

BILL RICHARDSON Governor

DIANE DENISH Lieutenant Governor

# NEW MEXICO ENVIRONMENT DEPARTMENT

# Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505-6303 Phone (505) 476-6000 Fax (505) 476-6030 www.nmenv.state.nm.us



RON CURRY Secretary

JON GOLDSTEIN Deputy Secretary

#### **CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

February 10, 2009

Matt Lavery, Director Participant Services PNM Resources 2401 Aztec Road NE, MS-Z110 Albuquerque, NM 87107

## RE: NOTICE OF DEFICIENCY RCRA PART B POST-CLOSURE CARE PERMIT APPLICATION PERSON GENERATING STATION, JUNE 2007 PNM RESOURCES, EPA ID# NMT360010342 HWB-PNM-07-002

Dear Mr. Lavery:

The New Mexico Environment Department (NMED) has reviewed PNM Resources' (Applicant) Person Generating Station (Facility) Resource Conservation and Recovery Act (RCRA) Part B Post-Closure Care Permit Application dated June 2007, with transmittal letter dated June 11, 2007. NMED finds the subject application to be administratively incomplete. This Notice of Deficiency (NOD) identifies various issues that the Applicant must address to complete the Permit Application. These issues are outlined herein. Instructions for submittal of the required information follow.

## A. REGULATORY REQUIREMENTS (SECTION 1.3.2)

1. The discussion in this Section of the Permit Application and related Table 1 must contain more detail concerning the applicable regulations that mandate groundwater monitoring for a unit undergoing corrective action.

The Unlined Well meets the definition of a surface impoundment (as defined in 20.4.1.100 NMAC incorporating 40 CFR § 260.10). Because it received wastes after July 26, 1982, the Unlined Well (hereinafter referred to as the "Regulated Unit") must comply with the

Mr. Lavery February 10, 2009 Page 2 of 12

requirements of 20.4.1.500 NMAC incorporating of 40 CFR § 264.90(a)(2) for regulated units, which requires compliance with 20.4.1.500 NMAC incorporating 40 CFR §§ 264.91 through 264.100 for purposes of detecting, characterizing and responding to releases to the aquifer. In accordance with 20.4.1.500 NMAC incorporating § 264.100(d), in conjunction with a corrective action program, a groundwater monitoring program must be implemented to demonstrate the effectiveness of the corrective action program, and must be based on the requirements for a compliance monitoring program and must be as effective as that program in determining compliance with the groundwater protection standard under 20.4.1.500 NMAC incorporating § 264.92 and in determining the success of the corrective action program under 20.4.1.500 NMAC incorporating § 264.199(e).

14

Thus, the Post-Closure Care Permit Application must address, in particular, the requirements of 20.4.1.500 NMAC incorporating 40 CFR §§ 264.97, 264.99 and 264.100 as amended July 14, 2006, for establishing a compliance groundwater monitoring program that properly integrates into the ongoing corrective action program at the Facility.

# B. <u>SECURITY PROVISIONS (SECTION 2.2)</u>

2. The Post-Closure Care Permit Application must document that warning signs stating "Danger-Unauthorized Personnel Keep Out" in both English and Spanish are to be posted at the entrance and the fence at the Facility in sufficient numbers to be seen and legible from 25 feet away, in accordance with 20.4.1.500 NMAC incorporating 40 CFR § 264.14 (c).

## C. INSPECTION PROVISIONS (SECTION 2.3)

3. The Post-Closure Care Permit Application, in accordance with 20.4.1.500 NMAC incorporating 40 CFR § 264.15(c), must specify that the Applicant shall remedy any imminent or already occurring deterioration or malfunction of equipment or structures revealed during an inspection.

4. The Post-Closure Care Permit Application must include, in table form, a comprehensive Inspection Checklist for inspecting the Facility, including any related health and safety equipment, security fences, and operating and structural equipment (including all groundwater monitoring and extraction wells) that are used to prevent, detect, or respond to environmental or human health hazards. The semi-annual inspection schedule for the groundwater monitoring and extraction wells may be coordinated with the scheduled groundwater sampling events.

5. The Post-Closure Care Permit Application must state that a copy of past inspection reports will be maintained at the Facility and the Applicant's offices for a minimum of three (3) years from the date of the inspection.

6. The Post-Closure Care Permit Application must state that inspection of the cap at the Regulated Unit will be continued unless its removal has been approved by NMED.

