _____ SCALE: _____	LEE & COMPANY, LLC 1812 E 24th ST. HARRISONVILLE, MISSOURI PHONE: (816) 855-8346 E-MAIL: GLENN@LEE-ENGINEERS.COM	PROJECT: BISHOPS LODGE NEW MEXICO	SHEET: 0001 POST ANOXIC SECTION VIEW A-A	PROJECT NO.: 000-1002-1 SHEET NO.: 5-08



SECTION VIEWS POST ANOXIC
B-B
SCALE: 3/4"=1'-0"



Date: _____ Drawn by: _____ Check by: _____ Title: _____	Revision: _____ Date: _____ Drawn by: _____ Check by: _____ Title: _____	Rev: _____ Date: _____ Drawn by: _____ Check by: _____ Title: _____	L&P & COMPANY, LLC 1612 E. 6th St., HARRISONVILLE, MISSOURI PHONE: (816) 855-3544 E-MAIL: GLOUCESTER@L&P.COM	PROJECT: BISHOPS LODGE NEW MEXICO	SHEET: BISHOPS LODGE POST ANOXIC SECTION VIEW B-B	PROJECT NO.: _____ SHEET NO.: 5-09

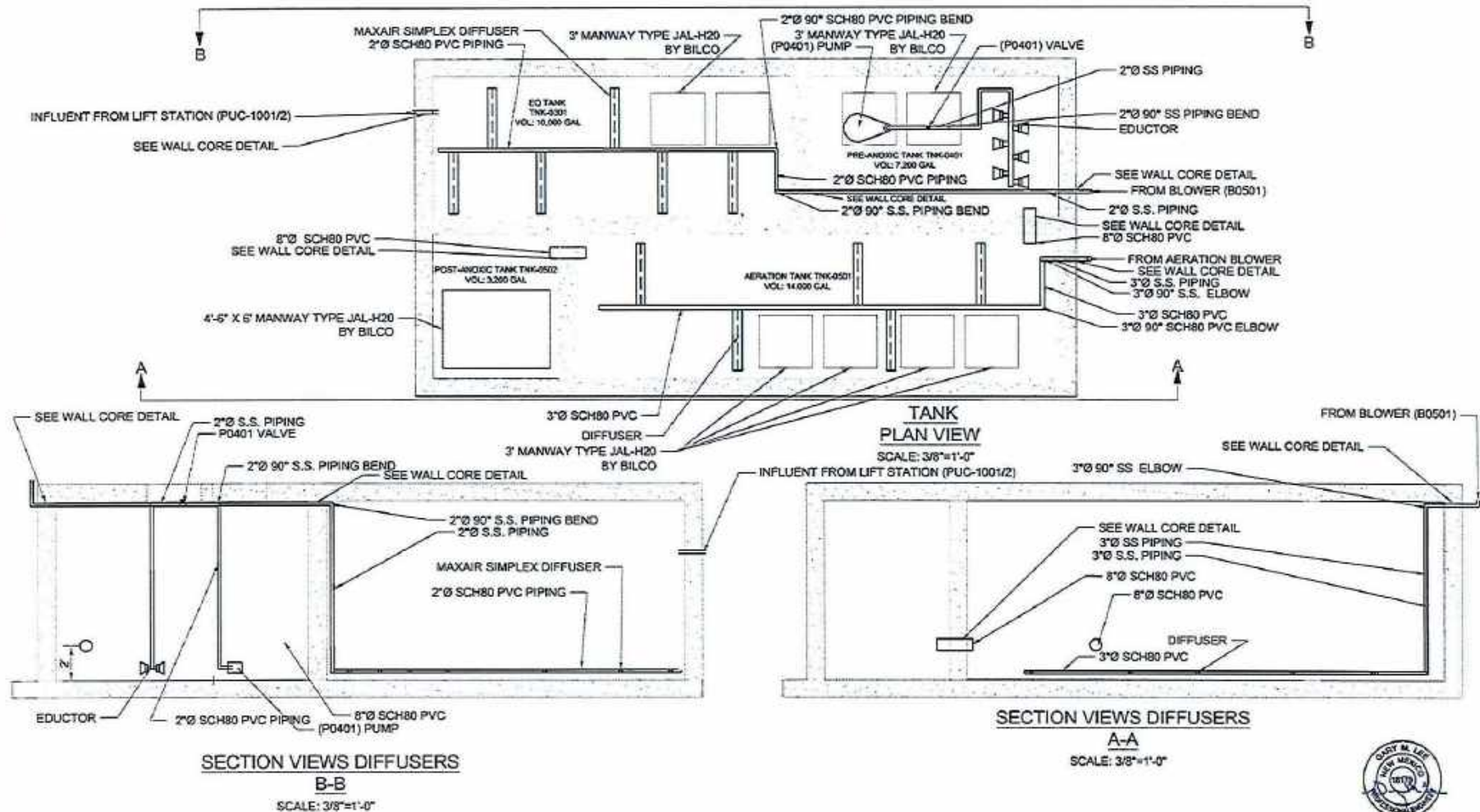


NOTE: ALL INTERNAL PIPING, VALVES
AND PUMPS PROVIDED BY NEWTERRA EQUIPMENT PROVIDER.

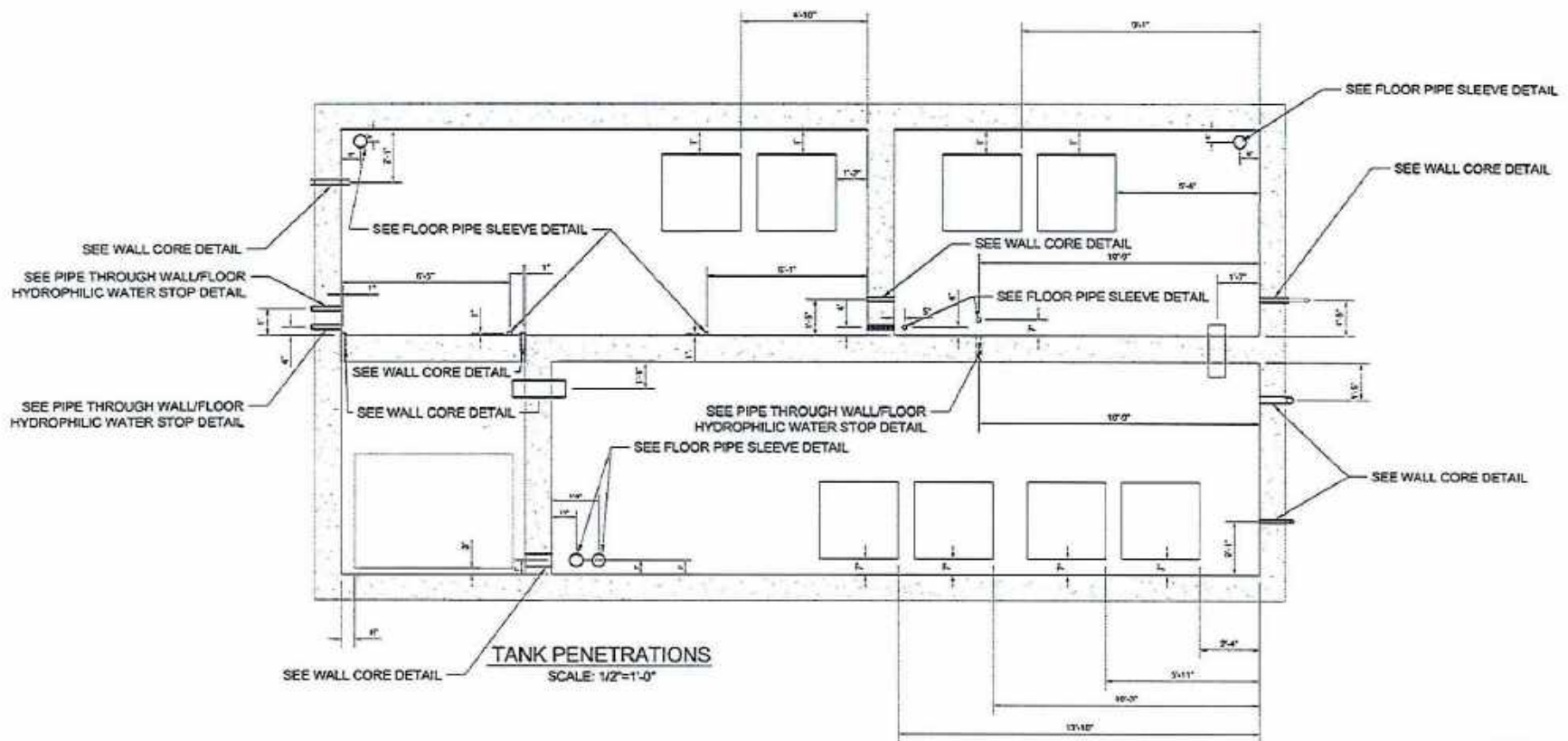


DESIGNED: _____ DRAWN: _____ CHECKED: _____ IN CHARGE: _____	DATE: 11/28/2017 CDR: _____ SCALE: _____ SHEET: _____	LEE & COMPANY, LLC 1512 E. 6th St., Albuquerque, New Mexico PHONE: (505) 825-3544 E-MAIL: GLECOMET-ENGINEERS.COM	SHEET: _____ BISHOPS LODGE NEW MEXICO	SHEET: _____ BISHOPS LODGE POST ANOXIC SECTION VIEW C-C	PROJECT NO.: _____ NO. OF SHEETS: 3 SHEET NO.: 5-10

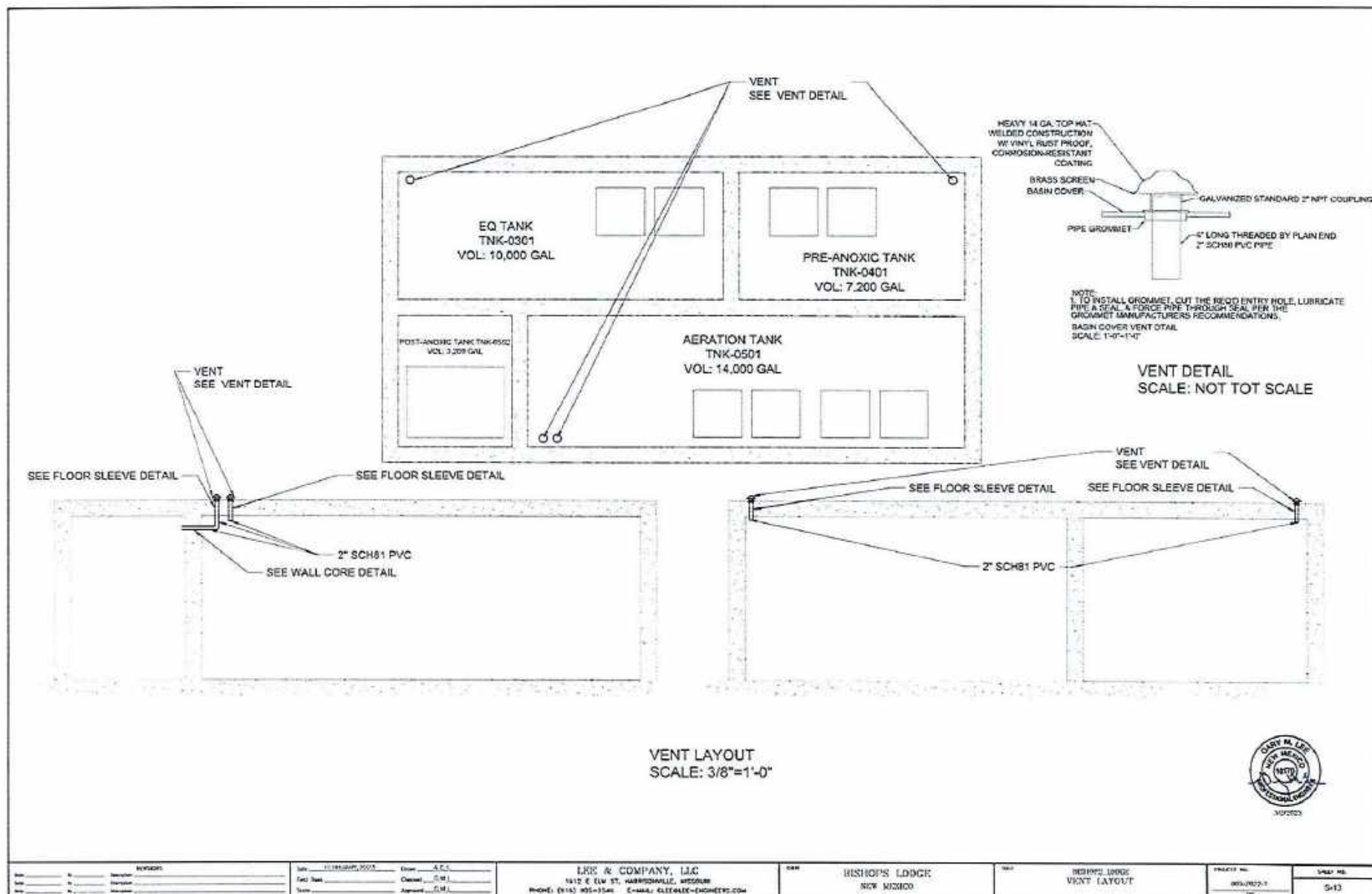
NOTE: ALL INTERNAL PIPING, VALVES
AND PUMPS PROVIDED BY NEWTERRA EQUIPMENT PROVIDER

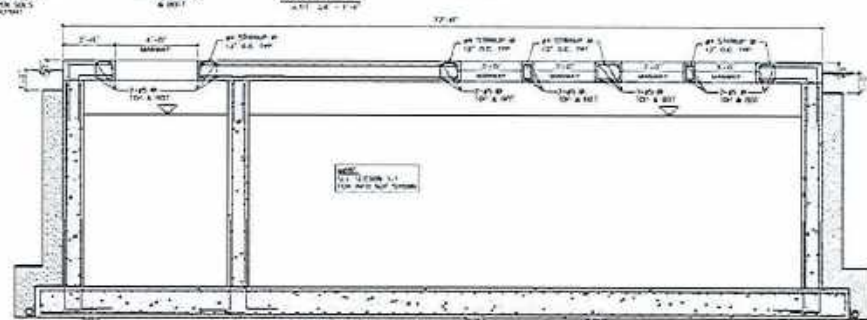
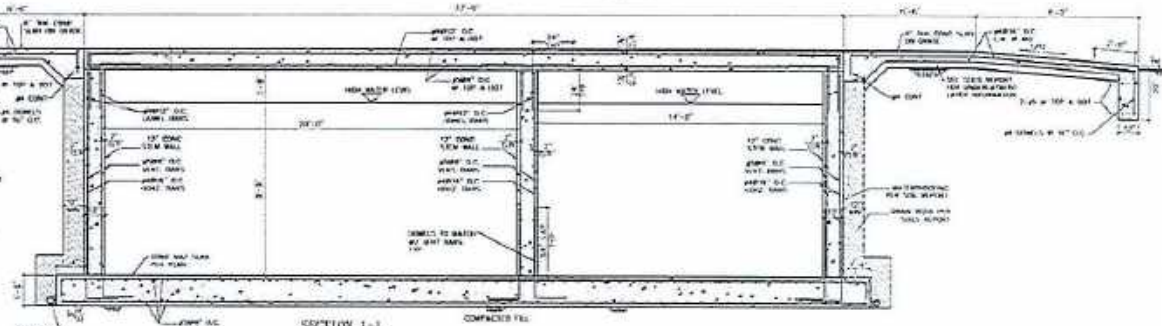
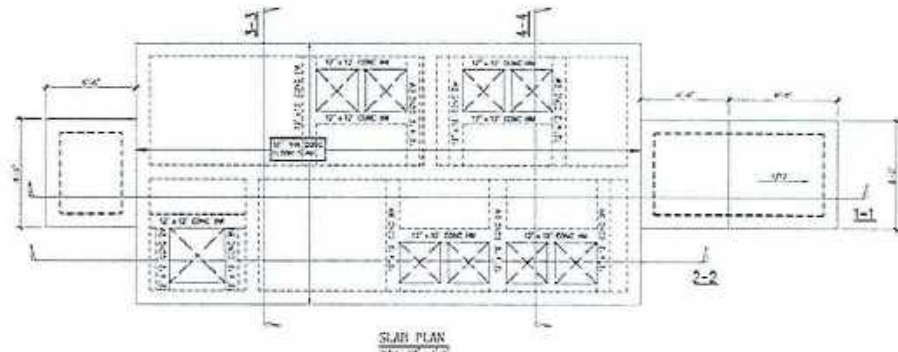


DESIGNED BY: _____ CHECKED BY: _____ DATE: _____	DRAWN BY: _____ DATE: _____ SCALE: _____	LEE & COMPANY, LLC 1612 E. 6th St., HARRISONVILLE, MISSOURI PHONE: (816) 425-1546 E-MAIL: GLENN@LEE-ENGINEERS.COM	BISHOPS LODGE NEW JERSEY	PROJECT NO.: _____ SHEET NO.: _____	SCALE: 3/8"=1'-0" SHEET NO.: S-11

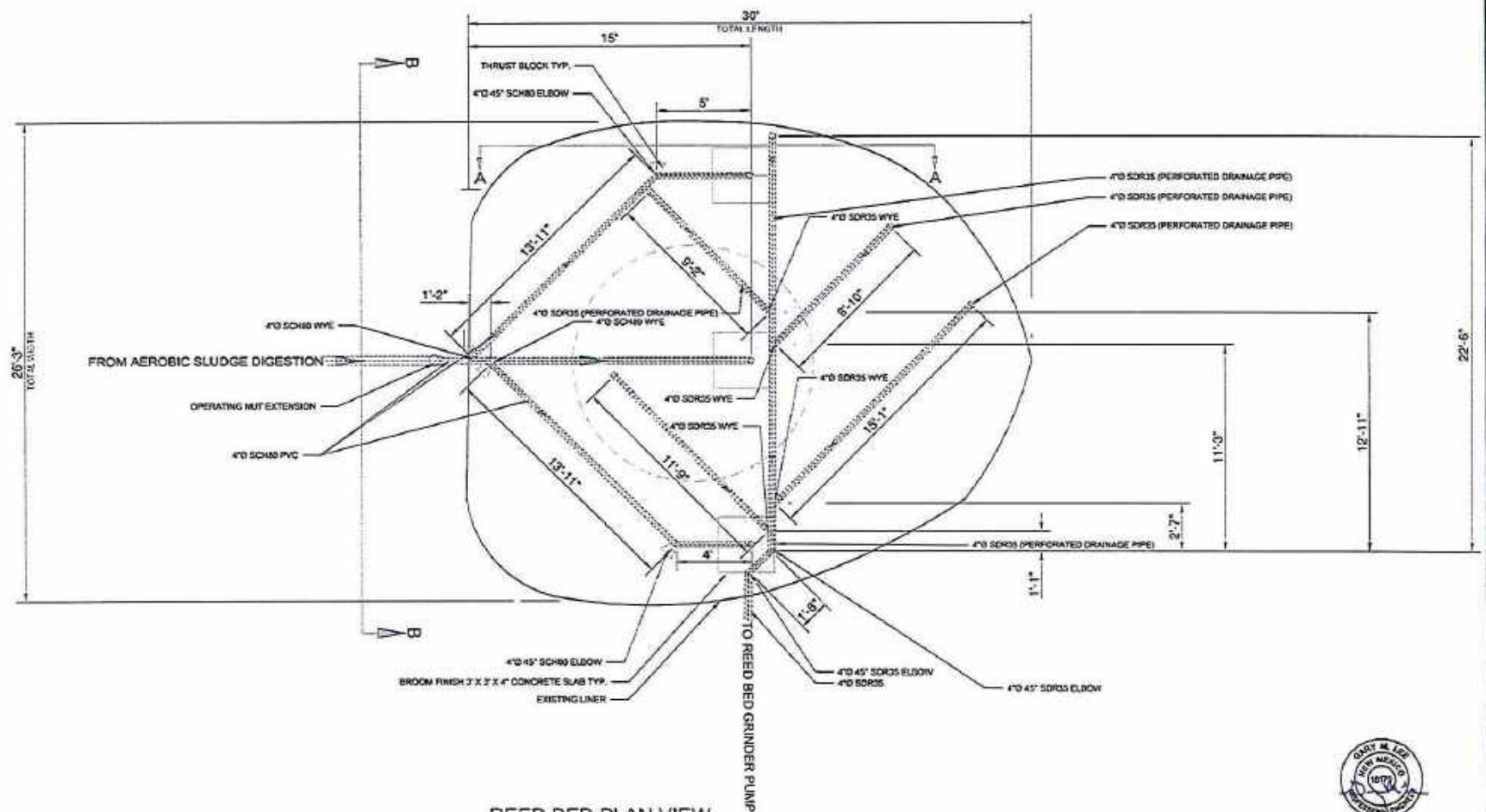


Title _____ Date _____ Drawn by _____ Checked by _____ Approved by _____	Title _____ Date _____ Drawn by _____ Checked by _____ Approved by _____	LEE & COMPANY, LLC 1612 E. 4th St., Harrisonville, Missouri PHONE: (314) 333-1546 E-MAIL: ELDERLEE-ENGINEERS.COM	PROJECT NO. _____ SHEET NO. _____	SHEET NO. _____ SHEET NO. _____	SHEET NO. _____ SHEET NO. _____





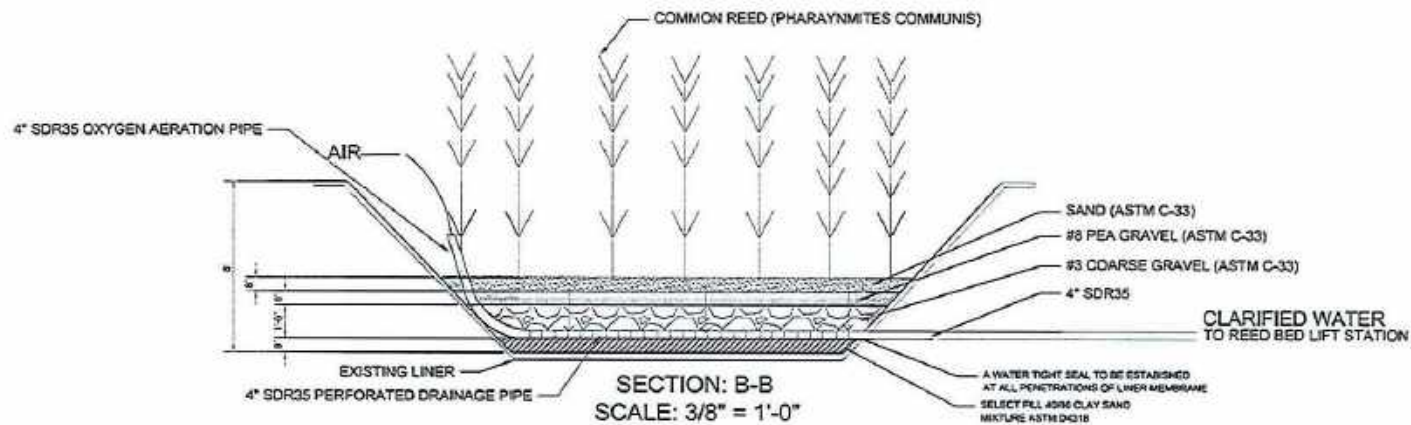
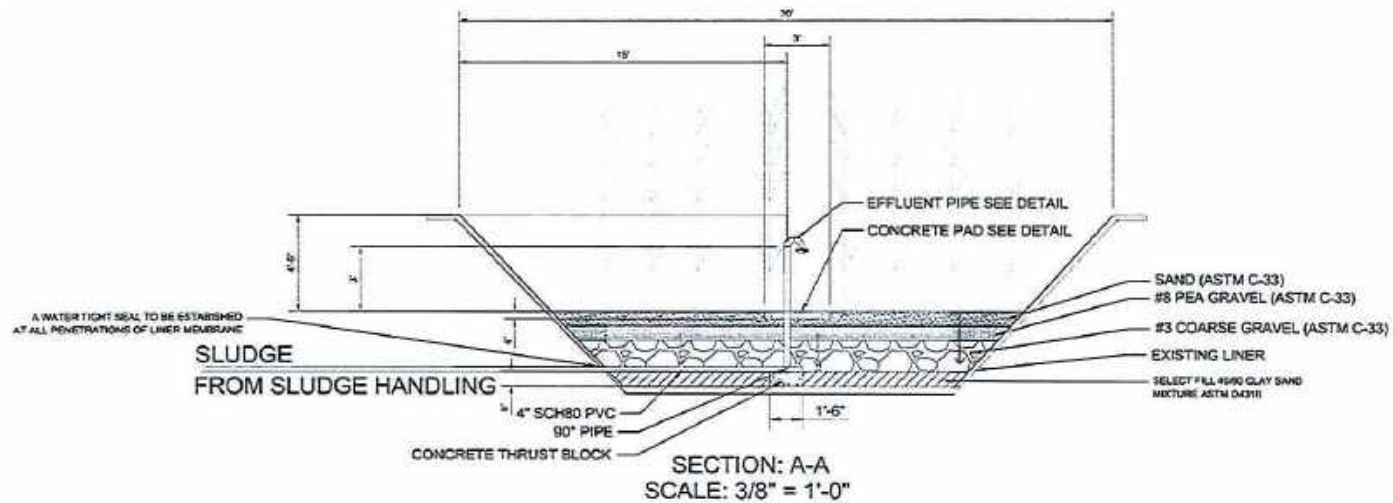
REMARKS Date: 10/22/2014 By: [Signature] Description: [Blank] Date: [Blank] By: [Blank] Description: [Blank]		Date: 11/04/2014 (2014) By: [Signature] Date: [Blank] By: [Blank] Description: [Blank] Date: [Blank] By: [Blank] Description: [Blank]		LEE & COMPANY, LLC 1612 E CLAY ST, HANDESMANVILLE, MISSOURI PHONE: (816) 805-3346 E-MAIL: GLENN@LEE-CHANCELLOR.COM		DESHOPS LODGE NEW MEXICO		DESHOPS LODGE TANKAGE STRUCTURAL PLAN		PROJECT NO. [Blank] SHEET NO. [Blank]	



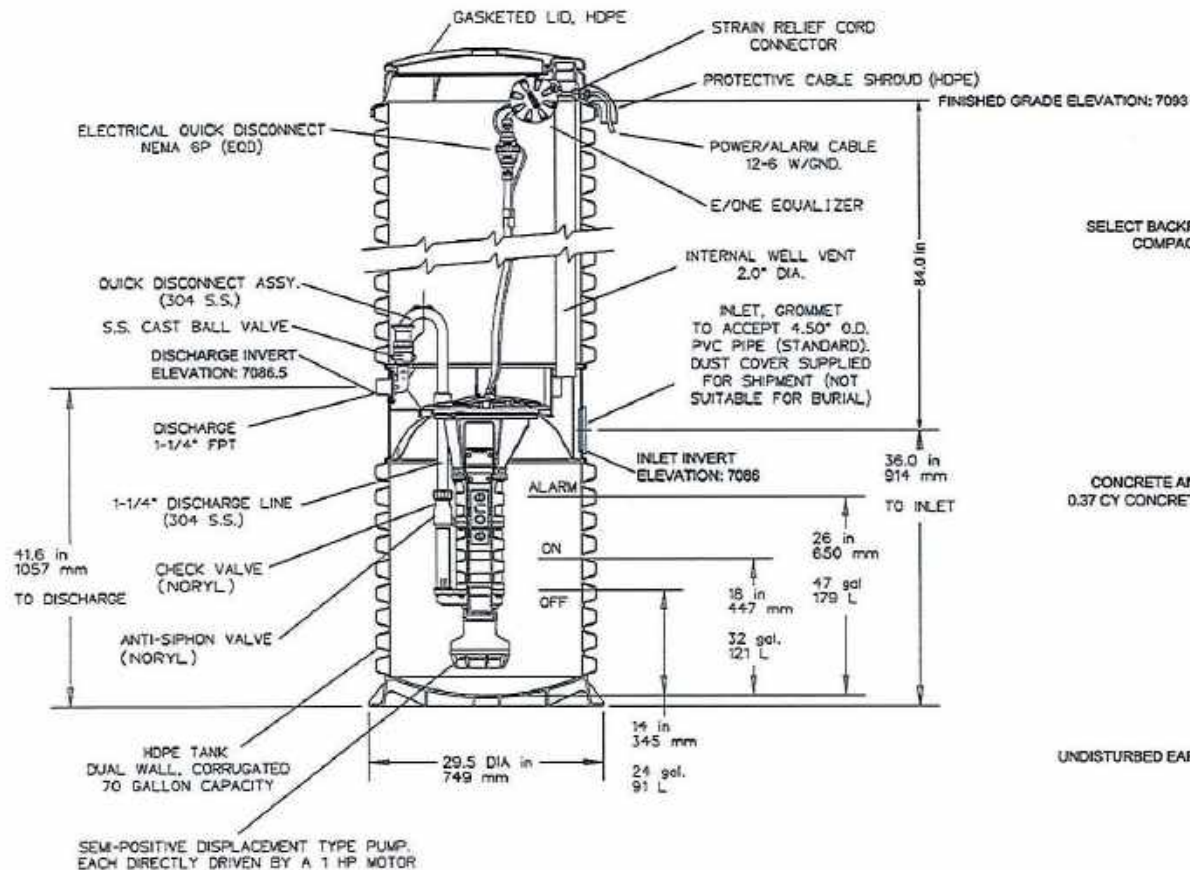
REED BED PLAN VIEW
SCALE: 3/8" = 1'-0"



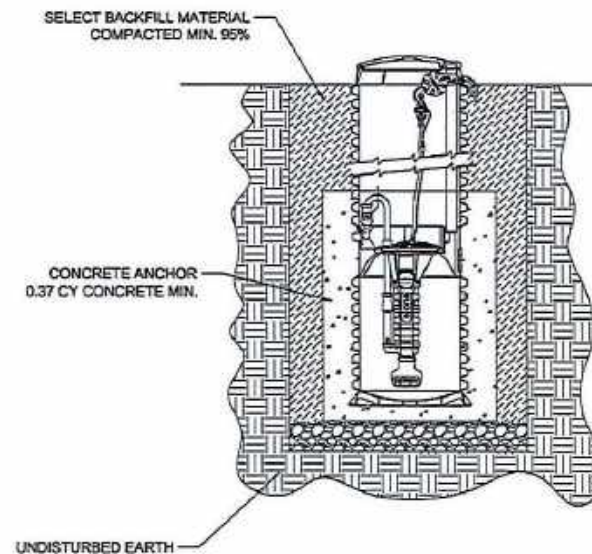
SHEET NO. 15	REVISIONS 1. Description 2. Description 3. Description	DATE: 11/15/2022 DRAWN BY: S.J.L. CHECKED BY: S.M.L.	LEE & COMPANY, LLC 1412 E. OLIVE ST., WARRENDALE, MISSOURI PHONE: (816) 955-1246 E-MAIL: GUY@LEE-ENGINEERS.COM	PROJECT NO. BISHOPS LODGE NEW M3000	SHEET NO. BISHOPS LODGE REED BED	PROJECT NO. BISHOPS LODGE REED BED	SHEET NO. 15-15



REVISION 1. 11/18/2021 2. 11/18/2021 3. 11/18/2021			Date: 11/18/2021 Drawn: J.M.L. Title: Bishop's Lodge Scale: As Shown Checked: C.V.L. Approved: C.V.L.		SHEET NO. 18-16
LEE & COMPANY, LLC 1612 E. 13th St. Wagonville, Colorado PHONE: (303) 935-1548 E-MAIL: GLENN@LEE-ENGINEERS.COM			NAME: BISHOP'S LODGE NEW MEXICO	PROJECT: BISHOP'S LODGE REED BED PROJECT	DRAWN BY: J.M.L. DATE: 11/18/21



