

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



IN THE MATTER OF:)
THE APPLICATION OF S&R)
SEPTIC FOR THE RENEWAL OF) **GWB 19-28 (P)**
A SEPTAGE DISPOSAL FACILITY,)
DISCHARGE PERMIT, DP-465)

**GROUND WATER QUALITY BUREAU'S
PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW**

Pursuant to 20.1.4.500.B NMAC, the Ground Water Quality Bureau (“Bureau”) of the Water Protection Division (“Division”) of the New Mexico Environment Department (“NMED” or “Department”) submits the following proposed findings of fact and conclusions of law.

CLOSING SUMMARY

The Environment Department works with degrees of certainty, i.e. the best information available at a given time. The more doubt that is introduced about the nature of a site, the more cautious the Department must be in order to remain protective. Gaps in knowledge about underlying geology or the nature of what is discharged at a site are the types of doubt that may result in the Department being conservative until it can fill those gaps in knowledge.

Although prior permit renewals have been granted, studies that were apparently not contemplated by former staff have shown the underlying geology to be more volatile than originally believed. Faulting and fracturing may create more rapid conduction of pollutants while simultaneously making information gathered at neighboring sites less reliable when profiling a specific location. Additionally, because water-production wells seek a large, long-term aquifer, they tend to aim deep, ignoring shallow moisture and making it problematic to rely on them for

information about “perched” aquifers. These factors have introduced doubt about what lies beneath the Applicant’s site.

Unusually high readings for contaminants that should not be dumped at the facility (fats, oils and grease) have also introduced doubt about what is being discharged.

Therefore, the Department believes additional information needs to be gathered about the subterranean features at the facility. On this point, the Applicant did not wholly disagree. Each party drafted a strategy for obtaining that information and, ultimately, reached a verbal agreement that was summarized in the hearing testimony and is more formally memorialized in **Attachment 1** at the end of this document.

Ultimately, the burden of proof is on the Applicant to show that its preferred version of a permit remains protective of groundwater and human health. That said, the Environment Department considers the compromises to Conditions 21 and 22, as drafted herein, satisfactory to meet those requirements.

RESPONSE TO COLLATERAL ESTOPPEL MOTION

At the October 16 hearing, the Applicant motioned for collateral estoppel based upon joint Findings of Fact and Conclusions of Law adopted by the hearing officer and/or secretary following prior hearings on the Applicant’s permit in 1999 and 2002. The hearing officer encouraged the Department to reserve its response for the present post-hearing document.

Although the doctrine arises more from common law than codification, the Department first points to 20.1.4.100 NMAC for the general precept that administrative hearings are not intended to have the same degree of formality or procedural constraints as a traditional courtroom.

A legacy doctrine, collateral estoppel plainly arose in the judiciary, where its applicability is largely recognized. How it interacts with the administrative state, however, is a topic of ongoing exploration. (Matthew Faust, *Collateral Damage: When Should the Determinations of Administrative Adjudications Have Collateral Estoppel Effect in Subsequent Adjudications?*, 84 *Fordham L. Rev.* 2879 (2016).)

Although from a different jurisdiction, *State of Michigan v. Thomas* is particularly on point, addressing an analogous situation from which useful principles can be extracted. (805 F.2d 176 (6th Cir, 1986).) The EPA had previously approved a fugitive-dust rule in Illinois but later disapproved the same regulatory scheme in Michigan. Michigan asserted collateral estoppel, but the court disagreed. “An administrative agency may reexamine its prior decisions and may depart from its precedents provided the departure is explicitly and rationally justified. ...

[A]dministrative agencies are ‘neither required nor supposed to regulate the present and the future within the inflexible limits of yesterday.’” (*Id.* At 184). When illustrating that the EPA had a rational justification for its shift, the court quoted this testimony: “It is not difficult to explain why USEPA might now disapprove a regulation that it approved five years ago and which approval it defended in court. The answer is that the Agency now knows more about RACT for industrial fugitive dust and knows more about the kind of control programs and permits that a state might approve under such a rule.” (*Id.*) In short, an agency is *expected* to adjust upon receipt of new information. “At no time should an agency be estopped from using its increased expertise.” (*Id.* At 185).

As the Applicant stated, administrative determinations have occasionally been granted issue-precluding status in the courts. However, applying it within agencies “raises a host of concerns that are absent from the comparatively straightforward process of applying agency

decisions in court.” (Faust, 84 Fordham L. Rev. at 2890.) “The application of collateral estoppel is usually classified as an area of procedural, rather than substantive, law. Agencies have the discretion to choose which procedures they use, subject only to the requirements of the APA and their authorizing statute.” (*Id.* At 2908).