#### D. <u>EMERGENCY EQUIPMENT (SECTION 2.4.1)</u>

7. The Post-Closure Care Permit Application must specify the type and number of portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment available at the Facility, and any other equipment required by 20.4.1.500 NMAC incorporating 40 CFR § 264.32(c).

## E. <u>TESTING AND MAINTENANCE OF EMERGENCY EQUIPMENT (SECTION</u> 2.4.2)

8. The Post-Closure Care Permit Application must include an Inspection Checklist that documents the date and time of the testing, maintenance or repairs (if necessary) of the emergency equipment at the Facility as required by 20.4.1.500 NMAC incorporating 40 CFR § 264.33.

#### F. ACCESS TO COMMUNICATIONS AND ALARM SYSTEMS (SECTION 2.4.3)

9. The Post-Closure Care Permit Application must specify the type of communications systems capable of providing internal communications (20.4.1.500 NMAC incorporating 40 CFR § 264.32(a)) and summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams (20.4.1.500 NMAC incorporating 40 CFR § 264.32(b)).

## G. ARRANGEMENTS WITH LOCAL AUTHORITIES (SECTION 2.4.4)

10. The Post-Closure Care Permit Application must include a copy of the documentation required by 20.4.1.500 NMAC incorporating 40 CFR § 264.37 that is submitted to police and fire departments as well as emergency response teams to familiarize them with the hazardous waste properties and associated hazards at the Facility.

## H. CONTINGENCY PLAN AND EMERGENCY PROCEDURES (SECTION 2.4.5)

11. As required by 20.4.1.500 NMAC incorporating 40 CFR § 264.52(d), the Post-Closure Care Permit Application must include the addresses of all persons qualified to act as emergency coordinator who are listed in the contingency plan.

12. The Post-Closure Care Permit Application must indicate that a copy of the contingency plan will be maintained at the Facility and as part of the operating record at the Applicant's office (20.4.1.500 NMAC incorporating 40 CFR § 264.53a)). In addition, a copy of the contingency plan must be submitted to police and fire departments as well as emergency response teams that may be called upon to provide emergency services (20.4.1.500 NMAC incorporating 40 CFR § 264.53(b)).

13. The Post-Closure Care Permit Application must include provisions to amend the contingency plan in the event that the list of emergency coordinators changes or any of the other conditions listed in 20.4.1.500 NMAC incorporating 40 CFR § 264.54 occur.

Mr. Lavery February 10, 2009 Page 4 of 12

14. One of the two people listed in the Permit Application must be designated the primary emergency coordinator in the Post-Closure Care Permit Application pursuant to 20.4.1.500 NMAC incorporating 40 CFR § 264.52 (d).

15. Pursuant to 20.4.1.500 NMAC incorporating 40 CFR § 264.52, the contingency plan in the Post-Closure Care Permit Application must describe the actions Facility personnel are to take to comply with 20.4.1.500 NMAC incorporating 40 CFR § 264.51 and 40 CFR § 264.56 in response to fires, explosions or any release hazardous waste or hazardous waste constituents to the air, soil or surface waste at the Facility.

## I. RECORDKEEPING AND REPORTING (SECTION 2.5)

16. The Post-Closure Care Permit Application must state that during the post-closure care period, semi-annual progress reports will be submitted to NMED providing the following information (Table 3 of this NOD):

a. A discussion of corrective-measures-related activities undertaken during the time period, including the total amount of water pumped from the extraction wells and treated in the Groundwater Treatment System (GWTS). An estimate of the amount of contaminant recovered from the aquifer during each reporting period must also be included;

b. Individual groundwater extraction rates and the volume of groundwater pumped from each of the extraction wells (VEW, EW-1, EW-2, EW-3 and EW-4);

c. Data tables summarizing the results of the groundwater level measurements including reference elevation for each monitor well and the depth to water;

d. Data tables summarizing detected Appendix IX analytes, if any, which are not listed on Table 1 of this NOD;

e. The data tables required in the preceding sections must include all historical data in addition to that from the most recent sampling event;

f. A discussion based on current activities and sampling and analysis results of any changes in the locations and levels of contamination at the Facility; identified migration pathways; impacts (or potential impacts) on human health and the environment since the last reporting period; and, any recommendations for changes to the corrective measures or monitoring systems; and

g. The Applicant must prepare graphs for each monitor well in the monitor well system plotting groundwater elevations and concentrations of hazardous constituents against time.

