

STATE OF NEW MEXICO  
BEFORE THE SECRETARY OF ENVIRONMENT



IN THE MATTER OF: )  
THE APPLICATION OF S&R )  
SEPTIC FOR THE RENEWAL OF )  
A SEPTAGE DISPOSAL FACILITY, )  
DISCHARGE PERMIT, DP-465 )

GWB 19-28 (P)

**NEW MEXICO ENVIRONMENT DEPARTMENT'S  
STATEMENT OF INTENT TO PRESENT TECHNICAL TESTIMONY**

The Ground Water Quality Bureau (“Bureau”) of the Water Protection Division (“Division”) of the New Mexico Environment Department (“Department”), pursuant to 20.1.4.300(B) and 20.6.2.3110(C) NMAC, submits this Statement of Intent to Present Technical Testimony in the matter of the application (“Application”) by S&R Septic (“Applicant”) for a discharge permit renewal at the public hearing beginning on Wednesday, October 16, 2019.

1. The entity for whom the witnesses will testify.

The Ground Water Quality Bureau of the Water Protection Division of the Department.

2. The Division’s recommended decision to approve, deny, or approve with conditions the application.

The Bureau, on behalf of the Division, recommends approval of the Applicant’s application for a permit, provided the Applicant complies with certain conditions as set out in the proposed permit. The Bureau reserves the right to recommend additional conditions for the permit and the right to modify its position based on any comment or testimony presented at the hearing or based on any written comment submitted in connection with the Application.

3. The name, address, affiliation, educational and work background of each technical witness.

The Bureau will call the following witness at the hearing to present technical testimony:

A. Jason Herman. Mr. Herman is a domestic waste team leader for the Bureau. He has been employed by the Department for two years. Mr. Herman's educational and professional background are described in his resume, attached as NMED Exhibit 2. Mr. Herman is expected to provide testimony regarding the regulatory framework under which the Bureau issues permits and the basic components of a discharge permit. Mr. Herman will also testify about the recent regulatory history of DP-465, a summary of the discharge permit renewal application submitted by the Applicant, the permit conditions imposed by NMED, and the regulatory authority and reasons for NMED's proposed conditions, general discharge permit requirements and recommendations concerning DP-465. His written testimony is provided as NMED Exhibit 1.

4. Length of direct testimony of each witness.

A. Mr. Herman: 45 minutes

5. A list and description of anticipated exhibits.

<u>EXHIBIT NUMBER</u>	<u>TITLE OF EXHIBIT</u>
NMED Exhibit 1	Written Testimony of Jason Herman
NMED Exhibit 2	Resume of Jason Herman
NMED Exhibit 3	Drakos Report Figure 3
NMED Exhibit 4	Drakos Report Figure 4
NMED Exhibit 5	Drakos Report Figure 6
NMED Exhibit 6	Administrative Index

The Bureau hereby reserves the right to introduce and to move for admission of any other exhibit in support of rebuttal testimony at the hearing.

6. List of all technical materials relied upon by the witnesses.

A. Applicant's Application for Permit;

B. Water Quality Act, NMSA 1978 §§ 74-6-1 to -17 (1993);

C. New Mexico Water Quality Regulations, 20.6.2.1 through 20.6.5399 NMAC;

D. Permit Procedures-Environment Department, 20.1.4 NMAC.

The Bureau hereby reserves the right to rely upon any other technical materials in support of rebuttal testimony at the hearing.

Respectfully submitted,

GROUND WATER QUALITY BUREAU  
NEW MEXICO ENVIRONMENT DEPARTMENT

*/s/ Owen Johnson*

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## **INTRODUCTION**

My name is Jason Herman, and I am currently employed as a Hydrologist Supervisor in the Ground Water Quality Bureau (“GWQB”) of the New Mexico Environment Department (“NMED”) – a position I have held since June 2019. In my capacity as a Hydrologist Supervisor, I am the team leader for domestic waste groundwater discharge permits. In this position, my duties include reviewing applications for domestic waste discharge permits and ensuring consistency in domestic waste discharge permits and policy development. I have worked in the GWQB for two years.

Prior to joining the GWQB, I worked for two private water-treatment firms in south Florida for eight years as a fresh-water specialist on a variety of projects ranging from large scale groundwater treatment systems to desalination system design. I hold a bachelor’s degree in Environmental Planning and Design and two master’s degrees: one in Water Resources Management and the other in Community and Regional Planning, both from the University of New Mexico.

### **I. REGULATORY FRAMEWORK**

#### **The WQCC Regulations**

In 1977, the New Mexico Water Quality Control Commission (“WQCC”), pursuant to the New Mexico Water Quality Act (the “Act”), promulgated regulations set forth at 20.6.2 NMAC (the “Regulations”) to protect groundwater quality, surface water quality and public health. The stated goal of the Regulations is to protect all groundwater with an existing concentration of 10,000 mg/l or less total dissolved solids for present and potential future use as domestic and agricultural water supply, as well as to protect those segments of surface waters which are gaining because of groundwater inflow for uses designated in the New Mexico Water Quality Standards. 20.6.2.3101 NMAC. To this end, the WQCC established health-based groundwater quality standards for a number of organic and inorganic contaminants and a list of water contaminants defined as toxic pollutants. These standards can be found at 20.6.2.3103 NMAC.

#### **Permits**

To control discharges from sources to groundwater, the Regulations prohibit a person from discharging effluent or leachate containing contaminants enumerated under Section 20.6.2.3103 NMAC into groundwater unless such person has a discharge permit. 20.6.2.3104 NMAC. To obtain a discharge permit or modification/renewal of an existing permit, a person must submit an application to NMED. 20.6.2.3106 NMAC. In the discharge permit application, the applicant is required to set forth a method of discharge that will ensure compliance with the Regulations, including the groundwater quality standards at 20.6.2.3103 NMAC. 20.6.2.3106 NMAC.

When the GWQB has determined the application administratively complete, it then has 30 days to post notice of this determination on its website and notify the applicant, the public, those persons who have requested notification, any affected local, state, federal, tribal or pueblo

governmental agency, and the Governor, Chairperson or President of each Indian Tribe, Pueblo or Nation within the state of New Mexico, as identified by the NMED. 20.6.2.3108.B NMAC. The applicant must also provide public notice to the general public in the local area of the proposed discharge. 20.6.2.3108 B and F. Once completed the applicant must submit proof of notice, including an affidavit of public notice completion and proof of synopsis publication. After the first public notice process is complete, a draft permit or notice of intent to deny is then prepared by NMED. Once the draft or notice of intent to deny has been prepared, the Regulations require a second public notice publication which includes a period of at least 30 days during which written comments or request for public hearing may be submitted to NMED. 20.6.2.3108(M) NMAC. If the NMED secretary (“Secretary”) determines, based upon these comments and requests, that there is significant public interest in the matter, a public hearing must be held. 20.6.2.3108(M) NMAC. If a hearing is held, NMED is required to provide the above-mentioned parties with notice at least 30 days prior to the hearing. 20.6.2.3108.N NMAC.

Within 30 days after the public hearing, the Secretary must, based upon the full administrative record, either approve, approve with conditions or disapprove the application for a new discharge permit, modification or renewal. 20.6.2.3109(B) NMAC. The Secretary must approve the discharge permit if it complies with requirements set forth at 20.6.2.3109(C) NMAC. Conversely, the Secretary must deny an application if any of the causes for denial enumerated under Section 74-6-5 of the Act or 20.6.2.3109(H) NMAC exist.

The term of a discharge permit is generally five years from the date the permit is issued. 20.6.2.3109(H) NMAC. The holder of a discharge permit must submit an application for renewal at least 120 days before the permit expires for it to be administratively continued. 20.6.2.3106(G) NMAC.

### **Components of Discharge Permits**

The terms and conditions for each discharge permit are organized into the following five sections: operational plan, monitoring and reporting, contingency plan, closure plan, and general requirements. The operational plan specifies the requirements associated with the operations and maintenance of a facility with respect to the collection, treatment, distribution and disposal of wastewater, storm water management, solids management, and site security. The monitoring and reporting section specifies the sampling point locations (e.g., monitoring wells, discharge outfalls, soil sampling, etc.), sampling protocols (e.g., composite vs. grab sampling, well purging, etc.), sampling frequency, chemical parameters to be sampled, monitoring of discharge rates, delivery manifests, treatment records, and reporting requirements. The contingency plan specifies the requirements associated with the actions the applicant must take in the event that spills or failures occur or if disposal of septage threatens to cause exceedances of groundwater standards or adverse impacts to public health. Finally, the closure plan specifies the requirements associated with the actions the applicant will take at a facility when operations cease and the facility is closed. Specifically, the closure plan must address the reclamation of the site and post-operational monitoring of groundwater at the site, as appropriate, and describe actions the applicant will take to minimize potential impacts to ground and surface waters, and public health.