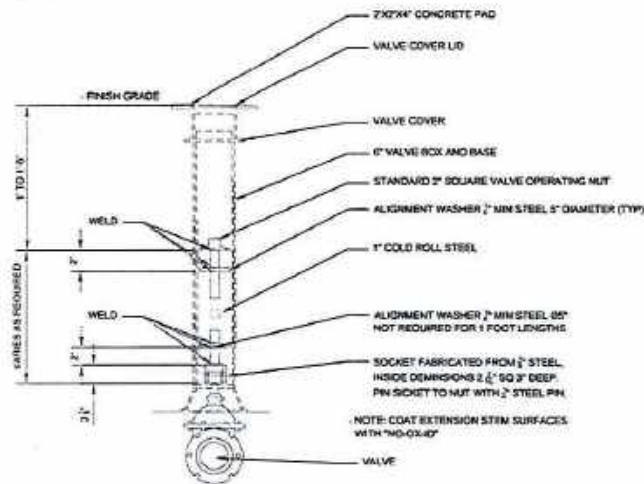
**REED BED GRINDER PUMP
DETAIL**



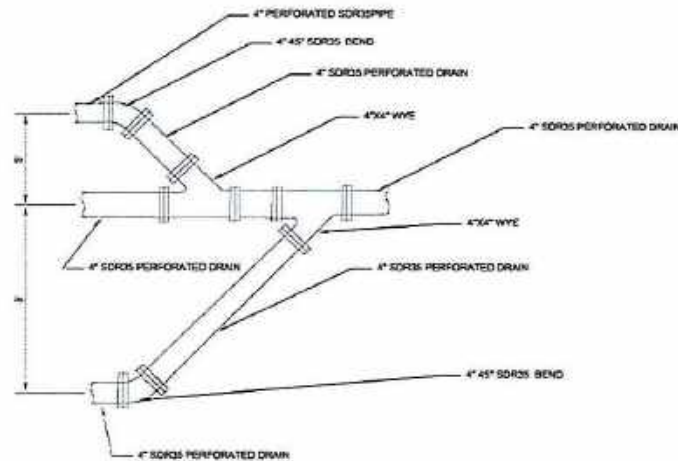
**GRINDER PUMP CONCRETE
ANCHOR DETAIL**



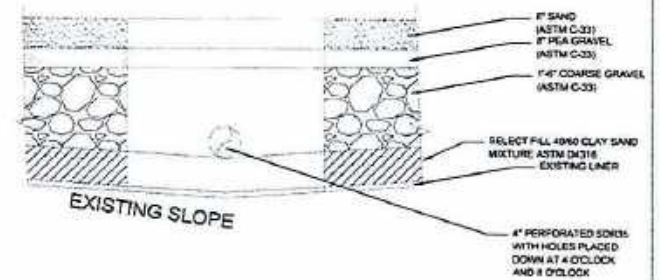
REVISIONS Date _____ By _____ Description _____ Date _____ By _____ Description _____ Date _____ By _____ Description _____	Date: DECEMBER 2000 Drawn: J.C.S. First Date: _____ Checked: G.M.L. Date: _____ Approved: G.M.L.	LEE & COMPANY, LLC 1612 E. SAN ST. HARRISBURG, MISSOURI PHONE: (816) 505-3545 E-MAIL: GLENN@LEE-COMPANY.COM	SHEET BISHOPS LODGE NEW MEXICO	TITLE BISHOPS LODGE REED BED GRINDER PUMP DETAIL	PROJECT NO. 1000-2000-1	SHEET NO. X-XX



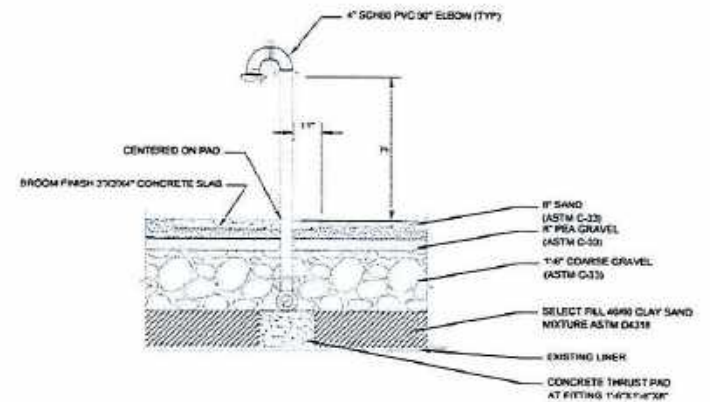
OPERATING NUT EXTENSION
NOT TO SCALE



DETAIL
NOT TO SCALE



DETAIL
NOT TO SCALE



DETAIL
NOT TO SCALE



REVISION: 1. _____ 2. _____ 3. _____			DESIGNED BY: _____ CHECKED BY: _____ DATE: _____			PROJECT NO.: _____ SHEET NO.: _____ TOTAL SHEETS: 1		
LEE & COMPANY, LLC 1612 E. CLAY ST., HARRISONVILLE, MISSOURI PHONE: (816) 355-3546 E-MAIL: GLENN@LEE-ENGINEERS.COM			NAME: BISHOPS LODGE SIZE: 3'X3'0"			TITLE: BISHOPS LODGE BEND TSD DETAIL		

ELECTRICAL ABBREVIATIONS

31. CONTRACTOR SHALL THOROUGHLY CLEAN AND POLISH THE FINISHED EQUIPMENT WITHIN THE CONTRACT AREA AND RESTORE ALL SURROUNDING GROUNDS TO THE CONDITION OF THE SITE PRIOR TO COMPLETION.
32. THE CONTRACTOR SHALL TEST ALL EQUIPMENT INSTALLED UNDER THE SCOPE OF WORK AND DEMONSTRATE ITS PROPER OPERATION TO THE OWNER. CONTRACTOR SHALL COORDINATE ALL FINAL INSPECTION OF THE SYSTEM WITH COMPLETION.
33. PRIOR TO FINAL ACCEPTANCE, ALL DEFICIENCIES IDENTIFIED SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
34. ALL CERTIFICATES OF APPROVAL SHALL BE IN DUPLICATE, DELIVERED TO THE OWNER'S REPRESENTATIVE AND BECOME THE PROPERTY OF THE OWNER.
35. CONTRACTOR SHALL MAINTAIN A COPY OF ALL DRAWINGS AND APPROVED SHOP DRAWINGS ON SITE AND RECORD ALL REVISIONS AND DEVIATIONS FROM THE ORIGINAL CONTRACT DOCUMENTS. A COPY SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE UPON THE COMPLETION OF WORK.
36. CONTRACTOR SHALL PROVIDE TWO PRINTED COPIES AND TWO ELECTRONIC COPIES OF ALL MATERIALS, SERVICE AGREEMENTS AND WARRANTIES TO THE OWNER UPON COMPLETION OF CONSTRUCTION.
37. THE ENTIRE ELECTRICAL SYSTEM WITHIN THIS SCOPE OF WORK IS PROVIDED ON AN "AS-BUILT" BASIS UPON COMPLETION OF CONSTRUCTION, ANY WORK, MATERIALS OR SYSTEMS SHOWING DEFECTS OR MALFUNCTIONS SHALL BE CORRECTED WITHOUT CHARGE TO THE OWNER WITHIN THE FIRST YEAR.
38. FOR UTILITY SERVICE (TRANSFERS), CONTRACTOR SHALL PROVIDE CONDUITS, CONDUIT RISERS, WEATHER HEADS, GROUNDING, CABLE TIES, METAL BUSES, CABLE, WIRE CONNECTORS, AND ANY OTHER ITEMS AS REQUIRED BY THE UTILITY.

AC	AMPERES	LP	LIGHTING PANEL
AFF	ALTERNATING CURRENT	LTC	LOAD TAP CHANGER
AFG	ABOVE FINISHED FLOOR	LTG	LIGHTING
AKU	AUTHORITY HAVING JURISDICTIONS	M	METER OR MOTOR
ALC	AMPERES INTERRUPTING CAPACITY	MA	MAXIMUM
AL	ALUMINUM	MCX	MOTOR CONTROL CENTER
AT	AMP TRIP	MCP	MOTOR CIRCUIT PROTECTOR
AUX	AMERICAN WIRE GAUGE	MM	METAL KNUCLE OR HANDLE
	AUXILIARY	MM	MINIMUM
		mm	MILLIMETER
BACE	BUILDING AUTOMATION CONTROL SYSTEM	MTD	MOUNTED
BCU	BUILDING CONTROL UNIT	MTD	MOUNTING
BL	BASIC IMPOSE LEVEL	MTR	MOTOR
BOT	BOTTOM OF TRAY	MV	MEDIUM VOLTAGE
C	CONTACTOR/CONDUIT/COIL	N	NEUTRAL OR NORTH
CD	CIRCUIT BREAKER	NA	NON-AUTOMATIC
CD	CANDIDA	NC	NORMALLY CLOSED
CKT	CIRCUIT	NEC	NATIONAL ELECTRICAL CODE
CL	CENTERLINE	NLG	NOT IN CONTRACT
CL	CENTERLINE	NF	NON-FUSED
CP	CONTROL PANEL	NO	NORMALLY OPEN
CR	CARD READER	NTS	NOT TO SCALE
CT	CURRENT TRANSFORMER		
		OC	ON CENTER
D	DEEP	OL	OL CIRCUIT BREAKER
DC	DIRECT CURRENT	OBL	OVERLOAD RELAY
DCCS	DISTRIBUTED CONTROL SYSTEM	O/W	OUT/WATER
DDC	DIGITAL CONTROL		
DISC	DISCONNECT	P	POLE
DPST	DOUBLE POLE SINGLE THROW	PA	PUBLIC ADDRESS
DPV	DATA PROCESSING UNIT	PB	PUSH BUTTON OR PULL BOX
DWG	DRAWING	PC	PHOTOCELL
		PCL	PROGRAMMABLE CONTROL MODULE
		PCM	PANEL
EC	ELECTRICAL CONTRACTOR	PFC	POWER PANEL
EF	EXHAUST FAN	PVC	POLY VINYL CHLORIDE
EAS	EMERGENCY MANAGEMENT CONTROL SYSTEM		
EWT	ELECTRICAL METALLIC TUBING	RHS	RADIANT HEATER
EP	EXPLOSION PROOF	RMS	ROOT MEAN SQUARE
EPO	EMERGENCY POWER OFF	RTU	ROOM TOP UNIT
ETM	ELAPSED TIME METER	RU	RACK UNIT
		RVAT	REDUCED VOLTAGE AUTO TRANSFORMER
F	FIXED-FIT	RVNR	REDUCED VOLTAGE, NON-REVERSING
FACP	FIRE ALARM CONTROL PANEL		
FAFP	FIRE ALARM ANNUNCIATOR PANEL	S	SLIP FIT
FM	FREQUENCY MONITOR	SB	SPICE BOX
FVNR	FULL VOLTAGE, NON-REVERSING	SCADA	SUPPLEMENTARY CONTROL AND DATA ACQUISITION
		SEL	SELECTOR SWITCH
GFI	GROUND FAULT CIRCUIT INTERRUPTER	SEL	SINGLE POLE DOUBLE THROW
GFP	GROUND FAULT PROTECTION	SPST	SOLENOID
GND	GROUND	SS	SELECTOR SWITCH
GRS	GALVANIZED RIGID CONDUIT	STB	STARTER
		STTS	STARTING
H	PHASE OR HOT CONDUCTOR	SW	SWITCH
H4	HANDHOLE		
HP	HORSEPOWER	TC	TIME CLOCK
HACH	HEATING, AIR CONDITIONING & REFRIGERATION	TEB	TELEPHONE TERMINAL BOARD
	TYPIC CIRCUIT BREAKER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
HO	HIGH INTENSITY DISCHARGE		
HPS	HIGH PRESSURE SODIUM	UCP	UNDERGROUND ELECTRICAL
HVAC	HEATING VENTILATION & AIR CONDITIONING	UON	UNLESS OTHERWISE NOTED
I&C	INSTRUMENTATION AND CONTROLS	V	VOLTS
IG	ISOLATION GROUND	VA	VOLT AMPERES
INS	INSULATION	VFD	VARIABLE FREQUENCY DRIVE
IPS	IRON PIPE SIZE	VRLA	VALVE REGULATED LEAD ACID
J	JUNCTION BOX		
		W	WIRE OR WATT
KCMIL	THOUSAND CIRCULAR MILS	WP	WEATHER PROOF
KVA	KILOVOLT AMPERE		
KVAR	KILOVOLT AMPERE REACTIVE	WFM	TRANSFORMER
KW	KILOWATT	2SPN	TWO SPEED, NON REVERSING

ELECTRICAL LEGEND



JUNCTION BOX



GROUND SWAG



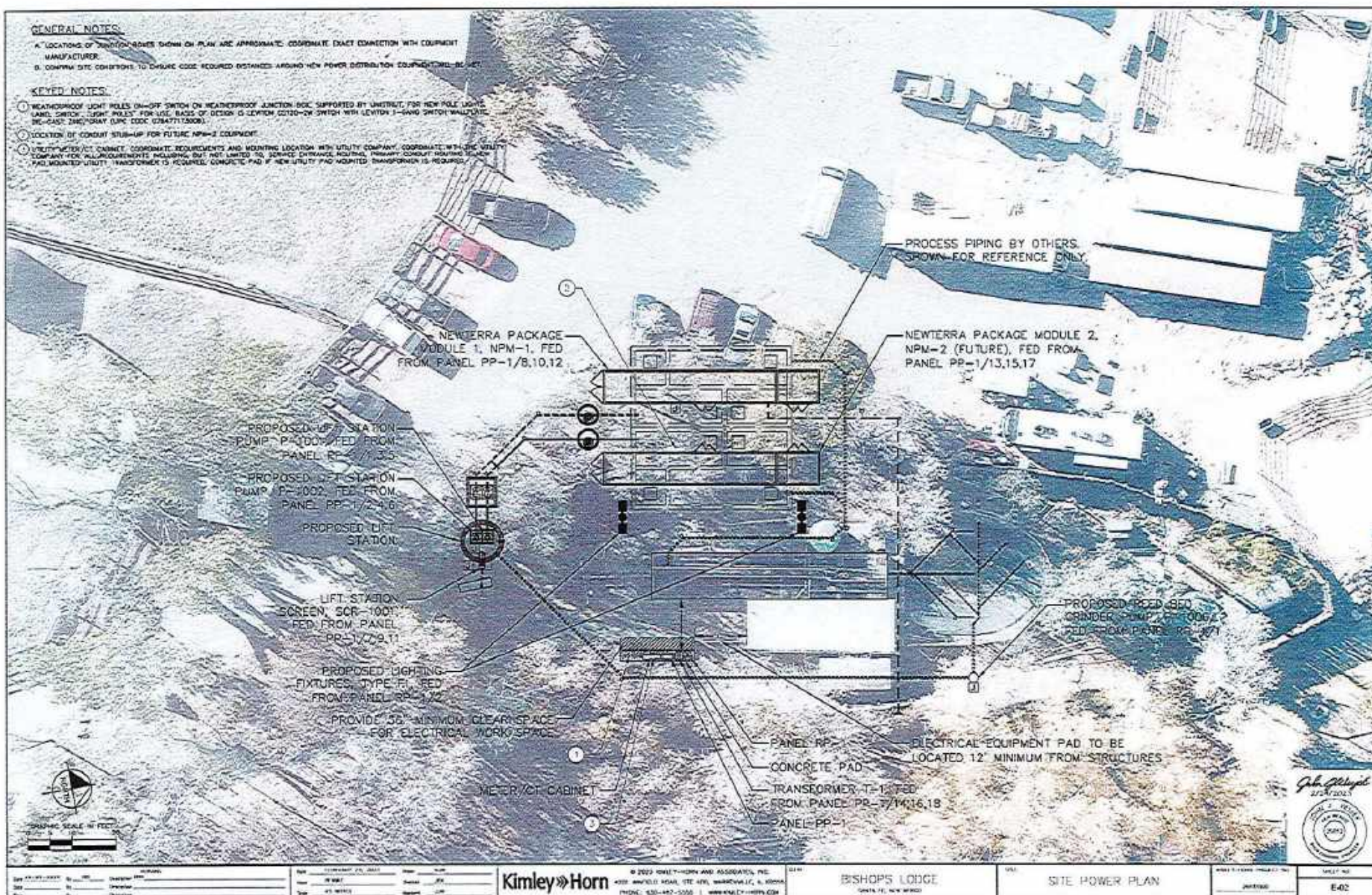
ROSE MOUNTED LIGHTING FIXTURE

GENERAL NOTES

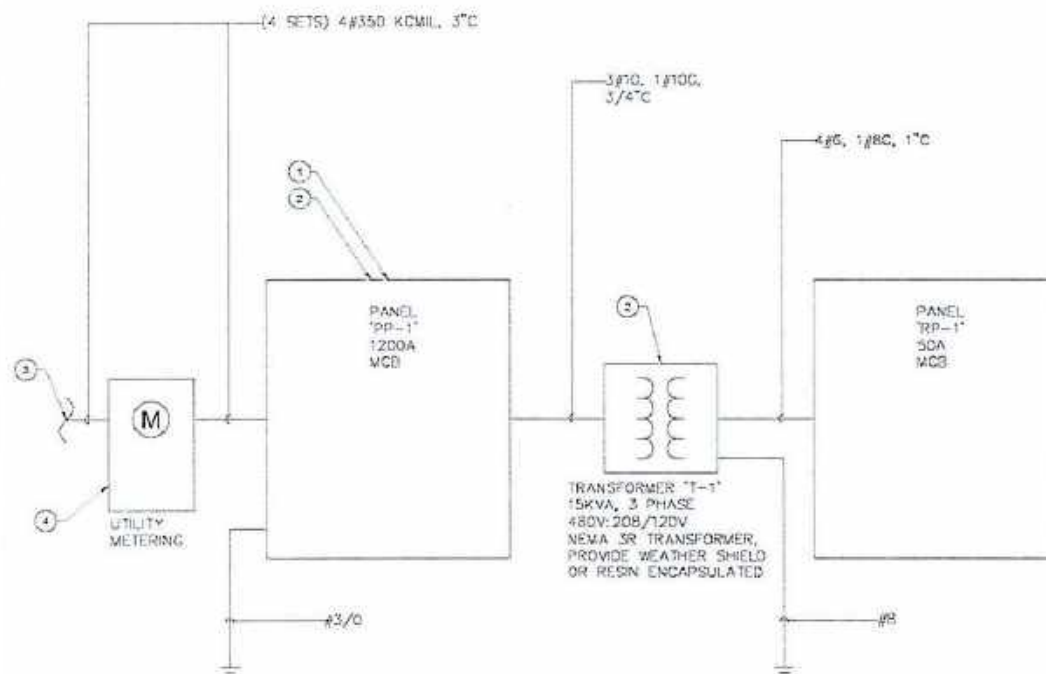
A. LOCATIONS OF POSITION BOXES SHOWN ON PLAN ARE APPROXIMATE. COORDINATE EXACT CONNECTION WITH EQUIPMENT MANUFACTURER.
B. CONFORM SITE CONDITIONS TO ENSURE CODE REQUIRED DISTANCES AROUND NEW POWER DISTRIBUTION EQUIPMENT WILL BE MET.

KEYED NOTES

- WEATHERPROOF LIGHT POLES ON-OFF SWITCH ON WEATHERPROOF JUNCTION BOX SUPPORTED BY UNSTRUCT. FOR NEW POLE LIGHTS (LAND SWITCH "LIGHT POLES" FOR USE BASES OF DESIGN G LEVISON G2120-ON SWITCH WITH LEVISON 1-5/8" SWITCH WALL MOUNTED, BE-CAST 2840/GRAY (UPC CODE 078477115008).
- LOCATION OF CONDUIT STUB-UP FOR FUTURE NPM-2 EQUIPMENT.
- UTILITY WATER/CT CABINET COORDINATE REQUIREMENTS AND MOUNTING LOCATION WITH UTILITY COMPANY. COORDINATE WITH THE UTILITY COMPANY FOR ALL REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, SERVICE ENTRANCE, ACQUITS, PRIMARY CONDUIT ROUTING, SEALS, PAD MOUNTED UTILITY TRANSFORMER (S), CONCRETE PAD IF NEW UTILITY PAD MOUNTED TRANSFORMER IS REQUIRED.



DATE: 11/11/2011 BY: [Signature] CHKD: [Signature] APP: [Signature]	PROJECT: [Blank] SHEET: [Blank] REV: [Blank]	REV: [Blank] DATE: [Blank] BY: [Blank] CHKD: [Blank] APP: [Blank]	Kimley-Horn © 2012 KIMLEY-HORN AND ASSOCIATES, P.C. 4000 WINDFALL ROAD, STE 400, WINDFALL, WA 99550 PHONE: 435-482-5055 WWW.KIMLEY-HORN.COM	BISHOP'S LODGE GRANTA, WA, NEW MEXICO	SITE POWER PLAN	DATE: 11/11/2011 SHEET: 402	E-02



GENERAL NOTES:

- ALL EQUIPMENT SHOWN IN SINGLE LINE DIAGRAM SHALL BE NEMA 3R, WEATHER RESISTANT AND MOUNTED ON A CONCRETE FOUNDATION. PROVIDE UNIFORMITY TO SUPPORT PANELS.
- CONTRACTOR SHALL PROVIDE AND FLASH LABELS ON ALL EQUIPMENT PER 2017 NEW MEXICO ELECTRICAL CODE SECTIONS 110.10 AND 110.12(D).
- ELECTRICAL POWER STUDIES ARE REQUIRED PER SPECIFICATIONS AND SHALL BE PROVIDED PRIOR TO ORDERING OF EQUIPMENT.
- CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS FOR PROCESSING EQUIPMENT INCLUDING QUANTITY OF WIRING.
- CONTRACTOR SHALL CONFORM AND OBTAIN FOR PANELBOARDS THROUGH REQUIRED POWER SOURCES AS DETERMINED BY SPECIFICATIONS.

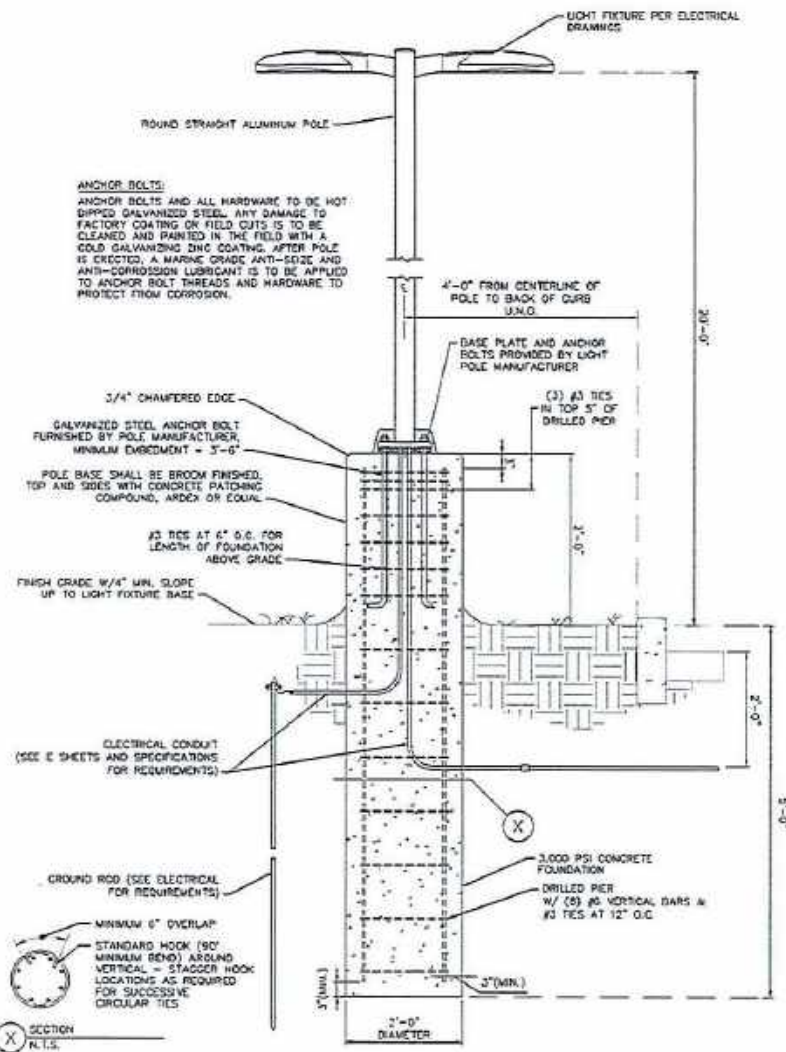
REMARKS NOTES:

- SHALL BE PERMIT ENTRANCE MARK, PROVIDE SERVICE RACK PROTECTION (EPI) OR MAIN CIRCUIT BREAKER FOR 2017 NEW MEXICO ELECTRICAL CODE SECTION 240.20, 4.20 MINIMUM INCHES MINIMUM BARS/SHOULDER 1/2 INCH IN ACCORDANCE WITH 2017 NEW MEXICO ELECTRICAL CODE SECTION 240.20.
- EQUIPMENT SHALL HAVE A WARNING SIGN ON EQUIPMENT FOR 2017 NEW MEXICO ELECTRICAL CODE SECTION 110.21. WARNING SIGN SHALL BE MARK IN ACCORDANCE WITH ANSI Z39.1 ENVIRONMENTAL AND SAFETY SIGNS. THE LANGUAGE SHALL READ "480 VOLT" (480V DANGER) SHALL BE 17" x 17".
- TO UTILITY SERVICE EQUIPMENT, COORDINATE WITH THE UTILITY COMPANY FOR ALL REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, SERVICE TIE-IN ROUTING, PRIMARY CONDUIT ROUTING IF NEW PAD MOUNTED UTILITY TRANSFORMER IS REQUIRED, CONDUIT IF PAD IF NEW UTILITY PAD MOUNTED TRANSFORMER IS REQUIRED.
- UTILITY/CLIENT: COORDINATE REQUIREMENTS AND MOUNTING LOCATION WITH UTILITY COMPANY.

PANELBOARD (PP-1)									
EQUIPMENT INFORMATION					PANELBOARD (PP-1)		EQUIPMENT INFORMATION		
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1. NO. 1 - NEW MEXICO PACKING, MODULE 2, WILL BE INSTALLED IN A FUTURE PHASE. 2. SHALL PROVIDE EMPTY CONDUIT WITH PULL STRING FROM PANEL, STICK UP CONDUIT AT EQUIPMENT LOCATION AND CAP.

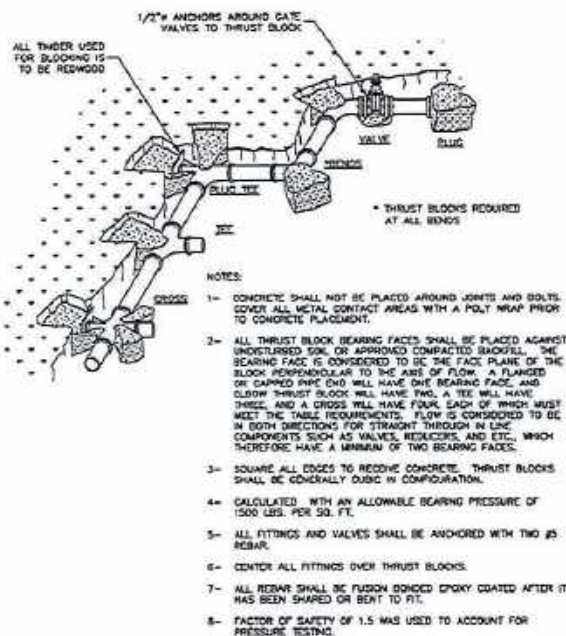
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EQUIPMENT STATUS: TP-1					EQUIPMENT STATUS: TP-1		EQUIPMENT STATUS: TP-1		
EQUIPMENT STATUS: TP-1									



LIGHT POLE FOUNDATION DETAIL N.T.S.



DATE: 01/14/2010	BY: JH	CHECKED: JH	DATE: 01/14/2010	BY: JH	CHECKED: JH	DATE: 01/14/2010	BY: JH	CHECKED: JH	DATE: 01/14/2010	BY: JH	CHECKED: JH
KIMLEY-HORN & ASSOCIATES, INC.				KIMLEY-HORN & ASSOCIATES, INC.				KIMLEY-HORN & ASSOCIATES, INC.			
4001 BAYVIEW BLVD., SUITE 400, WILMINGTON, DE 19804				4001 BAYVIEW BLVD., SUITE 400, WILMINGTON, DE 19804				4001 BAYVIEW BLVD., SUITE 400, WILMINGTON, DE 19804			
PHONE: 302-441-7000 FAX: 302-441-7001 WWW.KIMLEY-HORN.COM				PHONE: 302-441-7000 FAX: 302-441-7001 WWW.KIMLEY-HORN.COM				PHONE: 302-441-7000 FAX: 302-441-7001 WWW.KIMLEY-HORN.COM			
BISHOP'S LODGE				BISHOP'S LODGE				BISHOP'S LODGE			
CHARTER 11, NEW YORK				CHARTER 11, NEW YORK				CHARTER 11, NEW YORK			
LIGHT POLE FOUNDATION DETAIL				LIGHT POLE FOUNDATION DETAIL				LIGHT POLE FOUNDATION DETAIL			
D-01				D-01				D-01			



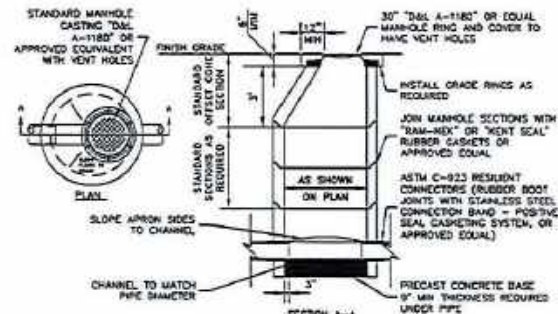
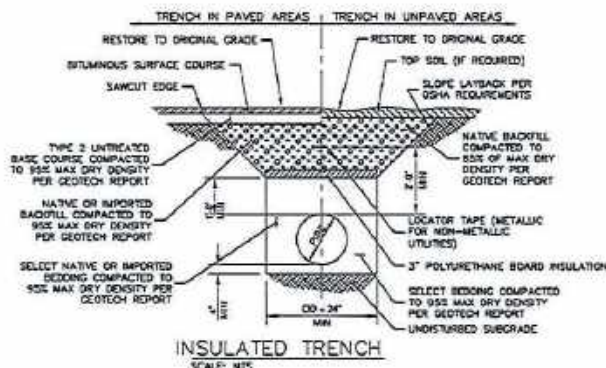
THRUST BLOCK
SCALE: NTS

THRUST BLOCK BEARING AREA IN SQ. FT. @150 PSI WORKING PRESSURE										
PIPE SIZE	CROSS	TEE	WYE	END	VALVE	90°	45°	22.5°	11.25°	END
4	5.2	1.9	1.9	1.9	1.9	5.7	1.8	1.8	1.8	5.2
6	8.0	2.3	2.3	2.3	2.3	8.9	2.3	2.3	2.3	8.0
8	10.3	2.8	2.8	2.8	2.8	10.9	2.8	2.8	2.8	10.3
10	12.7	3.1	3.1	3.1	3.1	13.2	3.1	3.1	3.1	12.7
12	15.0	3.4	3.4	3.4	3.4	15.5	3.4	3.4	3.4	15.0
14	17.4	3.7	3.7	3.7	3.7	17.9	3.7	3.7	3.7	17.4
16	19.7	4.0	4.0	4.0	4.0	20.2	4.0	4.0	4.0	19.7
18	22.0	4.3	4.3	4.3	4.3	22.5	4.3	4.3	4.3	22.0
20	24.3	4.6	4.6	4.6	4.6	24.8	4.6	4.6	4.6	24.3
22	26.6	4.9	4.9	4.9	4.9	27.1	4.9	4.9	4.9	26.6
24	28.9	5.2	5.2	5.2	5.2	29.4	5.2	5.2	5.2	28.9

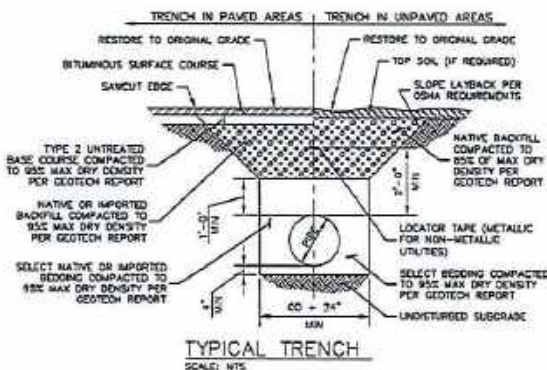
THRUST BLOCK BEARING AREA IN SQ. FT. @200 PSI WORKING PRESSURE										
PIPE SIZE	CROSS	TEE	WYE	END	VALVE	90°	45°	22.5°	11.25°	END
4	3.8	1.3	1.3	1.3	1.3	4.1	1.2	1.2	1.2	3.8
6	5.5	1.9	1.9	1.9	1.9	5.9	1.7	1.7	1.7	5.5
8	7.2	2.5	2.5	2.5	2.5	7.7	2.2	2.2	2.2	7.2
10	8.9	3.1	3.1	3.1	3.1	9.4	2.7	2.7	2.7	8.9
12	10.6	3.7	3.7	3.7	3.7	11.1	3.2	3.2	3.2	10.6
14	12.3	4.3	4.3	4.3	4.3	12.8	3.7	3.7	3.7	12.3
16	14.0	4.9	4.9	4.9	4.9	14.5	4.2	4.2	4.2	14.0
18	15.7	5.5	5.5	5.5	5.5	16.2	4.7	4.7	4.7	15.7
20	17.4	6.1	6.1	6.1	6.1	17.9	5.2	5.2	5.2	17.4
22	19.1	6.7	6.7	6.7	6.7	19.6	5.7	5.7	5.7	19.1
24	20.8	7.3	7.3	7.3	7.3	21.3	6.2	6.2	6.2	20.8