Mr. Lavery February 10, 2009 Page 5 of 12

#### J. PERSONNEL TRAINING PROGRAM REQUIREMENTS (SECTION 2.6)

16. In accordance with 20.4.1.500 NMAC incorporating 40 CFR § 264.16(a)(2), the Post-Closure Care Permit Application must state that Facility personnel will be trained in the implementation of the contingency plan.

## K. <u>POST-CLOSURE COST ESTIMATE (SECTION 2.8)</u>

17. The Post-Closure Care Permit Application must include a revised cost estimate for postclosure care and corrective action reflecting the changes associated with implementation of the corrective action required for the post-closure care period. These changes include the costs associated with the sampling and analysis of water samples collected from the additional monitor wells required by NMED for post-closure care that were not included in the Applicant's June 2007 Post-Closure Care Permit Application.

18. The Post-Closure Care Permit Application must state that the post-closure cost estimate must be adjusted for inflation as specified in 20.4.1.500 NMAC incorporating 40 CFR § 264.144(b). Revisions of the post-closure care cost estimate will be submitted to NMED 60 (sixty) days prior to the anniversary date of the establishment of the financial instrument used to comply with 40 CFR § 264.145.

## L. <u>PROOF OF INSURANCE (SECTION 2.9)</u>

19. The Post-Closure Care Permit Application must state that upon cancellation of the insurance policy by either the Applicant or the insurer, the Applicant shall deliver written notice of this cancellation to NMED. This cancellation shall become effective 60 calendar days after a copy of such written notice is received by NMED as specified in 20.4.1.500 NMAC incorporating 40 CFR § 264.151(j)(2).

## M. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE

20. The Post-Closure Care Permit Application must state that the Applicant will submit updated information to NMED demonstrating that the Applicant meets the financial assurance test after the close of each succeeding fiscal year as specified in 20.4.1.500 NMAC incorporating 40 CFR § 264.145(f)(5).

21. As the rating for the most recent bond issued to the Applicant for the cost of post-closure care has been downgraded, as required by 20.4.1.500 NMAC incorporating 40 CFR § 264.145(f)(ii), the Post-Closure Care Permit Application must now state that the Applicant will meet the requirements under 20.4.1.500 NMAC incorporating 40 CFR § 264.145(f)(i) for financial assurance.

Mr. Lavery February 10, 2009 Page 6 of 12

# N. UNLINED WELL CORRECTIVE ACTION PLAN (SECTION 3.2)

22. The Post-Closure Care Permit Application must state that the Applicant will submit a work plan to NMED for approval that addresses removal of the RCRA cap, SVE system components and vapor monitoring wells.

23. The Post-Closure Care Permit Application must state that the Applicant will submit to NMED, by registered mail, a certification that Corrective Action for Soil was performed in accordance with the specifications in the current Post-Closure Care Plan. This certification must be signed by the Applicant and an independent professional engineer registered in New Mexico (20.4.1.500 NMAC incorporating 40 CFR § 264.115).

24. The Post-Closure Care Permit Application must state that no later than the submission of the certification of completion of Corrective Action for Soil at the Facility, the Applicant will submit to the authority with jurisdiction over local land use and NMED, a revised survey plat indicating the location and dimensions of the Regulated Unit with respect to permanently surveyed landmarks. The plat must be prepared and certified by a professional land surveyor. The revised plat must contain a note, prominently displayed, which states the Applicant's obligation to restrict further disturbance of the Regulated Unit beyond that approved by NMED for Alternate Use of the land (20.4.1.500 NMAC incorporating 40 CFR § 264.116).

# O. NFA RECOMMENDATION (SECTION 3.3)

25. Soil sampling results suggest that the concentrations of hazardous constituents in soil at the Regulated Unit are below NMED soil screening standards and no longer pose an unacceptable risk to human health, the environment, or groundwater. However, as the Regulated Unit is the source of the groundwater contamination underlying the Facility, No Further Action (NFA) status can not be granted until corrective action for the groundwater contamination is completed.

## P. REQUEST FOR ALTERNATE USES (SECTION 3.4)

26. The Post-Closure Care Permit Application must state that before an alternate use for the surface land at the Regulated Unit is implemented, the Applicant will notify NMED in writing of the proposed use and obtain approval from NMED for the proposed land use.