The basic policy behind collateral estoppel is also at odds with the present administrative action. Courts formed the doctrine to promote judicial economy and the need for finality. In the present context, the Department is statutorily required to revisit permits at least every five years (*see* NMSA 1978 § 74-6-5(I) requiring that permit terms not exceed five years). Rather than evaluate the attendant issues a single time and turn away forever, it is specifically supposed to revisit them as a steward. If it ignored that responsibility, it would be shirking its duty to regulate. The Department is not supposed to pursue “administrative economy,” and no permit is perpetually “final.” In these circumstances, collateral estoppel stands opposed to legislative intent.

PROPOSED FINDINGS OF FACT

A. The Facility

1. S&R Septic (“Applicant”) is a domestic-septage and sludge disposal company originally permitted in 1987. Since then, it has gone through several permit renewals, the most recent of which was in December 2012. The 2012 permit allowed discharge of up to 9,857 gallons per day (not to exceed 69,000 gallons per week) of domestic septage to 13 unlined disposal cells totaling 2.31 acres on a rotational basis. It also allowed discharge of up to 8,333 gallons per month (not to exceed 100,000 gallons per year) of liquid/semi-solid/solid domestic-wastewater-treatment-facility and/or package-treatment-plant sludge to three cells totaling .46 acres on a rotational basis. The Applicant has applied to retain those limits. **AR Doc. 4.**

2. When measured on a *per-acre* basis, the allowable discharge is 4,267 gallons per day. That is more than any other active septage facility in New Mexico, excepting Barry's Septage (DP-1878), the elevated limit for which is effectively nullified by an additional restriction limiting it to 200 pounds of total nitrogen per year. **NMED Exh. 8; Testimony Vol II, pg. 326.**

3. The facility is located on Tune Drive approximately three miles northwest of Taos, NM on the north side of Highway 64.

4. Contaminants of concern to the Department are nitrogen species and pathogens in particular, but may also include other chemicals such as formaldehyde due to the varying materials and strategies associated with septic-tank use. **NMED Exh. 1, pgs. 6-7.**

B. History of the Permit (drawn from NMED Exh. 1, pgs. 3-5)

5. The Department first issued a permit to the Applicant on April 7, 1987, authorizing the discharge of 12,000 gallons per day of septage into shallow ponds.

6. The Department approved an increase to 20,000 gallons per day on July 25, 1990.

7. The Department renewed the permit on June 10, 1992.

8. Simultaneous with a decrease in discharge volume to 10,000 gallons per day and a transition from shallow ponds to 12 shallow disposal cells, the permit was renewed on July 28, 1999.

9. A public hearing on the Applicant's next renewal application was held October 8, 2002. The renewed permit was issued May 22, 2003.

10. A joint NMED and Environmental Protection Agency inspection found operational deficiencies in March 2005 and proposed a \$32,000 penalty that was reduced to \$1,800 in a May 2007 consent agreement.

11. On April 11, 2008, the Department deauthorized grease-trap and carwash-grit waste disposal at the facility.

12. The Department renewed the permit on December 27, 2012.

13. The 2012 permit expired without submission of a renewal application on December 27, 2017.

14. The Department received the renewal application presently at issue on February 22, 2018. **AR Doc. 4.**

15. In September 27, 2018, a Department field technician witnessed an S&R Septic pumper truck pumping what appeared to be grease-trap waste from a restaurant in Taos. The following day, Applicant refused entry by inspectors into the facility. Three days later, on October 1, inspectors gained access and gathered samples that tested 100 times greater for total petroleum hydrocarbons and fats/oils/grease than similar facilities.

C. Geology and Hydrology of the Site

16. The facility is located on the Costilla Plains between the Taos Plateau and the Sangre de Cristo Mountains. In this area, groundwater is typically found in the alluvial sediments, which consist of deposits from the Holocene, early Quaternary and late Tertiary Ages known, collectively, as the Santa Fe Group. That Group, in turn, is interbedded with clay deposits and volcanic rocks such as servilleta basalt. **NMED Exh. 1, p. 6.**

17. The facility is also within the Los Cordovas Fault Zone, which has a north-south orientation. There is fracturing of bedrock and, in general, the fractures are not cemented.

NMED Exh. 1, p. 6, referencing NMED Exhs. 3, 4 and 5.