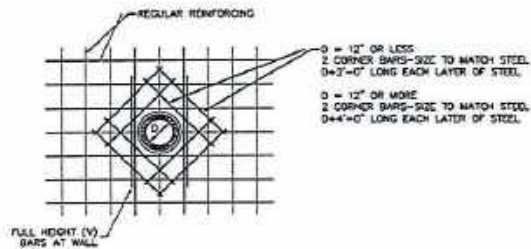
THRUST BLOCK BEARING AREA IN SQ. FT. @250 PSI WORKING PRESSURE										
PIPE SIZE	CROSS	TEE	WYE	END	VALVE	90°	45°	22.5°	11.25°	END
4	3.0	1.0	1.0	1.0	1.0	3.3	0.9	0.9	0.9	3.0
6	4.5	1.5	1.5	1.5	1.5	4.9	1.3	1.3	1.3	4.5
8	6.0	2.0	2.0	2.0	2.0	6.5	1.7	1.7	1.7	6.0
10	7.5	2.5	2.5	2.5	2.5	8.0	2.1	2.1	2.1	7.5
12	9.0	3.0	3.0	3.0	3.0	9.6	2.5	2.5	2.5	9.0
14	10.5	3.5	3.5	3.5	3.5	11.1	2.9	2.9	2.9	10.5
16	12.0	4.0	4.0	4.0	4.0	12.6	3.3	3.3	3.3	12.0
18	13.5	4.5	4.5	4.5	4.5	14.1	3.7	3.7	3.7	13.5
20	15.0	5.0	5.0	5.0	5.0	15.6	4.1	4.1	4.1	15.0
22	16.5	5.5	5.5	5.5	5.5	17.1	4.5	4.5	4.5	16.5
24	18.0	6.0	6.0	6.0	6.0	18.6	4.9	4.9	4.9	18.0

THRUST BLOCK BEARING AREA IN SQ. FT. @500 PSI WORKING PRESSURE										
PIPE SIZE	CROSS	TEE	WYE	END	VALVE	90°	45°	22.5°	11.25°	END
4	1.5	0.5	0.5	0.5	0.5	1.6	0.4	0.4	0.4	1.5
6	2.2	0.8	0.8	0.8	0.8	2.4	0.6	0.6	0.6	2.2
8	3.0	1.0	1.0	1.0	1.0	3.2	0.8	0.8	0.8	3.0
10	3.7	1.3	1.3	1.3	1.3	4.0	1.0	1.0	1.0	3.7
12	4.5	1.5	1.5	1.5	1.5	4.8	1.2	1.2	1.2	4.5
14	5.2	1.8	1.8	1.8	1.8	5.6	1.4	1.4	1.4	5.2
16	6.0	2.0	2.0	2.0	2.0	6.4	1.6	1.6	1.6	6.0
18	6.7	2.3	2.3	2.3	2.3	7.1	1.8	1.8	1.8	6.7
20	7.5	2.5	2.5	2.5	2.5	7.9	2.0	2.0	2.0	7.5
22	8.2	2.8	2.8	2.8	2.8	8.6	2.2	2.2	2.2	8.2
24	9.0	3.0	3.0	3.0	3.0	9.4	2.4	2.4	2.4	9.0



PRECAST MANHOLE
SCALE: NTS



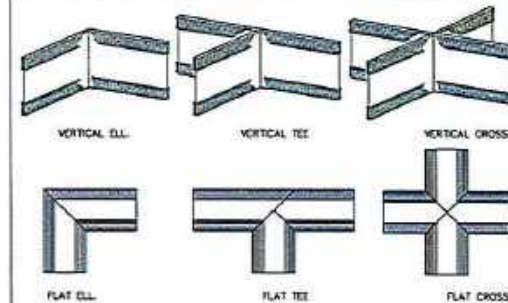


WALL AND FLOOR PIPE PENETRATION
EXTRA REINFORCING
SCALE: NTS

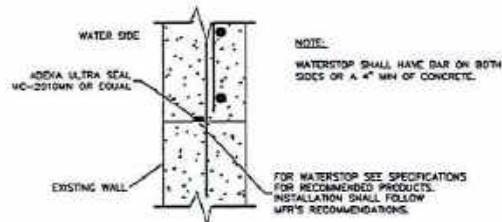
NOTE:
ALL CONSTRUCTION JOINTS BELOW GRADE
MUST HAVE WATERSTOP. THE WATERSTOP MUST
BE PVC SERRATED TYPE WITH CENTER BULB,
NOT LESS THAN 3/8\"/>



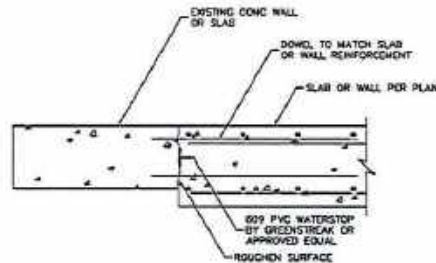
WATERSTOP
SCALE: NTS



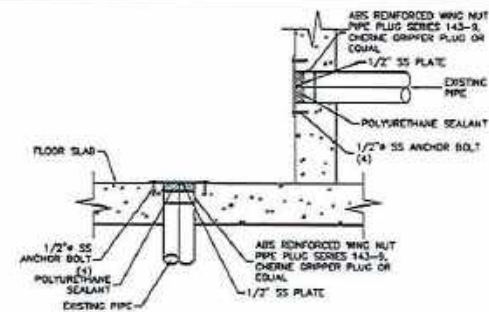
FLAT STRIP WATERSTOPS
SCALE: NTS



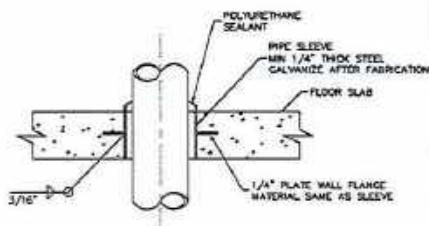
HYDROPHILIC WATERSTOP
SCALE: NTS



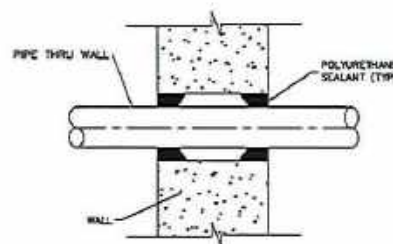
609 PVC WATERSTOP
SCALE: NTS



FLOOR/WALL PIPE PLUG
SCALE: NTS

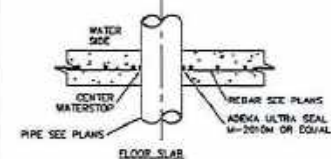


ALL FLOOR PENETRATIONS FOR HARD PIPING
OF EQUIPMENT SHALL HAVE A FLOOR SLEEVE.
FLOOR PIPE SLEEVE
SCALE: NTS

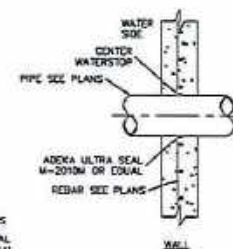


WALL CORE
SCALE: NTS

- NOTES:
- 1- FOR WATER STOP SEE SPECIFICATIONS FOR RECOMMENDED PRODUCTS.
 - 2- INSTALLATION SHALL FOLLOW MANUFACTURERS RECOMMENDATIONS.
 - 3- WATERSTOP SHALL HAVE BAR ON BOTH SIDES OR A 4\"/>



PIPE THRU WALL/FLOOR
HYDROPHILIC WATER STOP
SCALE: NTS



REVISIONS			Date: 02/06/2012			Drawn: A.C.S.		
Rev	No	Description	Field Entry	Checked	G.M.L.			
Rev	No	Description	Scale	Approved	G.M.L.			

LEE & COMPANY, LLC
1812 E. 6TH ST., HAWKSBYVILLE, MISSOURI
PHONE: (314) 503-3548 E-MAIL: GLENN@LEE-ENGINEERS.COM

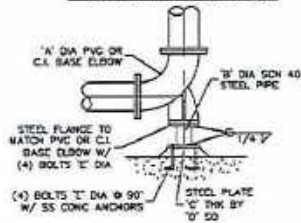
NAME: BISHOPS LODGE
NEW MEXICO

TITLE: BISHOPS LODGE
WATER STOP DETAILS

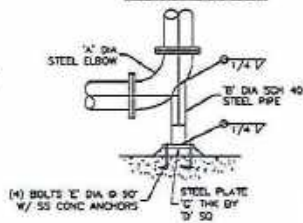
PROJECT NO.: 002-7027-5
SHEET NO.: D-03

DIMENSIONS IN INCHES				
ELBOW	"A" DIA	"B" DIA	"C" THICK	"D" DIA
4	2	3/8	6	5/8
6	2 1/2	3/8	7	5/8
8	4	1/2	8	5/8
10	4	1/2	9	5/8
12	6	1/2	11	3/4
14	6	1/2	11	3/4
16	6	1/2	11	3/4
18	8	1/2	12 1/2	3/4
20	8	1/2	13 1/2	3/4
24	8	1/2	13 1/2	3/4
30	10	3/4	16	7/8
36	12	3/4	19	7/8
42	16	3/4	23 1/2	1
48	18	3/4	25	1 1/8

PVC OR C.I. ELBOW

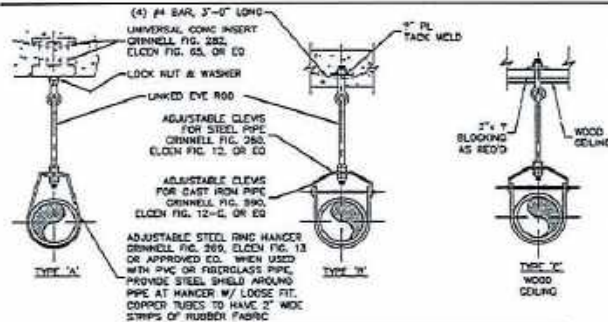


STEEL ELBOW



PIPE ELBOW SUPPORT

SCALE: NTS



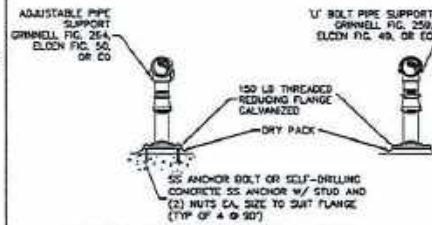
PIPE HANGER RODS AND SUPPORT SPACING				
PIPE DIA (INCHES)	ROD DIA (INCHES)	MAX SUPPORT SPACING (FEET)	TYPE 'A'	TYPE 'B'
1 & SMALLER	3/8	6	5	610
1 1/4 TO 2	3/8	8	5	610
2 1/2 TO 3 1/2	1/2	12	5	1330
4 TO 5	5/8	14	5	1430
6, 8	3/4	16	5	1430
10, 12	7/8	18	5	1430
14, 16	1	20	5	1430

PIPE HANGER

SCALE: NTS

ADJUSTABLE PIPE SUPPORT APPROXIMATE DIMENSIONS IN INCHES						
PIPE DIA	"A"	"B"	"C"	MINIMUM	MAXIMUM	
2 1/2	2 1/2	1 1/2	8	8	11 1/2	
3	2 1/2	1 1/2	8	8 1/4	11 3/4	
3 1/2	2 1/2	1 1/2	9	8 1/2	12	
4	3	1 1/2	9	10 1/4	14	
6	3	1 1/2	9	11 3/8	15 1/4	
8	3	1 1/2	9	13 5/8	16 1/2	
10	3	1 1/2	9	14 5/8	16 1/4	
12	3	1 1/2	9	15 5/8	19 3/8	
14	4	3	11	16 7/8	20 3/4	
16	4	3	11	16 7/8	22 1/4	
18	6	3 1/2	13 1/2	21 1/4	24	
20	6	3 1/2	13 1/2	23 1/4	25 1/2	
24	6	4	13 1/2	26 1/2	28 1/4	
30	6	4	13 1/2	28 3/8	31 1/2	
32	6	4	13 1/2	30 5/8	32 3/4	
36	6	4	13 1/2	32 5/8	34 3/4	

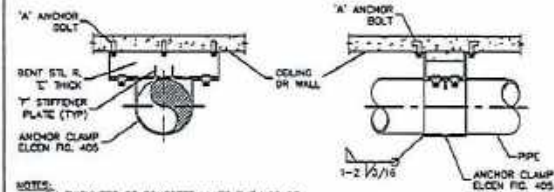
*SEE MFR.



ADJUSTABLE PIPE SUPPORT

SCALE: NTS

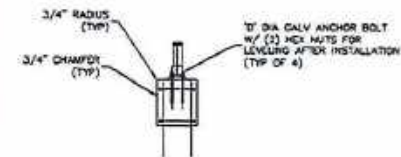
DIMENSIONS IN INCHES						
PIPE DIA	"A"	"B"	"C"	"D" (APPROX)	"E"	"F"
2 TO 4	(4) 5/8	1 1/4	5 3/4	8 1/2 (OMIT ONE)	3/8	1/4
6 TO 10	(4) 3/4	1 1/2	11	7 5/8 (OMIT ONE)	1/2	3/8
12 TO 16	(6) 7/8	1 1/2	13	10 1/4	1/2	3/8
18 TO 30	(6) 1	1 1/2	15	7 1/4	5/8	1/2



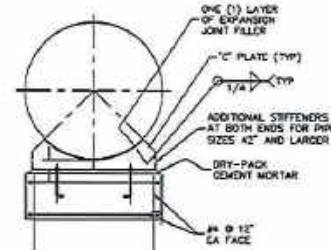
NOTES:
1. WHEN THICKNESS OF CONCRETE LIMITS THE USE OF ANCHOR BOLT LENGTHS AS TABULATED, SHORTER BOLTS WELDED TO REINFORCING BARS MAY BE USED.
2. GALVANIZE AFTER FABRICATION.

PIPE ANCHOR

SCALE: NTS



SIDE VIEW



SECTION VIEW



PIPE SUPPORT DIMENSIONS IN INCHES												
NOMINAL PIPE SIZE	PIPE				SPACING							
	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"
8	4	12	3/8	5/8	4 1/2	6	12	10	6 1/2	8	16	13
8	4	12	3/8	5/8	5	5	13	11	7 1/2	9	16	14
10	4	12	3/8	5/8	6	9	15	12	8	13	18	15
12	4	12	3/8	5/8	7	11	17	13	10	15	20	16
14	4	12	3/8	5/8	8	12	17	14	11	16	21	17
16	4	12	3/8	5/8	9	13	19	15	12	18	24	18
18	4	12	3/8	5/8	10	14	20	16	13	19	24	19
20	5	12	3/8	5/8	10	15	21	17	13	21	25	21
22	5	12	3/8	5/8	12	16	24	18	14	23	28	22
24	5	12	3/8	5/8	13	16	24	19	16	24	30	23
26	5	12	3/8	5/8	14	21	27	20	18	26	32	24
30	5	12	3/8	5/8	16	23	28	22	20	29	34	26
34	5	15	3/8	5/8	18	26	32	24	22	33	38	29
36	5	15	3/8	5/8	19	27	32	25	24	34	40	30
42	6	18	1/2	1	21	31	36	28	27	36	45	33
48	6	18	1/2	1	24	36	42	31	30	44	50	37
54	6	18	1/2	1	26	40	46	34	34	48	56	40
60	6	18	1/2	1 1/8	32	45	52	37	36	54	60	44
66	6	18	1/2	1 1/8	33	49	56	40	40	56	66	47
72	6	18	1/2	1 1/8	36	53	60	43	44	63	70	50

CONCRETE BASE PIPE SUPPORT

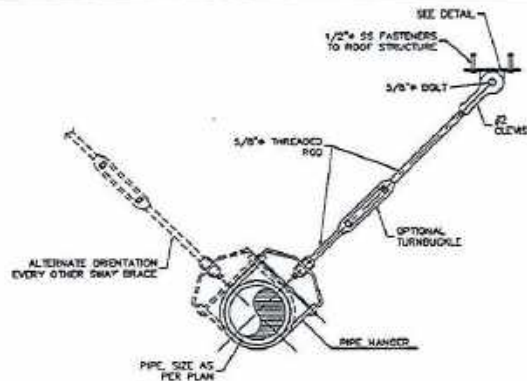
SCALE: NTS

REVISIONS		Date: 11/01/2020	Drawn: G.S.L.	Check: G.S.L.	Approved: G.S.L.	Project No.	Sheet No.
1	1	11/01/2020	G.S.L.	G.S.L.	G.S.L.	003-2022-1	D-04

LEE & COMPANY, LLC
1812 E. FLAM ST. HAWKINSVILLE, MISSOURI
PHONE: (816) 893-3548 E-MAIL: LEE@LEE-CD.COM

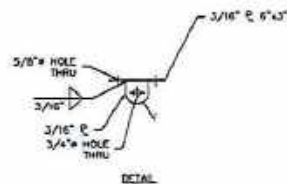
BISHOPS LODGE
NEW MEXICO

BISHOPS LODGE
PIPE SUPPORTS 1

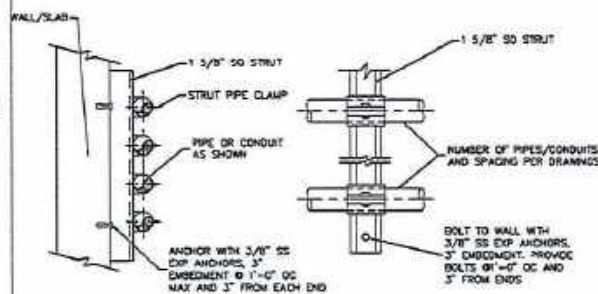


NOTES:

- 1- PLACE ADJACENT TO VERTICAL HANGER.
- 2- TO BE LOCATED AT 10'-0" OC MAX.



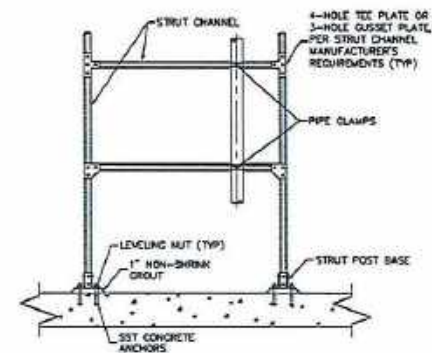
SEISMIC PIPE SWAY BRACE
SCALE: NTS



NOTE:

- 1- UNLESS NOTED OTHERWISE, FOR INDOOR AND OUTDOOR LOCATIONS ALL MATERIAL SHALL BE STAINLESS STEEL. STRUTS SHALL BE 12 GAUGE CHANNEL (1 5/8\"/>

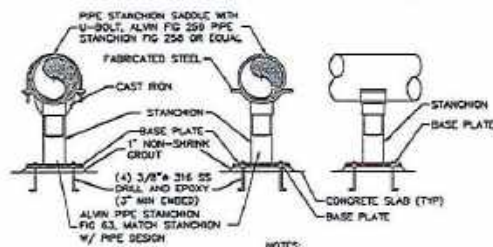
WALL MOUNT PIPING/CONDUIT STRUT SUPPORT
SCALE: NTS



NOTES:

- 1- FOR PIPING INSTALLED HORIZONTALLY, ADD ADDITIONAL VERTICAL PREFORMED CHANNEL SUPPORT CENTERED BETWEEN HORIZONTAL SUPPORTS.
- 2- FOR UTILITY WATER, FILL AIR, AND OTHER PIPING LESS THAN 4\"/>

FREE STANDING PIPING/CONDUIT STRUT SUPPORT
SCALE: NTS

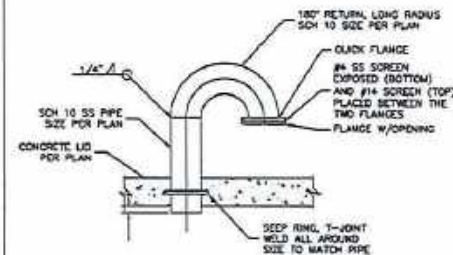


NOTES:

- 1- UNLESS NOTED OTHERWISE PIPE STANCHIONS AND ACCESSORIES SHALL BE HOT GALVANIZED (HGD).
- 2- PROVIDE RIHDIONAL CONCRETE SUPPORT PAD WITH #4 AT 12\"/>

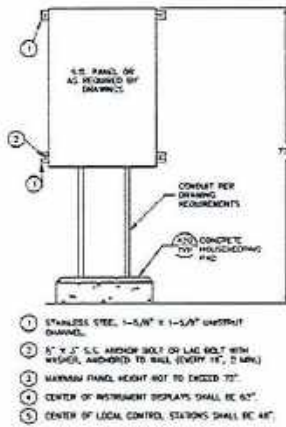
STATIONARY PIPE SUPPORT
SCALE: NTS

PIPE SUPPORT DIMENSIONS IN INCHES					
PIPE DIA.	1/4"	3/8"	1/2"	3/4"	1"
4		4 3/16			
5		4 13/16			
6		5 7/16			
8	3"	6 15/16	3 5/8	3 5/8	
10		8 7/16			
12		9 15/16			
14		10 1/2	4		
16		11 1/2			
18		12 1/2			
20		14 1/2			
22		15 1/2			
24	4"	17 1/2	5	6	
26		18 1/2			
30		20 1/2			
32		21 5/8			
36		23 5/8	6 3/4		

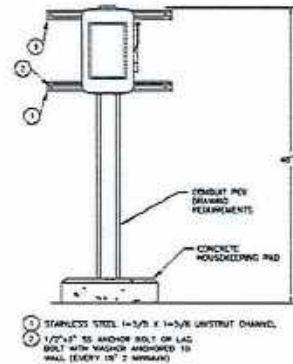


AIR VENT
SCALE: NTS

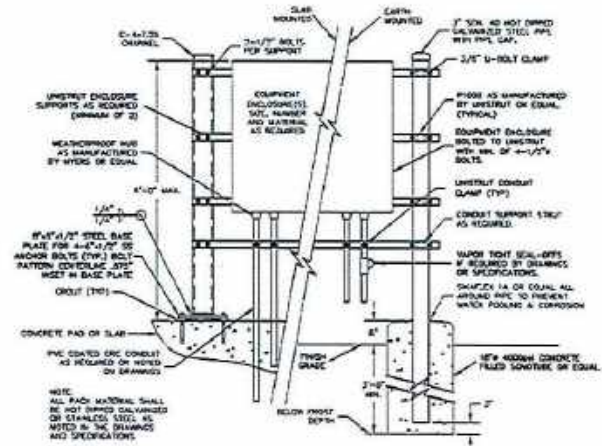




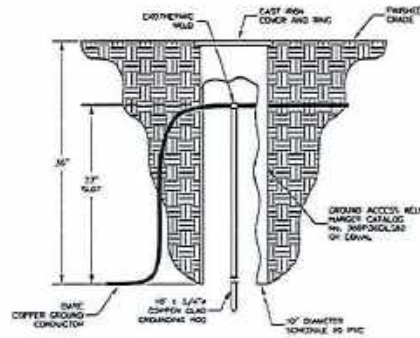
WALL MOUNTED PANEL
SCALE: NONE



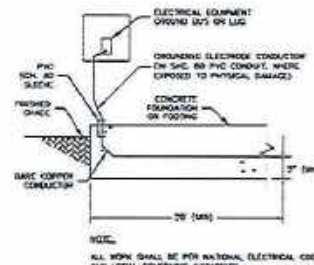
WALL MOUNTED DISCONNECT
SCALE: NONE



EQUIPMENT RACK DETAIL
NO SCALE



GROUND ROD WITH ACCESS WELL
SCALE: NONE



GROUNDING DETAIL ("UFER")
SCALE: NONE



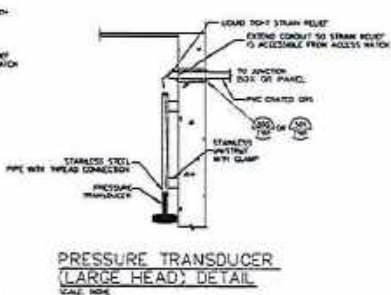
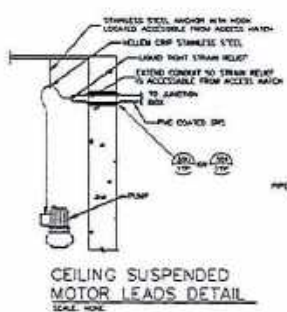
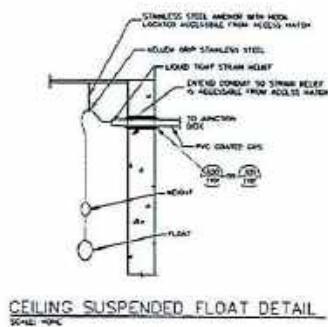
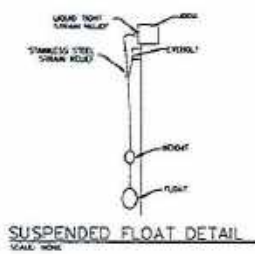
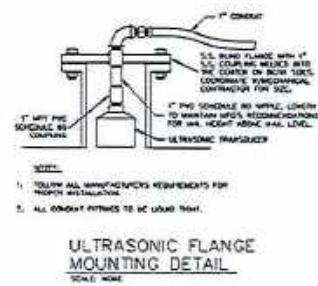
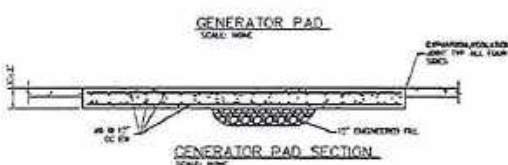
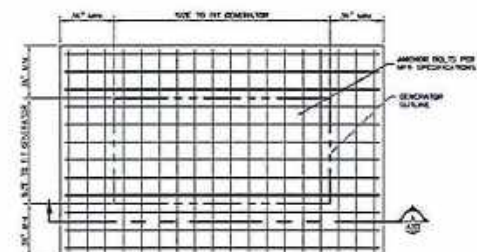
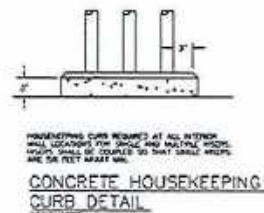
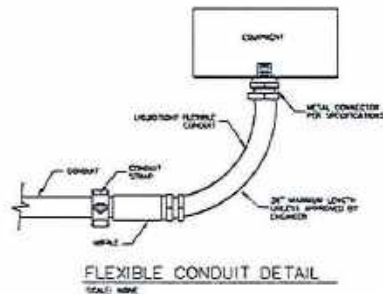
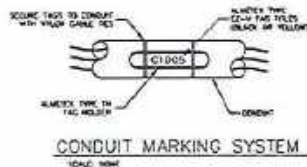
DATE: 05/24/2020	DRAWN: J.S.C.	PROJECT: BISHOPS LODGE	SHEET NO.: D-06
CHECKED: C.M.L.	PROJECT: BISHOPS LODGE	PROJECT NO.: 003-2020-1	
APPROVED: C.M.L.	PROJECT: BISHOPS LODGE	PROJECT: BISHOPS LODGE	
	PROJECT: BISHOPS LODGE	PROJECT: BISHOPS LODGE	

LEE & COMPANY, LLC
1912 E. 8th St, HARRISONVILLE, MISSOURI
PHONE: (816) 505-3548 E-MAIL: GLENN@LEE-ENGINEERS.COM

BISHOPS LODGE
NEW MEXICO

BISHOPS LODGE
ELECTRICAL DETAILS 1

PROJECT NO.: 003-2020-1
SHEET NO.: D-06



REVISIONS No. _____ Description _____ No. _____ Description _____ No. _____ Description _____				Date: 02/28/2020 Drawn: J.C.S. Checked: G.M.L. Scale: _____ Approved: G.M.L.		LEE & COMPANY, LLC 1812 E. CLAY ST., HARRISONVILLE, MISSOURI PHONE: (816) 805-2548 E-MAIL: CLEVERLEY-ENGINEERS.COM		PROJECT: BISHOPS LODGE SHEET: ELECTRICAL DETAILS 3		PROJECT NO.: 800-7025-1 SHEET NO.: D-08	



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

PUBLIC NOTICE

Groundwater Discharge Permits Proposed for Approval

September 20, 2024

Dear Interested Party,

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) hereby provides notice that the following Groundwater Discharge Permits have been proposed for approval. NMED will allow 30 days after the date of publication of this notice (or as otherwise provided below) for submittal of written comments and/or a request for a public hearing for a permitting action. You can add the comment period to your calendar through our Events Calendar located at <https://www.env.nm.gov/events-calendar/>. You can now submit your comments online using the Public Comment Portal located at <https://nmed.commentinput.com/>. Requests for public hearing shall be in writing and shall set forth the reasons why a hearing should be held. A hearing will be held if NMED determines that there is substantial public interest. After the administrative record for a permitting action is complete and all required information is available, NMED will approve, approve with conditions, or disapprove the Permit based on the administrative record.

NMED maintains a Public Involvement Plan (PIP) for each permitting action to plan for providing public participation opportunities and information that may be needed for the community to participate in a permitting process. PIPs may be viewed on-line at <https://www.env.nm.gov/public-notice/>, at the NMED field office nearest to the proposed permitted activity, or by contacting the NMED Permit Contact identified below. NMED also maintains facility-specific mailing lists for persons wishing to receive associated notices for a permitting action.

To learn more about a Discharge Permit and the permitting process, to be placed on a facility-specific mailing list, or to obtain a copy of a draft permit or PIP, please contact the NMED Permit Contact at the telephone number or address provided below. Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notice/> under the tab for the facility's county. Comments or a request for hearing regarding a draft permit should be addressed to the GWQB, PO Box 5469, Santa Fe, NM 87502-5469, or emailed to the NMED Permit Contact.

If you are a non-English speaker, do not speak English well, or if you have a disability, you may contact the NMED Permit Contact to request assistance, an interpreter, or an auxiliary aid in order to learn more about a

Science | Innovation | Collaboration | Compliance

Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469
Telephone (505) 827-2900 | www.env.nm.gov/gwqb/

EXHIBIT
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Discharge Permit: DP-75, Bishop's Lodge Wastewater Treatment Facility

- County: Santa Fe | Closest City: Santa Fe
- Applicant: B L Santa Fe, LLC, Chris Kaplan, 7001 N. Scottsdale Road, Suite 2050, Scottsdale, AZ 85253.
- NMED Permit Contact: Jason Herman, Program Manager, Jason.Herman@env.nm.gov or pps.general@env.nm.gov, Telephone: 575-649-3871 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Santa Fe: 540 Camino Edward Ortiz, Santa Fe, NM 87507.
- Written comments or requests for a hearing for DP-75 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-75, Bishop's Lodge Wastewater Treatment Facility: B L Santa Fe, LLC proposes to renew and modify the Discharge Permit for the discharge of up to 30,000 gallons per day of domestic wastewater from treatment system to reuse areas and disposal system. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 1297 Bishop's Lodge Road, Santa Fe, in Sections 5 and 6, Township 17 North, Range 10 East, Santa Fe County. Groundwater most likely to be affected is at a depth of approximately 23 feet and had a pre-discharge total dissolved solids concentration of 300 milligrams per liter.

Discharge Permit: DP-328, Elephant Butte Lake State Park

- County: Sierra | Closest City: Elephant Butte
- Applicant: State Parks Division, EMNRD, 1220 South Saint Francis Drive, Santa Fe, NM 87505
- NMED Permit Contact: Gerald Knutson, Water Resource Professional, Gerald.Knutson@env.nm.gov or pps.general@env.nm.gov, Telephone: 505-660-7189 or 505-827-2900.
- Draft permits may be viewed on-line at <https://www.env.nm.gov/public-notices/> under the tab for the facility's county.
- The Public Involvement Plan may be viewed online at <https://www.env.nm.gov/public-notices/> or at the NMED office in Las Cruces: 2301 Entrada Del Sol, Las Cruces, NM 88001.
- Written comments or requests for a hearing for DP-328 accepted until 5:00 p.m. MDT, October 21, 2024.

Notice: DP-328, Elephant Butte Lake State Park: State Parks Division EMNRD proposes to renew the Discharge Permit for the discharge of up to 20,000 gallons per day of domestic wastewater to treatment and disposal systems. Potential contaminants from this type of discharge include nitrogen compounds. The facility is located at 101 Highway 195, approximately one-mile northeast of Elephant Butte, in Sections 12 and 13, Township 13 South, Range 04 West, Sierra County. Groundwater most likely to be affected is at a depth of approximately 84 feet and had a pre-discharge total dissolved solids concentration of 784 milligrams per liter.



EPA

How Wastewater Treatment Works... The Basics

**EXHIBIT
D**

One of the most common forms of pollution control in the United States is *wastewater treatment*. The country has a vast system of collection sewers, pumping stations, and treatment plants. Sewers collect the wastewater from homes, businesses, and many industries, and deliver it to plants for treatment. Most treatment plants were built to clean wastewater for discharge into streams or other receiving waters, or for reuse.

Years ago, when sewage was dumped into waterways, a natural process of purification began. First, the sheer volume of clean water in the stream diluted wastes. Bacteria and other small organisms in the water consumed the sewage and other organic matter, turning it into new bacterial cells; carbon dioxide and other products. Today's higher populations and greater volume of domestic and industrial wastewater require that communities give nature a helping hand.