Each of the five sections may contain additional conditions that require actions to be

performed by the applicant by an implementation deadline. This includes additional studies and the installation of monitoring devices in accordance with 20.6.2.3107(A) NMAC.

## **II. REGULATORY HISTORY OF DP-465**

1. On February 4, 1987, Mr. Steve Rael submitted a discharge permit application for the S&R Septic septage disposal facility (the "facility").
2. On April 7, 1987, NMED issued discharge permit DP-465 to Mr. Steve Rael authorizing the discharge of 12,000 gallons per day (gpd) of septage into shallow ponds at the facility.
3. On July 25, 1990, NMED approved a modification to DP-465 increasing the allowable discharge volume to 20,000 gpd.
4. On June 10, 1992, NMED approved the renewal of DP-465.
5. On July 28, 1999, NMED approved the modification and renewal of DP-465 which decreased the allowable discharge volume to 10,000 gpd and changed the operational plan from shallow ponds to twelve shallow disposal cells.
6. On May 14, 2001, NMED required Mr. Steve Rael to modify DP-465 to install additional fencing around the perimeter of the facility.
7. On September 12, 2001, Dr. William Mansker, on behalf of Mr. and Mrs. Steve Rael, submitted a request and application for renewal of DP-465.
8. On October 18, 2001, NMED deemed Mr. Rael's application administratively complete in accordance with 20.6.2.3108.A NMAC.
9. On October 19, 2001, NMED sent notice of the proposed renewal of DP-465 to the required parties in accordance with 20.6.2.3108.B and C NMAC.
10. On October 20, 2001, NMED published public notice of the proposed renewal of DP-465 in the Albuquerque Journal in accordance with 20.6.2.3108.B and C NMAC.
11. On October 25, 2001, NMED published public notice of the proposed renewal of DP-465 in the Taos News in accordance with 20.6.2.3108.B and C NMAC.
12. Following public notice of the proposed discharge permit renewal, NMED received a number of letters from members of the community, including requests for a public hearing from Doug West representing the Stagecoach Neighborhood Association, Wayne Ludvigson representing the Hondo Mesa Community Association, Roger C. Sanders on behalf of the Council of Neighborhood Associations, Carol Richman, and Alex Kurtz.
13. On December 6, 2001, the Secretary of NMED determined that a public hearing would be held regarding the proposed renewal of DP-465 because of significant public interest.
14. On February 21, 2002 and March 22, 2002, NMED held meetings with Mr. and Mrs. Rael to discuss the concerns of NMED and the public pertaining to the facility's proposed method of disposal. At those meetings, NMED requested Mr. and Mrs. Rael to submit additional information and a revision to the permit renewal application.
15. On April 12, 2002, Dr. William Mansker, on behalf of S&R Septic, submitted an amended permit renewal application to NMED.
16. On June 27, 2002, NMED sent notice of the public hearing to all required persons and affected tribal and governmental agencies in accordance with 20.6.2.3108(E) NMAC.



17. On June 30, 2002, NMED published notice of the public hearing to be held on August 6, 2002 in the Albuquerque Journal in accordance with 20.6.2.3108.E NMAC.
18. On July 4, 2002, NMED published notice of the public hearing in the Taos News in accordance with 20.6.2.3108.E NMAC
19. On July 17, 2002, NMED entered the draft discharge permit renewal into the administrative record.
20. On July 19, 2002, NMED received a letter from Dr. William Mansker on behalf of S&R Septic stipulating to all conditions contained in the draft discharge permit renewal dated July 17, 2002.
21. October 8, 2002 – NMED holds hearing GWQB 02-03 regarding the renewal of DP-465. During the hearing, NMED, the Permittee and ten members of the public provide testimony. On April 11, 2003 the hearing officer issues a report and a final order from Secretary Curry is issued on the 30<sup>th</sup> of the same month. The final order states that the permit shall be issued with additional conditions determined during the hearing.
22. May 22, 2003 – The renewal permit is issued by the GWQB with conditions.
23. March 1, 2005 – A joint NMED and EPA inspection finds further operational deficiencies and results in the EPA proposing a \$32,500 penalty which is reduced in a consent agreement to \$1,800 on May 2, 2007
24. August 10, 2005 through January 25, 2008 – NMED receives five complaints during this period and inspects the facility once in response to a complaint and three times as routine inspections.
25. April 11, 2008 – Grease trap and carwash grit waste is de-authorized by NMED which requires the facility to discontinue these types of disposal onsite.
26. May 16, 2008 through August 31, 2012 – NMED receives multiple renewal applications and application amendments from the permittee during this period. During this time NMED also receives complaints, objections and comments from many members of the public and from the permittee.
27. October 29, 2012 – NMED issues a response to comments including a revised draft with additional conditions and revisions.
28. November 13-28, 2012 – NMED receives additional objections and complaints from members of the public on the revised draft of the renewal permit.
29. December 27, 2012 – NMED issues a revised renewal permit.
30. December 27, 2017 – The permit expires without the submission of an application for renewal.
31. December 28, 2017 – NMED inspects the facility, informs the permittee of the expired permit term and provides copies of the application form. The inspection reveals deficiencies with the signage at the front gate and within the facility. Additionally, the permittee is informed that he had failed to submit monitoring reports for the previous three years and did not construct the splash pads as required by conditions in the 2012 renewal.
32. February 22, 2018 – NMED receives the renewal application for the expired permit
33. May 15, 2018 – The application is deemed administratively complete and public notice instructions are provided to the Applicant.

34. June 22, 2018 – NMED fulfills the department’s first public notice responsibilities 20.6.2.3108.A NMAC
35. September 24, 2018 – The Applicant provides the required affidavit of completion and proof of first public notice completion. 20.6.2.3108.C NMAC
36. August 27, 2018 – Having failed to achieve voluntary compliance from the December 28, 2017 inspection, NMED issues a Notice of Non-Compliance (NONC) to the permittee for the signs, missing monitoring reports and lack of splash pads. The permittee completed construction of the splash pads, submitted photo documentation and the missing monitoring reports by October 25, 2018.
37. September 27, 2018 – The GWQB receives a report from the NMED-EHB field office that a field technician witnessed an S&R Septic pumper truck pumping grease trap waste from a restaurant in Taos. The inspectors attempt to perform an inspection at the facility the next day (September 28). The permittee refuses to allow the inspectors entry to the facility. Inspectors return on Monday October 1, 2018 and observe Cell 13 covered in a thin layer of fresh dirt. The inspectors collect soil samples from the cell and test for Total Petroleum Hydrocarbons (TPH) and total recoverable fats, oils and grease (FOG). Results from the samples show elevated levels of both TPH and FOG. Samples were collected from two other septage disposal facilities and compared to the results from Cell 13. The comparison shows that levels of TPH and FOG in Cell 13 are 100 times greater than septage disposal cells at other facilities. Inspectors request all pumping records and disposal manifests for the reported time frame. The permittee provides the requested manifests which do not include any documentation for the reported grease trap pumping location.
38. November 14, 2018 – The GWQB receives and responds to a request for temporary closure of the facility from the Stagecoach Neighborhood Association. Requiring for closure is determined to be outside of NMED’s regulatory authority.
39. April 29, 2019 – The GWQB provides the Applicant with the draft permit prior to the second public notice and comment period. 20.6.2.3108.J NMAC
40. May 24, 2019 – Public notice is published in the Taos News and Albuquerque Journal and mailed out to all required interested parties. 20.6.2.3108.J NMAC
41. May 24 through June 24, 2019 – During the second public notice comment period multiple concerned members of the public contact Mr. Herman to voice their objections to the facility itself and the permit renewal. During the comment period the GWQB receives ten requests for a hearing. The requests for hearing are from individual residents, a neighborhood association, a local water district and multiple adjacent business owners. The GWQB also receives objections and complaints that did not include a request for hearing from one resident, a retired petroleum geologist and an adjacent business owner.