18. Based on a well located one mile away, the New Mexico State Engineer (“OSE”) recorded water depth at approximately 500 feet. Records are insufficient regarding perched groundwaters. **NMED Exh. 1, p. 6.**

19. The OSE well log for the Waste Management of New Mexico well profiled 102 feet of brown gravel and clay from eight to 110 feet below surface. The Mark D. Miller well log profiled 89 feet of clay and gravel from 10 to 99 feet below surface. **Exh. Snyder 1, part 2.**

20. The 1999 Shomaker Report estimated nitrogen migration below the Applicant’s facility at 15-30 feet after 12 years of operation. **AR Doc. 1.**

21. Modeling in the 2000 Duke Engineering Report predicts said migration of nitrogen contaminants below the facility to have reached depths of at least 70 feet after 32 years of operation. **AR Doc. 2; NMED Exh. 1, pg. 6.**

22. Until the Applicant’s environmental consultant performed a site investigation in October of 2019, no follow-up studies had been performed at the facility regarding vertical migration of contaminants since the Shomaker/Duke reports. **NMED Exh. 1, p. 7.**

23. EA Engineering describes the 2019 investigation as “limited.” **Exh. Snyder 1, p. 1.** Near-surface gravels prevented air-rotary drilling beyond 35 feet below ground surface. Three grab samples and one split-spoon sample were obtained. **Exh. Snyder 1, part 4.**

D. Public Notice and Requests for Hearing

24. Pursuant to 20.6.2.3108(A) NMAC, the Applicant undertook the initial public-notice responsibilities, making its renewal application known, on June 22, 2018. **AR Doc. 10.**

25. Pursuant to 20.6.2.3108(J) NMAC, the comment period for the draft permit began May 24, 2019, following publication in the Taos News and Albuquerque Journal, as well as mailing to all interested parties. **AR Docs 38, 39.**

26. The Applicant did not submit any comments, but more than 10 members of the public requested a hearing. These included individual residents, a neighborhood association, adjacent business owners, and a water and sanitation district. **AR Docs. 40-53.**

27. The Public Involvement Plan was duly revised, **AR Doc. 54**, and notice of a public hearing – in both English and Spanish – was published in the Albuquerque Journal and Santa Fe New Mexican on or before September 15, 2019. **AR Docs. 55, 56.**

28. When the initial evening of testimony ran long, notice of a continuance was sent to all interested parties informing them of the new day, time and location.

E. The Hearing

29. A hearing was held October 16, 2019, at the Taos County Commission Chambers beginning at 5:30 p.m. Exceeding the available time, it was continued on October 21, 2019, at the Taos Civic Plaza and Convention Center beginning at 10 a.m.

30. In addition to the Applicant and the Department, three additional entities made entries of appearance and/or submitted notices to present technical information. These were the El Prado Water and Sanitation District, Jerome Hansen and Dion Smith.

31. In total, 14 people testified or delivered verbal comment. The Applicant presented three witnesses – Jay Snyder, Jim McCann and Steve Rael – and the Department presented one: Jason Herman. Of the public comments, eight generally opposed the permit or sought additional investigation before issuance while two generally supported the permit.

32. Jerome Hansen, a trained geologist and member of the Stagecoach Neighborhood Association made extensive use of Google-Earth slides depicting the facility over 2-3 decades. He expressed concern about permeability of the underlying rock and potential contamination of groundwater. **Testimony Vol. 1, pg. 20.**

33. Phillip Tafoya testified to the value of the service provided by the Applicant and asked how the hearing was initiated. The hearing officer provided a response to his question. **Testimony Vol. 1, pg. 178.** Tafoya favored renewal of the permit.

34. Mary Lane Leslie spoke on behalf of the Stagecoach Neighborhood Association. She testified that other septage haulers in the area utilize the municipal wastewater-treatment plant for disposal rather than exposed cells. She asserted that pathogens in the septage are dangerous to human health and asked that permit conditions address vectors and potential airborne contaminants. She worried that the Department lacks adequate resources to oversee and monitor the facility based on historical violations of the permit. She ultimately asked that the Applicant be required to use the wastewater-treatment plant. **Testimony Vol. I, pgs. 183-197.**

35. Norbert Mondragon disfavored renewal of the permit due in part to reservations about the Department's lack of manpower and reliance on self-reporting by the facility. He also expressed frustration with the narrow focus on groundwater when he considers airborne pathogens similarly concerning. **Testimony Vol. I, pgs. 204-06.**