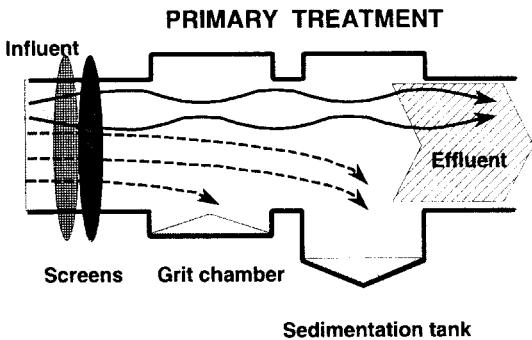
The basic function of wastewater treatment is to speed up the natural processes by which water is purified. There are two basic stages in the treatment of wastes, *primary* and *secondary*, which are outlined here. In the primary stage, solids are allowed to settle and removed from wastewater. The secondary stage uses biological processes to further purify wastewater. Sometimes, these stages are combined into one operation.

Primary Treatment

As sewage enters a plant for treatment, it flows through a *screen*, which removes large floating objects such as rags and sticks that might clog pipes or damage equipment. After sewage has been screened, it passes into a *grit chamber*, where cinders, sand, and small stones settle to the bottom. A grit chamber is particularly important in communities with combined sewer systems where sand or gravel may wash into sewers along with storm water.

After screening is completed and grit has been removed, sewage still contains organic and inorganic matter along with other suspended solids.

These solids are minute particles that can be removed from sewage in a *sedimentation tank*. When the speed of the flow through one of these tanks is reduced, the suspended solids will gradually sink to the bottom, where they form a mass of solids called *raw primary biosolids* (formerly *sludge*). Biosolids are usually removed from tanks



by pumping, after which it may be further treated for use as a fertilizer, or disposed of in a land fill or incinerated.

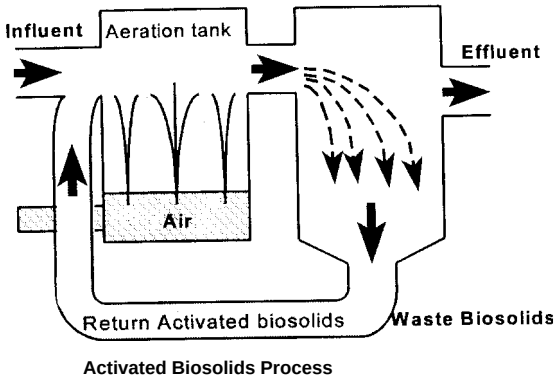
Over the years, primary treatment alone has been unable to meet many communities' demands for higher water quality. To meet them, cities and industries normally treat to a *secondary treatment level*, and in some cases, also use advanced treatment to remove nutrients and other contaminants.

Secondary Treatment

The *secondary stage* of treatment removes about 85 percent of the organic matter in sewage by making use of the bacteria in it. The principal secondary treatment techniques used in secondary treatment are *the trickling filter* and the *activated sludge process*.

After effluent leaves the sedimentation tank in the primary stage it flows or is pumped to a facility using one or the other of these processes. A trickling filter is simply a bed of stones from three to six feet deep through which sewage passes.

SECONDARY TREATMENT



More recently, interlocking pieces of corrugated plastic or other synthetic media have also been used in trickling beds. Bacteria gather and multiply on these stones until they can consume most of the organic matter. The cleaner water trickles out through pipes for further treatment. From a trickling filter, the partially treated sewage flows to another sedimentation tank to remove excess bacteria.

The trend today is towards the use of the activated sludge process instead of trickling filters. The activated sludge process speeds up the work of the bacteria by bringing air and sludge heavily laden with bacteria into close contact with sewage. After the sewage leaves the settling tank in the primary stage, it is pumped into an *aeration tank*, where it is mixed with air and sludge loaded with bacteria and allowed to remain for several hours. During this time, the bacteria break down the organic matter into harmless by-products.

The sludge, now activated with additional billions of bacteria and other tiny organisms, can be used again by returning it to the aeration tank for mixing with air and new sewage. From the aeration tank, the partially treated sewage flows to another sedimentation tank for removal of excess bacteria.

To complete secondary treatment, effluent from the sedimentation tank is usually *disinfected* with chlorine before being discharged into receiving

waters. Chlorine is fed into the water to kill pathogenic bacteria, and to reduce odor. Done properly, chlorination will kill more than 99 percent of the harmful bacteria in an effluent. Some municipalities now manufacture chlorine solution on site to avoid transporting and storing large amounts of chlorine, sometimes in a gaseous form. Many states now require the removal of excess chlorine before discharge to surface waters by a process called dechlorination. Alternatives to chlorine disinfection, such as ultraviolet light or ozone, are also being used in situations where chlorine in treated sewage effluents may be harmful to fish and other aquatic life.

Other Treatment Options

New pollution problems have placed additional burdens on wastewater treatment systems. Today's pollutants, such as heavy metals, chemical compounds, and toxic substances, are more difficult to remove from water. Rising demands on the water supply only aggravate the problem. The increasing need to reuse water calls for better wastewater treatment. These challenges are being met through better methods of removing pollutants at treatment plants, or through prevention of pollution at the source. Pretreatment of industrial waste, for example, removes many troublesome pollutants at the beginning, not the end, of the pipeline.

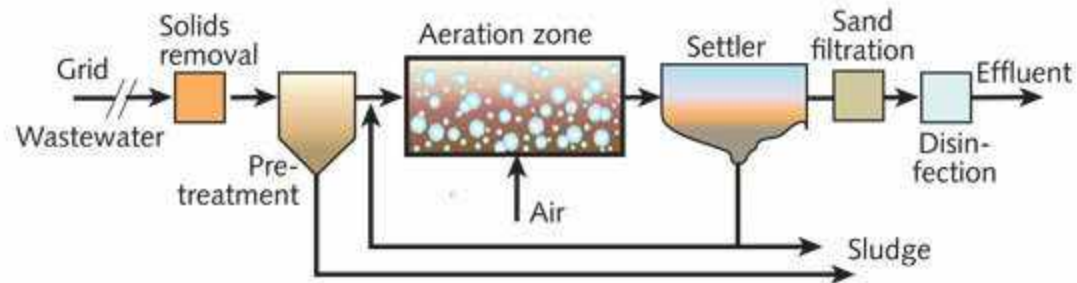
To return more usable water to receiving lakes and streams, new methods for removing pollutants are being developed. *Advanced waste treatment techniques* in use or under development range from biological treatment capable of removing nitrogen and phosphorus to physical-chemical separation techniques such *filtration*, *carbon adsorption*, *distillation*, and *reverse osmosis*. These wastewater treatment processes, alone or in combination, can achieve almost any degree of pollution control desired. Waste effluents purified by such treatment, can be used for industrial, agricultural, or recreational purposes, or even drinking water supplies.



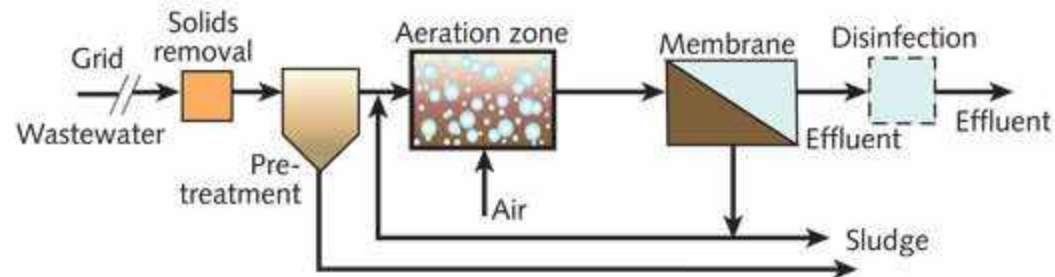
United States
Environmental Protection Agency
(4204)
Washington, DC 20460-0001

Official Business
Penalty For Private Use \$300

(a) Activated Sludge Treatment (AST) Process



(b) Membrane Bioreactor (MBR) process



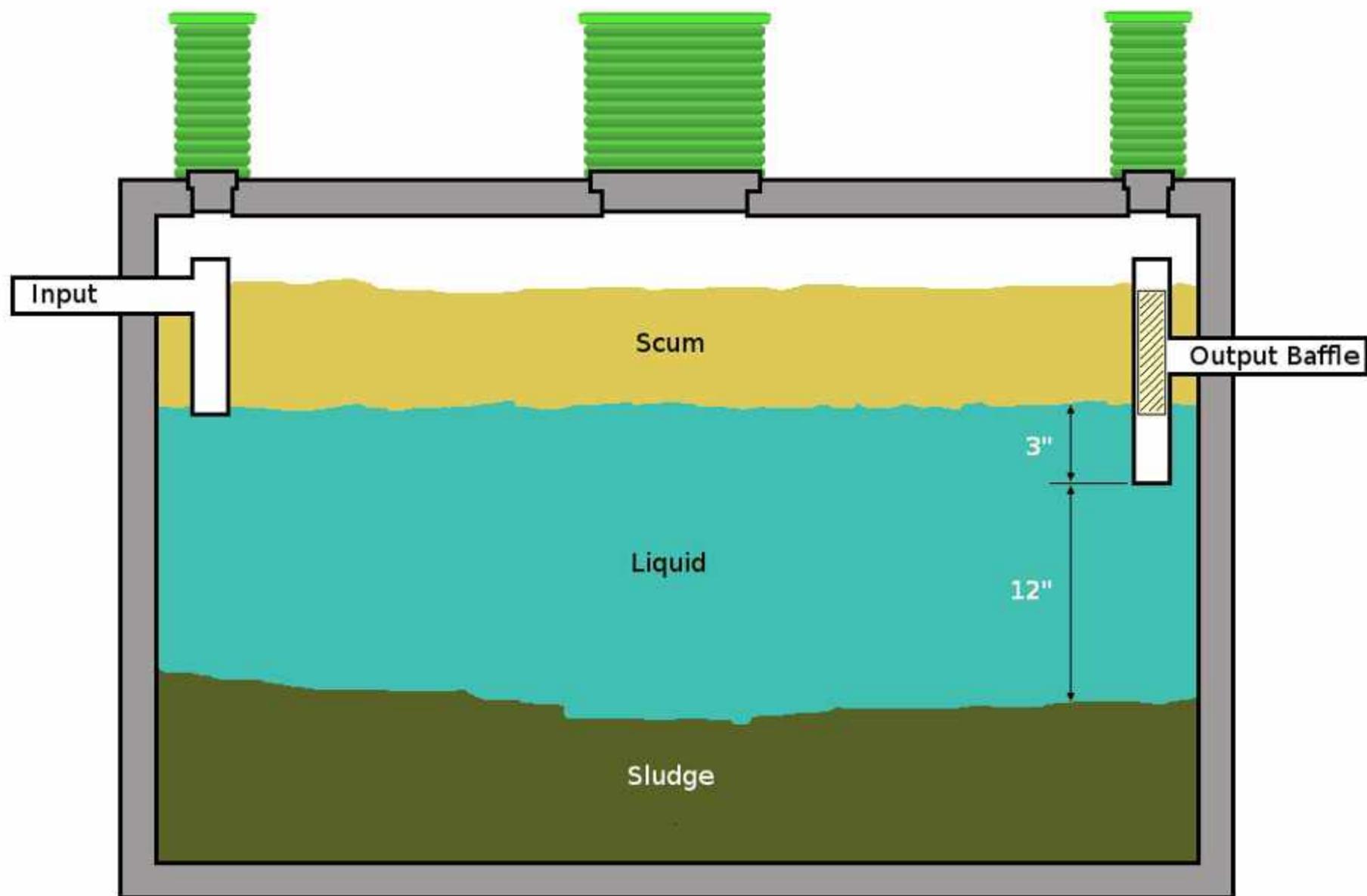
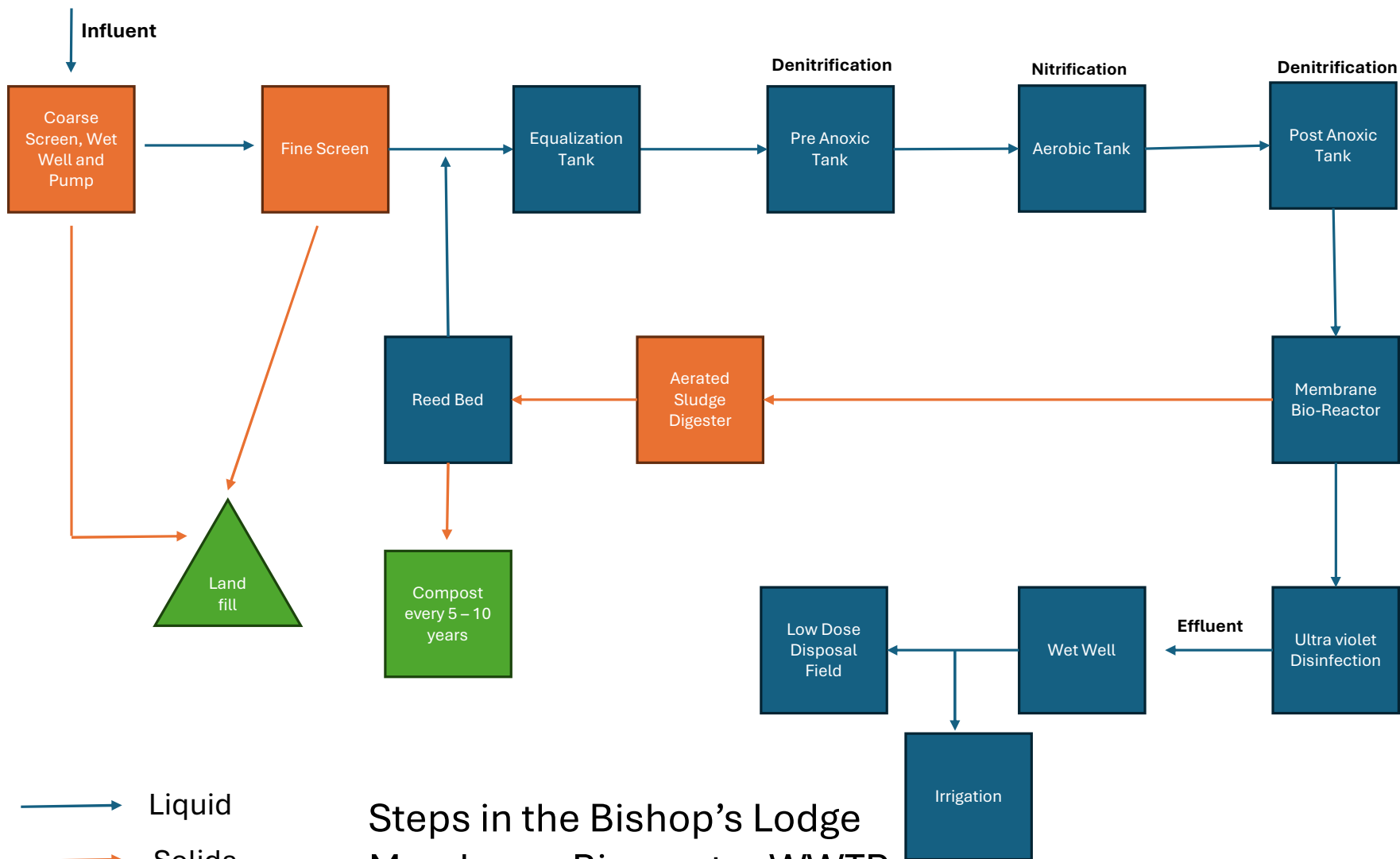


EXHIBIT
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Steps in the Bishop's Lodge
Membrane Bioreactor WWTP

EXHIBIT
G

The Atmosphere | National Oceanic and Atmospheric Administration

 noaa.gov/jetstream/atmosphere

Introduction to the Atmosphere

The atmosphere is a layer of gas and suspended solids extending from the Earth's surface up many thousands of miles, becoming increasingly thinner with distance but always held by the Earth's gravitational pull.

The atmosphere surrounds the Earth and holds the air we breathe; it protects us from outer space; and holds moisture (clouds), gases, and tiny particles. In short, the atmosphere is the protective bubble in which we live.

This protective bubble consists of several gases (listed in the table below), with the top four making up 99.998% of all gases. Of the dry composition of the atmosphere, **nitrogen** by far is the most common. Nitrogen dilutes oxygen and prevents rapid burning at the Earth's surface. Living things need it to make proteins.

Oxygen is used by all living things and is essential for respiration. It is also necessary for combustion (burning). **Argon** is used in light bulbs, in double-pane windows, and to preserve museum objects such as the original Declaration of Independence and Constitution. Plants use **carbon dioxide** to make oxygen. Carbon dioxide also acts as a blanket that prevents the escape of heat into outer space.

The exact amounts of each gas vary slightly from day to day. The [NOAA Global Monitoring Lab](#) updates trends in the 4 main Greenhouse Gases in the atmosphere daily.

Gas	Symbol	Content	
Nitrogen	N ₂	78.084%	
Oxygen	O ₂	20.946%	
Argon	Ar	0.934%	
Carbon dioxide	CO ₂	0.042%	
Neon	Ne	18.182 parts per million	
Helium	He	5.24 parts per million	

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H**

Gas	Symbol	Content
Methane	CH ₄	1.92 parts per million
Krypton	Kr	1.14 parts per million
Hydrogen	H ₂	0.55 parts per million
Nitrous oxide	N ₂ O	0.33 parts per million
Carbon monoxide	CO	0.10 parts per million
Xenon	Xe	0.09 parts per million
Ozone	O ₃	0.07 parts per million
Nitrogen dioxide	NO ₂	0.02 parts per million
Iodine	I ₂	0.01 parts per million
Ammonia	NH ₃	trace

Chemical makeup of the atmosphere EXCLUDING water vapor

These percentages of atmospheric gases are for a completely dry atmosphere. The atmosphere is rarely, if ever, dry. **Water vapor** (water in a gas state) is nearly always present, up to about 4% of the total volume.

Water Vapor	Nitrogen	Oxygen	Argon
0%	78.084%	20.947%	0.934%
1%	77.30%	20.70%	0.92%
2%	76.52%	20.53%	0.91%
3%	75.74%	20.32%	0.90%
4%	74.96%	20.11%	0.89%

Chemical makeup of the atmosphere INCLUDING water vapor

In the Earth's desert regions (30°N/S), when dry winds are blowing, the water vapor contribution to the composition of the atmosphere will be near zero. Water vapor contribution climbs to near 3% on extremely hot/humid days. The upper limit, approaching 4%, is found in tropical climates.

Reference: Mesh Micron Conversion Chart

The chart below details the equivalents to convert from mesh to micron or vice versa. These measurements indicate the mesh or pore openings in your filter bag material

Micron	U.S. Mesh	Inches
2000	10	0.0787
1680	12	0.0661
1410	14	0.0555
1190	16	0.0469
1000	18	0.0394
841	20	0.0331
707	25	0.028
595	30	0.0232
500	35	0.0197
420	40	0.0165
354	45	0.0138
297	50	0.0117
250	60	0.0098
210	70	0.0083
177	80	0.007
149	100	0.0059
125	120	0.0049
105	140	0.0041
88	170	0.0035
74	200	0.0029
63	230	0.0024
53	270	0.0021
44	325	0.0017
37	400	0.0015

Reference: Principles of Liquid Filtration

Liquid Filtration

Liquid filtration involves the removal of contaminant particles in a fluid system. The grade of filter chosen for a specific application is usually determined by the size of the particle to be removed. Contaminant particles are measured using the "micron" unit of measurement.

Micron

A micron is a metric unit of measurement where one micron is equivalent to one one-thousandth of a millimetre [1 micron (1 μ) = 1/1000 mm] or 1 micron (micrometer) = 1/1,000,000 of a metre.

Visualizing a micron

- a human red blood cell is 5 microns
- an average human hair has a diameter of 100 microns
- most humans cannot see anything smaller than 40 microns with the unaided eye.

EXHIBIT

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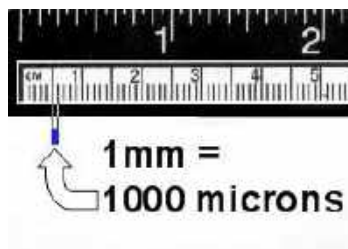
The following chart relates to size of some common particles:

Lower Limit	Upper Limit	Contaminant
Micron	Micron	
0.3	0.4	Smoke, Paint Pigments
0.4	0.55	Bacteria
0.55	0.7	Lung Damaging Paint
0.7	1.0	Atmospheric Dust
1.0	1.3	Molds
1.6	2.2	Flour Mill Dust
3	4	Cement Dust
4	5.5	Pulverized Coal
5.5	7	Commercial Dust
7	10	Pollen
10	75	Silt
75	1000	Sand

The micron unit of measurement is used not only to measure the size of a contaminate particle, it is also used to measure the size of the openings in filter media, hence, a media's micron rating. This system of measurement is more accurate when gauging woven filtration structures, such as monofilaments, than it is for gauging non-woven structures, such as felts.

What is a Micron?

A micron is a unit of measure in the metric system. It equals one-millionth of a meter and one-thousandth of a millimeter. It is a shorten word for micrometer.



m	meter	39.37 inch
dm	decimeter	3.937 inch
cm	centimeter	.3937 inch
mm	millimeter	.03937 inch
um	micrometer	.00003937 inch

Micrometers measure things that are very small. It is ideal for measuring things that are so small that the naked eye can barely see it. And it is ideal for measuring things so small that the naked eye cannot see it. For example, airborne allergens such as pollen and mold spores usually fall just below the level of what the eye can see.

The word comes from the Greek word "Mikros" which means small.

The table below shows the placement of this unit of measure in the metric system.

You can see how small of a unit of measure that it is. If you were using a high power microscope or a SEM microscope and wanted to measure what you were looking at, the next unit of measure that is smaller is a nanometer. One thousand nanometers equals one micron.

The Unit-Length-Conversion website is a great website to [convert to and from microns](#) to other units of measure.

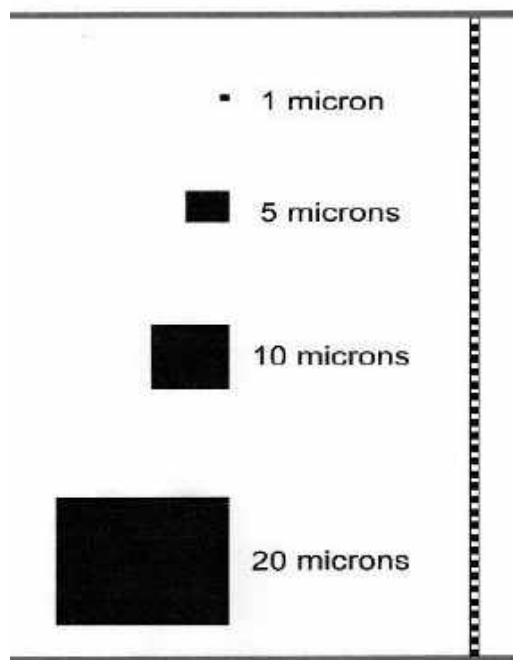
How to Visualize such a Small Unit of Measure

I will try to describe a visual picture to put such a small size into perspective. To know that 25,400 microns equals one inch is one thing. To understand and to be able to visualize what that means is another.

To begin, I want to establish a point of reference that we can all relate to. Copy paper for the computer printer can vary in thickness. For this example, we will say that the average thickness of common copy paper is 100 *microns*. I arrive at this figure by measuring a ream of 500 sheets of paper. I take that measurement and divide by 500 and come up with a figure that is very close to .12 mm.

Pick up a piece of paper and look at the edge (the thickness) and you will see that the period at the end of this sentence is bigger.

The picture below represents **the thickness** of copy paper.



The horizontal line at top of the picture represents the top of the paper which is the writing side. The bottom line in the picture represents the bottom of the paper which would be the side that is touching the desk as you write.

Look at the edge thickness of a piece of paper and then look at the diagram above. This should help this small size into perspective.

If a piece of paper was lying flat on your desk, the right side of the picture above shows what a hundred microns would look like stacking upon top of each other along the edge (the thickness) of the paper.

This unit of measure makes it the ideal unit of measure for airborne allergens. As shown in the article [Particle Sizes of Airborne Allergens](#), most allergic airborne triggers range between 1-100 microns in size. And when talking about [nasal allergies](#), the smaller the particle size, the more potential it has to stay airborne longer before settling. This results in more of a chance for the allergens to be breathed in.

MESH TO MICRON CONVERSION CHART

U.S. MESH	INCHES	MICRONS	MILLIMETERS
3	0.2650	6730	6.730
4	0.1870	4760	4.760
5	0.1570	4000	4.000
6	0.1320	3360	3.360
7	0.1110	2830	2.830
8	0.0937	2380	2.380
10	0.0787	2000	2.000
12	0.0661	1680	1.680
14	0.0555	1410	1.410
16	0.0469	1190	1.190
18	0.0394	1000	1.000
20	0.0331	841	0.841
25	0.0280	707	0.707
30	0.0232	595	0.595
35	0.0197	500	0.500
40	0.0165	400	0.400
45	0.0138	354	0.354
50	0.0117	297	0.297
60	0.0098	250	0.250
70	0.0083	210	0.210
80	0.0070	177	0.177
100	0.0059	149	0.149
120	0.0049	125	0.125
140	0.0041	105	0.105
170	0.0035	88	0.088
200	0.0029	74	0.074
230	0.0024	63	0.063
270	0.0021	53	0.053
325	0.0017	44	0.044
400	0.0015	37	0.037

Mesh Sizes and Microns

What does mesh size mean? Figuring out mesh sizes is simple. All you do is count the number of openings in one inch of screen (in the United States, anyway.) The number of openings is the mesh size. So a 4-mesh screen means there are four little squares across one linear inch of screen. A 100-mesh screen has 100 openings, and so on. As the number describing the mesh size increases, the size of the particles decreases. Higher numbers equal finer material. Mesh size is not a precise measurement of particle size.

What do the minus (-) and plus (+) plus signs mean when describing mesh sizes? Here's a simple example of how they work. -200-mesh would mean that all particles smaller than 200-mesh would pass through. +200 mesh means that all the particles 200-mesh or larger are retained.

How fine do screens get? That depends on the wire thickness. If you think about it, the finer the weave, the closer the wires get together, eventually leaving no space between them at all. For this reason, beyond 325-mesh particle size is usually described in "microns."

What is a micron? A micron is another measurement of particle size. A micron is one-millionth of a meter or one twenty-five thousandth of an inch.

Sieve Mesh #	Inches	Microns	Typical Material
14	.0555	1400	-
28	.028	700	Beach Sand
60	.0098	250	Fine Sand
100	.0059	150	-
200	.0029	74	Portland Cement
325	.0017	44	Silt
400	.0015	37	Plant Pollen
(1200)	.0005	12	Red Blood Cell
(2400)	.0002	6	-
(4800)	.0001	2	Cigarette Smoke

The mesh numbers in parentheses are too small to exist as actual screen sizes; they are estimates included for reference.



NMED GROUND WATER QUALITY BUREAU GUIDANCE:

ABOVE GROUND USE OF RECLAIMED DOMESTIC WASTEWATER

January 2007

PURPOSE

This document provides guidance for the above ground use of reclaimed domestic wastewater necessary to ensure protection of public health and the environment. The New Mexico Environment Department (NMED) has developed this guidance document to promote the safe use of reclaimed wastewater to offset the use of limited potable water resources in the State. This guidance document is intended to provide direction for any person seeking to submit an application for a Ground Water Discharge Permit that includes the above ground use of reclaimed wastewater. This document is used by NMED technical staff to ensure consistency in the application review process and in the development of permit requirements. This guidance document will also be made available to the regulated community and their consultants to provide a basis for future facility planning.

Ground Water Discharge Permit applications for above ground use of reclaimed domestic wastewater that follow this guidance document will be approved. However, applicants may make alternative demonstrations to NMED that the existing or proposed discharge of reclaimed domestic wastewater at a specific facility is protective of public health and the environment. NMED encourages the development and implementation of new processes and equipment, and will favorably consider them on a case by case basis.

The generator of the reclaimed wastewater is responsible for discharges of reclaimed wastewater unless this responsibility is assumed by a separate entity pursuant to an approved Ground Water Discharge Permit. Implementation of the requirements for existing dischargers will be determined on an individual facility basis at the time of permit renewal and/or modification.

Finally, the discharge of reclaimed wastewater may also be regulated by the New Mexico Construction Industries Division (CID). For example, the use of reclaimed wastewater for indoor plumbing (e.g., toilet flushing, fire suppression) requires approval from CID.

DEFINITIONS

The following definitions are used in this guidance document:

Agronomic Rate: the rate of application of nutrients to plants that is necessary to satisfy the plants' nutritional requirements while strictly minimizing the amount of nutrients that run off to surface waters or which pass below the root zone of the plants.

Class 1A Reclaimed Wastewater: the highest quality reclaimed wastewater described in this guidance document and can be most broadly utilized except for direct consumption. [approved uses listed in Table 1]

Class 1B Reclaimed Wastewater: the second highest quality reclaimed wastewater described in this guidance document and is suitable for uses in which public exposure is likely. [approved uses listed in Table 1]

Class 2 Reclaimed Wastewater: reclaimed wastewater suitable for uses in which public access and exposure is restricted. [approved uses listed in Table 1]

EXHIBIT J

Class 3 Reclaimed Wastewater: reclaimed wastewater suitable for uses in which public access and exposure is prohibited. [approved uses listed in Table 1]

Domestic wastewater: wastewater containing human excreta and water-carried waste from typical residential plumbing fixtures and activities, including but not limited to wastes from toilets, sinks, bath fixtures, clothes or dishwashing machines and floor drains.

Dwelling unit: a structure which contains bedrooms.

Establishment: a structure used as a place of business, education, or assembly.

Flood Irrigation: land application of reclaimed wastewater by ditches, furrows, pipelines, low flow emitters and other non-sprinkler methods.

Food Crops: any crop intended for human consumption.

Grab Sample: an individual sample collected in less than 15 minutes.

Major WWTP: any treatment plant with a maximum design capacity of 1,000,000 gallons or more per day.

Minor WWTP: any treatment plant with a maximum design capacity of less than 1,000,000 gallons per day.

Monthly Geometric Mean: value calculated by taking the sum of the logarithms (sum log x) of each of the data points from the previous calendar month, dividing the sum by the number of data points and then taking the anti-logarithm of the result (10^y = anti-logarithm of 'y').

NTU: nephelometric turbidity units, measured by a nephelometer.

Occupied establishment: any establishment that is occupied regularly at the time of irrigation.

Peak hourly flow: the highest hourly flow rate within a 24 hour period.

Reclaimed wastewater: domestic wastewater that has been treated to the specified levels for the defined uses set forth in this guidance document and other applicable local, state, or federal regulations.

Spray Irrigation: land application of reclaimed wastewater by dispersing it in the air utilizing equipment which provides a low trajectory application and which minimizes misting of the reclaimed wastewater.

3-hour Composite Sample: three effluent portions collected no closer together than one hour (collected between 8:00 am and 4:00 pm) and composited in proportion to flow.

6-hour Composite Sample: six effluent portions collected no closer together than one hour (collected between 8:00 am and 4:00 pm) and composited in proportion to flow.

24-hour Composite Sample: twenty-four effluent portions collected no closer together than one hour and composited in proportion to flow.

30-day Average:

For fecal coliform bacteria: the geometric mean of the values for all effluent samples collected during a calendar month.

For other than for fecal coliform bacteria: the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

BACKGROUND

This guidance document supersedes the New Mexico Environmental Improvement Division (NMEID) 1985 Policy for the Use of Domestic Wastewater Effluent for Irrigation and NMED's 2003 Policy for the Above Ground Use of Reclaimed Domestic Wastewater. This guidance document establishes reclaimed wastewater quality levels, site restrictions, management practices, and uses for different categories of reclaimed wastewater that are approvable by NMED. Unless an alternative demonstration is proposed by the applicant and accepted by NMED, NMED will propose Ground Water Discharge Permit conditions for above ground discharges of reclaimed wastewater based on the recommendations set forth in this guidance document. While the requirements set forth in this guidance document are deemed protective of public health and the environment, the guidance document does not prevent communities from adopting more stringent requirements.

WASTEWATER TREATMENT PROCESSES

The specified quality levels for Class 1B, Class 2, and Class 3 assume a minimum of conventional secondary wastewater treatment plus disinfection. Class 1A assumes treatment to remove colloidal organic matter, color, and other substances that interfere with disinfection, thereby allowing for the use of the reclaimed wastewater for urban landscaping adjacent to dwelling units or occupied establishments.

GENERAL ABOVE GROUND USE PERMIT CONDITIONS

A. ALL APPROVED USES

1. Whenever reclaimed wastewater is used for any use approved in this guidance document, the wastewater should meet the minimum requirements set forth in this guidance document, unless a demonstration is made that an alternate requirement offers an equivalent protection of public health. The burden of proof for an alternative demonstration rests upon the discharger.
2. Whenever reclaimed wastewater other than Class 1A is used in areas with public access, it should be applied at times and in a manner that minimizes public contact.
3. Whenever reclaimed wastewater is used in areas with restricted public access, the public should be excluded from entering the area.
4. Reclaimed wastewater should only be used for soil compaction or dust control in construction areas where application procedures minimize aerosol drift to public areas.
5. Reclaimed wastewater quality requirements should be measured at the discharge point of the wastewater treatment plant.
6. Signs (in English and Spanish) should be placed at the entrance to areas receiving reclaimed wastewater, and other locations where public access may occur stating: **"NOTICE – THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER – DO NOT DRINK"; "AVISO – ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS – NO TOMAR"**. Alternate wording may be approved by NMED.
7. All piping, valves and outlets should be color-coded in purple pursuant to the latest revision of the New Mexico Plumbing and Mechanical Code to differentiate piping or fixtures used to convey reclaimed wastewater from piping or fixtures used for potable or other water. All valves, outlets, and sprinkler heads used in reclaimed wastewater systems should be of a type that can only be operated by authorized personnel. Those

portions of reclaimed wastewater systems that are underground and were installed prior to the adoption of this guidance document are exempt from the purple color-coding requirement if all accessible portions of the reclaimed wastewater system are colored purple or clearly labeled as being part of a reclaimed wastewater distribution system.