### **III. DESCRIPTION OF SITE**

#### **Geology and Geohydrology**

Three general physiographic subdivisions lie within Taos County: the Taos Plateau to the west, the Sangre de Cristo Mountains to the east, and the Costilla Plains lying between the

plateau and the mountains. The facility is located on the Costilla Plains, approximately one-quarter mile north of the Taos Municipal Airport. On the Costilla Plains, groundwater is found in the alluvial sediments, which consist of the most recent Quaternary (Holocene) deposits near the surface and the alluvial sediments of the early Quaternary and late Tertiary age, referred to as the Santa Fe Group. The Santa Fe Group consists of alluvial sediments inter-bedded with volcanic rocks and clay deposits. The Santa Fe Group underlies and inter-bedded with the Servilleta Basalt of Pliocene age in the Taos Plateau.

In addition, the facility is located in the vicinity of the Los Cordovas Fault Zone. Faults have been mapped in the area in a north-south strike orientation and may extend thousands of feet downward. The area in which the facility is located can be characterized, based upon the extrapolation of data from recent mapping of the region at the southern end of the Los Cordovas Faults, as an area where faulting is more extensive than previously recognized. Studies showed that there is significant fracturing of bedrock, and in general the fractures are not cemented. This has been confirmed by another geologic study done in the area (Drakos et al, 2004).

NMED has reviewed records from the New Mexico Office of the State Engineer of wells located within one mile of the facility. These records report water depths in the wells of approximately 500 feet. These records provide insufficient data regarding the existence of perched groundwaters in association with the wells.

In 1999 NMED contracted with John Shomaker & Associates to perform a study to evaluate the migration of nitrogen compounds into the vadose zone below the S&R Septic disposal facility. (AR XX) A final report from the study indicates that migration of nitrogen contaminants at the S&R Septage disposal facility was limited to approximately 15 - 30 feet below ground surface after 12 years of operation. The groundwater transport modeling described in the 2000 Duke Engineering and Services summary report predicts migration of nitrogen contaminants below the facility to be at depths of 70 feet or greater after 32 years of operation. (AR XX)

## **Groundwater Quality**

A report titled Water Resources of Taos County New Mexico published by the U.S.G.S. in 1993 provided the original reported range of total dissolved solids in Taos County from 73 to 928 milligrams per liter (mg/L), which is below the 10,000 mg/L concentration for total dissolved solids set forth at 20.6.2.3101 NMAC.

## **Waste Characteristics**

Many factors affect the physical characteristics of septage, including but not limited to the habits of septic tank users, septic tank size and design, septic tank pumping frequency, water supply characteristics and piping materials, the presence of water conservation fixtures and garbage disposals, the use of household hazardous chemicals and the use of water softeners, and climate (EPA, Guide to Septage Treatment and Disposal, 1994). In addition, wastes from portable toilets typically contain chemical additives such as biocide (typically formaldehyde or glutaraldehyde). Contaminants of concern to NMED in the proposed discharge at the S&R Septic

facility include but are not limited to, nitrogen species and pathogens.

#### **IV. NMED'S PROPOSED DISCHARGE PERMIT**

The Applicant has proposed to discharge a volume of domestic septage (including portable toilet waste) of up to 9,857 gallons per day (gpd) on an average weekly basis, not to exceed a maximum of 69,000 gallons per week. The Applicant also proposed to discharge a volume of liquid, semi-solid and solid domestic wastewater treatment facility and/or package treatment plant sludge of up to 8,333 gallons per month on an average annual basis, not to exceed a maximum of 100,000 gallons per year. The two types of waste material, domestic septage and wastewater treatment plant sludge, will be disposed of in designated, separate, unlined, shallow disposal cells. Septage is allowed to be disposed of in thirteen cells and sludge in three cells. Both waste types will be treated prior to disposal with lime to a pH of 12 for a minimum of 30 minutes.

This discharge permit was prepared by NMED's technical staff by evaluating the character of the discharge, site-specific characteristics, the proposed facility components, and the adequacy of the proposed monitoring plan. Technical staff reviewed the permit application, previously submitted documents in the administrative record, and other associated technical materials. The permit drafting process included a scoping meeting with department management to review the basis for previous permit conditions, to consider new information, to ensure consistency among discharge permits issued to similar facilities, and to address any deficiencies.

#### **Issues Identified**

Significant issues were identified as needing to be addressed in the permit. A brief summary of these issues and the context for the changes made in the draft renewal permit conditions is provided below.

1. To date no follow-up studies have been performed at the facility regarding the vertical migration of contaminants at the site. This is of concern due the 1999 nitrogen migration study's suggestion that contaminants would continue downward migration to depths of 70 feet or greater.
2. To date no studies have been performed at the facility or in the immediate area regarding the presence of shallow or perched groundwater. Our lack of understanding of the presence of shallow groundwater is of concern due the 1999 nitrogen migration study's suggestion that contaminants would continue downward migration to portions of the vadose zone that remain unstudied.
3. Due to the uncertainty of the underlying hydrogeology at the facility and comparatively high nitrogen loading rates it was decided additional understanding of the subsurface was required to be protective of groundwater.

4. The previous permits contained insufficient soil monitoring to prevent the disposal of unauthorized waste types at the facility. Based on recent soil sampling results for TPH and FOG from the S&R Septic facility and comparative samples taken from other similar facilities provided rational basis for inclusion of additional soil monitoring requirements.

I propose that these issues have been appropriately addressed in the draft permit.

### **Permit Conditions**

Below are the proposed discharge permit terms and conditions for the issuance of DP-465 that NMED believes are necessary to ensure compliance with the Act and Regulations. A number of conditions are excluded from this discussion because they simply reference the regulatory authority previously mention in this testimony and do not impose any new burdens on the applicant.

### **Operational Plan**

1. (Condition 3) The permittee shall maintain 24-inch berms around the facility to prevent surface water run-on and run-off. The berms shall be inspected on a regular basis, as well as after any major precipitation event, and repaired as necessary. In place of a berm across the facility entrance, the permittee shall maintain the shallow (minimum depth of six inches) stormwater diversion bar trenches parallel to each side of the facility entrance gate.

The reason for this condition is to comply with Section 20.6.2.3109(C) NMAC and Section 74-6-5 of the Act to ensure protection of groundwater quality, surface water quality and public health. The justification for the permit condition is provided in the condition.

2. (Condition 4) The permittee shall maintain fences around the entire disposal facility to control access by the general public and animals. The fences surrounding the facility shall consist of a minimum of three-strand barbed wire fence and locking gates. Fences shall be maintained throughout the term of this Discharge Permit.

The reason for this condition is to comply with Subsections B and C of 20.6.2.3109 NMAC and Section 4-6-5 of the Act to ensure protection of groundwater quality, surface water quality and public health. The justification for the permit condition is provided in the condition.

3. (Condition 5) The permittee shall maintain the following signs at the following locations:
  - Signs posted at the facility entrance and every 500 feet along the facility boundary that state: "Notice: Waste Disposal Area - KEEP OUT" and "Aviso: Área de Disposición - NO ENTRAR".
  - A sign posted at the entrance gate with the name of the facility's contact person, office phone number of the contact person, emergency contact phone number for the facility, and physical location of facility including township, range, and section(s).
  - A sign posted at the entrance gate that states, "This facility is permitted by the New Mexico Environment Department. To contact the Department, dial 505-827-2900."

- Signs on cells shall indicate in English and Spanish that the water is not potable.
- A sign at the boundary of each cell to identify the cell number and the waste type authorized to be discharged in the cell.

All signs shall be weatherproof and shall remain legible for the term of this Discharge Permit.

The reason for this condition is to comply with Subsections B and C of 20.6.2.3109 NMAC and Section 4-6-5 of the Act to ensure protection of groundwater quality, surface water quality and public health.

4. (Condition 6) The permittee shall maintain the surface disposal cells in such a manner as to avoid conditions that could affect the ability of septage and/or sludge to be evenly distributed across the surface of the disposal cells. Such conditions include or may be characterized by the following:

- erosion damage;
- animal burrows or other damage;
- the presence of vegetation including aquatic plants, weeds, woody shrubs or trees growing within the disposal cell and/or surrounding berms;
- the presence of large debris or large quantities of debris in the impoundment;
- evidence of seepage; or
- evidence of berm subsidence.

Vegetation growing in or around the disposal cells shall be routinely controlled by mechanical removal in a manner that is protective of the disposal cell.

The permittee shall visually inspect the disposal cells 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 a disposal cell or berm, or that may result in an unauthorized discharge, the permittee shall enact the contingency plan set forth in this Discharge Permit.

The reason for this condition is to comply with Sections 20.6.2.3106 and 20.6.2.3109 NMAC by preventing contaminated wastewater from moving directly or indirectly into groundwater. The justification for the permit condition is provided in the condition.

5. (Condition 7) Different waste types shall not be combined and shall be disposed of in separate cells that receive only a single designated waste type.