36. Dion Smith, a member of the Stagecoach Hills Neighborhood Association, also objected to airborne contaminants as a potential cause of disease. He has received complaints about odors and conducted research on the health effects of breathing sewage fumes. He listed hydrogen sulfide, carbon dioxide, methane and ammonia as gases typically associated with septage. He expressed concern about the Department's lack of manpower for enforcement and encouraged disposal at the wastewater-treatment plant. **Testimony Vol. I, pgs. 267-273.**

37. John Painter spoke on behalf of the El Prado Water and Sanitation District, located north of Taos. He holds a level-4 certification and operator's license from the Department's drinking water bureau. The District relies on several production wells, including one near the Applicant's facility. While Painter did not think it is currently impacted, he expressed concern about the future and stressed the need for additional monitoring. He encouraged drilling at least one borehole at the facility and ensuring that the Applicant does not dispose of fats/oils/grease or hydrocarbons at the facility. **Testimony Vol. II, pg. 303-304.**

38. Lois Rodin discussed the functioning of sewage-cell systems and what distinguishes an effective one from a poor one. She felt the Applicant could dispose at the wastewater-treatment plant. **Testimony Vol. II, pgs. 311-312.**

39. Cheryl Atcity is the environmental program manager for the Taos Pueblo Environmental Office. She expressed concern that renewal of the permit could harm subsurface water and, by extension, wildlife, such as bison herds. **Testimony Vol. II, pg. 313.**

40. Douglas Daubert read a statement from prior witness Jerome Hansen, who could not appear for the second day of proceedings. Through Daubert, Hansen stated that the Applicant's counsel failed to serve him with a significant amount of information, which resulted in his being caught off guard during cross-examination. **Testimony Vol. II, pg. 346.** For his

part, Daubert was uncomfortable with a proposed reduction in boreholes from five to one and did not think it could adequately test for off-site seepage. He also emphasized the Applicant's gaps in monitoring reports, encouraged disposal at the wastewater-treatment plant, and called for denial of the permit. **Testimony Vol. II, pg. 348-351.**

41. Bruce Popham, who worked closely with the Florida environment department, related his surprise at discovering open-pit dumping upon his relocation to Taos. He considers the facility a risk to the well fields. **Testimony Vol. II, pg. 354.**

F. Negotiations

42. The Bureau met with the Applicant on August 13, 2019 and with El Prado Water and Sanitation District on August 20, 2019. Both meetings focused on discussion and information gathering but no commitments to alter the draft permit.

43. On October 21, 2019, just prior to commencing the continued hearing, the Applicant, the Bureau and El Prado verbally negotiated modifications to Conditions 21 and 22 of the permit. These were first summarized in the testimony of Jason Herman, **Testimony Vol. II, pgs. 319-323**, and are more formally captured in **Attachment 1** to this document.

G. Permit Conditions

44. The conditions in the draft permit are divided into five subsections with a total of 51 conditions.

45. Features of the operational plan include requiring 24-inch berms around the facility and a stormwater-diversion-bar trench (at least six inches deep) at the facility entrance. Fencing and a locking gate will surround the entire facility to control access by animals and the

public. Signs shall be posted every 500 feet stating it is a waste-disposal area with non-potable water. Contact information for both the facility operator and the Department will be posted at the entrance. Each disposal cell will be marked with a number and the authorized waste type. Depth of liquid shall not exceed three inches in any cell at any time. Different waste types shall not be combined. Cell vegetation shall be removed, and the permittee shall inspect the facility weekly for residual trash. Erosion-preventing splash pads shall be maintained. Each septage or sludge load will be mixed with lime and held at a pH of 12.0 for a minimum of 30 minutes. Sludge is allowed only in cells 3, 4 and 5. **NMED Exhibit 1, pgs. 8-10.**

46. Features of the monitoring/reporting plan include semi-annual reporting and ensuring that a detailed manifest is kept for each load of waste. The permittee shall demonstrate compliance with 40 CFR 503. If monitoring wells are installed, ongoing sampling for nitrogen species, total dissolved solids and chloride will be required. The permittee shall complete a surface-disposal data sheet for each cell documenting the amount of nitrogen applied each month; these will be part of the semi-annual reports. Sludge discharges will be monitored for by type and percent total solids to determine the dry weight; each type will be analyzed for TKN and NO₃-N. Composite samples from five locations within each cell will be collected semi-annually and analyzed for TKN, NO₃-N, FOG and TPH. **NMED Exhibit 1, pgs. 11-14.**

47. The Department invites John Painter, of the El Prado Water and Sanitation District, and Jerome Hanson to provide input on the “work plan” mentioned in the revised first paragraph of Condition 21 (as depicted in **Attachment 1**), thus according the public ongoing involvement in the process. **Testimony, Vol. II, pg. 321.**

48. Modifications to Conditions 21 and 22 (as depicted in **Attachment 1** of this document) have had repercussions for Conditions 23-28, which are contingent on the need for

monitoring wells. Where similar language does not already exist, they should now be interpreted with the following phrase preceding them: "If for any reason monitoring wells are required to be installed...."