8. Reclaimed wastewater systems should have no direct or indirect cross connections with potable water systems pursuant to the latest revision of the New Mexico Plumbing and Mechanical Code. For reclaimed wastewater systems that were installed prior to the adoption of this guidance document, the absence of cross connections may be demonstrated via hydrostatic testing or as-built drawings, supported by an affidavit under oath that no cross connection exists.
9. Above ground use of reclaimed wastewater should not result in excessive standing or pooling of wastewater, and should be applied at the appropriate agronomic rate. Irrigation should not be conducted at times when the receiving area is saturated or frozen.
10. The discharge of reclaimed wastewater should be confined to the area designated and approved for receiving the wastewater. Irrigation should be postponed at times when windy conditions may result in drift of reclaimed wastewater outside the designated area of application.
11. Treatment facilities that provide reclaimed wastewater to parks, golf courses, schools and other areas where human exposure is likely must have an emergency storage pond or alternate disposal method where reclaimed wastewater can be diverted during periods when conditions are unfavorable for approved uses or when the quality requirements defined in this guidance document cannot be met.

B. IRRIGATION OF FOOD CROPS

1. Reclaimed wastewater should not be used for the spray irrigation of food crops.
2. Reclaimed wastewater should not be used for surface irrigation of food crops except where there is no contact between the edible portion of the crop and the wastewater, and the wastewater should have a level of quality no less than Class 1B Reclaimed Wastewater (Table 2).

C. IRRIGATION OF FODDER, FIBER AND SEED CROPS

1. Reclaimed wastewater used for the irrigation of pasture to which milking cows or goats have access should have a level of quality no less than Class 2 Reclaimed Wastewater (Table 2).
2. Except pasture for milk-producing animals, reclaimed wastewater used for the irrigation of fodder, fiber and seed crops should have a level of quality no less than Class 3 Reclaimed Wastewater (Table 2).

D. IRRIGATION OF LANDSCAPES

1. Reclaimed wastewater used for irrigation should be applied such that direct and windblown spray is confined to the area designated and approved for application.
2. Reclaimed wastewater used for the irrigation of freeway landscapes and landscapes in other areas where the public has similarly limited access or exposure should have a level of quality no less than Class 2 Reclaimed Wastewater (Table 2). Public access to the irrigation site must be restricted during the period of application.

3. Reclaimed wastewater used for the irrigation of parks, playgrounds, schoolyards, golf courses, cemeteries and other areas where the public has similarly open access should have a level of quality no less than Class 1B Reclaimed Wastewater (Table 2), and the irrigation system should have low trajectory spray nozzles. *Areas which are spray irrigated and located within 100 feet of a dwelling unit or occupied establishment should only receive Class 1A Reclaimed Wastewater (Tables 2 & 3).*

CLASSIFICATION AND USES OF RECLAIMED WASTEWATER

This guidance document identifies four classes of reclaimed wastewater (Class 1A, Class 1B, Class 2, and Class 3) based on reclaimed wastewater quality and the likelihood of public exposure. Table 1 presents the approved uses.

Table 1. Approved Uses for Reclaimed Wastewater by Class

Class of Reclaimed Wastewater	Approved Uses
Class 1A	All Class 1 uses. <i>No setback limit</i> to dwelling unit or occupied establishment.
	Backfill around potable water pipes
	Irrigation of food crops ¹
Class 1B	Impoundments (recreational or ornamental)
	Irrigation of parks, school yards, golf courses ²
	Irrigation of urban landscaping ²
	Snow making
	Street cleaning
	Toilet flushing
	Backfill around non-potable piping
Class 2	Concrete mixing
	Dust control
	Irrigation of fodder, fiber, and seed crops for milk-producing animals
	Irrigation of roadway median landscapes
	Irrigation of sod farms
	Livestock watering
	Soil compaction
Class 3	Irrigation of fodder, fiber, and seed crops for non-milk-producing animals
	Irrigation of forest trees (silviculture)

¹ Irrigation of food crops should only be allowed for food crops when there is no contact between the edible portion of the crop and the wastewater. Spray irrigation is prohibited for food crops.

² If reclaimed wastewater is applied using spray irrigation, the setback limitation of Table 3 “Spray Irrigation” should be observed.

Class 1A reclaimed wastewater may be used for any purpose except direct consumption, food handling and processing, and spray irrigation of food crops. Class 1B reclaimed wastewater may be used where public exposure is likely, and where the appropriate setback requirements are met (Table 3, page 9). Class 2 and Class 3 reclaimed wastewater may be used where public access is restricted with correspondingly less stringent requirements for treatment and disinfection. Any reclaimed wastewater treated to higher quality than the lower classes may be used for the purposes established for the lower classes. *Other uses of reclaimed wastewater not included in Table 1 will be evaluated on a case by case basis by NMED to determine the appropriate water quality classification for the given use.*

WASTEWATER QUALITY LEVELS AND MONITORING PROTOCOL

This section identifies minimum wastewater quality levels and monitoring frequencies for the various classes of reclaimed wastewater. The frequency of wastewater quality monitoring is patterned after U.S. Environmental Protection Agency (USEPA) requirements for discharges of treated and disinfected wastewater to surface waters. Monitoring requirements are dependent on the quality of reclaimed wastewater produced at the treatment plant and the design capacity of the treatment plant. For example, a “major” wastewater treatment plant (having a maximum design capacity of 1 million gallons or more per day) producing Class 1A Reclaimed Wastewater has the most stringent monitoring requirements. The wastewater quality levels and monitoring frequencies for the various classes of reclaimed wastewater are presented in Table 2. In the event that a facility proposes alternative wastewater quality levels and/or monitoring frequencies, it is the responsibility of the facility owner/operator to demonstrate that the alternative proposal provides an equivalent measure of public health protection as the measures set forth in this guidance document.

Table 2. Wastewater Quality Requirements and Monitoring Frequencies by Class of Reclaimed Wastewater

Class of Reclaimed Wastewater	Wastewater Quality Parameter	Wastewater Quality Requirements		Wastewater Monitoring Requirements	
		30-Day Average	Maximum	Sample Type	Measurement Frequency
Class 1A	BOD ₅	10 mg/l	15 mg/l	Minimum of 6-hour composite	3 tests per week for major WWTP ¹ ; 1 test per 2 weeks for minor WWTP
	Turbidity	3 NTU	5 NTU	Continuous	Continuous
	Fecal Coliform	5 per 100 ml	23 per 100 ml	Grab sample at peak flow	3 tests per week for major WWTP; 1 test per week for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak flow	Record values at peak hourly flow when Fecal Coliform samples are collected
Class 1B	BOD ₅	30 mg/l	45 mg/l	Minimum of 6-hour composite	3 tests per week for major WWTP ¹ ; 1 test per 2 weeks for minor WWTP
	TSS	30 mg/l	45 mg/l	Minimum of 6-hour composite	3 tests per week for major WWTP ¹ ; 1 test per 2 weeks for minor WWTP
	Fecal Coliform	100 organisms per 100 ml	200 organisms per 100 ml	Grab sample at peak flow	3 tests per week for major WWTP; 1 test per week for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak flow	Record values at peak hourly flow when Fecal Coliform samples are collected

Table 2. Wastewater Quality Requirements and Monitoring Frequencies by Class of Reclaimed Wastewater (continued)

Class of Reclaimed Wastewater	Wastewater Quality Parameter	Wastewater Quality Requirements		Wastewater Monitoring Requirements	
		30-Day Average	Maximum	Sample Type	Measurement Frequency
Class 2	BOD ₅	30 mg/l	45 mg/l	Minimum of 6-hour composite for major WWTP; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	TSS	30 mg/l	45 mg/l	Minimum of 6-hour composite for major WWTP; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	Fecal Coliform	200 organisms per 100 ml	400 organisms per 100 ml	Grab sample at peak hourly flow	1 test per week for major WWTP; 1 test per month for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak hourly flow	Record values at peak hourly flow when Fecal Coliform samples are collected
Class 3	BOD ₅	30 mg/l	45 mg/l	Minimum of 3-hour composite for major WWTP ⁵ ; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	TSS	75 mg/l	90 mg/l	Minimum of 3-hour composite for major WWTP; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	Fecal Coliform	1,000 organisms per 100 ml	5,000 organisms per 100 ml	Grab sample at peak hourly flow	1 test per week for major WWTP; 1 test per month for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak hourly flow	Record values at peak hourly flow when Fecal Coliform samples are collected

Note: *E. coli* may be used in place of Fecal Coliform as an indicator organism, once an equivalency has been established.

ACCESS RESTRICTIONS AND SET-BACK REQUIREMENTS

Table 3 presents the access controls and setback distances necessary to minimize direct and indirect public exposure to reclaimed wastewater. Setback distances recommended in this guidance document are in all cases the distance from the edge of any area receiving reclaimed wastewater to well casings, dwelling units, or occupied establishments.

In addition to the setbacks described in Table 3, all water supply wells within 200 feet of a wetted irrigation area must be evaluated for adequate well head construction and irrigation practices to ensure protection of ground water. NMED may impose additional setbacks as needed to make certain that the application of reclaimed wastewater does not threaten ground water resources.

Table 3. Access Restrictions and Set Back Requirements

Class of Reclaimed Wastewater	Spray Irrigation	Flood Irrigation and Surface Drip Irrigation
Class 1A	• No access control • No setback to dwelling unit or occupied establishment • Low pressure/low trajectory irrigation system only	• No access control
Class 1B	• No access control; irrigate at times when public exposure is unlikely • 100 ft set-back from dwelling unit or occupied establishment • Low pressure/low trajectory irrigation system only	• No access control; irrigate at times when public exposure is unlikely
Class 2	• Access restricted by perimeter fencing using 4-strand barbed wire and locking gate or other NMED approved access controls • 100 ft set-back from dwelling unit or occupied establishment • Low pressure/low trajectory irrigation system only	• Access restricted by perimeter fencing using 4-strand barbed wire and locking gate, or other NMED approved access controls
Class 3	• Access restricted by perimeter fencing using 4-strand barbed wire and locking gate • 500 ft set-back from dwelling unit or occupied establishment • Low pressure/low trajectory irrigation system only	• Access restricted by perimeter fencing using 4-strand barbed wire and locking gate • 100 ft set-back to dwelling unit or occupied establishment.

Summary of New Mexico's Water Reuse Guideline or Regulation for Agriculture

 epa.gov/waterreuse/summary-new-mexicos-water-reuse-guideline-or-regulation-agriculture

July 3, 2022



This page is part of the EPA's [REUSExplorer](#) tool, which summarizes the different state level regulations or guidelines for water reuse for a variety of sources and end-uses.

The source water for this summary is **Treated Municipal Wastewater**.

On this page:

This page is a summary of the state's water reuse law or policy and is provided for informational purposes only. Please always refer to the state for the most accurate and updated information.

In New Mexico, water reuse for includes food crops when there is no contact between the edible portion of the crop and the wastewater; fodder, fiber and seed crops for milk-producing and non-milk-producing animals; sod farms; pasture for milking cows or goats; and forest trees. The source of water is specified by the state as domestic wastewater. This write-up uses state terms when discussing sources or uses of water that may differ from the Regulations and End-Use Specifications Explorer's (REUSExplorer's) terms.

**EXHIBIT
K**

Technical basis

The New Mexico Environment Department (NMED) provides guidance for above ground reuse of reclaimed domestic wastewater to “ensure protection of public health and the environment” (NMED, 2007). All applicable provisions of the Clean Water Act (CWA) (33 U.S.C. §§ 1251 et seq.), including its implementing regulations, must be met in addition to any relevant rule requirements under the Food Safety Modernization Act (FSMA) (124 Stat. 3885). Class 1A reclaimed wastewater is approved for the irrigation of food crops where there is no contact with the edible portion of the crop in areas where public access is likely; specific restrictions on public access are not provided. Class 2 and Class 3 reclaimed wastewaters are approved for agricultural irrigation reuse applications in areas where public access is restricted with correspondingly less stringent requirements for treatment and disinfection for Class 3 when compared to Class 2 and Class 1A. Treatment requirements and performance standards are applied for the removal of microbial contaminants, chemicals and other relevant indicators related to agriculture and are summarized in the table. New Mexico developed their specifications and/or removals of microbial contaminants, chemicals and other relevant indicators based on a comparison to other state reuse approaches (Colorado, Arizona, Texas, Washington and Florida), NPDES limits (40 C.F.R. part 122) and related New Mexico surface water limits (N.M. Code R. § 20.6.4).

Water reuse for agriculture approved for use in New Mexico

NMED (2007) defines the following approved water reuse for agriculture:

- Food crops when there is no contact between the edible portion of the crop and the wastewater (Class 1A)
- Fodder, fiber and seed crops for milk-producing animals (Class 2)
- Sod farms (Class 2)
- Pasture for milking cows or goats (Class 2)
- Fodder, fiber and seed crops for non-milk-producing animals (Class 3)
- Forest trees (silviculture) (Class 3)

Water reuse treatment category for agriculture

The various classes of reclaimed water treatment are defined by their respective treatment requirements and applicable performance standards. The respective treatment requirements are briefly summarized regarding water reuse for agriculture (NMED, 2007):

- Class 1A reclaimed wastewater is suitable only for irrigation of food crops when there is no contact between the edible portion of the crop and the wastewater. Spray irrigation of food crops is prohibited. Application of Class 1A reclaimed water does not require restrictions on public access and exposure. It requires a minimum of treatment to remove colloidal organic matter, color and other substances that interfere with disinfection plus disinfection. Requirements for treatment and disinfection (measurements of fecal coliforms) are more stringent when compared to Class 2 and Class 3.
- Class 2 reclaimed wastewater is suitable for purposes in which public access and exposure is restricted. It requires a minimum of conventional secondary wastewater treatment plus disinfection. Requirements for treatment and disinfection (single sample maximum for total suspended solids and measures of fecal coliforms) are more stringent when compared to Class 3.
- Class 3 reclaimed wastewater is suitable for purposes in which public access and exposure is restricted. It requires a minimum of conventional secondary wastewater treatment plus disinfection.

Additional context and definitions

In New Mexico, reclaimed water is defined as “domestic wastewater that has been treated to the specified levels for the defined uses set forth in this guidance document and other applicable local, state, or federal regulations” (NMED, 2007). Domestic wastewater is defined as “wastewater containing human excreta and water-carried waste from typical residential plumbing fixtures and activities, including but not limited to wastes from toilets, sinks, bath fixtures, clothes or dishwashing machines and floor drains” (NMED, 2007).

New Mexico requires all municipal reclaimed wastewater piping, valves and outlets to be colored purple to differentiate it from piping or fixtures used for potable or other water (NMED, 2007). Reclaimed wastewater systems should have no indirect or direct cross connections with potable water systems. Signs in English and Spanish stating “NOTICE – THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER – DO NOT DRINK” must be placed at the entrance to areas receiving reclaimed wastewater and other locations where public access may occur.

Water reuse for agriculture specifications

Summary of New Mexico's Water Reuse for Agriculture Specifications

Recycled Water Class/Category	Source Water Type	Water Quality Parameter	Specification	Sampling/Monitoring Requirements (Frequency of monitoring; site/location of sample; quantification methods)*
Class 1A Reclaimed Water (Irrigation of food crops)	Domestic wastewater	5-day biochemical oxygen demand (BOD5)	10 mg/L (30-day average) 15 mg/L (single sample maximum)	Minimum of 6-hour composite and 3 tests per week for major WWTP ^a and 1 test per 2 weeks for minor WWTP
		Turbidity	3 NTU (30-day average); 5 NTU (single sample maximum)	Continuous monitoring
		Fecal coliform ^b	5 organisms/100 mL (30-day average) 23 organisms/100 mL (single sample maximum)	Grab sample at peak flow; 3 tests per week for major WWTP ^a and 1 test per week for minor WWTP
		Total residual chlorine (TRC) or UV transmissivity	None, monitor only	Grab sample or reading at peak hourly flow; Record values at peak hourly flow when fecal coliform samples are collected
		Nitrogen	Not specified	Not specified

Class 2 Reclaimed Water (Irrigation of sod farms, fodder, fiber and seed crops for milk- producing animals and pasture for milking cows or goats)	Domestic wastewater	5-day biochemical oxygen demand (BOD5)	30 mg/L (30- day average) 45 mg/L (single sample maximum)	Minimum of 6-hour composite and 1 test per week for major WWTP ^a ; Grab sample and 1 test per month for minor WWTP
		Total suspended solids (TSS)	30 mg/L (30- day average) 45 mg/L (single sample maximum)	
		Fecal coliform ^b	200 organisms/100 mL (30-day average) 400 organisms/100 mL (single sample maximum)	Grab sample at peak hourly flow; 1 test per week for major WWTP ^a ; 1 test per month for minor WWTP
		Total residual chlorine (TRC) or UV transmissivity	None, monitor only	
		Nitrogen	If reclaimed wastewater contains >10 mg/L, the reuse permittee must submit a Land Application Data Sheet (LADS) to ensure they will not exceed loading of 200 lbs/acre/year	Not specified

Class 3 Reclaimed Water (Irrigation of forest trees (silviculture), fodder, fiber and seed crops for non-milk- producing animals)	Domestic wastewater	5-day biochemical oxygen demand (BOD5)	30 mg/L (30- day average) 45 mg/L (single sample maximum)	Minimum of 3-hour composite and 1 test per week for major WWTP ^a ; Grab sample and 1 test per month for minor WWTP
		Total suspended solids (TSS)	30 mg/L (30- day average) 75 mg/L (single sample maximum)	
		Fecal coliform ^b	1,000 organisms/100 mL (30-day average) 5,000 organisms/100 mL (single sample maximum)	
		Total residual chlorine (TRC) or UV transmissivity	None, monitor only	
		Nitrogen	If reclaimed wastewater contains >10 mg/L, the reuse permittee must submit a Land Application Data Sheet (LADS) to ensure they will not exceed loading of 200 lbs/acre/year	

Source= NMED (2007), N.M. Code R. § 20.6.2.3109.C(3)

* Information about sampling and monitoring requirements such as frequency, site and quantification methods not specifically listed in the table was not explicitly specified in the State-specific regulations.

^a A “major” WWTP has a maximum design capacity of 1 million gallons or more per day. A “minor” WWTP has a maximum design capacity of less than 1 million gallons per day.

^b*E. coli* may be used in place of fecal coliform as an indicator organism once an equivalency has been established.

Upcoming state law or policy

NMED has proposed supplemental requirements for water reuse (20.6.8 NMAC) including produced water and will accept public comment through December 1, 2023.

References

Clean Water Act, 33 U.S.C. §§ 1251 et seq.

EPA-Administered Permit Programs: The National Pollutant Discharge Elimination System (NPDES), 40 C.F.R. part 122.

Food Safety Modernization Act (FSMA), 124 Stat. 3885.

New Mexico Environment Department (NMED). 2007. Ground water quality bureau guidance: Above-ground use of reclaimed domestic wastewater, New Mexico Environment Department. 2007.

Secretary Approval, Disapproval, Modification or Termination of Discharge Permits, and Requirement for Abatement Plans, N.M. Code R. § 20.6.2.3109.C(3).

Standards for Interstate and Intrastate Surface Waters, N.M. Code R. § 20.6.4.

Disclaimers

Please contact us at waterreuse@epa.gov if the information on this page needs updating or if this state is updating or planning to update its laws and policies and we have not included that information on the news page.

Bishop's Lodge Facility Map - DP #75

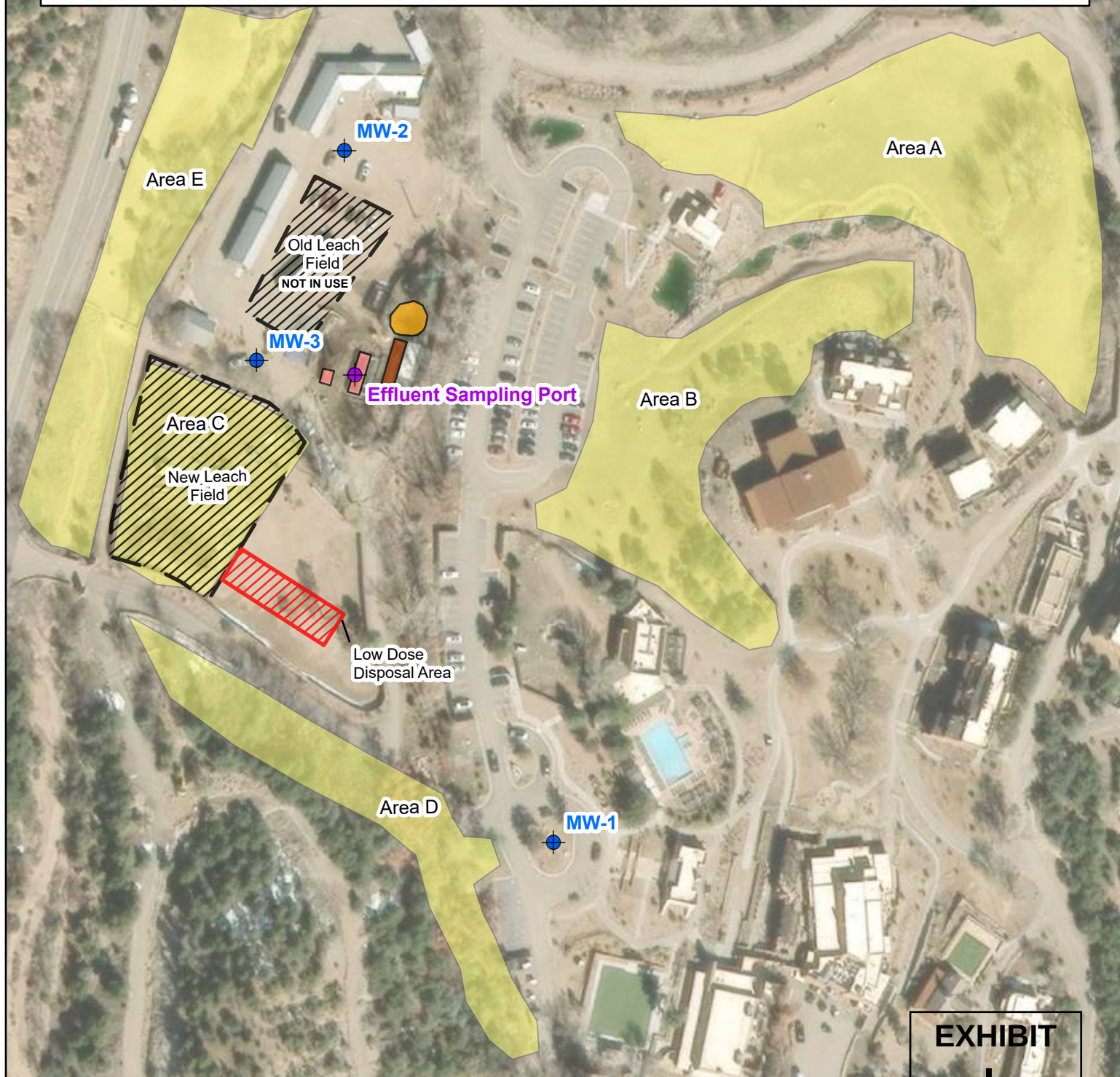


EXHIBIT
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Legend

Effluent Sampling Port	Aerobic Sludge Digester
Monitoring Well	Synthetically Lined Reed Bed
Treatment Plant	Reclaimed Effluent Reuse Area
Low Pressure Dose Disposal Area	Old Leach Field
New Leach Field	



0 0 0.01 0.01 0.01 0.02
Miles

GZ Glorieta
Geoscience
A Division of GZA



ANALYTICAL REPORT

PREPARED FOR

Attn: Boot Pierce
Glorieta GeoScience A Divison of GZA
PO BOX 5727
Santa Fe, New Mexico 87502

Generated 10/11/2024 4:14:16 PM

JOB DESCRIPTION

Bishops Lodge Resort

JOB NUMBER

885-13143-1

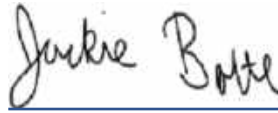
EXHIBIT
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Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Authorized for release by
Jackie Bolte, Project Manager
jackie.bolte@et.eurofinsus.com
(505)345-3975

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10/11/2024 4:14:16 PM



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Definitions/Glossary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13143-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Glorieta GeoScience A Division of GZA
Project: Bishops Lodge Resort

Job ID: 885-13143-1

Job ID: 885-13143-1

Eurofins Albuquerque

Job Narrative 885-13143-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 10/3/2024 2:54 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.5°C.

General Chemistry

Method SM5210B_Calc: The method blank result associated with batch 860-192894 was higher than the method-required limit of 0.2 mg/L.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Biology

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13143-1

Client Sample ID: BL-WWTP-Effluent

Lab Sample ID: 885-13143-1

Date Collected: 10/03/24 13:10

Matrix: Water

Date Received: 10/03/24 14:54

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand (SM 5210B)	ND		3.0	mg/L		10/04/24 15:59	10/04/24 17:44	1

Method: SM 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	MPN/100mL			10/03/24 16:44	1

QC Sample Results

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13143-1

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 860-192894/2

Matrix: Water

Analysis Batch: 192894

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.786		0.0000020	mg/L			10/04/24 16:25	1

Lab Sample ID: USB 860-192894/1

Matrix: Water

Analysis Batch: 192894

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.240		0.0000020	mg/L			10/04/24 16:22	1

Lab Sample ID: LCS 860-192894/3

Matrix: Water

Analysis Batch: 192894

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	213		mg/L		108	85 - 115

Method: 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Lab Sample ID: MB 885-13636/1

Matrix: Water

Analysis Batch: 13636

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	MPN/100mL			10/03/24 16:44	1

QC Association Summary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13143-1

General Chemistry

Prep Batch: 191579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13143-1	BL-WWTP-Effluent	Total/NA	Water	BOD Prep	

Analysis Batch: 192894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13143-1	BL-WWTP-Effluent	Total/NA	Water	SM 5210B	191579
SCB 860-192894/2	Method Blank	Total/NA	Water	SM 5210B	
USB 860-192894/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 860-192894/3	Lab Control Sample	Total/NA	Water	SM 5210B	

Biology

Analysis Batch: 13636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13143-1	BL-WWTP-Effluent	Total/NA	Water	9223B	
MB 885-13636/1	Method Blank	Total/NA	Water	9223B	

Lab Chronicle

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13143-1

Client Sample ID: BL-WWTP-Effluent
Date Collected: 10/03/24 13:10
Date Received: 10/03/24 14:54

Lab Sample ID: 885-13143-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	BOD Prep			191579	TV	EET HOU	10/04/24 15:59
Total/NA	Analysis	SM 5210B		1	192894	ALL	EET HOU	10/04/24 17:44
Total/NA	Analysis	9223B		1	13636	SS	EET ALB	10/03/24 16:44

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13143-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli
Oregon	NELAP	NM100001	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-25
Florida	NELAP	E871002	06-30-25
Louisiana (All)	NELAP	03054	06-30-25
Oklahoma	NELAP	1306	08-31-25
Texas	NELAP	T104704215	06-30-25
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

Environment Testing

Environment Testing

Ver. 05/06/2024

Login Sample Receipt Checklist

Client: Glorieta GeoScience A Division of GZA

Job Number: 885-13143-1

Login Number: 13143

List Source: Eurofins Albuquerque

List Number: 1

Creator: Dominguez, Desiree

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Glorieta GeoScience A Division of GZA

Job Number: 885-13143-1

Login Number: 13143

List Number: 2

Creator: Baker, Jeremiah

List Source: Eurofins Houston

List Creation: 10/04/24 01:38 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



ANALYTICAL REPORT

PREPARED FOR

Attn: Lisa Vulpas
Glorieta GeoScience A Divison of GZA
PO BOX 5727
Santa Fe, New Mexico 87502

Generated 10/14/2024 7:18:33 AM

JOB DESCRIPTION

Bishop's Lodge Resort

JOB NUMBER

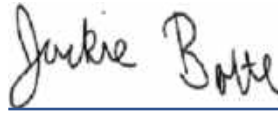
885-13536-1

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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10/14/2024 7:18:33 AM

Authorized for release by
Jackie Bolte, Project Manager
jackie.bolte@et.eurofinsus.com
(505)345-3975

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Definitions/Glossary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-13536-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Glorieta GeoScience A Division of GZA
Project: Bishop's Lodge Resort

Job ID: 885-13536-1

Job ID: 885-13536-1

Eurofins Albuquerque

Job Narrative 885-13536-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 10/10/2024 11:50 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 9.3°C.

Biology

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-13536-1

Client Sample ID: BL-WWTP-Effluent
Date Collected: 10/10/24 09:45
Date Received: 10/10/24 11:50

Lab Sample ID: 885-13536-1
Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	MPN/100mL			10/10/24 16:09	1

- 1
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QC Sample Results

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-13536-1

Method: 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Lab Sample ID: MB 885-14087/1						Client Sample ID: Method Blank		
Matrix: Water						Prep Type: Total/NA		
Analysis Batch: 14087								
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	MPN/100mL			10/10/24 16:09	1

QC Association Summary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-13536-1

Biology

Analysis Batch: 14087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13536-1	BL-WWTP-Effluent	Total/NA	Water	9223B	
MB 885-14087/1	Method Blank	Total/NA	Water	9223B	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Lab Chronicle

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-13536-1

Client Sample ID: BL-WWTP-Effluent
Date Collected: 10/10/24 09:45
Date Received: 10/10/24 11:50

Lab Sample ID: 885-13536-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	14087	MV	EET ALB	10/10/24 16:09

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

- 1
- 2
- 3
- 4
- 5
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- 7
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Accreditation/Certification Summary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-13536-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

Oregon	NELAP	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

[illegible]

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Glorieta GeoScience A Division of GZA

Job Number: 885-13536-1

Login Number: 13536

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Boot Pierce
Glorieta GeoScience A Divison of GZA
PO BOX 5727
Santa Fe, New Mexico 87502

Generated 10/24/2024 9:43:38 AM

JOB DESCRIPTION

Bishops Lodge Resort

JOB NUMBER

885-13753-1

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Authorized for release by
Jackie Bolte, Project Manager
jackie.bolte@et.eurofinsus.com
(505)345-3975

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Definitions/Glossary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Glorieta GeoScience A Division of GZA
Project: Bishops Lodge Resort

Job ID: 885-13753-1

Job ID: 885-13753-1

Eurofins Albuquerque

Job Narrative 885-13753-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/15/2024 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 351.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-14377 and analytical batch 885-14557 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM5210B_BODCalc: The glucose-glutamic acid standard (LCS) recovered outside the recovery limits specified in the method in batch 885-14383. The method holding time had expired, therefore the analysis was not repeated. The data was qualified and reported.