The reason for this condition is to comply with Subsection C of 20.6.2.3109 and Subsection A of 20.6.2.3107 NMAC and to follow best management practices guidance by the EPA.

6. (Condition 8) The permittee shall inspect the facility weekly and collect any residual solid waste (trash) within the cells and elsewhere at the facility. The collected materials shall be disposed of in a manner consistent with all local, state and federal regulations.

The reason for this condition is to comply with Section 20.6.2.3109 NMAC and Section 74-6-5 of the WQA to ensure protection of groundwater quality, surface water quality and public health.

7. (Condition 9) The permittee shall maintain splash pads for each cell to prevent erosion. Splash pads shall remain visible and undamaged.

The reason for this condition is to comply with Sections 20.6.2.3106 and 20.6.2.3109 NMAC by preventing contaminated wastewater from moving directly or indirectly into groundwater through preventing erosion of the surface layer of each cell.

8. (Condition 11) Treatment and disposal of domestic septage sludge shall be in accordance with all local, state and federal requirements. Ponding of septage shall be minimized and the depth of liquid in any disposal cell shall not exceed 3 inches at any time.

The reason for this condition is to comply with Section 20.6.2.3109 NMAC by requiring an operational practice that results in reducing the hydraulic head on the unsaturated zone.

9. (Condition 12) Each septage load being disposed of shall be mixed with lime and held at a pH of 12.0 for a minimum of 30 minutes. The amount of lime added and the final pH shall be included in the manifest summary submitted in the semi-annual monitoring reports

The reason for this condition is to comply with Section 20.6.2.3109 NMAC and disposal in accordance with 40 CFR 503.33(a)(5) to reduce vector attraction.

10. (Condition 14) The permittee shall apply sludge to three unlined shallow surface disposal cells (Cells 3, 4, and 5) on a rotational basis. The sludge shall be evenly distributed throughout the individual cells in use. Ponding of liquid sludge shall be minimized, and disposal of sludge shall be in accordance with all local, state and federal requirements.

The reason for this condition is to comply with Section 20.6.2.3109 NMAC by reducing the hydraulic head on the unsaturated zone.

11. (Condition 15) Each sludge load being disposed of shall be mixed with lime and held at a pH of 12.0 for 30 minutes. The amount of lime added, and the final pH shall be included in the manifest summary submitted in the semi-annual monitoring reports.

The reason for this condition is to comply with Section 20.6.2.3109 NMAC and disposal in accordance with 40 CFR 503.33(a)(5) to reduce vector attraction.

## Monitoring and Reporting Plan

12. (Condition 18) Semi-annual monitoring shall be performed during the following periods and reports submitted to NMED as follows:

January 1st through June 30th – due by August 1st and

July 1st through December 31st – due by February 1st.

The reason for this condition is to comply with Subsection A of 20.6.2.3107 NMAC.

13. (Condition 19) The permittee shall ensure there exists a manifest for each load of waste received. The manifest shall record the following information:

- name of the hauling company;
- date of receipt;
- name and address of the waste origin;
- type of waste or description of contamination;
- volume of waste;
- confirmation statement of inspection for acceptable waste type;
- signature of person performing disposal action certifying the accuracy of the manifest; and
- cell identification and location within the cell where the waste is discharged.

Copies of each manifest created during the reporting period shall be submitted to NMED if requested. A summary of the manifests created during the reporting period shall be submitted in the semi-annual monitoring reports. The summaries shall include the date, customer, customer location, quantity disposed, cell disposed into, pounds of lime used and final pH.

The reason for this condition is to comply with Sections 20.6.2.3107 and 20.6.2.3109(H) NMAC by providing monitoring of effluent.

14. (Condition 20) The permittee shall submit copies of documentation demonstrating compliance with the requirements set forth by 40 CFR Part 503. Documentation records shall be submitted to NMED in the next semi-annual monitoring report.

The reason for this condition is to comply with Sections 20.6.2.3107 and 20.6.2.3109(H) NMAC by providing monitoring of effluent and to ensure compliance with other regulatory authorities.

15. (Condition 21) Within 180 days following the effective date of this Discharge Permit, the permittee shall complete soil borehole sampling in Cells 6, 7, 10, 11, and 13. NMED shall be notified at least 30 days prior to the sampling event, and sampling shall be completed in the following manner:

- One borehole per cell located in the center of each disposal cell
- Samples taken from each borehole at 5ft depth intervals (5<sub>ft</sub>, 10<sub>ft</sub>, 15<sub>ft</sub>, etc.)



- Samples shall be collected and maintained in sample coreboxes for NMED inspection
- Conducted in such a way that detects groundwater if present
- The depth of each borehole shall be to the first occurrence of a solid basalt layer
- Laboratory analysis of each sample for the following physical properties
  - Bulk density
  - Particle size distribution
  - Porosity
  - Hydraulic conductivity
  - Moisture content
- Laboratory analysis of each sample for the follow analytes
  - TKN
  - NO<sub>3</sub>-N
  - NH<sub>3</sub>-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, D 2488-93, D 4220-89, D 4700-91 and D 5434-93.

Each borehole shall be plugged and abandoned by emplacement of cement slurry from the bottom of the borehole to five feet below ground level. The final five feet of each borehole shall be filled with auger cuttings. Ninety days after completion of the sampling, the permittee shall submit a completion report to NMED detailing the analysis and results for each cell.

The reasons for this condition are to comply with Section 20.6.2.3107(A) NMAC and for the following:

- a) To determine the vertical extent of contaminant migration associated with the discharge to comply with Section 20.6.2.3107(A)(3) NMAC.
  - b) To sufficiently characterize the site-specific geology to determine if the permit conditions comply with Subsections A and C of 20.6.2.3109 NMAC.
  - c) To determine the existence of any perched groundwater under the facility.
16. (Condition 22) If Total Nitrogen content is found to be elevated above the non-impacted levels identified by Table 11 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" in any of the samples collected at a depth of 70 feet, the permittee shall submit a written monitoring well location proposal for review and approval by NMED within 60 days of the completion of the sampling required by Condition 21 of this Discharge Permit. The proposal shall designate the locations of the monitoring wells required to be installed by Condition 23 of

this Discharge Permit. The proposal shall include, at a minimum, the following information.

- a) A map showing the proposed location of the monitoring wells.
- b) A written description of the specific location proposed for the monitoring wells including the distance (in feet) and direction of the monitoring wells 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.
- 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.

The reason for this condition is to comply with Section 20.6.2.3107(A) by creating a system of monitoring and reporting to verify the permit is achieving the expected results.

17. (Conditions 23-25) These conditions included requirements for monitoring well installation within 30 days of well location approval, initial sampling requirements for all wells required to be installed, and surveying of each well to determine groundwater flow and confirm the wells are located properly.

The reason for these monitoring conditions is to comply with Section 20.6.2.3107(A) NMAC. Three monitoring wells are required and are the only way to effectively determine groundwater flow direction which subsequently verifies that the wells have been installed hydrologically down gradient of the sources they are intended to monitor.

18. (Conditions 26-28) Ongoing sampling is required by Condition 26 if monitoring wells are required to be installed. Sampling requirements include nitrogen species, TDS and Chloride along with accurate depth to water measurements. Condition 27 is a standard monitoring requirement for facilities with three or monitoring wells that have been surveyed and depth to water is regularly measured. A contour map assists in ensuring the monitoring system is adequately downgradient of the contaminant source. Condition 28 sets forth additional access authority for monitoring wells and inspection of the monitoring devices.

The reason for this condition is to comply with Sections 20.6.2.3107 and 20.6.2.3109 NMAC by requiring ongoing monitoring of the groundwater most likely to be affected by the discharge and procedures for detecting failure of the monitoring system.

19. (Condition 29). Domestic septage discharges are monitored by requiring that the permittee shall complete a Surface Disposal Data Sheet (SDDS) to document the amount of nitrogen applied to each surface disposal cell each month. A SDDS shall be completed for each cell, and shall reflect the volume and total nitrogen concentration of waste discharged to the land disposal cells for each month. The total nitrogen concentration shall be determined from either of the following methods:

- 1) Assuming total nitrogen concentration of 600 mg/L based on average characteristics of septage (Guide to Septage Treatment and Disposal, EPA/625/R-94-002); or
- 2) Assuming a total nitrogen value derived from the laboratory analysis of a composite sample from a minimum of six waste loads using a sampling protocol approved by NMED prior to sample collection.

Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. The SDDS, or a statement that no surface disposal occurred within the specific cell, shall be submitted to NMED in the semi-annual monitoring reports.