# Q. <u>GROUNDWATER FINAL CLEANUP LEVELS AND ATTAINMENT</u> <u>DEMONSTRATION (SECTION 4.1.2)</u>

27. The compliance period is the number of years equal to the active life of the waste management area (July 1976 to October 1983, 7 years) including the closure period (October 1983 to September 1988, 5 years), thus a total of 12 years. As the Applicant is still engaged in a corrective action program at the end of the compliance period identified above, the compliance period is extended (20.4.1.500 NMAC incorporating 40 CFR § 264.96(c)) until the Applicant can demonstrate the groundwater standard of 20.4.1.500 NMAC incorporating 40 CFR § 264.96(c)

Mr. Lavery February 10, 2009 Page 7 of 12

not been exceeded for a period of three consecutive years. The Post-Closure Care Permit Application must discuss extension of the compliance period due to the need to continue with corrective action at the Facility.

28. The Post-Closure Care Permit Application must state that the Applicant will analyze samples from compliance point monitor wells (PSMW-01R, PSMW-08A, PSMW-10 and PSMW-13A) for constituents in Appendix IX annually (i.e., enhanced sampling) to determine whether additional hazardous constituents are present in the uppermost aquifer (20.4.1.500 NMAC incorporating 40 CFR § 264.99(g)). The Post-Closure Care Permit Application must state which Appendix IX constituents the Applicant is proposing to sample for the purpose of enhanced sampling in the groundwater.

29. The Post-Closure Care Permit Application must state that if the Applicant identifies Appendix IX constituents in groundwater that are not already identified in the Permit as hazardous constituents, the Applicant may resample within one month and repeat the Appendix IX analysis. If the second analysis confirms the presence of any new constituents the Applicant must report the concentration of these constituents to NMED within seven (7) calendar days after the completion of the second analysis and add them to the monitoring list. If the Applicant chooses not to resample, then they must report the concentrations of the new constituents to NMED within seven calendar days after completion of the initial analysis and add them to the monitoring list. (20.4.1.500 NMAC incorporating 40 CFR § 264.99(g))

# R. <u>GROUNDWATER RECOVERY WELL NETWORK AND TREATMENT</u> SYSTEM (SECTION 4.1.4)

30. Extraction wells PSMW-25, PSMW-26 and EW-5 may be eliminated from the recovery system as proposed. The Post-Closure Care Permit Application must state that a work plan to plug and abandon these wells will be submitted to NMED.

31. If any monitoring well is to be decommissioned during the term of the Post-Closure Care Permit, the Post-Closure Care Permit Application must state that the monitor well will be replaced with an equivalent well approved by the NMED within 60 days of the date the well is taken out of service. Prior to decommissioning a well, the Applicant will notify NMED in writing of the rationale for such a decision.

# S. GROUNDWATER TRANSPORT (SECTION 4.2.2)

32. The Applicant must submit revised Permit Application Tables 8 and 9 summarizing the sampling and water level measurement requirements for the groundwater monitor wells proposed by the Applicant and the additional groundwater monitoring wells required by the NMED for Post-Closure Care. These groundwater monitoring wells are listed on Table 2 of this NOD.

33. The Applicant shall add information on groundwater monitor wells PSMW-11, PSMW-20, PSMW24C-500, PSMW27C-500, PSMW27C-600 and PSMW-37 to Permit Application

Mr. Lavery February 10, 2009 Page 8 of 12

Appendix C detailing well completion and construction diagrams for wells used in the monitoring network.

## T. DEEPER GROUNDWATER REMEDIATION (SECTION 4.3.2)

34. In order to monitor the concentration of groundwater contamination present in the deep aquifer, the following deeper groundwater monitor wells must be included in the groundwater sampling network for the site: PSMW-24C-500; PSMW-27C-500; and PSMW-27C-600. The Post-Closure Care Permit Application must be revised to include these wells.

35. The Post-Closure Care Permit Application must state that additional deeper groundwater monitoring wells will be added back into the sampling program must sampling and analysis results indicate an increase in the concentration of hazardous constituents in the deep aquifer.

36. The Post-Closure Care Permit Application must include a description of how all the deeper groundwater monitoring wells will be maintained. All deeper groundwater monitor wells must be included in the semi-annual inspection schedule for the Facility.