Method SM5210B_BODCalc: The DO depletion is < 2.0mg/L at the maximum sample aliquot allowed. Therefore, the BOD result is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Biology

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Client Sample ID: BL-WWTP-EFFLUENT

Lab Sample ID: 885-13753-1

Date Collected: 10/15/24 13:20

Matrix: Water

Date Received: 10/15/24 15:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97		10	5.0	mg/L			10/18/24 05:45	20
Nitrate as N	6.8		2.0	0.40	mg/L			10/16/24 04:16	20
Nitrite as N	ND		0.10	0.012	mg/L			10/16/24 18:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	510		50	25	mg/L			10/17/24 08:38	1
Nitrogen, Total Kjeldahl (EPA 351.2)	0.66	F1	0.50	0.50	mg/L		10/16/24 09:47	10/18/24 12:10	1
Biochemical Oxygen Demand (SM5210B)	ND	*-	2.0	2.0	mg/L			10/16/24 12:04	1
Nitrogen, Total (EPA Total Nitrogen)	7.5		1.0	0.50	mg/L			10/18/24 10:35	1

Method: SM 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	1.0	MPN/100mL			10/15/24 17:25	1

Client Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Client Sample ID: MW-1

Lab Sample ID: 885-13753-2

Date Collected: 10/15/24 10:00

Matrix: Water

Date Received: 10/15/24 15:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		10	5.0	mg/L			10/18/24 05:56	20
Nitrate as N	6.2		0.10	0.020	mg/L			10/16/24 04:30	1
Nitrite as N	ND		0.10	0.012	mg/L			10/16/24 18:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	720		50	25	mg/L			10/17/24 08:38	1
Nitrogen, Total Kjeldahl (EPA 351.2)	ND		0.50	0.50	mg/L		10/16/24 09:47	10/18/24 12:14	1
Nitrogen, Total (EPA Total Nitrogen)	6.2		1.0	0.50	mg/L			10/18/24 10:35	1

Client Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Client Sample ID: MW-2

Lab Sample ID: 885-13753-3

Date Collected: 10/15/24 12:50

Matrix: Water

Date Received: 10/15/24 15:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		2.5	1.3	mg/L			10/18/24 06:07	5
Nitrate as N	0.33	J	0.50	0.10	mg/L			10/16/24 04:57	5
Nitrite as N	ND		0.10	0.012	mg/L			10/16/24 19:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	360		50	25	mg/L			10/17/24 08:38	1
Nitrogen, Total Kjeldahl (EPA 351.2)	ND		0.50	0.50	mg/L		10/16/24 09:47	10/18/24 12:16	1
Nitrogen, Total (EPA Total Nitrogen)	ND		1.0	0.50	mg/L			10/18/24 10:35	1

Client Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Client Sample ID: MW-3

Lab Sample ID: 885-13753-4

Date Collected: 10/15/24 11:30

Matrix: Water

Date Received: 10/15/24 15:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		10	5.0	mg/L			10/18/24 06:18	20
Nitrate as N	1.4		0.10	0.020	mg/L			10/16/24 05:52	1
Nitrite as N	ND		0.10	0.012	mg/L			10/16/24 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	630		50	25	mg/L			10/17/24 08:38	1
Nitrogen, Total Kjeldahl (EPA 351.2)	0.54		0.50	0.50	mg/L		10/16/24 09:47	10/18/24 12:17	1
Nitrogen, Total (EPA Total Nitrogen)	1.9		1.0	0.50	mg/L			10/18/24 10:35	1

QC Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-14296/4

Matrix: Water

Analysis Batch: 14296

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			10/15/24 16:13	1

Lab Sample ID: LCS 885-14296/5

Matrix: Water

Analysis Batch: 14296

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.69		mg/L		94	90 - 110

Lab Sample ID: MRL 885-14296/3

Matrix: Water

Analysis Batch: 14296

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.522		mg/L		104	50 - 150

Lab Sample ID: MB 885-14297/4

Matrix: Water

Analysis Batch: 14297

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.10	0.020	mg/L			10/15/24 16:13	1
Nitrite as N	ND		0.10	0.012	mg/L			10/15/24 16:13	1

Lab Sample ID: MB 885-14297/51

Matrix: Water

Analysis Batch: 14297

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.10	0.020	mg/L			10/16/24 03:35	1

Lab Sample ID: LCS 885-14297/5

Matrix: Water

Analysis Batch: 14297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.50	2.50		mg/L		100	90 - 110
Nitrite as N	1.00	0.941		mg/L		94	90 - 110

Lab Sample ID: LCS 885-14297/52

Matrix: Water

Analysis Batch: 14297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.50	2.49		mg/L		100	90 - 110

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QC Sample Results

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 885-14297/3

Matrix: Water

Analysis Batch: 14297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.0984	J	mg/L		98	50 - 150
Nitrite as N	0.100	0.102		mg/L		102	50 - 150

Lab Sample ID: MB 885-14359/4

Matrix: Water

Analysis Batch: 14359

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.10	0.020	mg/L			10/16/24 15:24	1
Nitrite as N	ND		0.10	0.012	mg/L			10/16/24 15:24	1

Lab Sample ID: LCS 885-14359/5

Matrix: Water

Analysis Batch: 14359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.50	2.53		mg/L		101	90 - 110
Nitrite as N	1.00	0.954		mg/L		95	90 - 110

Lab Sample ID: MRL 885-14359/3

Matrix: Water

Analysis Batch: 14359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.101		mg/L		101	50 - 150
Nitrite as N	0.100	0.103		mg/L		103	50 - 150

Lab Sample ID: MB 885-14476/4

Matrix: Water

Analysis Batch: 14476

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			10/17/24 18:23	1

Lab Sample ID: MB 885-14476/60

Matrix: Water

Analysis Batch: 14476

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			10/18/24 04:19	1

Lab Sample ID: LCS 885-14476/12

Matrix: Water

Analysis Batch: 14476

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	5.00		mg/L		100	90 - 110

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QC Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-14476/61
Matrix: Water
Analysis Batch: 14476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.88		mg/L		98	90 - 110

Lab Sample ID: MRL 885-14476/3
Matrix: Water
Analysis Batch: 14476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.541		mg/L		108	50 - 150

Method: 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 885-14443/1
Matrix: Water
Analysis Batch: 14443

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		50	25	mg/L			10/17/24 08:38	1

Lab Sample ID: LCS 885-14443/2
Matrix: Water
Analysis Batch: 14443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1020		mg/L		102	80 - 120

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 885-14377/3-A
Matrix: Water
Analysis Batch: 14557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14377

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	ND		0.50	0.50	mg/L		10/16/24 09:47	10/18/24 12:05	1

Lab Sample ID: LCS 885-14377/5-A
Matrix: Water
Analysis Batch: 14557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14377

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	10.0	9.96		mg/L		100	90 - 110

Lab Sample ID: LCS 885-14377/5-A
Matrix: Water
Analysis Batch: 14560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14377

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	10.0	10.1		mg/L		101	90 - 110

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QC Sample Results

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LLCS 885-14377/4-A

Matrix: Water

Analysis Batch: 14557

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14377

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	0.500	ND		mg/L		97	50 - 150

Lab Sample ID: 885-13753-1 MS

Matrix: Water

Analysis Batch: 14557

Client Sample ID: BL-WWTP-EFFLUENT

Prep Type: Total/NA

Prep Batch: 14377

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	0.66	F1	10.0	9.58	F1	mg/L		89	90 - 110

Lab Sample ID: 885-13753-1 MSD

Matrix: Water

Analysis Batch: 14557

Client Sample ID: BL-WWTP-EFFLUENT

Prep Type: Total/NA

Prep Batch: 14377

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.66	F1	10.0	9.73		mg/L		91	90 - 110	1	20

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 885-14383/1

Matrix: Water

Analysis Batch: 14383

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			10/16/24 12:04	1

Lab Sample ID: LCS 885-14383/2

Matrix: Water

Analysis Batch: 14383

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	147	*-	mg/L		74	85 - 115

Method: 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Lab Sample ID: MB 885-14353/1

Matrix: Water

Analysis Batch: 14353

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	1.0	MPN/100mL			10/15/24 17:25	1

QC Association Summary

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

HPLC/IC

Analysis Batch: 14296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-14296/4	Method Blank	Total/NA	Water	300.0	
LCS 885-14296/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14296/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	300.0	
885-13753-2	MW-1	Total/NA	Water	300.0	
885-13753-3	MW-2	Total/NA	Water	300.0	
885-13753-4	MW-3	Total/NA	Water	300.0	
MB 885-14297/4	Method Blank	Total/NA	Water	300.0	
MB 885-14297/51	Method Blank	Total/NA	Water	300.0	
LCS 885-14297/5	Lab Control Sample	Total/NA	Water	300.0	
LCS 885-14297/52	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14297/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	300.0	
885-13753-2	MW-1	Total/NA	Water	300.0	
885-13753-3	MW-2	Total/NA	Water	300.0	
885-13753-4	MW-3	Total/NA	Water	300.0	
MB 885-14359/4	Method Blank	Total/NA	Water	300.0	
LCS 885-14359/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14359/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	300.0	
885-13753-2	MW-1	Total/NA	Water	300.0	
885-13753-3	MW-2	Total/NA	Water	300.0	
885-13753-4	MW-3	Total/NA	Water	300.0	
MB 885-14476/4	Method Blank	Total/NA	Water	300.0	
MB 885-14476/60	Method Blank	Total/NA	Water	300.0	
LCS 885-14476/12	Lab Control Sample	Total/NA	Water	300.0	
LCS 885-14476/61	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14476/3	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Prep Batch: 14377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	351.2	
885-13753-2	MW-1	Total/NA	Water	351.2	
885-13753-3	MW-2	Total/NA	Water	351.2	
885-13753-4	MW-3	Total/NA	Water	351.2	
MB 885-14377/3-A	Method Blank	Total/NA	Water	351.2	
LCS 885-14377/5-A	Lab Control Sample	Total/NA	Water	351.2	
LLCS 885-14377/4-A	Lab Control Sample	Total/NA	Water	351.2	
885-13753-1 MS	BL-WWTP-EFFLUENT	Total/NA	Water	351.2	
885-13753-1 MSD	BL-WWTP-EFFLUENT	Total/NA	Water	351.2	

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QC Association Summary

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

General Chemistry

Analysis Batch: 14383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	SM5210B	
USB 885-14383/1	Method Blank	Total/NA	Water	SM5210B	
LCS 885-14383/2	Lab Control Sample	Total/NA	Water	SM5210B	

Analysis Batch: 14443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	2540C	
885-13753-2	MW-1	Total/NA	Water	2540C	
885-13753-3	MW-2	Total/NA	Water	2540C	
885-13753-4	MW-3	Total/NA	Water	2540C	
MB 885-14443/1	Method Blank	Total/NA	Water	2540C	
LCS 885-14443/2	Lab Control Sample	Total/NA	Water	2540C	

Analysis Batch: 14540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	Total Nitrogen	
885-13753-2	MW-1	Total/NA	Water	Total Nitrogen	
885-13753-3	MW-2	Total/NA	Water	Total Nitrogen	
885-13753-4	MW-3	Total/NA	Water	Total Nitrogen	

Analysis Batch: 14557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	351.2	14377
885-13753-2	MW-1	Total/NA	Water	351.2	14377
885-13753-3	MW-2	Total/NA	Water	351.2	14377
885-13753-4	MW-3	Total/NA	Water	351.2	14377
MB 885-14377/3-A	Method Blank	Total/NA	Water	351.2	14377
LCS 885-14377/5-A	Lab Control Sample	Total/NA	Water	351.2	14377
LLCS 885-14377/4-A	Lab Control Sample	Total/NA	Water	351.2	14377
885-13753-1 MS	BL-WWTP-EFFLUENT	Total/NA	Water	351.2	14377
885-13753-1 MSD	BL-WWTP-EFFLUENT	Total/NA	Water	351.2	14377

Analysis Batch: 14560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-14377/5-A	Lab Control Sample	Total/NA	Water	351.2	14377

Biology

Analysis Batch: 14353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13753-1	BL-WWTP-EFFLUENT	Total/NA	Water	9223B	
MB 885-14353/1	Method Blank	Total/NA	Water	9223B	

Lab Chronicle

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Client Sample ID: BL-WWTP-EFFLUENT

Lab Sample ID: 885-13753-1

Date Collected: 10/15/24 13:20

Matrix: Water

Date Received: 10/15/24 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	14297	RC	EET ALB	10/16/24 04:16
Total/NA	Analysis	300.0		1	14359	JT	EET ALB	10/16/24 18:36
Total/NA	Analysis	300.0		20	14476	JT	EET ALB	10/18/24 05:45
Total/NA	Analysis	2540C		1	14443	ES	EET ALB	10/17/24 08:38
Total/NA	Prep	351.2			14377	HR	EET ALB	10/16/24 09:47
Total/NA	Analysis	351.2		1	14557	HR	EET ALB	10/18/24 12:10
Total/NA	Analysis	SM5210B		1	14383	MV	EET ALB	10/16/24 12:04
Total/NA	Analysis	Total Nitrogen		1	14540	MA	EET ALB	10/18/24 10:35
Total/NA	Analysis	9223B		1	14353	KH	EET ALB	10/15/24 17:25

Client Sample ID: MW-1

Lab Sample ID: 885-13753-2

Date Collected: 10/15/24 10:00

Matrix: Water

Date Received: 10/15/24 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	14297	RC	EET ALB	10/16/24 04:30
Total/NA	Analysis	300.0		1	14359	JT	EET ALB	10/16/24 18:50
Total/NA	Analysis	300.0		20	14476	JT	EET ALB	10/18/24 05:56
Total/NA	Analysis	2540C		1	14443	ES	EET ALB	10/17/24 08:38
Total/NA	Prep	351.2			14377	HR	EET ALB	10/16/24 09:47
Total/NA	Analysis	351.2		1	14557	HR	EET ALB	10/18/24 12:14
Total/NA	Analysis	Total Nitrogen		1	14540	MA	EET ALB	10/18/24 10:35

Client Sample ID: MW-2

Lab Sample ID: 885-13753-3

Date Collected: 10/15/24 12:50

Matrix: Water

Date Received: 10/15/24 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		5	14297	RC	EET ALB	10/16/24 04:57
Total/NA	Analysis	300.0		1	14359	JT	EET ALB	10/16/24 19:04
Total/NA	Analysis	300.0		5	14476	JT	EET ALB	10/18/24 06:07
Total/NA	Analysis	2540C		1	14443	ES	EET ALB	10/17/24 08:38
Total/NA	Prep	351.2			14377	HR	EET ALB	10/16/24 09:47
Total/NA	Analysis	351.2		1	14557	HR	EET ALB	10/18/24 12:16
Total/NA	Analysis	Total Nitrogen		1	14540	MA	EET ALB	10/18/24 10:35

Client Sample ID: MW-3

Lab Sample ID: 885-13753-4

Date Collected: 10/15/24 11:30

Matrix: Water

Date Received: 10/15/24 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	14297	RC	EET ALB	10/16/24 05:52
Total/NA	Analysis	300.0		1	14359	JT	EET ALB	10/16/24 19:17

Eurofins Albuquerque

Lab Chronicle

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Client Sample ID: MW-3
Date Collected: 10/15/24 11:30
Date Received: 10/15/24 15:25

Lab Sample ID: 885-13753-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		20	14476	JT	EET ALB	10/18/24 06:18
Total/NA	Analysis	2540C		1	14443	ES	EET ALB	10/17/24 08:38
Total/NA	Prep	351.2			14377	HR	EET ALB	10/16/24 09:47
Total/NA	Analysis	351.2		1	14557	HR	EET ALB	10/18/24 12:17
Total/NA	Analysis	Total Nitrogen		1	14540	MA	EET ALB	10/18/24 10:35

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishops Lodge Resort

Job ID: 885-13753-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540C		Water	Total Dissolved Solids
300.0		Water	Chloride
300.0		Water	Nitrate as N
300.0		Water	Nitrite as N
351.2	351.2	Water	Nitrogen, Total Kjeldahl
9223B		Water	Escherichia coli
SM5210B		Water	Biochemical Oxygen Demand
Total Nitrogen		Water	Nitrogen, Total

Oregon	NELAP	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
351.2	351.2	Water	Nitrogen, Total Kjeldahl
9223B		Water	Escherichia coli
SM5210B		Water	Biochemical Oxygen Demand
Total Nitrogen		Water	Nitrogen, Total

Login Sample Receipt Checklist

Client: Glorieta GeoScience A Division of GZA

Job Number: 885-13753-1

Login Number: 13753

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Boot Pierce
Glorieta GeoScience A Divison of GZA
PO BOX 5727
Santa Fe, New Mexico 87502

Generated 10/26/2024 11:08:06 AM

JOB DESCRIPTION

Bishop's Lodge Resort

JOB NUMBER

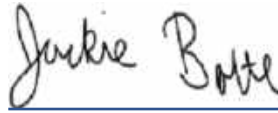
885-14235-1

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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10/26/2024 11:08:06 AM

Authorized for release by
Jackie Bolte, Project Manager
jackie.bolte@et.eurofinsus.com
(505)345-3975

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Definitions/Glossary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-14235-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Glorieta GeoScience A Division of GZA
Project: Bishop's Lodge Resort

Job ID: 885-14235-1

Job ID: 885-14235-1

Eurofins Albuquerque

Job Narrative 885-14235-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 10/24/2024 11:41 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.2°C.

Biology

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-14235-1

Client Sample ID: BL-effluent_10_24_24
Date Collected: 10/24/24 08:50
Date Received: 10/24/24 11:41

Lab Sample ID: 885-14235-1
Matrix: Water

Method: SM 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	1.0	MPN/100mL			10/24/24 14:33	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

QC Sample Results

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-14235-1

Method: 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Lab Sample ID: MB 885-14871/1					Client Sample ID: Method Blank				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 14871									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Escherichia coli	ND		1.0	1.0 MPN/100mL			10/24/24 14:33	1	

QC Association Summary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-14235-1

Biology

Analysis Batch: 14871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14235-1	BL-effluent_10_24_24	Total/NA	Water	9223B	
MB 885-14871/1	Method Blank	Total/NA	Water	9223B	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Lab Chronicle

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-14235-1

Client Sample ID: BL-effluent_10_24_24
Date Collected: 10/24/24 08:50
Date Received: 10/24/24 11:41

Lab Sample ID: 885-14235-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	14871	SS	EET ALB	10/24/24 14:33

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Glorieta GeoScience A Division of GZA
Project/Site: Bishop's Lodge Resort

Job ID: 885-14235-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

Oregon	NELAP	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

HALL ENVIRONMENTAL ANALYSIS LABORATORY



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 885-14235 COC

Tel. 505-345-3975 Fax 505-345-4107

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Login Sample Receipt Checklist

Client: Glorieta GeoScience A Division of GZA

Job Number: 885-14235-1

Login Number: 14235

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Boot Pierce
Glorieta GeoScience A Divison of GZA
PO BOX 5727
Santa Fe, New Mexico 87502

Generated 11/7/2024 4:43:32 PM

JOB DESCRIPTION

BL Facilities, LLC

JOB NUMBER

885-14569-1

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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11/7/2024 4:43:32 PM

Authorized for release by
Jackie Bolte, Project Manager
jackie.bolte@et.eurofinsus.com
(505)345-3975

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Definitions/Glossary

Client: Glorieta GeoScience A Division of GZA
Project/Site: BL Facilities, LLC

Job ID: 885-14569-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
s	Seeded Control Blank (SCB) Recovery High

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Glorieta GeoScience A Division of GZA
Project: BL Facilities, LLC

Job ID: 885-14569-1

Job ID: 885-14569-1

Eurofins Albuquerque

Job Narrative 885-14569-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 10/31/2024 2:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C.

General Chemistry

Method SM5210B_Calc: The correction factor for the Seeded Control Blank (SCB) for batch 860-198461 was outside the method range of 0.6 to 1.0 mg/L. Thus, there is added uncertainty for the associated sample results.

Method SM5210B_Calc: The method blank result associated with batch 860-198461 was higher than the method-required limit of 0.2 mg/L.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Biology

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Glorieta GeoScience A Divison of GZA
Project/Site: BL Facilities, LLC

Job ID: 885-14569-1

Client Sample ID: BL-WWTP-Effluent
Date Collected: 10/31/24 12:45
Date Received: 10/31/24 14:30

Lab Sample ID: 885-14569-1
Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Biochemical Oxygen Demand (SM 5210B)	ND		2.1	mg/L		11/01/24 15:41	11/01/24 16:39	1	

Method: SM 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Escherichia coli	ND		1.0	MPN/100mL			10/31/24 16:08	1	

QC Sample Results

Client: Glorieta GeoScience A Division of GZA
Project/Site: BL Facilities, LLC

Job ID: 885-14569-1

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: 885-14569-1 DU

Matrix: Water

Analysis Batch: 198461

Client Sample ID: BL-WWTP-Effluent

Prep Type: Total/NA

Prep Batch: 197382

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Biochemical Oxygen Demand	ND		ND		mg/L		NC	25

Lab Sample ID: SCB 860-198461/2

Matrix: Water

Analysis Batch: 198461

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.05	s	0.0000020	mg/L			11/01/24 15:57	1

Lab Sample ID: USB 860-198461/1

Matrix: Water

Analysis Batch: 198461

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.235		0.0000020	mg/L			11/01/24 15:54	1

Lab Sample ID: LCS 860-198461/3

Matrix: Water

Analysis Batch: 198461

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	168		mg/L		85	85 - 115

Method: 9223B - Coliforms, Total, and E.Coli (Colilert - Quanti Tray)

Lab Sample ID: MB 885-15211/1

Matrix: Water

Analysis Batch: 15211

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	MPN/100mL			10/31/24 16:08	1

QC Association Summary

Client: Glorieta GeoScience A Divison of GZA
Project/Site: BL Facilities, LLC

Job ID: 885-14569-1

General Chemistry

Prep Batch: 197382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14569-1	BL-WWTP-Effluent	Total/NA	Water	BOD Prep	
885-14569-1 DU	BL-WWTP-Effluent	Total/NA	Water	BOD Prep	

Analysis Batch: 198461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14569-1	BL-WWTP-Effluent	Total/NA	Water	SM 5210B	197382
SCB 860-198461/2	Method Blank	Total/NA	Water	SM 5210B	
USB 860-198461/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 860-198461/3	Lab Control Sample	Total/NA	Water	SM 5210B	
885-14569-1 DU	BL-WWTP-Effluent	Total/NA	Water	SM 5210B	197382

Biology

Analysis Batch: 15211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14569-1	BL-WWTP-Effluent	Total/NA	Water	9223B	
MB 885-15211/1	Method Blank	Total/NA	Water	9223B	

Lab Chronicle

Client: Glorieta GeoScience A Divison of GZA
Project/Site: BL Facilities, LLC

Job ID: 885-14569-1

Client Sample ID: BL-WWTP-Effluent
Date Collected: 10/31/24 12:45
Date Received: 10/31/24 14:30

Lab Sample ID: 885-14569-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	BOD Prep			197382	TV	EET HOU	11/01/24 15:41
Total/NA	Analysis	SM 5210B		1	198461	ALL	EET HOU	11/01/24 16:39
Total/NA	Analysis	9223B		1	15211	SS	EET ALB	10/31/24 16:08

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Glorieta GeoScience A Division of GZA
Project/Site: BL Facilities, LLC

Job ID: 885-14569-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli
Oregon	NELAP	NM100001	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
9223B		Water	Escherichia coli

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-25
Florida	NELAP	E871002	06-30-25
Louisiana (All)	NELAP	03054	06-30-25
Oklahoma	NELAP	1306	08-31-25
Texas	NELAP	T104704215	06-30-25
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26



Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: Glorieta GeoScience A Division of GZA

Job Number: 885-14569-1

Login Number: 14569

List Source: Eurofins Albuquerque

List Number: 1

Creator: Alderette, Joseph

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Glorieta GeoScience A Division of GZA

Job Number: 885-14569-1

Login Number: 14569

List Number: 2

Creator: Torrez, Lisandra

List Source: Eurofins Houston

List Creation: 11/01/24 11:00 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Ron Curry has served as Secretary of the New Mexico Environment Department for Governor Bill Richardson since January 2003. Ron developed the first environmental strategic plan for the Public Service Company of New Mexico (PNM), worked on an Environmental Impact Statement for Los Alamos National Laboratory, and represented both the New Mexico Environmental Law Center and the Coalition for Clean and Affordable Energy before the State Legislature. In the early 1990s, he served as the Environment Department's first Deputy Secretary. Born in Hobbs and raised in Albuquerque, Ron is also an avid balloonist. He has flown KKO Radio's flagship hot air balloon at rallies around the state for 22 years. Ron has two grown children and lives in Albuquerque.



HOW WATER QUALITY AFFECTS PLANNING

Ron Curry
New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502-0110

EXHIBIT
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Thank you, John. Always when I have an opportunity to speak in front of a group of folks, I like to bring greetings from Governor Bill Richardson. Because, after all, if he hadn't put me here, I wouldn't have the opportunity to bring you his greetings. It is a real pleasure working for Bill Richardson, as some of you in this room can attest to, as Bill Hume certainly can attest to because he works more closely with him on a day-to-day basis than I do. But I have to tell you that it is one of the most exciting things that I have done in my life, and it is probably the most rewarding. So I bring you greetings from the Governor.

One of the things that the Governor always tells us, whether we're a cabinet secretary or whether we're anywhere in his staff, and I think you heard him say this in the paper this morning, he would prefer that we err on the side of being bold rather than err on the side of the status quo. So everyday when I go to work at the Environment Department, where we have over 600 employees in 23 different offices scattered around the state, that is the message that we continually try to get across to our staff. Governor Richardson has spent most of this day busy with President Fox from Mexico. One thing that I can say

about President Fox is that he is a very eloquent speaker and he is very tall, very tall. He was a real pleasure to listen to this morning and I was able to use some of my Spanish ability to understand at least two-thirds of what he said.

I don't have to tell this group how important the issue of water is. What I would like to stress today, and what we stress every day at the Environment Department, is the linkage between water quantity and water quality. It is a linkage that I have been preaching a lot lately but it is particularly important to a group like this that deals with water planning every day.

Most of the time when people think about water in the state of New Mexico, and again my friend Bill Hume would attest to this, we spend a lot of time talking about Las Campañas up in Santa Fe and how they're trading water with the City of Santa Fe, or the silvery minnow case down in the Albuquerque area. People often think that water is all about water quantity, how much water each user or each fish will get. Quantity is an important issue, I grant you that. But we also we have to wonder about how much water the Texans get. Do we have any Texans here today? I was born in Hobbs, New Mexico, which is almost like being born in Texas. My mother used to tell me that for the grace of God and five miles I would have been a Texan today. Whatever the reason, I'm glad to be a New Mexican, a native New Mexican, even though a lot of people say Hobbs is a little Texas. I often wonder about the fact that we have to give Texas so much of our water. Why must we give a state like Texas so much of our water when you look at some of their laws they have on their books in the State of Texas? I will tell you about some of these laws as we go along today. You know, New Mexico has to send Texas a certain amount of water each year. Texas has a law in their state that says when two trains meet each other at a railroad crossing, each shall come to a full stop, and neither shall proceed until the other is gone. And we have to give them water? Why?!

The Environment Department is charged with making sure that our state's water, whether it's in an aquifer, in a river, or in a glass sitting in front of you, is protected. It is a huge job and probably the most fascinating job I have ever held in my life. We literally have the opportunity in the Environment Department to engage in one form or another with every business and every organization in the state of New Mexico and every part of our Department deals with water. And it usually deals with water quality. We do

everything from operating the Groundwater Bureau and Surface Water Bureau all the way to inspecting restaurants and the quality of water that is served to you everywhere in New Mexico, except Albuquerque. Then we're thrown things to make it even a little more interesting given the Department's wide mandate. We even have the Occupational Safety and Health Bureau within our Department. We are concerned with protecting workers safety and also with the water they drink while at work.

We have a Drinking Water Bureau in our Department responsible for monitoring and regulating 1,300 to 1,400 drinking water systems of all sorts whether it is a mutual domestic, the City of Albuquerque, or the City of Santa Fe. We're responsible for regulating the drinking water as it travels into homes throughout the state. It is a huge responsibility. We find we are protecting our natural resources as well as workers on the jobsite, in diners, and in restaurants. In one way or another, everything we do is tied to water. Because of that, we think about things like air quality and limiting acid rain by making sure our air is clean and making sure our landfills are properly lined to prevent seepage. It's a big job, and has gotten even bigger as the drought has deepened.

As water supplies diminish, the water we have becomes that much more valuable and it becomes that much more important that we keep it from becoming polluted. Protecting our water resources has been a high priority for the Bill Richardson administration. To make sure that everyone in the Department shares this priority, we have created unifying themes for the agency. This may sound a little bit philosophical or like we're holding hands all the time trying to make ourselves feel good. But I believe that you need to have a unified theme like water because it runs through everything we do at the New Mexico Environment Department.

We have three themes. The first theme is the one that over arches all of them. We intend to focus our resources at the New Mexico Environment Department with a holistic approach to the protection of human health and environment. This will mean a lot of things and will touch every program and every bureau and affect every decision we make.

I want to tell you briefly something about our approach. As I mentioned, we do a wide variety of things at the Department. We have had the opportunity to move a few people around within our Department to try to get them to more closely communicate with one another. That is part of our holistic approach.

When you first hear the word “holistic” you think, “well they went off on some retreat and they got some consultant to talk and they came up with the word.” Well it’s true, we did. The important thing is that now we are going about taking that holistic theme and putting it into place in every part of the Department. Why is that important to you? When Governor Richardson named me to this post on December 13th of last year, I was confronted by the press that was assembled on that day and they asked me point blank, “Are you going to make fast changes in the organization of the Department?” I said I didn’t think so. At the time I said we won’t get into it. I said that I thought the biggest problem in the Environment Department is that it’s “management challenged.” I still think that. One of the reasons that we came up with the holistic themes was because we thought that the Department was management challenged, and not getting enough leadership from the top-down. Another reason is pretty simple. For those of you who have been in our building, you know that many of our programs are located on the second floor. Our Surface Water Bureau and our Ground Water Bureau are literally a few feet away from one another. As it turns out, because of one thing or another, in the past few years the Surface Water Bureau Chief and the Ground Water Bureau Chief have not communicated with each other, even though they are just down the hall from each other. Yet it so happens that they deal with the same medium and that’s protecting water quality.

As we take a holistic approach, there are other things that we need to think about. One of the things that came to me with this job, also from the Governor, was my Deputy Secretary, Derrith Watchman-Moore. She’s the former head of the Navajo EPA and the former Chief of Staff. Her father was a state legislator for over 20 years and her brother was a state legislator for about four years. Derrith brings an immense amount of talent to the Department, and she also brings a holistic approach about managing and helping people in the Environment Department as well as the people that we affect understand how a holistic approach coming from the Navajo Nation is helping improve New Mexico’s Environment Department. For those of you who have not met Derrith, I encourage you to do so. She is a very, very bright woman. She is 39 years old, has five children, and lives in Rio Rancho and Crystal, New Mexico, which is 60 miles north of Gallup. The thing that she liked when she first met me was that I was from Hobbs and I didn’t have a Hobbs accent. Because of that, we’re going to take a balloon

ride over to Crystal, New Mexico together one day and we are going to fly out near her home. Derrith has brought so much soul to the Environment Department. Having some soul when you are talking about the environment or environmental regulations is important, especially when you are talking about water. We are going to learn so many things from Derrith, about how water is appreciated in the tribal nations in our state and, hopefully, we will be able to transfer some of that understanding into our daily workplace.

Let’s talk about the public perception of the Department – as it’s the NMED that protects the public and the environment and in order to do that we need to work together across programs. One of the things we are going to do is to establish help baselines for communities across the state. This big picture, or holistic approach, will help us inform the public and drive our actions and decisions.

How many of you have bottled water in here today? I saw some in the back of the room. I was reminded recently about what are often unforeseen impacts of the big picture. I was reading an article, I think it was in *E Magazine*, about the bottled water boom. Because bottled water is perceived to be healthier, many people now only drink bottled water. That’s fine. Although, as a guy who makes sure tap water is safe, I’m a little bit offended. The problem comes when it is time to throw all those damn plastic bottles away. Studies indicate that nine out of ten of these bottles either end up as litter or in a landfill, those that aren’t recycled. That equals 30 million bottles a day that have to go somewhere. If that place is in the landfill, then those plastics will take up to 1,000 years to breakdown. And as they do, they can release chemicals into the environment, potentially polluting groundwater. So think about that the next time you go and get a bottle of water. Hopefully none of you are in the bottled-water business. It is an ironic problem; by trying to live healthier and drink bottled water, we can end up polluting our own local resources. It’s kind of a circle: It is a holistic thing going on but not in necessarily a positive way.

Another thing that comes to play when you start talking about managing water quality from a holistic approach is the 220,000 septic tanks that we have in the state of New Mexico, and that’s a guess as to how many septic tanks exist. The Environment Department is responsible for septic tanks and we became more responsible in 1997 when there was a law change that took some of the responsibility that used to be with the Construction Industries Bureau

back to the Environment Department. We estimate that as many as half of those septic tanks are either illegally installed, which means they were improperly installed at midnight or they are leaking. The problem now becomes, especially in certain parts of our state where you have septic tank on top of septic tank on top of septic tank on top of well water, and if one of those septic tanks starts to leak and effluent gets into your well water or groundwater, you're polluting yourself. That's a holistic problem because not only are we charged with protecting groundwater, we also are charged with protecting drinking water. If your drinking water comes out of a well that's being polluted by you or your neighbor, it's again a holistic situation. Stop and think about those 220,000 septic tanks in the state of New Mexico. We believe that it's not leaking underground storage tanks and gasoline tanks, nor mercury coming from power plants, that are causing most of our problems. Septic tanks in the state of New Mexico are our biggest source of groundwater pollution. We launched a very aggressive program about 90 days ago where we go out and find as many septic tanks as we can and make sure they are in compliance. The Environment Department must be consistent on how they enforce septic tank rights or liquid waste regulations whether it's in Hobbs, Farmington, Belen, or Cordova.

We will continue to take a step back and look at problems like this so that we can see them through a holistic approach. We will be doing a community assessment that will be on-going and regularly updated. The information will be freely shared among programs within the Department and with the public. The Environment Department is great at collecting and analyzing information. It is now time, using the best technology available, to find ways to combine and make information more accessible.

The second of our unified themes is diversity. All qualifications being equal, you will see this department hiring more people of color and promoting more into management positions. Diversity isn't just about gender or race, it's also about geography in our state. I often tell people it is hard to believe when you are standing in downtown Hobbs, New Mexico, my hometown, that there is a place as beautiful as Taos in New Mexico. How many of you have been to Hobbs? Let me say that again. When you're standing in downtown Hobbs, it's hard to believe that there is a place as beautiful as Taos in New Mexico. We have a diversity of geography in New Mexico and as the Environment

Department is implementing and enforcing regulations, we have to be aware of that diversity as well.