The reason for this condition is to comply with Sections 20.6.2.3107 and 20.6.2.3109(H) NMAC by providing monitoring of leachate and effluent that may impact groundwater.

20. (Conditions 30-32) Domestic Wastewater Treatment Plant Sludge discharges are monitored by requiring the sampling of each sludge type being discharged and then analyzing them for percent total solids to determine the dry weight of the sludge discharged. Each sludge type also must be sample and analyzed for TKN and NO<sub>3</sub>-N by dry weight basis. Lastly, the total nitrogen loading is calculated using a SDDS sheet and submitted with the supporting analysis in the semiannual monitoring reports.

The reason for this condition is to comply with Sections 20.6.2.3107 and 20.6.2.3109(H) NMAC by providing monitoring of leachate and effluent that may impact groundwater.

21. (Condition 33) Composite samples shall be collected semi-annually from five locations within each of the shallow disposal cells. Using a hand auger or shovel, the permittee shall collect soil samples from five locations in each cell, from the surface to a depth of eight inches. The soil samples from the five locations shall be mixed together, and the composite sample shall be analyzed for TKN, NO<sub>3</sub>-N and Fats Oils and Grease (FOG)/Total Petroleum Hydrocarbons (TPH). Samples shall be collected and analyzed, and the analytical results shall be submitted to NMED in the semi-annual monitoring reports.

The reason for this condition is to comply with Section 20.6.2.3107(A) NMAC and to ensure that the discharge of waste not authorized by the permit does not occur.

### **Contingency Plan**

22. (Conditions 34 – 35) If Monitoring wells are required by the permit these conditions provide the contingency plan to ensure appropriate steps are taken by the applicant in the event that either routine groundwater monitoring results indicate that a groundwater standard has been exceeded (Condition 34) or if it is determined that one or more of the monitoring wells has been constructed or located improperly (Condition 35).

The reason for this condition is to comply with Section 20.6.2.3107(A)(10) NMAC.

23. (Condition 36) In the event that the soil sampling show that the amount of FOG/TPH is elevated above 3,000 mg/kg, the permittee shall excavate and dispose of the contaminated soil. The permittee shall propose completion of removal 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 following the end of the monitoring period in which the exceedance occurred. The permittee shall initiate implementation of the Plan following approval by NMED.

The reason for this condition is to comply with Section 20.6.2.3107(A)(10) NMAC and to ensure that a contingency plan is in place if it is determined that the discharge of waste not authorized by the permit has occurred.

24. (Condition 37) In the event that inspection findings reveal significant damage likely to affect the structural integrity of disposal cell or its ability to contain contaminants, the permittee shall propose the repair of the cell by submitting a Corrective Action Plan to NMED for approval. The Plan shall be submitted to NMED within 30 days after discovery by the permittee or following notification from NMED that significant damage is evident. 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.

The reason for this condition is to comply with Section of 20.6.2.3107(A)(10) NMAC by preventing contaminated wastewater from moving directly or indirectly into groundwater.

25. (Condition 38) 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 24 hours 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 one week following discovery of the unauthorized discharge, the permittee shall submit written notification to NMED with the information listed above and any pertinent updates.

Within 15 days 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.

The purpose of this condition is to ensure that a contingency plan is in place to address spills in accordance with Section 20.6.2.1203 NMAC and to provide the permittee with regulatory guidance for the required response times and actions.

26. (Condition 39) 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.

The purpose of this condition is to ensure compliance with Section 20.6.2.3109(E) NMAC

### **Closure Plan**

27. (Condition 40) Upon closure of the facility, the permittee shall perform the following closure measures:

- a) Backfill the cells with clean fill (as necessary) and contour to provide for positive stormwater drainage.
- b) Re-vegetate the cells and disturbed areas at the facility by establishing a vegetative cover equal to 70% of the native perennial vegetative cover consisting of at least three native plant species including at least one grass, but not including noxious weeds. The permittee shall maintain the vegetative cover through two consecutive growing seasons.
- c) Submit proof to NMED that all closure activities set forth for the facility under 40 CFR 503 have been completed.

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.

The reason for this condition is to comply with Section 20.6.2.3107(A)(11) NMAC by providing a closure plan to address potential impacts to groundwater quality after the facility is closed.

### **General Terms and Conditions Discharge Permit Requirements**

28. (Conditions 41-51) NMED also proposes that the discharge permit include standard general requirements. They are included in all of NMED's discharge permits, covering a broad range of topics including monitoring and reporting, record keeping, inspection and entry, duty to provide information, reporting of spills, leaks and other unauthorized discharges, retention of records, enforcement, permit modifications, and the term of the permit.

## **V. NMED'S RECOMMENDATION**

Section 20.6.2.3109 NMAC provides that the Secretary shall approve a proposed discharge plan, modification or renewal if it meets one of three requirements, provided that the other requirements of the Regulations are met and the proposed discharge plan, modification or renewal demonstrates that neither a hazard to public health nor undue risk to property will result from the discharge. The proposed discharge plan for the renewal of DP-465, with conditions, will not adversely affect groundwater quality at and around the facility, nor will it result in either concentrations in excess of the standards of Section 20.6.2.3103 NMAC or the presence of any toxic pollutants at any place of withdrawal of water for present or reasonably foreseeable future use. Moreover, the proposed discharge plan, with conditions provides for adequate sampling and monitoring, meets all other applicable requirements under the Act and Regulations. Lastly, the proposed discharge plan with conditions presents neither a hazard to the public health nor undue risk to property. Additionally, upon information and belief, none of the causes for denying an application for a permit, modification or renewal under Section 7 4-6-5 of the Act or Section 20.6.2.3109(H) NMAC exist in this matter. On August 27, 2018 NMED issued a Notice of Non-Compliance to Applicant for failure to submit timely monitoring reports and non-compliance with other permit conditions. In response to the Letter, Applicant corrected the violations. As such, the referenced compliance issues, in my opinion, do not rise to the level of willful disregard for environmental laws.

Therefore, on behalf of the Ground Water Quality Bureau I recommend that, pursuant to his authority under Section 20.6.2.3109(B), the Secretary approve the proposed discharge permit renewal with the specified conditions.

# JASON HERMAN

## EDUCATION

**MAY 2017**

**MASTER OF WATER RESOURCES MANAGEMENT, UNIVERSITY OF NEW MEXICO**

Passed with distinction and graduated with a cumulative GPA of 3.9.

**MAY 2017**

**MASTER OF COMMUNITY AND REGIONAL PLANNING, UNIVERSITY OF NEW MEXICO**

Passed with distinction and graduated with a cumulative GPA of 3.9.

**MAY 2015**

**BACHELOR OF ENVIRONMENTAL PLANNING AND DESIGN, UNIVERSITY OF NEW MEXICO**

Graduated Summa Cum Laude with a GPA of 3.9.

## EXPERIENCE

**JUNE 2019 – CURRENT**

**DOMESTIC WASTE TEAM LEADER, NMED GROUND WATER QUALITY BUREAU**

As the Domestic Waste Team Leader for the Ground Water Quality Bureau, I review application for domestic waste discharges, oversee the development of domestic waste discharge permits and compliance documents to ensuring consistency, and develop policies for domestic waste permitting. Policy development has included the creation of standard operating procedures to discharge permit draft development and public noticing. In addition to the mentioned responsibilities I also oversee a caseload of high profile and complex permits.

**SEPTEMBER 2017 – JUNE 2019**

**ENVIRONMENTAL SCIENTIST, NMED GROUND WATER QUALITY BUREAU**

As an environmental scientist for the Ground Water Quality Bureau, I produced discharge permit renewals, compliance documents and performed facility inspections. I excelled at complex and detailed analysis of existing permits and facilities while being consistent with enforcement and compliance requirements for permittees. While maintaining a full permit caseload, I also routinely volunteered for additional responsibilities including being the Bureau's IPRA coordinator.

**JUNE 2015 – MAY 2017**

**RESEARCHER AND ASSISTANT, UNIVERSITY OF NEW MEXICO**

While at UNM, I researched the economics of potable reuse of domestic wastewater, the technologies currently used, and the potential future technologies. My research resulted in the publication of a peer reviewed journal article and submission of two final reports to the grant

funding agency, the New Mexico Water Resources Research Institute. Additional funding was awarded to conduct two public meetings for further investigation of the economic willingness of the public for potable reuse of domestic wastewater. I facilitated, led and organized the materials, meetings and support staff for the project as well as the final report.

