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State of New Mexico ENVIRONMENT DEPARTMENT Surface Water Quality Bureau

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PETER MAGGIORE SECRETARY

February 2, 1999

CERTIFIED MAIL - Return Receipt Requested

Steven Rae ESH-18, Water Quality and Hydrology Group Los Alamos National Laboratory, MS K497 Los Alamos, NM 87545

LANL's NPDES Permit Reapplication (NM0028355): NMED - SWQB Review Comments

Dear Mr. Rae,

The New Mexico Environment Department Surface Water Quality Bureau (NMED-SWQB) has completed its cursory review of the Los Alamos National Laboratory's (LANL) NPDES permit reapplication (NM0028355). Enclosed is a list of our preliminary concerns. For your convenience, items of similar nature are grouped together. In order to further facilitate our review of the permit application, within 30 days of the receipt of this letter, LANL is requested to meet with NMED-SWQB to discuss the issues defined in this letter.

Please feel free to call Joseph Archuleta or Barbara Hoditschek at (505)-827-2933 to arrange for this meeting. Your cooperation is appreciated.

Sincerely,

Glenn Saums

Program Manager

Point Source Regulation Section

Scott Wilson, EPA, Region 6 Mike Saladen, ESH-18

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1. Septic Tanks/Holding Tanks and Sumps

- Appendix O contains a list of Septic/Holding Tanks. However, it is not clear whether this list complete.(e.g. no sumps are included). Appendix O also does not identify the exact location or number of the septic/holding tanks and sumps, nor does it contain the pumping schedule associated with these structures. In addition, a discussion concerning the relevance (e.g. do the tanks, sumps, and TA-21 meet the WAC for volume pumped and constituents of concern such as hazard and radioactive waste) and for continuing rationale to use these septic/holding tanks, and sumps. description of how they relate to the SWCS plant would be helpful.
- TA-21, an old wastewater treatment plant, is being used as a holding tank, but is not listed in Appendix O. Does this omission indicate that the use of TA-21 will be terminated? If it was meant to be included as part of the application, please include a discussion of its intended use (e.g. list buildings discharging to TA-21). Also, list appropriate information about it on the Appendix O and Appendix L maps.
- The Appendix L map does not reflect the location of the 48 septic/holding tanks, 42 lift stations, and sumps. This information would be useful. Also, this map (Appendix L) still indicates TA-21 as an operational wastewater treatment plant. Please include the current status of TA-21 on the map.
- Identify all sumps associated with outfalls that receive storm water.

2. Flow and Impact to RCRA (PRS's)

 Please include on the revised map of the outfalls (Appendix F), all SWMU's located above and below the outfalls proposed for permit status. Also indicate on this map which outfalls receive storm water flow directly, or through collection systems (such as sumps) and at what volumes.

- Appendix T is a map that indicates all RCRA permitted sites. Please define which of these sites are currently classified as RCRA interim status sites? Also, indicate on this map any NPDES outfalls associated with these designated RCRA sites.
- The reapplication indicates some outfalls receive high amounts of flow (e.g., 001 and 051). High amounts of flow from outfalls may be causing erosion and/or impacting RCRA SWMUs located downstream. NMED-SWQB requests LANL address this issue by discussing with all facility managers utilizing outfalls, the importance of managing outfall flows through streamlining and/or modifying process management at the facility.
- DMR reports for NPDES outfall 051 indicate that problems may be occurring with the Total Toxic Organics (TTO) (e.g. results of 2 of 111 contributors to TTO were qualified as estimated under laboratory QA/QC methods). It is not clear as to what this means (e.g. which 2 of the 111 contributors are involved). In addition, identify the laboratory used and explain what is meant by "estimated under laboratory QA/QC. NMED also asks that LANL begin reporting which constituents are elevated when TTO is qualified as estimated under laboratory QA/QC methods.
- Barbara Hoditschek, on the tour of TA-50 conducted on October 29, 1998, was told that Investigative Derived Waste (IDW) was being received at TA-50. A notice of change of condition for outfall 051 reflects this change however, was not received or found in the reapplication. Please provide NMED-SWQB with a copy of this change of condition.