Just as a side note, we have 12 operational bureau chiefs in the Department including our district managers. When Derrith and I arrived after our appointment by Governor Richardson, there was one woman bureau chief. Today there are five, and we are very proud of that. I am a white boy, by the way, and I am very proud of that. We are going to continue to move forward in this area.

We recently launched a contract between the University of New Mexico and the State of New Mexico concerning environmental justice. Environmental justice is also an area that comes into play with water quality. I often like to refer to this story, and it's a true story. My children graduated from La Cueva High School in the early 1990s and have since gone on to New Mexico State University and graduated as Aggies. Both of them are very successful in their lives after having gone through college here in New Mexico. But back in the early 1990s, and to a certain extent still today, there was almost a "right of Spring" down in the South Valley of Albuquerque at Pajarito Elementary School where oftentimes you could see raw sewage come right up to the playground level if it had rained very hard. There was a problem down there at Pajarito, and almost every year you would see this happen. When you think about environmental justice I always think, "...you know, if raw sewage had come up on the La Cueva High School campus, I suspect it would only come up there once." But it went on year after year after year because of the location of Pajarito Elementary. Environmental justice issues occur all over the state of New Mexico and they are all different and hard to define. We realize it is a controversial issue, but what we want to do is illuminate the issue so that it becomes something that we think about and talk about in water quality. People should have good water quality no matter who they are or where they live or what they do. We think that by addressing the issue of environmental justice, we'll help alleviate that thought process and come up with some suggestions.

The third theme concerns a high performance and accountable workforce in the Environment Department. The Department, as many of you know, has some incredibly dedicated staff in the bureaus, folks who come to work everyday because they believe that by doing so they have a positive impact on the environment. Our task in this new administration

is to harness the energy of our best employees in order to achieve results that matter to the mission of the Environment Department, and most importantly, to New Mexico's health and environment. We are going to reward high performance workers, and conversely, provide sanctions for workers who aren't accomplishing what we need them to do. This will not be a sink or swim situation. We will provide more training to help people improve their skills, the skills they need to do their job successfully. By doing this, we will increase our productivity, give our employees greater personal responsibility, and most importantly, have more fun.

Now I mentioned earlier that Texas is taking our water and I want to give you another example of the laws they have on their books. In Texas, the state that is taking our water, it is illegal to milk another person's cow. Yes, taking our water...

I am going to talk briefly about some of our accomplishments. I know Governor Richardson is going to come to me and the other cabinet secretaries, and to Bill Hume, sometime soon and say, "What have you done for me lately?" Is that a fair statement, Bill? More importantly, "What have you done in the first year or the first 10 months since you and we have been in office?" "What have you done to be bold?" So I am going to list some things that we have done in the Environment Department that I think are very important in the areas of water.

First of all, back in April, working through the Environmental Protection Agency, we were the first state in the U.S. to get our impaired waters list submitted. We have 181 segments identified on the list. We also were the first state in the nation to have seven water sources identified on the Department of Energy's property list. They are all on the Parajito Plateau. We had to fight like the dickens to get those listed because the Department of Energy fought against us having that happen. However, the EPA took our side and so now we will be allowed to take measurements up there on dissolved solids. We also might be a little stronger as far as regulating those streams. It's a big deal because DOE started fighting us last year and continued to fight us into the new administration. But the end result is that EPA has listed those seven sources on the Impaired Water List.

Through the work of Mimi Stewart, who was here earlier today, we enacted graywater legislation this past year. The Governor signed the legislation into law in the first 60-day session of his administration. The law will allow New Mexicans to reuse water such as

the water that comes out of the washing machine and not worry about breaking the law anymore. We are still tweaking with this a little bit and some of these issues will go before the Environmental Improvement Board next month. But it was a great accomplishment to get that legislation through and a lot of credit goes to Representative Stewart and Governor Richardson.

We are rewriting our liquid waste regulations. We have a committee that is being led by Anna Marie Ortiz, who is Director of the Field Operations Division in the Environment Department. The liquid waste regulations were all over the map and we couldn't tell whether they had been written for the people who sell liquid waste systems, or they had been written for realtors, or they were just being enforced poorly by the Environment Department. The rewritten regulations will go before the Environmental Improvement Board either in December or January.

The Drinking Water Bureau is charged with drinking water assessments and regulations for 1,300 to 1,400 water systems throughout New Mexico. Had it been a private sector entity on January 1st of this year, the bureau would have been in Chapter 7, it was belly-up financially. It had not met any of its responsibilities to the EPA, and more importantly, it was letting down a lot of the communities. We have turned that around completely, financially, and the EPA likes us again. They're not going to make us pay money back based on what was going on. This is a big accomplishment and it affects almost every New Mexican in the state.

The Governor along with the Attorney General recently joined 11 other states on new source review and opposing some of the changes proposed by the Bush administration. Why is this important to the quality of water? Simply because we have coal burning generating stations in the state of New Mexico that can affect the quality of water. We believe that opposing the Bush rollback of these regulations is important to the quality of water in this state, even though Public Service Company of New Mexico will not be changing any of its operations.

Let me list some of the things we are going to be doing in the future that I think are important. New Mexico is one of four states that does not have primacy for NPDES and over the next 12 to 18 months we are going to start looking at ways to get primacy in this state. The Environment Department has primacy on almost all other programs that we regulate: hazardous waste, solid waste, drinking water, and so on. There is no reason why we shouldn't have it in surface water.

The usual argument has been made that we can't afford to do it, that we can't fund the people. My response is that it is important that we in New Mexico have control over as much as we can without having to rely on the people in Dallas or Washington. We have talented people in the Environment Department to get it done, along with working with a number of you folks.

I am going to close here in just a minute, but I have to tell you one other reason I am upset about the Texans taking our water. You know in Texas, and this is a real concern to me since I am a single guy, but in Texas – remember, the people who are taking our water – you can be legally married by publicly introducing a person as your husband or wife three times. Now that's risky business, that's very risky business.

I would like to ask you as you leave your water conference today to keep in mind the word "holistic" because we keep that in mind everyday at the Environment Department. We are trying to get it ingrained, if you will, in the people who work there and into the people we affect because everything we do is connected to water quality. We have to continue to step back so that we can see if somebody does something in drinking water how it might affect somebody in air quality or vice-versa.

I want to thank you all for allowing me to speak to you today and I want to say again that I am having as much fun in my professional life as I have ever had and I thank the Governor for that. It's really exciting to get up in the morning and look forward to going to work, and I do that everyday, seven days a week, maybe six. It is a pleasure to work for the Governor and it is a pleasure to have the opportunity to affect change and to help things get better in our environment and our health in the state of New Mexico.

One of my favorite quotes that I started telling my kids when they were young children comes from Ralph Waldo Emerson and I think it encapsulates a lot of the things that we talk about holistically in the environment. Ralph Waldo said, "We do not inherit the earth from our ancestors, we only borrow it from our children."

Thank you.

https://www.santafenewmexican.com/opinion/my_view/enforce-the-laws-criminal-and-environmental/article_6cc7dc28-ce20-11ef-afc1-233188aced49.html

MY VIEW RUSTY DAY

Enforce the laws — criminal and environmental

By Rusty Day

Jan 12, 2025

As you point out in your thoughtful editorial (“Frustrations over public safety are escalating,” Our View, Jan. 7), the repeated failure to enforce our laws erodes the public’s faith in government and respect for the rule of the law. Nothing is more corrosive to a well-ordered civil society than watching those who enact and enforce our laws ignore or flaunt them.

But that precept applies across the board, not just to criminal proceedings. In Tesuque, hundreds of downstream property owners are incensed by the failure of the New Mexico Environment Department to enforce state law and the administrative regulations specifically adopted to prevent contamination of our aquifers and drinking water. Instead of doing its job and preventing such contamination, Environment Department officials pretend to do so while enabling the very hazards to public health and water contamination that our laws and department regulations were specifically enacted to prevent.

When the Legislature enacted the Environmental Improvement Act of 1971, it directed the Environment Department to protect public health and prevent water and soils contamination by adopting and enforcing comprehensive regulations for the treatment and disposal of residential and commercial sewage. Ever since, the Liquid Waste Disposal Regulations adopted by the Environmental Improvement Board have carefully delineated the stringent safeguards all property owners must follow to dispose of the sewage they generate. Those regulations apply to every property owner throughout the State. They specify with clarity the steps that must be followed — not only to treat each property owner’s wastewater — but where and how to dispose of it safely.

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So why has the Environment Department apparently turned a blind eye to these important safeguards and the public and private interests they serve to protect? Why has the Environment Department instead chosen to apply what appear to be far less protective, less stringent standards to the application of Bishop's Lodge Resort for its new sewage discharge permit? Why has the Environment Department decided to give Bishop's Lodge and its subdivision a pass that no other property owner in Tesuque gets — or wants?

Clean water is our lifeblood. Environment Department, do your job. Prevent contamination. Stop enabling and facilitating it.

Rusty Day lives in Tesuque.

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF THE ENVIRONMENT

RECEIVED

MAR 14 2025


Luis Lopez, OPF

IN THE MATTER OF BISHOPS LODGE
RENEWAL AND MODIFICATION
DISCHARGE PERMIT APPLICATION
FOR DP-75

GWQB 24-69 (P)

PROTECT TESUQUE INC.'S CONSOLIDATED REPLY IN SUPPORT
OF ITS MOTION FOR PRE-HEARING PERMIT DENIAL

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EXHIBIT

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Protect Tesuque, Inc. submits this Consolidated Reply to the Responses of the New Mexico Environment Department (“NMED”) and BL Santa Fe, LLC (the “Resort”).

INTRODUCTION

The purpose of the Environmental Improvement Act of 1971 is:

“to create a department that will be responsible for environmental management and consumer protection in this state in order to ensure an environment that in the greatest possible measure will confer optimum health, safety, comfort and economic and social well-being on its inhabitants; will protect this generation as well as those yet unborn from health threats posed by the environment; and will maximize the economic and cultural benefits of a healthy people.”

NMSA 1978, § 74-1-2.

The purpose of the Liquid Waste Disposal and Treatment Regulations is:

“to protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and ground water contamination from on-site liquid waste disposal practices.”

20.7.3.6 NMAC. The Liquid Waste Regulations fulfill the overriding purpose of the Environmental Improvement Act and its implementing regulations by allocating the hazards of on-site liquid waste disposal to each property that generates the waste to be disposed, by limiting the scale and rate at which liquid wastes are treated, by limiting the locations, scale and rates at which treated wastes can be discharged to ground, and by requiring adequately sized, appropriately situated on-site disposal sites.

The Environmental Improvement Act was enacted four years after the Water Quality Act and three years after the Ground and Surface Water Protection Regulations (“GSWP Regulations”) to protect the health, drinking water and water rights of the people of Tesuque as well as thousands of other New Mexico residents who depend on New Mexico’s ground and surface waters for their survival. The Environmental Improvement Act and the Liquid Waste Regulations should be

construed and enforced to fulfill their overriding purpose, not ignored, misinterpreted, and undermined by the State agency responsible for their enforcement.

On the erroneous premise that the Liquid Waste Regulations do not apply to large volume generators of domestic and commercial liquid waste, NMED's Draft Permit does not just ignore the Liquid Waste Regulations, it incredibly contravenes every one of the fundamental safety principles on which the Liquid Waste Regulations are based to protect public health and the environment. The Draft Permit approves the aggregation of the liquid waste generated by scores of separate properties into a single combined waste stream. It approves treating that aggregated waste stream in a single off-site treatment unit at a rate and scale many times the permissible scale and rate. It approves shifting the disposal sites of that treated waste from the properties that generated them to an off-site location. It approves discharging those aggregated, partially treated wastes into a single, under-sized disposal field with a disposal area ten (10) times smaller than the minimum disposal area required for the volume of waste discharged, at a daily rate of discharge that is six (6) times greater than the permissible maximum rate of discharge. And it approves doing so under pressurized conditions to accelerate the release of effluent from the under-sized disposal field into surrounding soils and waters, including the underlying aquifers that feed hundreds of downstream drinking wells.

By discharging six times the permissible volume of treated effluent into a single 2,500 square foot disposal field that is ten times smaller than the minimum area required by the Liquid Waste Regulations for permissible on-site disposal, by doing so in a single disposal field instead of the six (6) widely separated disposal fields the Liquid Waste Regulations require, and by doing so under pressure into alluvial soils immediately adjacent to the Little Tesuque Creek where the

seasonal high water table is four (4) feet below the disposal field, the Resort is effectively injecting its effluent directly into the underlying aquifers and the private wells they supply.

Would the State police allow a trucking company to drive 90 mph through a 15 mph school zone – six times the permissible speed limit – on the pretext that school zone speed limits do not apply to vehicles that can drive faster than 15 mph?

Of course not. But that is precisely the fallacious reasoning on which NMED and the Resort rely to justify their refusal to apply the mandatory safeguards of the Liquid Waste Regulations, and why NMED's Draft Permit should and must be denied.

Worse still, the Resort's under-sized disposal field is located at the downstream edge of its property, where the contaminants it is releasing will forever impact its off-site neighbors, but not the Resort or its associated property owners. The Resort's disposal plan cynically shifts the hazards of contamination that its non-compliant practices will create away from the property owners responsible for those hazards, and onto their off-site, downstream neighbors, in gross violation of the allocation of hazards the Liquid Waste Regulations expressly mandate. The Liquid Waste Regulations require each generator to localize and compartmentalize the hazards that its on-site disposal of its liquid wastes will create by restricting their disposal to the property that generates them. The Liquid Waste Regulations require each generator to reduce those hazards through suitable on-site treatment, and then further reduce the remaining hazard of on-site disposal by limiting the rate at which treated effluent is discharged to on-site soils, and by restricting all such discharges to one or more on-site disposal fields that are appropriately engineered, appropriately located, appropriately sized, and appropriately separated from one another to prevent the release of the discharged contaminants to surrounding soils and water.

In short, the Resort's disposal plan not only exacerbates the hazards of contaminant release, but ensures that any and all resulting contamination will flow off of its property and into the aquifers and wells of its downstream neighbors.

It is the off-site downstream neighbors who will bear the risk that the Resort's aggregated waste stream will create: all the risk that hazardous contaminants are added unlawfully to that waste stream; all the risk that treatment proves ineffective to remove the waste stream's many harmful contaminants; and all the risk that an overloaded disposal field will sooner or later release the Resort's contaminants to the aquifers that feed and sustain their wells and drinking water. It is the downstream neighbors who will bear all of the burden of continually testing their wells for traces of the Resort's contamination, and all of the initial cost and risk of remediating it once detected.

The Liquid Waste Regulations were specifically crafted and adopted to prevent such transfers of hazard and risk. They should be applied and enforced. By ignoring the applicability of the Liquid Waste Regulations to the Resort's hazardous plan, and by pretending that the Resort's self-interested monitoring of a few wells for a very small number of contaminants a few times a year is an adequate substitute for the stringent safeguards the Liquid Waste Regulations would impose, NMED is complicit in the Resort's cynical transfer of hazard and risk to its downstream neighbors.

THE GOVERNING LAW

In 1967 the New Mexico Legislature adopted the Water Quality Act, NMSA 1978, Sections 74-6-1 through -17 (1967, as amended through 2019), established the Water Quality Control Commission (the "WQCC" or "Commission") and empowered the Commission to adopt a comprehensive water quality management program. Shortly thereafter, in 1968, the WQCC

promulgated the Ground and Surface Water Protection Regulations, Part 20.6.2 NMAC (effective 01/04/1968, as amended through 12/21/2018) (the “GSWP Regulations”).

As adopted in 1968, the GSWP Regulations establish maximum concentrations for certain specified contaminants in ground water. If the ground water’s pre-existing concentration of that contaminant is less than the standard established in 20.6.2.3103 NMAC, further “degradation of the ground water up to the limit of the standard” for that contaminant will be allowed. 20.6.2.3101(A)(1) NMAC. If, however, the pre-existing concentration of a listed contaminant exceeds the standard set in 20.6.2.3103, no further degradation of the ground water beyond that contaminant’s existing concentration will be allowed. 20.6.2.3101(A)(2) NMAC.

Pursuant to 20.6.2.3104, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into ground water unless s/he is discharging pursuant to a permit issued by the secretary. Pursuant to 20.6.2.3106, persons who plan to discharge any of the water contaminants listed in 20.6.2.3103, or any toxic pollutant that may move directly or indirectly into ground water, are required to submit notice and a discharge plan for approval of the secretary. When a permit has issued, discharges must be consistent with the terms and conditions of the permit. 20.6.2.3104 NMAC.

Pursuant to 20.6.2.3105(A), the requirements of 20.6.2.3104 and 20.6.2.3106 do not apply to (a) effluent or leachate which conforms to all the contaminant standards established in 20.6.2.3103(A), (B) and (C), and has a total nitrogen content of 10 mg/L or less, or (b) effluent which is regulated pursuant to the Liquid Waste Regulations, 20.7.3 NMAC.¹

¹ Following issuance of the Liquid Waste Regulations, the GSWP Regulations were amended in 2014 to add 20.6.2.3105(B), which exempts effluent regulated under the Liquid Waste Regulations from the requirements of 20.6.2.3104 and 3106 NMAC.

In 1971, three years *after* the WQCC adopted the GSWP Regulations, the New Mexico Legislature enacted the Environmental Improvement Act, NMSA 1978, Sections 74-1-1 through -17 (1971, amended through 2013) (the “EIA”). The EIA created the Environmental Improvement Board (“EIB”), empowered the EIB to “promulgate all regulations applying to persons and entities outside of the department [of environment]” (NMSA 1978, § 74-1-5), specifically defined the meaning of “on-site liquid waste systems” (NMSA 1978, § 74-1-3(C)), and directed the EIB to promulgate rules and standards for liquid waste. NMSA 1978, § 74-1-8(A)(3). In the very same legislation, the Legislature also created the New Mexico Environment Department and empowered it to enforce the rules, regulations and orders promulgated by the EIB. NMSA 1978, § 74-1-6(F).

In enacting the EIA four years after the Water Quality Act, and three years after adoption of the GSWP Regulations, the Legislature clearly concluded that the Water Quality Act and the GSWP Regulations were not sufficient to address the environmental and public health hazards posed by liquid waste. In short, additional regulation specifically addressing the hazards of liquid waste was needed to protect both the environment and public health. As if to underscore that conclusion, the Legislature subsequently made clear that any county or municipality requirements for on-site liquid waste systems must be at least as stringent as those promulgated by the EIB pursuant to the EIA. NMSA 1978, § 74-1-14.

A straight-forward comparison of the GSWP Regulations with the Liquid Waste Regulations illustrates the basis for the Legislature’s decision that additional, more specific regulation of the treatment and disposal of domestic and commercial liquid waste was needed.

First, the vast array of different discharge activities addressed and regulated by the GSWP Regulations – ranging from industrial, chemical and pharmaceutical manufacturing to oil and gas production, metal working, and construction to commercial, residential, recreational and public

and private waste treatment and disposal services – necessarily requires a generality of regulation that can apply across a broad spectrum of very different activities. And that is why the GSWP Regulations focus on a single hazard shared in common by the variety of activities it regulates: degradation of existing *in situ* ground water quality as measured by concentration levels of a specific set of harmful contaminants.

Second, by focusing on a much narrower subset of the activities regulated by the GSWP Regulations – the on-site generation, treatment and disposal of domestic and commercial liquid waste – the Liquid Waste Regulations are able to identify and address a much broader, far-reaching set of problems posed by liquid waste disposal than *in situ* degradation of water quality, ranging from the appropriate allocation of risk and responsibility for safe on-site treatment and disposal of liquid wastes, to the levels and methods of treatment appropriate to specific properties and generators of liquid waste, to the specific locations, soil conditions and dimensions of on-site disposal fields. All of these additional subjects are specifically and carefully addressed in the Liquid Waste Regulations; none of them are addressed in the GSWP Regulations.

Third, by focusing on the array of problems posed by on-site treatment and disposal of domestic and commercial liquid waste, the Liquid Waste Regulations are able to identify and address the hazardous practices and activities affecting each of those problems, and prescribe appropriate standards and prescriptive requirements to reduce and prevent the hazards such practices and activities pose. That is precisely why NMED acknowledges, as it must, that the Liquid Waste Regulations are “more prescriptive” than the GSWP Regulations. NMED Response at 3.

Finally, in so doing, the Liquid Waste Regulations are also able to address a broader set of regulatory objectives. Whereas the GSWP Regulations by necessity are focused on a single, narrow

objective – non-degradation of groundwater as measured by the *in situ* concentration of a very few specific contaminants – the Liquid Waste Regulations tackle a far broader, more encompassing set of public objectives: protection of the health and welfare of present and future New Mexico citizens by providing for the prevention and abatement of public health hazards as well as surface and groundwater contamination from on-site liquid waste disposal.

The rules of statutory and regulatory construction in New Mexico are clearly laid out in NMSA 1978, Section 12-2A-10:

- A. If statutes appear to conflict, they must be construed, if possible, to give effect to each. If the conflict is irreconcilable, the later-enacted statute governs. However, an earlier-enacted specific, special or local statute prevails over a later-enacted general statute unless the context of the later-enacted statute indicates otherwise.
- B. If an administrative agency's rules appear to conflict, they must be construed, if possible, to give effect to each. If the conflict is irreconcilable, the later-adopted rule governs. However, an earlier-adopted specific, special or local rule prevails over a later-adopted general rule unless the context of the later-adopted rule indicates otherwise.
- C. If a statute is a comprehensive revision of the law on a subject, it prevails over previous statutes on the subject, whether or not the revision and the previous statutes conflict irreconcilably.
- D. If a rule is a comprehensive revision of the rules on the subject, it prevails over previous rules on the subject, whether or not the revision and the previous rules conflict irreconcilably.

The EIA and its Liquid Waste Regulations are not only later-adopted than the Water Quality Act and the GSWP Regulations, but the Liquid Waste Regulations are also a more specific and more comprehensive revision of the prior GSWP Regulations on the subject of on-site treatment and disposal of domestic and commercial liquid waste. That is why the Liquid Waste Regulations provide the baseline requirements for on-site treatment and disposal of domestic and commercial liquid waste, and override the earlier, less specific, less comprehensive GSWP Regulations insofar as any conflict between their requirements.

While the Liquid Waste Regulations establish the baseline requirements for on-site treatment and disposal of domestic and commercial liquid waste, they do not preempt the GSWP Regulations, which also apply if the effluent of a liquid waste permittee violates the water quality standards of the GSWP Regulations. The Liquid Waste Regulations and the GSWP Regulations thus act in concert to reinforce and supplement one another if a liquid waste permittee fails to implement the engineering safeguards required by the Liquid Waste Regulations or threatens to exceed the water quality standards established by the GSWP Regulations.

THE RESPONSES OF NMED AND THE RESORT

At bottom, the Responses of NMED and the Resort to the instant motion are both predicated on their refusal to acknowledge and respect the Legislature's determination that the regulatory regime established under the Water Quality Act was not sufficient to protect public health and the environment against the hazards of on-site liquid waste treatment and disposal, and that further regulation of liquid waste by the EIB was necessary. NMED also refuses to recognize and accept the Legislature's explicit decision to delegate the authority and responsibility to promulgate those additional regulations to the EIB, not the WQCC or the department itself.

A. Are the Liquid Waste Regulations Inapplicable to Large Volume Generators?

The Liquid Waste Regulations were adopted by the EIB for the express purpose of prohibiting reckless, unsafe disposal to ground of liquid waste generated by dwellings, commercial establishments and other groups in order to protect the environment and public health. NMED is duty-bound to enforce the regulations promulgated by the EIB pursuant to the Legislature's directive, not undermine them.

As demonstrated in Protect Tesuque's Motion (pp. 10-12 and 42-48), nothing in the EIA or the Liquid Waste Regulations themselves limit the applicability of the regulations to small volume

generators of liquid waste. Instead, the Liquid Waste Regulations specifically define and specify the rate-limited means by which every property owner who seeks to dispose of liquid waste to ground must treat and discharge such wastes, irrespective of the volume of waste generated. As the Liquid Waste Regulations repeatedly make clear, they apply to every property owner and person who discharges untreated or treated liquid waste to ground, irrespective of the volume of waste generated (*see, e.g.*, 20.7.3.201(A), (B), (C) and (D)), including properties that generate more than 5,000 gpd of liquid waste. 20.7.3.302(C) NMAC.

NMED's attempt to construe the scope of the Liquid Waste Regulations as limited to small volume generators distorts the plain meaning of the single sentence on which it relies and ignores the Liquid Waste Regulations as a whole. It not only violates the rules of statutory construction and English grammar, but – in direct violation of 20.7.3.1001 NMAC – it would also subvert the clear purpose of the EIA and its Liquid Waste Regulations by subjecting the largest liquid waste generators to the least stringent regulatory safeguards. The fact that the phrase “5,000 gpd” in 20.7.3.2 NMAC refers to the treatment and disposal system by which liquid waste is discharged – not the volume of waste generated by a dwelling or establishment – necessarily means that the sentence on which NMED and the Resort rely refers to the rate-limited systems that 20.7.3.201(B) and (C) NMAC require every generator of liquid waste to use for discharges to ground, not the volume of waste generated. If, as NMED and the Resort both contend, Part 20.7.3.2 defined the applicability of the Liquid Waste Regulations to small volume generators only, then the provision would read: “This part, 20.7.3 NMAC, applies to dwellings, establishments and groups that generate 5,000 gallons or less of liquid waste per day” The fact that it does not is conclusive. So too is the fact that the exemption from GSWP regulation provided in 20.6.2.3105(B) NMAC does not apply to small volume generators only. If, as NMED and the Resort contend, the Liquid

Waste Regulations only applied to small volume generators, 20.6.2.3105(B) NMAC would make that clear by limiting the scope of its exemption to such small volume generators only.

Rather than address and refute the arguments presented in Protect Tesuque's Motion at pp. 10-12 and 42-48, NMED and the Resort simply insist without substantiation or proper statutory and regulatory construction that the Liquid Waste Regulations do not mean what they say. In doing so, they simply ignore the fact that the Legislature alone has the power to establish the Regulations' jurisdiction, and that section 74-1-3(C) of the EIA – the legislative enactment authorizing EIB to promulgate the Liquid Waste Regulations – defines the jurisdictional scope of the authority delegated to EIB by reference to the identity of generators to be regulated, not the volume of wastes they generate.

In rejecting a similar attempt of an administrative agency to read limitations into enabling legislation that simply were not there, the New Mexico Supreme Court made clear that the limited deference ordinarily afforded to an administrative agency's interpretation is "not boundless" and "does not give the [agency] authority to 'pour any meaning' it desires into the statute." *State ex rel. Sandel v. New Mexico Public Utility Commission*, 127 N.M. 272, 278 (1999), citing *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1504 (D.C. Cir. 1984). As the Court in *State ex rel. Sandel* held:

Because we cannot read into a statute or ordinance language which is not there, particularly if it makes sense as written [*citations omitted*], we cannot read the [Act] as authorizing the [agency] to abdicate its statutory responsibilities by 'set[ting] at naught an explicit provision of the Act.

Id. at 279, citing *FPC v. Texaco, Inc.*, 417 U.S. 380, 394 (1974).

In short, NMED's tortured attempt to construe the 5,000 gpd rate by which a permitted on-site liquid waste system can receive and dispose of treated liquid waste to ground as though it were inapplicable to properties that generate more than 5,000 gpd is akin to construing a 15 mph speed

limit as inapplicable to vehicles that go faster than 15 mph. It is both non-sensical and a disingenuous abnegation of the express purpose for which the Liquid Waste Regulations were adopted.

B. Does the Water Quality Act or the GSWP Regulations Preclude Application of the Liquid Waste Regulations to Large Volume Generators?

Both NMED and the Resort contend without substantiation that large volume generators of liquid waste are exclusively regulated under the Water Quality Act and its GSWP Regulations. NMED Response at 6; Resort Response at 2, 19. If the Water Quality Act and its GSWP Regulations have exclusive jurisdiction over liquid waste generators who treat and discharge more than 5,000 gpd, then why don't they say so? Neither NMED nor the Resort point to any provision in the Water Quality Act or the GSWP Regulations that claim such exclusive jurisdiction. Indeed, the Water Quality Act expressly states that it provides "additional and cumulative remedies" to prevent or abate pollution, not exclusive or preemptory remedies. NMSA 1978, § 74-6-13. The fact that NMED and the Resort point to no statutory basis to assert exclusive jurisdiction of the GSWP Regulations over large volume generators of liquid waste belies their contention.

And why – three years after the GSWP Regulations were adopted – did the Legislature enact the EIA, grant the EIB jurisdiction over the treatment and disposal of liquid waste, and direct it to promulgate regulations for the treatment and disposal of all liquid waste of dwellings, establishments and groups, all without any limitation as to the volume of waste generated? The fact the Legislature directed the EIB to adopt the Liquid Waste Regulations notwithstanding the existence of the GSWP Regulations demonstrates that the GSWP Regulations do not have exclusive jurisdiction over any generators of domestic or commercial liquid waste, large or small.

As Protect Tesuque fully explained in its Motion at p. 46, both the GSWP Regulations and the Liquid Waste Regulations apply to liquid waste generators in an overlapping and

complementary way. So long as the treated effluent discharged by a liquid waste system permitted under the Liquid Waste Regulations complies with the constraints imposed by the permit, no discharge plan under the Water Quality Act is required. If, however, the effluent discharged by a liquid waste system exceeds the 20.6.2.3103 NMAC water quality standards, or violates a requirement of the Liquid Waste Regulations, a discharge permit under the GSWP Regulations may also be required.

C. Do the Liquid Waste Regulations Apply to Dischargers Required to File a Discharge Plan Under the GSWP Regulations?

Pointing to the second clause of 20.7.3.2 (“and do not generate discharges that require a discharge plan pursuant to 20.6.2 NMAC ...”), NMED and the Resort both contend that the Liquid Waste Regulations do not apply to the Resort’s pending discharge permit application because the Resort has filed a discharge plan. That argument is specious. It ignores the primacy of the Liquid Waste Regulations and the interplay between the Liquid Waste Regulations and the GSWP Regulations established in 20.6.2.3105(B) NMAC.

First, as explained above, the Liquid Waste Regulations establish the baseline regulations that apply by their express terms to all dwellings, establishments and groups that generate liquid waste for on-site disposal. A liquid waste discharger cannot bypass the Regulations’ mandatory safeguards and nullify their applicability by ignoring or violating them. Nor can NMED undermine the primacy of those regulations by choosing to enforce different regulations instead.

Second, so long as a discharger of liquid waste complies with the permit and other requirements of the Liquid Waste Regulations, the GSWP Regulations expressly provide that the effluent it generates is exempt from any requirement to file a discharge notice or discharge plan. 20.6.2.3105(B) NMAC. If, however, a Liquid Waste permittee generates discharges that require a discharge plan under the GSWP Regulations, such as effluent or leachate that fails to conform with

all the standards of 20.6.2.3103, the Liquid Waste permittee is no longer exempt and must also file a discharge plan.

D. Do the GSWP Regulations and Liquid Waste Regulations Provide the Same Protections?

NMED asserts at page 4 of its Response that the Liquid Waste Regulations “do not provide any more *protection* of human health and the environment than the Ground and Surface Water Quality regulations.” It then proceeds to argue that there is no reason to apply both sets of regulations, and that application of the GSWP Regulations alone is sufficient.

By suggesting the Liquid Waste Regulations provide no “more” protection than the GSWP Regulations, NMED implies a false equivalency between the two sets of regulations, as though the application of one set of regulations will suffice to fulfill the protections provided only by the other set of regulations. Properly framed, the relevant issue is not an unanswerable quest to determine which set of regulations provides more or less protection than the other. Rather, the relevant inquiry is whether the GSWP Regulations provide the same kinds of protection as the Liquid Waste Regulations.

In assessing that fundamental issue, an accurate, informed understanding of the very limited protection provided by the GSWP Regulations, as reflected in the conditions and requirements imposed by NMED’s Draft Permit, is essential. The following undisputed facts expose the limited nature of the protections the Draft Permit’s application of the GSWP Regulations would provide:

1. The GSWP Regulations establish acceptable *in situ* ground water concentration levels for a specific set of contaminants (the “Regulated Contaminant Set”) based on their concentration levels at points where that ground water may be used for drinking water (20.6.2.3103 NMAC);

2. The GSWP Regulations prohibit discharges that might cause the *in situ* concentration of one or more of the contaminants in the Regulated Contaminant Set to exceed its allowable concentration(s) at those locations (*Id.*);
3. Neither the GSWP Regulations nor the Draft Permit require identification of the potentially harmful contaminants actually contained in the Resort's waste stream (the "Resort's Actual Contaminant Set") or analyze their concentration prior to treatment or discharge (20.6.2.3106 NMAC and NMED Draft Permit);
4. Neither the GSWP Regulations nor the Draft Permit require the Resort to perform analytical testing to determine whether its treatment process actually removes or reduces all contaminants in the Regulated Contaminant Set or the Resort's Actual Contaminant Set to acceptable concentration levels prior to discharge (20.6.2.3106 NMAC and NMED Draft Permit);
5. Neither the GSWP Regulations nor the Draft Permit require periodic testing of the Resort's treated effluent for the presence or concentration levels of all contaminants in the Regulated Contaminant Set or in the Resort's Actual Contaminant Set (20.6.2.3106 and 3107 NMAC, NMED Draft Permit);
6. Both the GSWP Regulations and the Draft Permit ostensibly rely on periodic sampling of one or more downstream wells to detect *in situ* ground water contamination but neither the GSWP Regulations nor the Draft Permit require routine, periodic testing of such samples for the presence or concentrations of contaminants in the Regulated Contaminant Set or the Resort's Actual Contaminant Set (20.6.2.3107 NMAC and NMED Draft Permit); and
7. In the absence of analytical testing of the Resort's periodic ground water monitoring samples for the presence and concentration levels of contaminants in the Regulated Contaminant Set and/or the Resort's Actual Contaminant Set, it is not possible to assess the presence of contamination in those samples.