**MAY 2009 – JANUARY 2012**

**FRESH WATER TREATMENT SPECIALIST, REVERSE OSMOSIS OF SOUTH FLORIDA**

As a freshwater treatment specialist, I gained experience in managing large design and installations. The majority of the projects I managed and developed were located in unique or difficult settings. In Nicaragua, I directed a local team of workers who were responsible for installing a water treatment system on a livestock transport ship. In Haiti, Jamaica and the Bahamas, I directed the installation of water systems under difficult conditions. In South Florida, I supervised and led a group of installation specialists at the West Palm Beach Wastewater Treatment facility where we installed a 600 gallon per minute system to condition and dechlorinate a supply for facility chlorine generation systems. During this time I installed and designed groundwater treatment systems for manufacturer facilities and amenity industries such as golf courses.

**JANUARY 2005 – MAY 2009**

**GROUNDWATER SPECIALIST AND GENERAL MANAGER, ALL FLORIDA WATER**

As the general manager of South Florida operations, I supervised four service and installation specialists and two administrative staff members. As general manager I was in charge of the design and installation of groundwater treatment systems and operate regeneration systems for deionized water production. I trained assisted manufacturing facilities with development of standard operating procedures for the maintenance of their water treatment systems in difficult and heavily regulated industries including cosmetic manufacturers and artificial kidney dialysis centers. Water systems in these facilities were required to comply with AAMI standards, FDA regulations and USP standards. As general manager, my responsibilities included ensuring the company remained in compliance with the Florida EPA regulatory oversight. The company's compliance was necessary for daily operation and including an industrial discharge variance.

## **PUBLICATIONS**

NMWRRI Final Report: The Cost of Direct and Indirect Potable Water Reuse in a Medium Sized Arid Inland Community (<https://nmwrri.nmsu.edu/tr-376/>)

NMWRRI Final Report: Measuring the Impact of Rate Increases on Consumer Acceptance of Potable Water Reuse Options in the Albuquerque Area (<https://nmwrri.nmsu.edu/wp-content/uploads/2016/Research/swra-2015-16/Herman-FinalReport.pdf>)

Peer Reviewed Article: The Costs of Direct and Indirect Potable Water Reuse in a Medium-Sized Arid Inland Community in the Journal of Water Process Engineering (Available upon request)