# U. <u>POST-CLOSURE CARE PLAN GROUNDWATER REMEDIATION (SECTION</u> <u>4.4)</u>

37. The Post-Closure Care Permit Application must state that the Applicant shall continue operation of the Groundwater Treatment System (GWTS) for shallow groundwater until compliance with cleanup standards is attained for all monitor wells at the site for a period of at least three (3) years (20.4.1.500 NMAC incorporating 40 CFR § 264.100(f)).

38. The Post-Closure Care Permit Application must state that semi-annual sampling and groundwater level measurements of all four shallow monitor wells and five extraction wells proposed by the Applicant and the annual sampling and semi-annual groundwater level measurements of seven additional shallow monitor wells required by NMED shall continue in accordance with the requirements of the Post-Closure Care Permit and scheduling on Table 3 of this NOD.

39. The Post-Closure Care Permit Application must state that once all wells have achieved three years of compliance, a phased shutdown of the GWTS will be initiated. This will entail an initial shutdown of the GWTS for a period of one year. If the concentration of constituents of concern increases above the concentration limits in any wells, the GWTS will be operated for additional six month periods of alternating shutdown and operation for a total of three years. This three year period will include semi-annual groundwater sampling and water level measurement at all monitoring wells in the sampling plan. The Post-Closure Care Permit Application must address how the Applicant proposes to proceed if the concentrations of constituents of concern are above the concentration limits after the three year period of the shutdown of the GWTS.

Mr. Lavery February 10, 2009 Page 9 of 12

#### V. POINT OF COMPLIANCE AND DOWNGRADIENT WELLS (SECTION 4.4.1)

40. NMED approves using monitoring well PSMW-01R as a point of compliance well at the Facility in accordance with 20.4.1.500 NMAC incorporating 40 CFR § 264.95. The Post-Closure Care Permit Application must state that all groundwater monitoring wells at the Facility shall be treated as compliance wells and groundwater shall attain the approved cleanup levels before ending corrective action.

41. NMED approves eliminating the following shallow monitor wells from further sampling and groundwater level measurement: PSMW-01B; PSMW-02; PSMW-03; PSMW-03B; PSMW-04; PSMW-06R; PSMW-08B; PSMW-09; PSMW-13B; PSMW-14; PSMW-19; PSMW-19X; PSMW-21; PSMW-23; PSMW-25; PSMW-26; PSMW-28; PSMW-29; PSMW-30; PSMW-31; PSMW-32; PSMW-33; PSMW-34; PSMW-35; and, PSMW-36. The Post-Closure Care Permit Application must state that some or all of these shallow groundwater monitoring wells may be added back into the sampling program should sampling and analysis results indicate an increase in concentration of hazardous constituents in the shallow aquifer. Thus, these wells must be maintained.

42. Pursuant to 20.4.1.500 NMAC incorporating 40 CFR 264.97, the groundwater monitoring system must consist of a sufficient number of wells to yield groundwater samples from the uppermost aquifer that represent the quality of background water at the Facility and that pas the point of compliance and allow for the detection of contamination when hazardous constituents have migrated from the Regulated Unit to the uppermost aquifer. The Post-Closure Care Permit Application must state this requirement.

43. In addition to the four shallow (PSMW-01R, PSMW-08A, PSMW-10 and PSMW-13A) groundwater monitoring wells and five extraction (VEW, EW-1, EW-2, EW-3, and EW-4) wells proposed by the Applicant for further semi-annual groundwater level measurement, and sampling and analysis using EPA Method 8260 (Table 1 of this NOD), NMED requires that groundwater at seven additional shallow monitoring wells (PSMW-11; PSMW-17; PSMW-18; PSMW-20; PSMW-22; PSMW-27; and PSMW-37) be sampled and analyzed on an annual basis. All 11 shallow and three deep groundwater monitoring wells and five extraction wells shall have the groundwater level measured on a semi-annual basis and the data used to prepare water level contour maps showing the direction and gradient of groundwater flow. The Post-Closure Care Permit Application must be revised to include the additional monitor wells required by NMED as noted on Table 2 of this NOD.

44. The Applicant may request that the required water quality sampling frequency for any monitor well that has been in compliance with the cleanup levels specified in Table 1 of this NOD for three consecutive years be reduced to once a year. A written request for a Permit Modification must be provided to NMED for approval before the monitoring frequency is reduced.