Because the GSWP Regulations, as applied in the Draft Permit, do not require the Resort to identify the potentially harmful contaminants actually in the 30,000 gpd effluent it proposes to discharge to ground, NMED and the Resort are necessarily relying on soil filtration and ground and surface water dilution to protect underlying soils and aquifers against contamination caused by discharges of the Resort's treated effluent to ground. And that hazardous reality – that no one knows what contaminants the Resort's effluent is discharging to ground, let alone the concentration and potentially harmful effect of each such contaminant – is one of the hazardous challenges the Liquid Waste Regulations were designed to address and regulate.

Even NMED concedes (at Response p. 3-4), as it must, that the Liquid Waste Regulations provide “more prescriptive” and categorically ***different safeguards*** than the GSWP Regulations, protections and safeguards that the Legislature and the EIB both deemed necessary and mandatory notwithstanding the pre-existing GWSP Regulations. Whereas the GSWP Regulations permit discharges that do not detectably cause the concentration in groundwater of certain specified contaminants to exceed the water quality standards of 20.6.2.3103, the Liquid Waste Regulations mandate the implementation of ***engineering and hydrologic controls*** to reduce and prevent the contamination of soils and water by ***any and all contaminants*** that may be present in treated liquid waste.

The Liquid Waste Regulations go far beyond the *in situ* water quality standards set by the GSWP Regulations to allocate and localize the responsibility and risk of on-site disposal of liquid waste to the properties that generate them, thereby protecting the rights and interests of neighboring property owners who might otherwise be adversely impacted by a generator’s treatment and disposal practices. Recognizing that the capacity of soils to filter out harmful contaminants is limited and can be dissipated and/or saturated over time, especially if the intensity and/or density of disposal changes, the Liquid Waste Regulations address the fundamental weaknesses of the GSWP Regulations by imposing constraints on the location of liquid waste treatment and disposal systems, the daily volume and rate of liquid waste that can be treated and disposed in each waste treatment system, and the minimum size, soil conditions, density and location of disposal fields.

As the Liquid Waste Regulations make clear, liquid waste treatment alone, no matter how advanced, is insufficient to prevent contamination and protect public health. And that is why the Liquid Waste Regulations not only limit the means and rate by which on-site treatment and disposal

may occur, but also specify the stringent safeguards that must be followed for any disposal of treated wastes to ground, including appropriate siting, minimum soil conditions, minimum permissible surface areas, and adequate separation and setbacks for all disposal fields.

In short, the GSWP Regulations do not serve the same purposes and do not provide the same protections as the Liquid Waste Regulations. And that is why application of the GSWP Regulations alone is no substitute for the protections mandated by the Liquid Waste Regulations.

E. Can NMED Pick and Choose Which Regulations Govern?

At pages 5-6 of its Response, NMED asserts that it may choose which regulations to apply at its discretion,² and that its decision to apply the GSWP Regulations to an application for on-site treatment and disposal of liquid waste precludes any applicability of the Liquid Waste Regulations.³

While NMED may disapprove or dislike the Legislature's decision to require additional regulation of liquid waste treatment and disposal, or the EIB's decision to do so by imposing mandatory engineering constraints on the treatment and disposal of all such wastes by private dwellings and commercial establishments, NMED has no right and no authority to ignore or contravene those decisions. The notion that NMED can ignore such mandated protection at its discretion is simply akin to the State Police ignoring a State-mandated 15 mph speed limit in school

² "Whether an applicant applies for a Liquid Waste Permit or a Groundwater Discharge Permit, the NMED Environmental Health liquid waste program and Ground Water Quality pollution prevention section may consult to determine which regulations govern the proposed discharge." NMED Opposition at 5.

³ "Here, Bishop's Lodge is seeking authorization for a maximum daily discharge volume ... which is six times the capacity limit of '5,000 gallons or less' of liquid waste per day. In addition, Bishop's Lodge is proposing to generate discharges that 'require a discharge plan pursuant to 20.6.2 NMAC,' which excludes the facility from regulatory requirements under 20.7.3 NMAC." NMED Opposition at 6.

zones on the pretext that such limits are no more protective of public safety than seat belts or “advanced technology” brakes. NMED cites no statutory authority to substitute its judgment for that of the Legislature or the EIB, and for good reason: there is none.

NMED’s imperious suggestion that an administrative agency, such as NMED, can pick and choose which legislative enactments it will enforce and which it will ignore was previously addressed and squarely rejected by the New Mexico Supreme Court in *State ex rel. Sandel v. New Mexico Public Utility Commission*, 127 N.M. 272 (1999). In *State ex rel. Sandel*, the New Mexico Public Utility Commission (“NMPUC”) claimed it had the authority to forego enforcement of the Legislature’s mandated bundling of electrical transmission and distribution systems, and instead allow a local reseller of electricity access to those systems so it could resell electricity to retail customers at market-based rates. The Supreme Court unanimously rejected that contention as a violation of the separation of executive and legislative powers in Article III, Section 1 of the New Mexico Constitution. “The fact that the NMPUC has recited the statutory terminology in its orders and attempted to pour a new meaning into that terminology is not sufficient to show that the NMPUC has acted within its authority and carried out its responsibilities under the legislative enactment.” *Id.* at 281. The Court characterized the NMPUC’s omission as follows:

By redefining the [Act’s] terminology so as ‘to set at naught an explicit provision of the Act,’ *Texaco*, 417 U.S. at 394, the NMPUC has gone beyond the type of limited administrative policymaking that we recognized in *Torres*, 119 N.M at 612, and embarked on a path that ‘conflict[s] with or infringe[s] upon what is the essence of legislative authority – the making of law.

Id. (citing *Clark*, 120 N.M. at 573. Just like the NMPUC’s decision in *Sandel* to forego enforcement of the statutory requirement for bundled transmission and distribution of electricity, NMED’s decision to forego enforcement of the EIB regulations mandated by the EIA would set at naught explicit provisions of the Act and conflict with the essence of legislative authority – the

making of law. NMED is duty bound by Article III, Section 1 of the New Mexico Constitution to enforce the Liquid Waste Regulations mandated by the Legislature, not ignore them.

F. Does NMED's Draft Permit Comply with the Liquid Waste Regulations?

The Liquid Waste Regulations localize and compartmentalize the responsibility for safe liquid waste disposal to the property generating the waste. They require site-specific adaptation of the engineered means by which the on-site treatment and disposal of liquid waste can occur. And they restrict the permissible rates and locations at which such wastes must be treated and then disposed of to ground.

By clearly defining the responsibility of each property owner for the safe treatment and disposal of the liquid wastes generated on its property (20.7.3.201(A) NMAC), the Liquid Waste Regulations not only apportion the risk and responsibility for safe on-site treatment and disposal of liquid waste, but establish an enforceable means to hold every property owner accountable for the safe treatment and disposal of the liquid wastes it generates. By delineating the permissible options by which each property owner may do so (20.7.3.201(B) and (C) NMAC), the Liquid Waste Regulations provide the needed flexibility and appropriate safeguards to protect the interests of each property owner and its surrounding neighbors.

If a property owner wishes to dispose of its liquid wastes to ground, the Liquid Waste Regulations apportion the hazards of that decision to the property owner who makes it by mandating that all such disposal must occur wholly within that property owner's lot (20.7.3.201(G) NMAC). By establishing mandatory limits on the scale and rate at which liquid waste can be treated and released to soils in an on-site permitted system, the Liquid Waste Regulations impose preventative safeguards to simplify effective treatment and protect against system malfunction, neglect, overuse, and soils saturation. By specifying the minimum surface areas, soil conditions

and hydrogeologic conditions required for each disposal field, as well as the setbacks required between disposal fields, the Liquid Waste Regulations greatly reduce the hazard of soils and water contamination.

Incredibly, NMED's draft permit does not simply ignore these and other mandatory safeguards of the Liquid Waste Regulations, it directly contravenes every one of them.

- Where the Liquid Waste Regulations require individuated responsibility and accountability for the safe generation, treatment and on-site disposal of liquid waste, NMED's Draft Permit obviates any basis to hold responsible property owners accountable for their waste generation and disposal practices.
- Where the Liquid Waste Regulations require 84 compartmentalized, on-site treatment systems specifically tailored to each of the 84 separate waste streams, NMED's Draft Permit would allow off-site aggregation and treatment of a much larger, more hazardous waste stream by a single system.
- Where the Liquid Waste Regulations require adequately separated, adequately-sized on-site disposal fields for each property's treated waste, NMED's Draft Permit would allow aggregation and off-site disposal of liquid wastes from scores of properties in a single, under-sized disposal field.
- Where the Liquid Waste Regulations restrict the volume and rate of on-site disposal of liquid waste to 5,000 gpd or less for each disposal field, NMED's Draft Permit would allow discharge of 30,000 gpd into a single, undersized disposal field.
- Where the Liquid Waste Regulations require at least six (6) widely separated disposal fields, each at least 4,375 square feet in area – receiving no more than 5,000 gpd of

secondary or tertiary treated effluent – NMED’s Draft Permit would allow discharge of 30,000 gpd into a single 2,500 square foot disposal field.

- Where the Liquid Waste Regulations require permitting based on the hazards and suitability of each disposal field’s soils, surrounding resources and hydrogeologic conditions, NMED’s Draft Permit provides no assessment and makes no findings regarding the proposed field’s suitability or likely impact of proposed discharges on surrounding soil and water resources.

NMED offers no rationale whatsoever for issuing a permit that contravenes the fundamental safeguards the Liquid Waste Regulations require. Instead, NMED incredibly argues that the Liquid Waste Regulations do not apply to liquid waste generators of more than 5,000 gpd, and that on-site discharges by all such large volume generators are instead exclusively subject to the Water Quality Act and its water quality standards. But even if, as NMED wrongly contends, the EIA allowed the NMED to apply the GSWP Regulations in lieu of the Liquid Waste Regulations – something the EIA clearly does not do - would that justify the issuance of a discharge permit that *contravenes every one of the fundamental safeguards the Liquid Waste Regulations provide?*

G. The Resort’s Response Deflects Attention from the Issue Presented

The issue presented by the instant motion is whether NMED erred in failing to apply the Liquid Waste Regulations to the Resort’s liquid waste discharge application. Ignoring that question, the Resort falsely asserts that Protect Tesuque contends the Water Quality Act does not apply to the Resort’s discharges. On that false premise, it then spends six (6) pages of its Response

trying to justify NMED's application of the GSWP Regulations to its application. Suffice it say that Protect Tesuque agrees that the GSWP Regulations also apply to discharges of liquid waste, albeit as secondary and supplementary regulations that backstop the primacy of the Liquid Waste Regulations.

But that is not the issue. To repeat, the issue is whether NMED erred in failing to apply the Liquid Waste Regulations to the Resort's liquid waste discharge permit. That issue requires the Hearing Officer to examine both the Water Quality Act **and** the EIA, not just the Water Quality Act; it requires consideration of both the GSWP Regulations **and** the Liquid Waste Regulations, not just the GSWP Regulations; and it requires application of the statutory rules by which courts determine which enactments and regulations have primacy to the extent they differ or conflict.

Nowhere in its Response does the Resort address the provisions of the EIA or the significance of its adoption four years after the Water Quality Act was adopted, and three years after the GSWP regulations were adopted. Nowhere does the Resort address the EIA's delegation of authority to the EIB – three years after the GSWP Regulations were adopted – to promulgate regulations specifically addressing the public health and environmental hazards posed by on-site treatment and disposal of domestic and commercial liquid waste. Nowhere does the Resort address the provisions of the Liquid Waste Regulations or the critical differences between the GSWP Regulations and the Liquid Waste Regulations, including the differences in subjects addressed and safeguards required, and the specificity and prescriptive extent with which they are addressed. And nowhere does the Resort or NMED address the statutory and regulatory rules of construction that confirm the primacy of the Liquid Waste Regulations over the GSWP Regulations in the regulation of on-site treatment and disposal of domestic and commercial liquid waste. To plagiarize Shakespeare, the Resort's Response is simply full of sound and fury signifying nothing.

H. The Liquid Waste Regulations Are More Prescriptive and More Protective Than the GSWP Regulations

The Resort asserts that the Liquid Waste Disposal and Treatment Regulations are “less prescriptive, less protective” than the GSWP Regulations applied by NMED. BL Response at 1, 23-24. Notably, NMED disagrees and asserts that the Liquid Waste Regulations are “more prescriptive” than the GSWP Regulations. NMED Response at 3-4. NMED’s position is bolstered by the fact that compliance with the Liquid Waste Regulations exempts liquid waste dischargers from the GSWP’s notice and permitting requirements. 20.6.2.2105(B) NMAC. Surely, NMED would not accept compliance with the Liquid Waste Regulations as a basis for exemption from the notice and discharge permitting requirements of the GSWP Regulations unless it believed that compliance with the Liquid Waste Regulations was at least as protective as the GSWP Regulations.

Incredibly, the Resort contends that “the Water Protection Regulations are more protective of human health, the environment, and water quality because Section 3103 requires treatment to the identified MCL standards, at a minimum, before any discharge to the ground. *See* 20.6.2.3103 A-D NMAC; BL Response at 25.)

To be blunt, that assertion is false. Neither 20.6.2.3103 NMAC nor the Draft Permit requires treatment to such levels, nor do they require the Resort to perform the analytical testing required to confirm that its treatment attains such results. The Fourth Quarter Monitoring Report submitted by the Resort as Exhibit M to its Response confirms that no such testing is performed.

Similarly, the Resort’s assertion that the Liquid Waste Regulations contain “no sampling, monitoring and reporting requirements” (BL Response at 25) is also false. *See* 20.7.3.901 (C) and (D) NMAC. Just as the GSWP Regulations leave the imposition of sample testing to the discretion of the secretary (*see* 20.6.2.3107(A) NMAC (“Each discharge plan shall provide for the following as the secretary *may* require), so too the Liquid Waste Regulations provide discretionary authority

to the permit issuer to impose different sample testing requirements depending on the type of the treatment process being used (20.7.3.901(C) NMAC), as well as more stringent requirements if deemed necessary to prevent a hazard to public health or the degradation of a body of water. 20.7.3.201(L) NMAC. For tertiary treatment processes, the permit issuer may require effluent testing for Total Nitrogen prior to discharge, just as Condition 9 of NMED's Draft Permit requires. 20.7.3.901(C)(3) NMAC. For treatment processes requiring disinfection, the permit issuer may require effluent testing for E. coli. 20.7.3.901(C)(4). Results of all such sample tests must be submitted to NMED within 30 days of the sampling event unless an exceedance of permit limits is detected, in which case the results must be reported within five (5) days. 20.7.3.901(D) NMAC.

While the Resort pretends that the Liquid Waste Regulations deal only with septic tanks and leach fields, whereby untreated wastewater is discharged below ground (*see* BL Response at 24), the Liquid Waste Regulations themselves are far more extensive, governing the design, engineering and permitting of all advanced liquid waste treatment and disposal systems, including the Resort's "technologically advanced" 30,000 gpd tertiary treatment plant. *See, e.g.*, 20.7.3.601; 20.7.3.603; and 20.7.3.605(A), (B) and (D) NMAC.

On the false premise that the Liquid Waste Regulations' disposal requirements apply only to ***untreated*** liquid waste disposed to ground, the Resort repeatedly asks the Hearing Officer to believe that its tertiary treatment plant obviates any need for the additional safeguards required by the Liquid Waste Regulations, such as appropriately sited, adequately sized, and adequately separated disposal fields. What the Resort ignores, however, is the fact that the Liquid Waste Regulations not only require tertiary treatment and disinfection of influent for the Resort's proposed treatment plant (*see* 20.7.3.601; 20.7.3.603; and 20.7.3.605(A), (B) and (D) NMAC), but also require adequately sized, appropriately sited, adequately separated disposal fields for

discharge of tertiary treated effluent, and restrict the daily rate of discharge for on-site disposal of such tertiary treated effluent to 5,000 gpd per disposal field. *See e.g.*, 20.7.3.302(A), (B) and (C); 20.7.3.303; 20.7.3.701; and 20.7.3.703 NMAC. As but one example, the Draft Permit's 30,000 gpd design flow for discharge of tertiary treated effluent requires no less than six (6) appropriately sited disposal fields (20.7.3.302(C) NMAC), each having a surface area of at least 4,375 square feet (20.7.3.703(M) NMAC), separated from one another by a setback distance of approximately 750 feet (20.7.3.302(C) NMAC). The fact that the Draft Permit fails to require any of these additional mandatory safeguards means that the Draft Permit is *far less protective* of the environment and public health – *not* more protective – than the Liquid Waste Regulations require.

The Resort obfuscates its noncompliance with the Liquid Waste Regulations by suggesting that its treatment of the wastes it generates should be compared with Publicly Owned Treatment Works (“POTWs”), including the City of Santa Fe, Espanola, and the Albuquerque Bernalillo County Water Utility Authority. Resort's Response at 21. The Resort's suggestion that Protect Tesuque contends the Liquid Waste Regulations apply to POTWs is absurd. None of the licensed public utilities cited by the Resort is subject to the Liquid Waste Regulations because, unlike the Resort, they are not generators of liquid waste, but rather are operators of permitted public sewers into which generators of liquid waste can discharge both untreated and treated liquid waste in full compliance with 20.7.3.201(B) and (C) NMAC. Moreover, these utilities do not discharge to ground; they treat and discharge into surface waters pursuant to the myriad testing and operational requirements imposed by their federal NPDES permits and the New Mexico Public Utility Act, NMSA Sections 62-3-1 *et. seq.* The Resort, of course, is subject to none of these requirements.

While the Resort acts as though it is a public utility, it has not obtained a certificate of public convenience and necessity or subjected itself to the rigorous training, testing, maintenance,

planning and safety requirements imposed on POTWs. See 17.14.1.9(D) NMAC (No Sewer Utility can “commence construction or operation without first obtaining a Certificate of Public Convenience and Necessity.”). In short, the Resort and its subdivision are not POTWs – they *are generators* of liquid waste, subject to all the requirements of the Liquid Waste Regulations, including the design and operational constraints imposed on liquid waste disposal systems through which effluent from a liquid waste treatment unit is discharged to ground. Comparing the Resort’s generation and disposal of liquid waste to a POTW is thus one more baseless argument conjured by the Resort to avoid compliance with the prescriptive requirements of the Liquid Waste Regulations.

I. The Resort’s Contention that its Wastewater Discharge “Meets or Exceeds” the Groundwater Quality Standards Is Utterly Baseless

The Resort asserts that its “wastewater is fully treated to meet or exceed all water quality standards before discharge to the ground,” and that its “wastewater discharge meet[s] or exceed[s] the applicable groundwater quality standards prescribed in 20.6.2.3101 A-D NMAC, which includes human health standards.” (BL Response at 8). As supposed proof for this contention, BL cites a one-page graphic (BL Exhibit G), the Ground and Surface Water Protection Regulation that requires compliance with the terms and conditions of an issued permit (20.6.2.3004 NMAC), and two irrelevant provisions of the Draft Permit (BL Exhibit A at 3 and 5), none of which substantiate BL’s contention.

In point of fact, the Draft Permit imposes no requirement to test the Resort’s post-treatment effluent prior to discharge for compliance with the water quality standards established in 20.6.2.3101 NMAC. The only test the Draft Permit requires for discharge of treated effluent is a test for Total Nitrogen. NMED Draft Permit at p. 6, Condition 9. If the Resort wishes to use its treated effluent as Class 1A reclaimed domestic wastewater for above ground irrigation, then it

must test that treated effluent to ensure that it does not exceed stated concentration limits for E. coli bacteria, BODs, Turbidity and UV Transmissivity (NMED Draft Permit at p. 6, Condition 10), but only during the weeks that the reclaimed domestic wastewater is used for surface irrigation. NMED Draft Permit at p. 20, Condition 41.⁴ While the Permit requires quarterly tests of treated wastewater from the effluent sampling port for TKN, NO₃-N, TDS and Cl, it establishes no limit on permissible concentration levels for these compounds, and requires no analysis for compliance with the water quality standards established in 20.6.2.3103 NMAC. NMED Draft Permit at p. 20, Condition 40. The Draft Permit requires no other tests of pre-discharge effluent, and the Resort has not submitted evidence of any further testing.

The Fourth Quarter 2024 Monitoring Report submitted by the Resort as Exhibit M to its Response confirms the fact that the Resort performs no testing whatsoever to assess whether its “wastewater is fully treated to meet or exceed all water quality standards before discharge to the ground.” BL Response at 8. The only reported test results in Exhibit M for samples labeled “client effluent” are tests for Nitrogen, Nitrate, TKN, Chloride, E. coli and BODs. Exhibit M at pp. 6, 20, 32, 52 and 64 of 74.

Similarly, the Draft Permit imposes no requirement to test the Resort’s quarterly ground water samples for compliance with the water quality standards established in 20.6.2.3103 NMAC. While the Draft Permit requires quarterly groundwater samples to be analyzed for TKN, NO₃-N, TDS and Cl, it imposes no limits on acceptable concentration levels for any of these compounds. NMED Draft Permit at p. 16, Condition 31. The Draft Permit’s contingency plan states that the Resort shall collect a confirmatory sample if “groundwater monitoring indicates that groundwater

⁴ Notably, the limited testing required in Condition 10 for use of treated effluent for above-ground irrigation is not required as a prerequisite or condition for discharge of the Resort’s treated effluent to its disposal field.

exceeds a standard identified in Section 20.6.2.3103 NMAC,” but the Permit nowhere imposes any obligation to test groundwater samples for the presence or concentration of any of the contaminants specified in 20.6.2.3103 NMAC, and the Quarterly Report submitted by the Resort as Exhibit M confirms that no tests are performed for compliance with the 20.6.2.3103 NMAC water quality standards. See Exhibit M at pp. 33-35 of 72.

What credence should the Hearing Officer give to unsubstantiated assertions for which there is demonstrably no basis in fact? And what inference should the Officer draw about the credibility of the party that makes such assertions?

NMED and the Resort both assert that NMED’s application of the GSWP Regulations to the Resort’s discharge application results in comparable or even greater protection than the Liquid Waste Regulations provide. But careful examination of the Draft Permit shows those assertions are illusory. A permit that imposes no enforceable limits on the nature and extent of contaminants discharged to ground and no mechanism to assess and enforce compliance with those limits is far less protective of the environment and public health than the engineered safeguards of the Liquid Waste Regulations, which prophylactically prevent and reduce the potential release of any and all contaminants in the first place. The simple truth is the GSWP Regulations are not alone sufficient to protect the environment and public health against the hazards of domestic and commercial liquid waste disposal, precisely as the Legislature determined in 1971 when it directed the EIB to promulgate the Liquid Waste Regulations. And that is also why NMED is wrong to ignore and contravene them.

J. The Resort’s Tertiary Treatment Does Not Remove All Potentially Harmful Contaminants

On the false premise that its wastewater is “fully treated” to remove all potentially harmful contaminants (BL Response at 8 and 9), the Resort asserts that its “discharge to ground is for

disposal only, not treatment,” as though the engineering safeguards imposed by the Liquid Waste Regulations for all on-site disposal fields are somehow unnecessary and irrelevant to the Resort’s on-site disposal. (emphasis in original). By layering a succession of false and unsubstantiated assertions on each other, the Resort would have the Hearing Officer believe that its “technologically advanced” tertiary treatment system removes all contaminants of potential concern and thus obviates any need for the additional safeguards the Liquid Waste Regulations require. But here again, the truth is quite different than the Resort’s unsubstantiated and misleading assertions.

As the Liquid Waste Regulations clearly provide, the use of tertiary treatment does not obviate the need for compliance with the Regulations’ requirements for rate-limited discharges in appropriately sited, adequately sized, adequately spaced disposal fields. *See, e.g.*, 20.7.3.603, 20.7.3.703(M), and 20.7.3.302(C) NMAC.

Why? Because as NMED will itself attest, the Resort’s “technologically advanced” tertiary treatment system is incapable of removing all of the potentially harmful contaminants that liquid waste contains. If the Resort’s treatment plant could remove all such contaminants, the Resort would have submitted influent and effluent tests showing that it did, and the Resort would then be exempt from compliance with the permitting requirements of the GSWP Regulations. *See* 20.6.2.3105(A) NMAC. The fact that the Resort has not submitted such tests, and that the Resort fails to qualify for the exemption provided by 20.6.2.3105(A) NMAC, speaks volumes about the credibility of the Resort’s unsubstantiated assertions.

As detailed in Protect Tesuque’s Motion (pp. 52-54), current wastewater treatment technologies, including technologies more advanced than the Resort’s membrane reactor (such as reverse phase osmosis and carbon filtration), are incapable of removing organofluorine

contaminants from treated wastewater. See [January 6, 2025 PNAS article](#). That is why the EIB wisely apportioned the risk and responsibility of disposing such wastes to ground to the property on which they are generated. That is why the EIB's Liquid Waste Regulations limit the volume and rate at which such wastes can be treated, so the scale and demands of such on-site treatment do not require continuous daily supervision and maintenance. That is why the Liquid Waste Regulations require rate-limited discharges of treated effluent to appropriately spaced, appropriately sited, adequately sized on-site disposal fields. And that is why the Liquid Waste Regulations, much like a speed limit in school zones, protect public health and safety in ways that the Resort's "technologically advanced" treatment system cannot and will not provide.

K. Class 1A Wastewater Does Not Provide the Protection the Resort Claims

The Resort trumpets its production of "Class 1A reclaimed domestic wastewater" as though that somehow obviates any need for the on-site disposal protections the Liquid Waste Regulations require. Here again, the Resort's rhetoric proves to be illusory bluster.

As NMED's Guidance on the Above Ground Use of Reclaimed Domestic Wastewater explains, the different classifications are determined by the levels or concentrations of BOD₅, Turbidity, Fecal coliform and UV Transmissivity of the reclaimed wastewater. See BL Response, Exhibit J. For example, the required 30-day average level of BODs for Class 1A wastewater may not exceed 10 mg/L, whereas the 30-day limit for Class 2 and Class 3 reclaimed wastewater is 30 mg/L. Based on that classification, the wastewater may or may not be used for certain above ground uses. Class 1A reclaimed domestic wastewater may be used, for example, in low pressure/low trajectory spray irrigation systems without access control to irrigate parks, schools, golf courses but not edible food crops. Class 2 reclaimed domestic wastewater may be used for dust control, irrigation of landscaping in roadway medians, irrigation of fodder and seed crops for

milk-producing animals, livestock and soil compaction. But neither classification is suitable for human consumption, and exposure to both must be controlled.

To the extent the Resort wishes to spray irrigate its landscaping without also controlling its patrons' access to those grounds, it must do so using Class 1A reclaimed domestic wastewater, as the Draft Permit clearly states. NMED Draft Permit at p. 1.⁵ The limited effluent testing required by Condition 10 of the Draft Permit and the limits it imposes for E. coli, BOD₅, Turbidity and UV Transmissivity, apply only to whatever effluent the Resort chooses to use for irrigation; they do not apply to the effluent discharged to ground in the Resort's single disposal field. As to those discharges, the Draft Permit imposes one condition only: Total Nitrogen 10 mg/L. NMED Draft Permit at p. 6, Condition 9.

In short, nothing in the Draft Permit requires the Resort to discharge Class 1A effluent to its disposal field, and the permit imposes no limits on the nature or concentration of contaminants discharged to ground other than Condition 9's limit on Total Nitrogen. Yet again, the Resort would have the Hearing Officer believe the Draft Permit requires protections and safeguards that prove to be illusory when examined carefully.

L. What Should the Resort Do?

The developers of the Bishop's Lodge Hills subdivision chose to forego on-site treatment and discharge to ground for disposal of the subdivision's liquid waste. Instead, they chose to install a private sewer system to collect and discharge the subdivision's liquid waste into an enclosed system or to a public sewer. As the Liquid Waste Regulations clearly provide, no person shall discharge untreated liquid waste except into a permitted and approved enclosed system, a permitted

⁵ "Class 1A reclaimed domestic wastewater discharges to an irrigation system totaling approximately five (5) acres and from a standpipe for temporary uses." NMED Draft Permit, BL Exhibit A at p.1

and approved liquid waste treatment unit or a public sewer system. 20.7.3.201(B) NMAC. Additionally, no person shall discharge effluent from a liquid waste treatment unit except through a permitted and approved waste disposal system or to a permitted public sewer system. 20.7.3.201(C) NMAC.

The fact that the developers of the Bishop's Lodge Hills subdivision chose to forego the construction and permitting of the facilities required for discharge to permitted and approved on-site liquid waste treatment and disposal systems is no excuse or justification to shift the cost, risk and burden of that decision onto their downstream neighbors. Nor does it justify issuance of a permit that allows on-site liquid waste discharges to ground without the infrastructure and engineering constraints the Liquid Waste Regulations require. The Liquid Waste Regulations could not be clearer. Having chosen to install a neighborhood sewer instead of compliant on-site liquid waste treatment systems, the Resort and its property owners have two available choices: (1) either invest in the infrastructure needed for a permitted and approved on-site enclosed system that does not discharge liquid waste to ground, or (2) connect to a permitted public sewer system. 20.7.3.201(C) NMAC.

CONCLUSION

Over fifty years ago, the Legislature directed the EIB to promulgate regulations to govern the on-site treatment and disposal to ground of liquid waste generated by dwellings, commercial establishments and other groups. EIB fulfilled that mandate by adopting the Liquid Waste Regulations, which apply without limit to every dwelling, establishment and group that seeks to dispose of liquid waste to ground. The Liquid Waste Regulations supplement the Water Quality Act's water quality standards, providing an extra measure of regulatory protection against contamination of our soils and water resources.

It is one thing for NMED to make an administrative mistake and fail to apply the applicable regulations to a pending permit. Such mistakes can readily be acknowledged and corrected.

But, as NMED's failure to acknowledge its mistake or withdraw its Draft Permit clearly demonstrates, this is not an administrative mistake. Not only does NMED refuse to acknowledge its error in failing to apply the Liquid Waste Regulations to the Resort's permit application, but it intransigently insists there is no mistake, that the law should somehow be distorted and twisted to support its erroneous position and reckless policy. And that is precisely what makes the present motion so critically important.

The New Mexico Legislature empowered the EIB – not NMED – to decide how to regulate domestic and commercial generators of liquid waste. Neither the Legislature nor the EIB limited the applicability of the resulting regulations based upon the volume of liquid waste generated. By ignoring the applicability of the Liquid Waste Regulations to the Resort's permit application, and by substituting in their place the water quality regulations as the basis upon which to review and approve the Resort's application, NMED is abrogating the Legislature's express delegation of authority to the EIB, and arrogating to itself the authority expressly delegated by the Legislature to the EIB. This NMED cannot do.

The Secretary should direct NMED's Water Division to withdraw the Draft Permit and apply the Liquid Waste Regulations to the Resort's application for on-site treatment and discharge of its liquid waste. Enforce the Liquid Waste Regulations precisely as the Legislature directs NMED to do. Protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of public health hazards and surface and ground water contamination from on-site liquid waste disposal practices, just as the law requires.

REQUEST FOR ORAL ARGUMENT

Protect Tesuque, Inc. respectfully requests oral argument on its Motion.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on March 14, 2025, a true and correct copy of the foregoing Reply filed in this matter and served via email to the persons listed below:

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/s Thomas M. Hnasko

Thomas M. Hnasko

From: [Herman, Jason, ENV](#)
To: [Chris Kaplan](#)
Cc: [Young, Avery, ENV](#); [Weatherly, Christal, ENV](#)
Subject: Re: DP-75 Leachfield Authorization
Date: Friday, February 7, 2025 4:14:36 PM
Attachments: [20190930 DP-75 FinalDP.pdf](#)

Hi Chris,

In response to your question regarding leachfields at Bishop's Lodge covered under DP-75. Your current discharge permit that was issued on September 30, 2019, is currently administratively continued and still is the effective permit regulating the discharge from the wastewater treatment facility at Bishops Lodge. The administratively continued discharge permit includes in the authorization section "The permittee is authorized to discharge treated wastewater to two leachfields for disposal" found at the top of page 3 (PDF page 7) of the permit (attached). This authorization does not specify the location, construction, or placement of the leachfields. Discharge into the new leachfield is covered by this authorization and is not a violation of the permit conditions or WQA.

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Pronouns: he, him, his ([Why is this important?](#))

EXHIBIT

7

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