HYDROLOGIC CHARACTERISTICS OF BASIN-FILL AQUIFERS

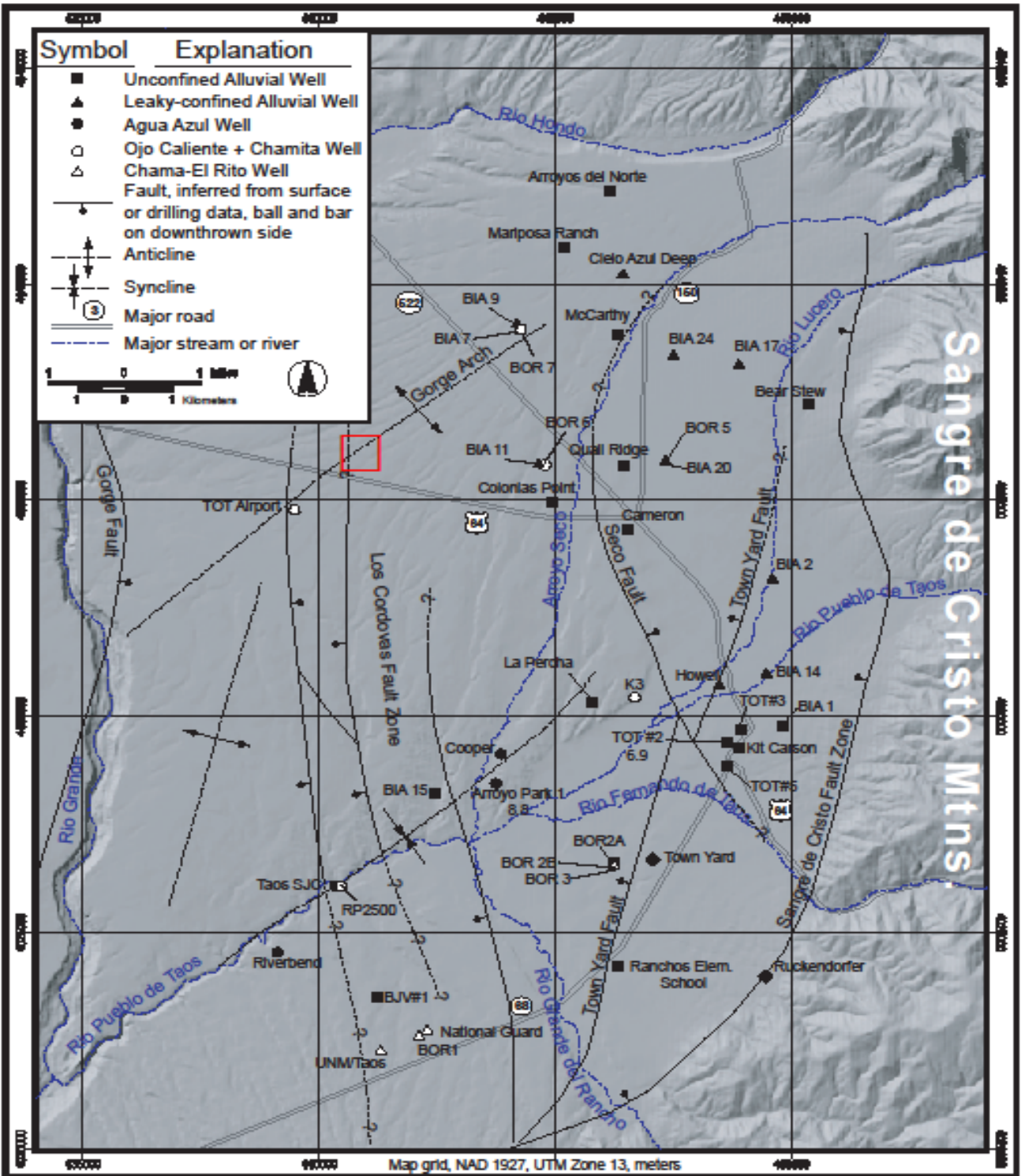


FIGURE 3. Map of study area with pumping test well locations

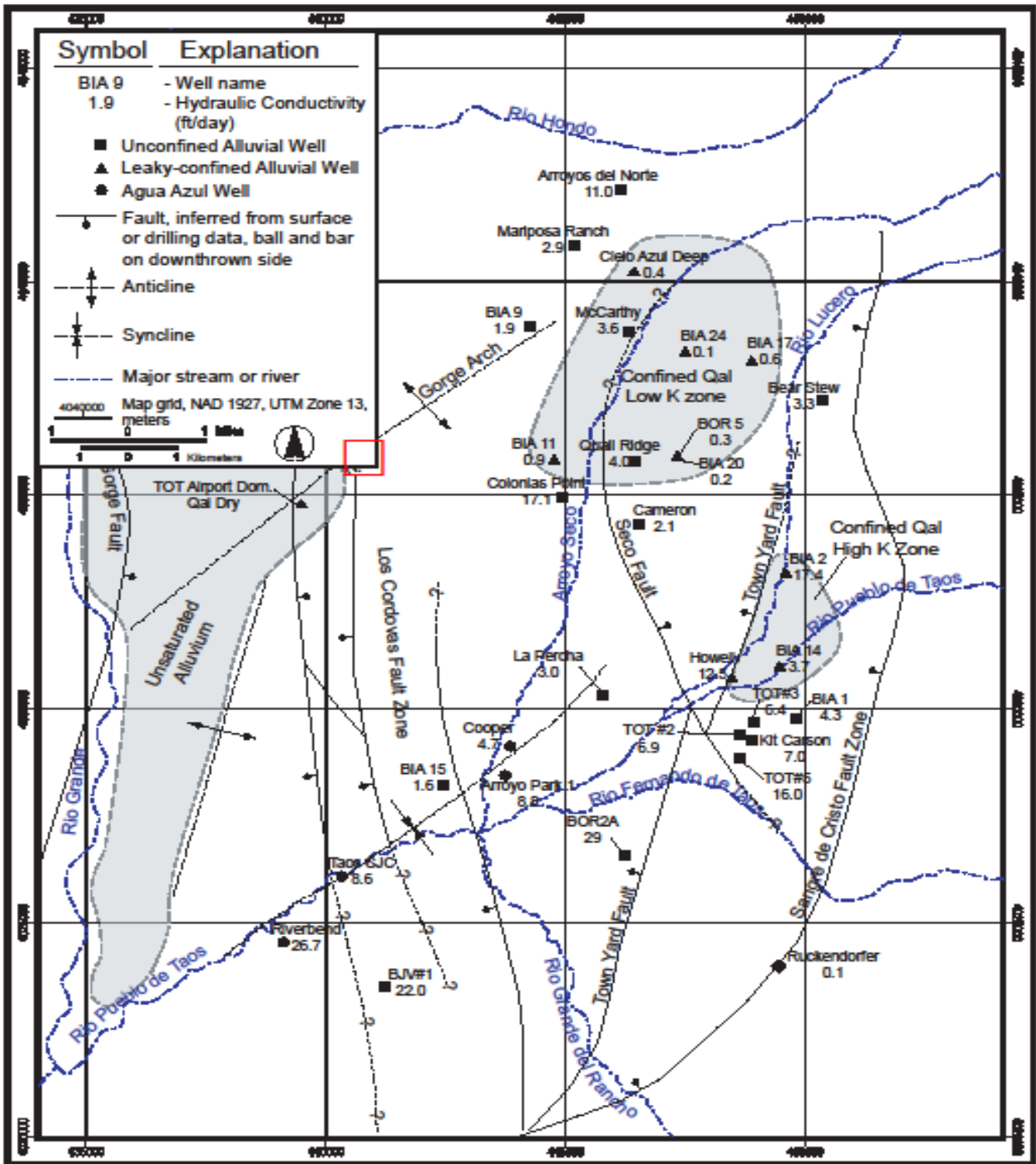


FIGURE 4. Map of shallow aquifer wells with K values from pumping tests

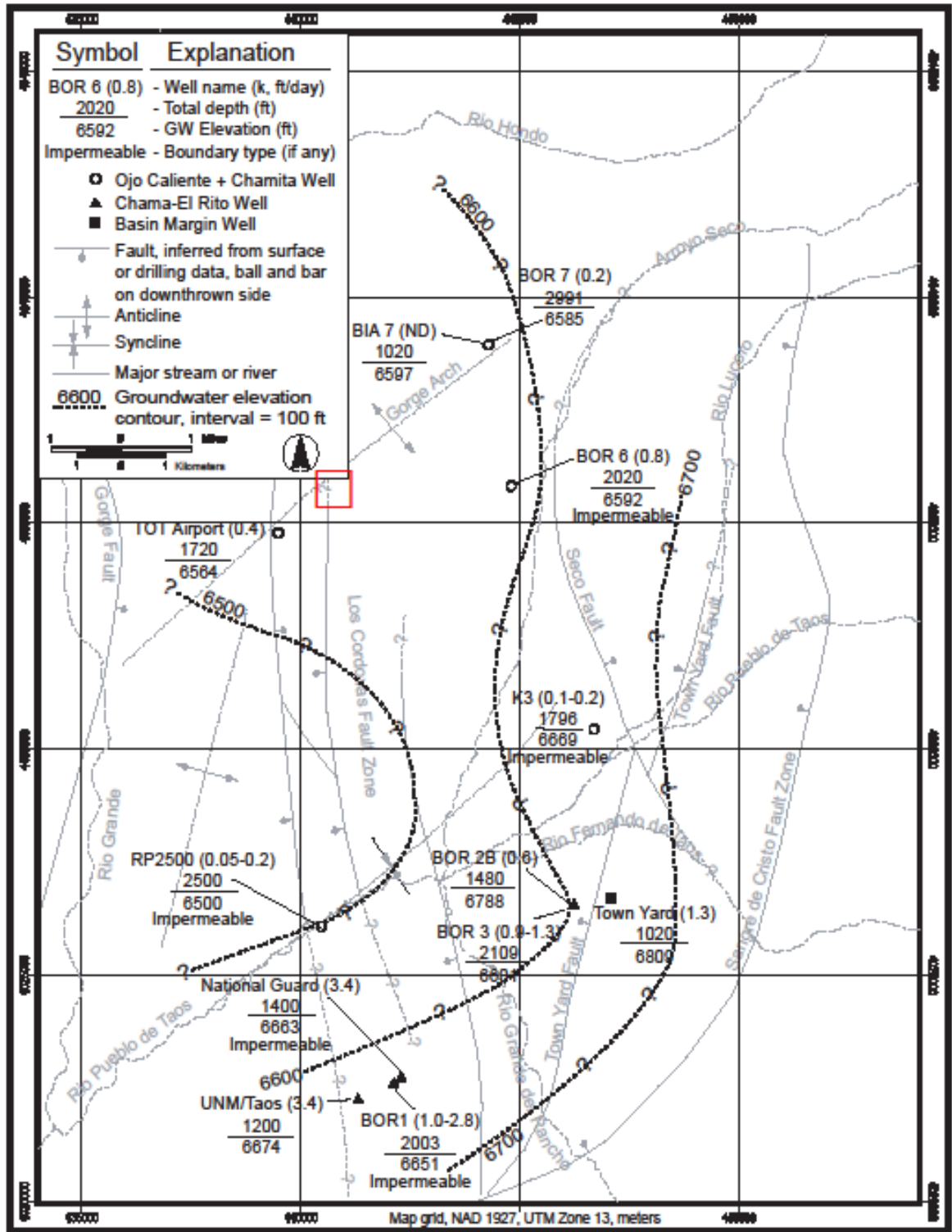


FIGURE 6. Potentiometric surface map and K values for deep basin-fill aquifer

S&R Septic Draft Permit Renewal - Administrative Record Index  
Hearing Date: October 16, 2019

DATE	FROM	TO	FORMAT	SUBJECT	INDEX NUMBER	
8/24/1999	John Shomaker & Associates, Inc.	NMED Ground Water Quality Bureau	Report	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		
8/18/2000	Duke Engineering & Services	NMED Ground Water Quality Bureau	Summary Report	Evaluation of the Migration of Nitrogen Compounds from Septage/Sludge Land Disposal Facilities: Vadose Zone Predictive Computer Modeling		
12/28/2018	Jason Herman and Pam Homer, NMED Ground Water Quality Bureau	File	Report	Inspection report for permit compliance assesment		
2/22/2018	Dr. William Mansker, Ph.D.	Jason Herman, Permit Reviewer, NMED Ground Water Quality Bureau	Application	Renewal application submitted by permittee		

6/27/2018	Frisco Gonzales	Gerald Knutson, NMED Ground Water Quality Bureau	Memorandum of Phone Conversation	S&R Septic Service, DP-465		
8/16/2018	Lochlin Farrell, NMED Ground Water Quality Bureau	Steve Rael, Owner of S & R Septic	Certified Mail	Administrative Completeness Determination and Applicant's Public Notice Requirements, DP- 465, S&R Septic		
8/27/2018	Michelle Hunter, NMED Ground Water Quality Bureau	Steve Rael, Owner of S & R Septic	Certified Mail	Notice of Non-Compliance, S&R Septic, DP-465		
9/7/2018	James C. Brockmann, Stein & Brockmann, P.A. Attorneys at Law	Jason Herman, Permit Reviewer, NMED Ground Water Quality Bureau	Letter	S&R Septic Application for Discharge Permit No. 465 (Objection and request for hearing)		
9/13/2018	Jason Herman, Permit Reviewer, NMED Ground Water Quality Bureau	Dr. William Mansker, Ph.D., and Loretta Rael, Owner of S&R Septic	Email	Response to questions and email (NONC)		
9/24/2018	Steve Rael, Owner of S & R Septic	NMED Ground Water Quality Bureau	Submission	Affidavit of Public Notice Completion Packet		
9/24/2018	Jason Herman, Permit Reviewer, NMED Ground Water Quality Bureau	Steve Rael, Owner of S & R Septic. Dr. William Mansker Ph.D., Consultant	Memorandum of Meeting	Response to Notice of Non- Compliance and Hearing Request		

9/26/2018	NMED Ground Water Quality Bureau		Plan	Public Involvement Plan (PIP) for Ground Water Quality Bureau Permit Renewal Application, S&R Septic DP-465		
9/27/2018	Mathew Bogar, Environmental Specialist, NMED EHB Taos Field Office	Jason Herman, Permit Reviewer, NMED GWQB	Email	RE: Septic Pumper Question, Report of S&R Septic pumping grease trap waste		
9/28/2018	Jason Herman and Avery Olshefski, NMED GWQB	File	Inspection Report	Unannounced Inspection		
10/1/2018	Jason Herman and Melanie Sandoval, NMED GWQB	File	Inspection Report	Follow-up inspection and sample collection		
10/2/2018	Jason Herman, Permit Reviewer, NMED GWQB	Hall Environmental Analysis Laboratory	Chain of Custody Record	Cell #13 soil sample being tested for Total Recoverable Oil and Grease and TPH		
10/9/2018	Jason Herman, Permit Reviewer, NMED GWQB	Dr. William Mansker Ph.D., Consultant	Email	Request for an Extension of Time - S&R Septic		
10/10/2018	Loretta Rael, S&R Septic	Jason Herman, Permit Reviewer, NMED GWQB	Email (6 photos attached)	Contact information sign and KEEP OUT WASTE DISPOSAL AREA - 2 side signs		