# X. <u>DEMONSTRATING ATTAINMENT OF GROUNDWATER CLEANUP LEVELS</u> (SECTION 4.4.2)

45. As indicated in Comment 40 above, a phased shutdown of the GWTS may be initiated after all groundwater monitoring wells have attained three years of compliance meeting the groundwater protection standard as described in the Post-Closure Care Permit Application. The Post-Closure Care Permit Application must state that the Applicant will submit a work plan to NMED for approval to perform the phased shutdown of the GWTS prior to its initiation.

46. The Post-Closure Care Permit Application must state that following the initiation of GWTS shutdown, the Applicant will sample and show compliance for three years (20.6.2.4103.D NMAC) through semi-annual sampling (Table 1 of this NOD) to demonstrate attainment of the groundwater cleanup levels.

47. If, after the GWTS shutdown period is initiated, if any monitoring well does not achieve compliance with the groundwater protection standard, the Applicant may apply to NMED for a Permit Modification to demonstrate technical infeasibility to achieve cleanup levels in accordance with 20.6.2.4103.E(1) NMAC. The technical infeasibility demonstration may include a substitute abatement standard(s) for the contaminant(s) that is (are) technically infeasible to clean up.

48. After initiating GWTS shutdown, the Applicant must maintain the GWTS in operational readiness until corrective action is complete. The Applicant must add to the Post-Closure Care Permit Application a plan that includes a description of how the GWTS will be maintained. The Applicant must conduct standby readiness demonstrations on a semi-annual basis, consisting of successfully operating the GWTS for three consecutive calendar days. The standby readiness demonstration must not be conducted within seven calendar days of any groundwater sampling event.

49. The Post-Closure Care Permit Application must state that the Applicant may propose monitored natural attenuation to attain groundwater cleanup levels. If so, the Applicant must submit to NMED a Permit Modification to change the corrective measure at the Facility to monitored natural attenuation. The implementation plan for monitored natural attenuation must include:

a. A demonstration of the efficacy of monitored natural attenuation using methods and procedures in accordance with NMED and Environmental Protection Agency guidance, including an estimate of the time expected needed to reach the target cleanup goals;

b. A revised groundwater monitoring plan including validation and long-term monitoring programs; and

c. A plan to ensure that the GWTS will be maintained in operational readiness until corrective action is complete.

Mr. Lavery February 10, 2009 Page 11 of 12

#### Y. SHALLOW GROUNDWATER RECOVERY SYSTEM (SECTION 4.4.3)

50. The Post-Closure Care Permit Application must state that the laboratory analytical results from the monthly sample collection of the influent and effluent water from the GWTS and water from the two irrigation lagoons required under the groundwater discharge permit (DP-1006) will be included in the semi-annual reports.

## Z. <u>GROUNDWATER TREATMENT SYSTEM OPERATIONS AND</u> <u>MAINTENANCE (SECTION 4.4.4)</u>

51. The Post-Closure Care Permit Application must state that the GWTS may be shut down for scheduled maintenance or repair for emergencies, and that the Applicant will notify NMED if the GWTS is not to operate for more than seven calendar days. The Post-Closure Care Permit Application must state that the Applicant shall provide in the operating record and the next semi-annual report information on repairs performed, the reasons for those repairs, and the aquifer response as determined by the water-level data for periods when the system does not operate for more than seven calendar days.

## AA. VOLUNTARY USE RESTRICTIONS (SECTION 4.4.6)

52. As proposed in the Post-Closure Care Permit Application PNM shall implement two voluntary groundwater use restrictions on PNM property.

a. The first restriction which prevents the development of any new production wells on PNM property within 1,000 feet of the shallow groundwater plume that are screened within the upper 100 feet of the saturated zone will be enforced until the concentrations of hazardous constituents at all monitoring wells have been reduced to levels that would not pose an unacceptable risk to human health or the environment.

b. The second restriction which prevents the development of any new production well on PNM property within 200 feet of the shallow groundwater plume regardless of the screened interval will be enforced until the mean concentrations of hazardous constituents at all monitoring wells have been reduced to meet drinking water standards.

53. The Post-Closure Care Permit Application must state that restrictions will be noted on the property plat for Persons Generating Station and filed with the Bernalillo County Zoning Division or its successor agencies. A copy of the revised plat with the restrictions noted on it will be submitted to NMED.