49. The permit includes a contingency plan that can be triggered by, among other things, exceedance of groundwater standards, FOG/TPH levels above 3,000 mg/kg, damage to the structural integrity of a cell or a spill/unauthorized discharge. Ensuing actions can include contacting the Department, excavation of contaminated soil, submission of a Corrective Action Plan, repair of damaged infrastructure, and abatement actions. **NMED Exhibit 1, pgs. 14-16.**

50. A closure plan includes backfilling the cells with clean fill and revegetating both the cells and any associated disturbed areas with native plants. **NMED Exhibit 1, pg. 16.**

PROPOSED CONCLUSIONS OF LAW

51. The Water Quality Control Commission ("WQCC") "may require persons to obtain from a constituent agency designated by the commission a permit for the discharge of any water contaminant." NMSA 1978, § 74-6-5(A).

52. The WQCC has adopted regulations implementing the Water Quality Act at 20.6.2 NMAC.

53. The regulations at 20.6.2.3104 NMAC provide that "no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into ground water unless he is discharging pursuant to a discharge permit issued by the secretary."

54. Applicant S&R Septic is a "person" within the meaning of the regulations. 20.6.2.7(JJ) NMAC.

55. The Department is an agency of the executive branch of the state of New Mexico, created by statute. NMSA 1978, § 9-7A-6(B)(3) (1991).

56. The Department is charged with evaluating applications for discharge permits and recommending approval or disapproval by the Secretary. 20.6.2.3018 NMAC.

57. Activities described by S&R Septic in the Application require a groundwater discharge permit to be evaluated by the Department. 20.6.2.3104 and 20.6.2.3018 NMAC.

58. The permit application complied with the requirements of 20.6.2.3106 NMAC. The Water Quality Act provides that a constituent agency shall "either grant the permit, grant the permit subject to conditions, or deny the permit." NMSA 1978, § 74-6-5(D).

59. The Department provided the public, including the Applicant, with notice of the proposed discharge permit in accordance with the regulations at section 20.6.2.3108(H) NMAC.

60. The Department provided the public, including the Applicant, an opportunity to comment on the proposed discharge permit in accordance with the regulations at 20.6.2.3108(K) NMAC.

61. The Department provided the public, including the Applicant, with notice of the public hearing in accordance with the regulations at 20.6.2.3110 and 20.1.4.200 NMAC.

A public hearing was held on the proposed discharge permit in accordance with the regulations at 20.6.2.3110 and 20.1.4 NMAC.

62. The proposed conditions "are reasonable and necessary to ensure compliance with the Water Quality Act and applicable regulations, including site-specific conditions." NMSA 1978, § 74-6-5(D).

63. The proposed discharge plan meets the requirements of the regulations and will

not result in a hazard to public health or undue risk to property, in accordance with 20.6.2.3109(C) NMAC.

64. The Bureau recommends the secretary's approval of the May 24, 2019 draft permit DP-465 with the modifications outlined in paragraph 47, paragraph 48 and Attachment 1. Based on the information contained in the notices of intent, the evidence presented at the public hearing and the applicable law, the Ground Water Quality Bureau respectfully requests that the hearing officer adopt and incorporate this Proposed Findings of Fact and Conclusions of Law in the hearing officer's report to the secretary.