10/10/2018	Loretta Rael, S&R Septic	Jason Herman, Permit Reviewer, NMED GWQB	Email (3 photos attached)	WWTP SIGNAGE for DP-465		
10/10/2018	Loretta Rael, S&R Septic	Jason Herman, Permit Reviewer, NMED GWQB	Email (16 photos attached)	Demestic septic signage DP-465 added to existing signs		
10/12/2018	Andy Freeman, Laboratory Manager, Hall Environmental Analysis Laboratory	Jason Herman, Permit Reviewer, NMED GWQB	Report	S and R Septic soil analysis results for Total Recoverable Oil & Grease		
10/17/2018	Andy Freeman, Laboratory Manager, Hall Environmental Analysis Laboratory	Jason Herman, Permit Reviewer, NMED GWQB	Report	S and R Septic soil analysis results for TPH, DRO and MRO		
10/21/2018	Loretta Rael, S&R Septic	Jason Herman, Permit Reviewer, NMED GWQB	Records Request	IPRA for 2014-2018 DP-465 Monitoring Reports		
10/24/2018	Loretta Rael, S&R Septic	Jason Herman, Permit Reviewer, NMED GWQB	Manifests	Manifests from 9/27/18-9/29/18 requested during inspection conducted on 10/1/18		

10/25/2018	Dr. William Mansker Ph.D., Consultant	Jason Herman, Permit Reviewer, NMED GWQB	Email	Statement of Compliance with 40 CFR 503 Regulations		
10/25/018	Loretta Rael, S&R Septic	Jason Herman, Permit Reviewer, NMED GWQB	Email (2 photos attached)	KEEP OUT Signs DP-465		
10/25/2018	Laurie Wicker, Member of the Public	Jason Herman, Permit Reviewer, NMED GWQB	Complaint	sewage pit in Taos		
10/26/2018	Dr. William Mansker Ph.D., Consultant	Jason Herman, Permit Reviewer, NMED GWQB	Email (2 well logs attached)	FW: Another version (Well record NMOSE 001.jpg and Well record NMOSE 002.jpg)		
11/13/2018	Steve Rael, S&R Septic	Jason Herman, Permit Reviewer, NMED GWQB	Email (16 photos attached)	Photographs of Splash Pad Construction		
11/14/2018	John Durham, President, Stagecoach Neighborhood Association (SNA)	Jason Herman, Permit Reviewer, NMED GWQB	Memo with attachment	Request for Interim Closure of S&R Lagoon Attachment: Resolution 13-41 A Resolution of the Town Council of the Town of Taos Establishing Administrative Policies and a Fee Structure Pertaining to all Septic Tank Waste Transported from the Taos Valley for Disposal at the Taos Valley Regional Wastewater Treatment Facility		
12/19/2018	Michelle Hunter, Chief, NMED GWQB	John Durham, President, Stagecoach Neighborhood Association (SNA)	Letter	Response to Request for Interim Closure of S&R Septic, DP-465		



12/20/2018	Andy Freeman, Laboratory Manager, Hall Environmental Analysis Laboratory	Jason Herman, Permit Reviewer, NMED-GWQB	Lab Report	RE: S&R Septic (Comparitive Soil Sample Taken From Charlies Septic 978 Cell#3)		
12/26/2018	Andy Freeman, Laboratory Manager, Hall Environmental Analysis Laboratory	Jason Herman, Permit Reviewer, NMED-GWQB	Lab Report	RE: S&R Septic (Comparitve Soil Sample Taken From SW Organics 1841 Cell#2)		
3/4/2019	Jason Herman, Permit Reviewer, NMED GWQB	Loretta Rael, S&R Septic	Email	Please verify you received fax		
4/29/2019	Jason Herman, Permit Reviewer, NMED GWQB	Steve and Loretta Rael, Owners, S&R Septic	Certified Mail	Draft Discharge Permit Renewal, DP-465, S&R Septic		
5/20/2019	Beau Schoen	Jason Herman, Permit Reviewer, NMED GWQB	Email	Objection to renewal. Email Subject: Tune dr. Open pit site S and R corp.		
5/24/2019	NMED GWQB		Public Notice Publication	Public Notice 2 To be published on or before May 24, 2019. Published in the Taos News and Albuquerque Journal. Written comments and requests for hearing accepted until 5:00 pm MDR, June 24, 2019.		

5/25/2019	The Albuquerque Journal and Taos News	NMED Ground Water Quality Bureau	Affidavit	Affidavit of Publication		
6/5/2019	Christin Dimas, El Prado Water and Sanitation District	Jason Herman, Permit Reviewer, NMED GWQB	Email	SCHEDULE FOR S&R PERMIT REQUEST / RESPONSE (support for Stagecoach Neighborhood Association)		
6/11/2019	Dion Smith	Jason Herman, Permit Reviewer, NMED GWQB	Letter	Objection to renewal and request for hearing		
6/13/2019	John Durham, President, Stagecoach Neighborhood Association (SNA)	Jason Herman, Permit Reviewer, NMED GWQB	Letter with attachments	Protest Against Renewal of NMED Discharge Permit #465 Mr. Steve Rael Permittee S&R Open Pit Sewage Lagoon. Hearing Request		
6/14/2019	Terry and Linda Thompson	Jason Herman, Permit Reviewer, NMED GWQB	Letter	Objection to renewal and request for hearing		
6/14/2019	Lois Rodin	Ground Water Quality Bureau, NMED	Letter	Request for hearing to protest Permit #465, S&R open lagoon sewage discharge		
6/18/2019	Jerome Hanson	Jason Herman, Permit Reviewer, NMED GWQB	Letter with attachments	Renewal of DP-465 S&R Septic Service Discharge Permit (Objection)		
6/20/2019	Sherry C. Popham	Jason Herman, Permit Reviewer, NMED GWQB	Letter	Request for a Public Hearing on Renewal of DP-465 S&R Septic Service Discharge Permit		
6/20/2019	Bruce K. Popham	Jason Herman, Permit Reviewer, NMED GWQB	Letter	Request for a Public Hearing on Renewal of DP-465 S&R Septic Service Discharge Permit		

6/20/2019	Anthony Palma and Janelle Sperow-Palma	Jason Herman, Permit Reviewer, NMED GWQB	Letter	NMED Discharge Permit #465 (Request for public hearing)		
6/21/2019	Jayson Wylie	Jason Herman, Permit Reviewer, NMED GWQB	Letter	NMED Discharge Permit #465 (Request for public hearing)		
6/24/2019	Douglas Daubert and Rhonda Vanderhoff	Jason Herman, Permit Reviewer, NMED GWQB	Letter	Request for hearing		
6/25/2019	James C. Brockmann, Stein & Brockmann, P.A.	Jason Herman, Permit Reviewer, NMED GWQB	Letter	S&R Septic Application for Discharge Permit No. 465 (Objection and request for meeting and hearing)		
7/26/2019	Jason Herman, Permit Reviewer, NMED GWQB	Facility Specific Interested Parties	Letter	Public Hearing for S&R Septic, DP-465		
7/26/2019	Jason Herman, Permit Reviewer, NMED GWQB	Steve Rael, Owner, S&R Septic	Letter	Public Hearing for S&R Septic, DP-465		
9/6/2019	NMED Ground Water Quality Bureau		Plan	Revised Public Involvement Plan (PIP) for Ground Water Quality Bureau Permit Renewal Application and Public Hearing, S&R Septic DP-465		
9/12/2019	NMED GWQB		Public Notice Publication	Notice of Public Hearing for DP-465 to be published on or before September 15, 2019 in the Albuquerque Journal and Santa Fe New Mexican, NOI to present technical testimony due by October 7, 2019.		

*9/15/19	The Albuquerque Journal and The Santa Fe New Mexican	NMED Ground Water Quality Bureau	Affidavit	Affidavit of Publication		
9/23/2019	Diane Shifrin	NMED	Post Card	Objection to renewal		
9/23/2019	Bea Balsami	NMED	Post Card	Objection to renewal		
9/23/2019	Gayle J. Montgomery	NMED	Post Card	Objection to renewal		