## BB. SAMPLING AND ANALYSIS PLAN (SECTION 4.5.1)

54. The proposal in the Post-Closure Care Permit Application to collect field measurements of pH and specific conductance during purging prior to sampling from low yield wells is acceptable; however, the Post-Closure Care Permit Application must state that measurements of temperature and turbidity will also be obtained. Field measurements including the volume of

Mr. Lavery February 10, 2009 Page 12 of 12

water purged, whether or not the well purged dry and the depth that the sampling pump, if used, was placed during sampling and purging must be included in the semi-annual Progress Reports. Low yield wells which will be purged dry prior to sampling must have field measurements taken prior to and after purging.

#### CC. GROUNDWATER GAUGING (SECTION 5.2)

55. The Post-Closure Care Permit Application must state that groundwater level measurements will be performed on all wells listed in Table 2 of this NOD on a semi-annual basis. Such measurements must be obtained within 24 hours prior to purging or sampling a well or at least 48 hours after the well has been purged or sampled. Recovery rates for monitor wells that purge dry must be documented in the semi-annual Progress Report.

#### **INSTRUCTIONS**

The Applicant must submit the required information in the form of revised pages for the Permit Application that incorporates all responses to this NOD. The revised pages must be submitted in two hard copies indicating added information in highlighted font, and deleted information in strikeout font, and must also be provided as electronic files on two compact discs (CDs). Further, in order to better facilitate review of the responses, the Applicant must provide a table showing each of the NMED's comments and the Applicant's responses.

The Applicant shall submit the requested information within ninety (90) calendar days from the date this letter is received by the Applicant. If you have any questions regarding this NOD, please contact Brian Salem of my staff at (505) 222-9576.

Sincerely,

James P. Bearzi Chief Hazardous Waste Bureau

Attachments: Tables 1, 2, and 3

cc: J. Kieling, NMED HWB
W. Moats, NMED HWB
B. Salem, NMED HWB
L. King, EPA Region 6 (6PD-F)
File: PNM 2009 and Reading PNM-07-002

01/27/2009

Hazardous Constituents	Concentration Limit (µg/L)	
1,1,2,2-Tetrachloroethylene (PCE)	5	
1,1-Dichloroethylene (1,1-DCE)	5	
1,1,1-Trichloroethane (1,1,1-TCA)	60	

# Table 1. Hazardous Constituents (HCs) and Concentration Limits

i National Providence

٠

 $\mathcal{A}^{-1} = \mathcal{B}_{\mathcal{B}}$ 

01/27/2009

Well No.	April	October	Additional Wells Required by NMED
Shallow MW			
PSMW-01R	HCs	HCs, App IX	
PSMW-07R*		App IX	
PSMW-08A	HCs	HCs, App IX	
PSMW-10	HCs	HCs, App IX	
PSMW-11		HCs	Х
PSMW-13A	HCs	HCs, App IX	
PSMW-17		HCs	X
PSMW-18		HCs	X
PSMW-20	· · · · · · · · · · · · · · · · · · ·	HCs	X
PSMW-22		HCs	X
PSMW-27		HCs	Х
PSMW-37		HCs	X
Deep MW			
PSMW-24C-500		HCs	X
PSMW-27C-500		HCs	X
PSMW-27C-600		HCs	Х
Extraction Wells			
VEW	HCs	HCs	
EW-1	HCs	HCs	
EW-2	HCs	HCs	
EW-3	HCs	HCs	
EW-4	HCs	HCs	

#### Table 2. Compliance and Corrective Action Monitoring Program - Groundwater Sampling and Gauging

\*

HCs

App IX

Upgradient compliance well Appendix IX analytes, enhanced sampling (40 CFR 264) Hazardous Constituents (Table 1) All Monitor wells shall be gauged semi-annually

# Table 3. Reporting Requirements

• • •

REPORT	FREQUENCY	WHEN REQUIRED
Progress Reports	2 times a year	April October
Appendix IX Results	Annually	October
Planned Changes	As required	30 days in advance of change
Anticipated Noncompliance	As required	30 days in advance of change
Noncompliance Reporting - Verbal	As required	Within 24 hours of discovery
Noncompliance Reporting - Written	As required	Within 15 days of discovery
Biennial reports	Once every 2 yrs	March 1 (even years)
Corrective Action Monitoring - Groundwater flow directions	2 times a year	April October
Unanticipated Noncompliance	As required	Within 30 days