ATTACHMENT 1

Monitoring Actions with Implementation Deadlines

#	Terms and Conditions
21.	<p>Within 60 days of the effective date of this Discharge Permit the permittee shall submit a work plan for NMED's approval outlining a shallow geohydrological evaluation beneath the facility. The goals of the work plan will be to identify the depth and concentration of all facility related contaminants, the existence of any saturated zones at or above the first encountered basalt layer, and any lithological zones capable of creating a perched aquifer. Members of the community shall have opportunity to provide input on the work plan.</p> <p>Within 120 days following NMED's approval of the work plan, the permittee shall implement the work plan at a location that NMED agrees is most likely to be representative of subsurface conditions. NMED shall be notified at least 30 days prior to implementing the work plan.</p> <p>Geohydrological evaluation will be completed in the following manner:</p> <ul style="list-style-type: none"> • A minimum of one borehole shall be drilled using a drilling technique most apt to produce continuous representative core, e.g., a hollow-stem auger or sonic drill. • Installation of a minimum of one moisture monitoring device, e.g., suction lysimeter. • Drilling shall be conducted in such a manner most apt to detect groundwater if present. • At a minimum, a borehole shall be advanced to the first occurrence of a basalt layer. • If moisture is encountered during drilling, boring shall cease and the borehole will be allowed to rest for two hours and an evaluation shall be made to determine whether fluid accumulates at the bottom of the hole. • If a saturated zone is identified above the first basalt layer, a monitoring well will be constructed into the zone. A second borehole shall be drilled nearby utilizing surface casing that isolates the saturated interval. The intent of the second borehole will be to continue characterization of lithology and moisture content to total depth. The lateral extent of any contaminated perched water will be fully delineated. • Continuous core samples shall be collected and retained during the advancement of the borehole. • All representative soil or lithology types (a minimum of five samples) shall be submitted for laboratory analysis for the following physical properties: <ul style="list-style-type: none"> ○ Bulk density ○ Particle size distribution ○ Porosity ○ Hydraulic conductivity ○ Moisture content • Soil or lithologic samples shall be collected at 10-foot intervals and submitted for laboratory analysis of for the following chemical analytes: <ul style="list-style-type: none"> ○ TKN ○ NO₃-N ○ NH₃-N ○ Cl ○ TOC • All samples shall be collected and analyzed in accordance with EPA Soil Sampling Science and Ecosystem Support Division Operating Procedure, SESDPROC-300-R3 (enclosed) or ASTM methods D 420-93, D 1452-80, D 1586-84, D2488-93, D 4220-89, D 4700-91 and D 5434-93.

#	Terms and Conditions
	<ul style="list-style-type: none"> • If chemical analysis of soil or lithologic samples indicate elevated nitrogen content (as defined by exceedance of the Table 11 concentrations specified in the 1999 study titled "Evaluation of the Migration of Nitrogen Compounds at the City of Santa Fe Sludge Disposal Site Near Santa Fe, New Mexico and at the S&R Septage Disposal Site Near Taos, New Mexico" [attached]) extends to the top of the first basalt layer, the permittee shall perform complete vertical characterization of contamination through and below the basalt. • If chemical analysis soil or lithologic samples indicates elevated nitrogen content at 150 feet below ground surface, the facility shall immediately cease discharging at the facility and shall implement the closure plan. • Soil moisture monitoring systems shall be installed, and the associated borehole shall be completed in accordance with industry standards and the methodology determined during the development of the work plan. • Ninety (90) days after completion of the soil borehole sampling, the permittee shall submit a work plan completion report to NMED detailing the physical and laboratory analysis of all sampling performed including a narrative describing the project, preparations, methodology used. The report shall also include the geologic logs from the coring and any other pertinent information collected during the study. <p>[Subsection C of 20.6.2.3106 NMAC, Subsection A of 20.6.2.3107 NMAC]</p>
22.	<p>If total nitrogen content is found to be elevated above the non-impacted levels identified by Table 11 in any of the soils to lithologic samples collected at a depth of 100 feet or deeper, the permittee shall submit a written moisture monitoring proposal for review and approval by NMED. This submittal shall occur within 60 days of the completion of the sampling required by Condition 21 of this Discharge Permit. The proposal shall designate the locations and design of vadose-zone monitoring systems sufficient to evaluate total nitrogen content migration. The proposal shall include, at a minimum, the following information.</p> <ol style="list-style-type: none"> a) A map showing the proposed location of the vadose-zone monitoring system. b) A written description of the specific location and design proposed for the monitoring system including the distance (in feet) and direction of the monitoring system 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. Design details of the vadose-zone monitoring system will also be provided. c) A statement describing the groundwater flow direction beneath the facility, and documentation and/or data supporting the determination. <p>All monitoring system locations shall be approved by NMED prior to installation.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>

Respectfully submitted,

GROUND WATER QUALITY BUREAU
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NEW MEXICO ENVIRONMENT DEPARTMENT

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CERTIFICATE OF SERVICE

I hereby certify that on November 27, 2019 a copy of the foregoing Proposed Findings of Fact and Conclusions of Law was sent via electronic mail to the following parties of record:

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