3. 13S Outfall Issues

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- During NMED's site visit with Scott Wilson of EPA, a liquid of unknown source and quantity was observed in the outfall 13S(a) sump. NMED had been informed during regular NPDES inspections that this outfall was not in use. obvious, however, from observation of residual deposits above the drain line that the liquid in the sump had discharged through the sump drain and out the 13S(a) outfall. explain how future discharges will be prevented and/or eliminated. If 135(a) is intended to be please submit a change to the reapplication.
 - According to Mike Saladen, the 13S(b) outfall had been removed from the permit, but has not yet been plugged. Please indicate if and when it will be plugged. Also, please list any other NPDES outfalls that have been removed from the permit, but not plugged. Attach any schedule that may relate to this issue.
 - The 13S outfall category is not clearly represented in the application. For example, a discrepancy exists regarding 13S, 13S(a), and 13S(b). Appendix F and Appendix C do not consistently reflect which outfalls exist. Also, the 13S(a) and 13S(b) outfalls are not listed as part of the application. Please modify and provide new information to the application which address these issues.

4. Representative Sampling

 Please clarify in the application, how sampling at outfalls 13s and 00l would be representative sampling.

5. LANL Internal Outfall Issues

 NMED-SWQB has seen several instances in the permit application which indicate potential internal outfalls may exist (e.g. effluent from TA-50, Room 60, is being blended into TA-50 effluent to be discharged to putfall 051). NMED Actainment Letter to S. Rae 02/12/99 Page 4

considers internal outfalls as a source of potential future problems. Therefore, NMED-SWQB is requesting LANL evaluate all proposed outfalls and clearly identify which may fall under "internal outfalls" as characterized according to 40 CFR (h) (1 and 2).

6. HE Plant

- Please provide NMED with a list and/or characterization of the HE/organic pollutants being introduced into the TA-16 plant. NMED-SWQB also would like to have a copy of the WAC for this facility.
- During a site visit of LANL with Scott Wilson of EPA, Barbara Hoditschek was told that the old TA-16 plant was to remain in service as a "standby plant". NMED-SWQB requests information describing what factors would trigger the use of the old TA-16 plant as a "standby" plant. Will the effluent from the old plant be comparable in quality to that of the new plant? How and when will the effluent be tested when the old plant is used?
- In the application, Appendix V, page 2, 2nd paragraph, the following is stated, "The EA compares the impacts of the proposed action with those of continuing to operate the existing temporary wastewater treatment facility without making any modifications to HE operations or reducing HE wastewater discharges (the "no action" alternative). Under this alternative, it is anticipated that HE wastewater discharges would periodically violate existing and future EPA discharge standards". Explain how LANL proposes to correct this situation at the old plant?

7. Outfalls not in use

• It was noted during a DMR review, that some outfalls have not been sampled for several years (e.g 05A-097, 03A-040, 03A-024,03A-160,04A-118 etc.). This seems to indicate they are also not

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being used. Please explain why no samples were taken, and why these outfalls should remain on the permit? Also identify any other outfalls which are not being used, but still remain on the application.

Old permit issues included in this reapplication

- In the reapplication, (Volume 1, page 1, paragraph 5), LANL indicates that the previous applications and other documents will be used as supporting documents. NMED requests that LANL provide citations and a copy of all documents that will be used as part of this application.
- 2nd paragraph of the 5, Volume I, page reapplication states, "Currently, designated State Water Quality Standards do not exist for the intermittent drainage's located with in the laboratory boundaries, only for the Rio Grande NMED-SWQB disagrees with itself". While there are no designated uses statement. specified in subpart II of the current New Mexico Standards for Interstate and Intrastate Streams (20 NMAC 6.1), designated uses are specified in § 1105.A of the standards. Further, existing and attainable use will need to be considered in review of this permit application.

9. Transfer of wells to Los Alamos County

- According to Scott Wilson (EPA), the transferred wells indicated in the lease, and proposed for removal from LANL's permit, will be removed by EPA when they receive an application from Los Alamos County. Describe how DOE/LANL will assure that the county submits this application since the lease agreement itself does not set a timeline for submittal.
- Appendix C needs to be revised as per the letter of September 14, 1998, which reflects the water system transfer. Outfalls, 03A-040, 3A-045, and 06A-106 are pending outfalls that were not covered in Volume 1 of the reapplication. Please

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provide the necessary information. Also provide the following exhibits indicated as part of the lease, but which were provided in the reapplication: A, B, and D through H. In addition, please identify SWMUs found above and below all wells and indicate these on the system map (exhibit C of the lease).

10. NOI Potable Water issues

 The potable water Notice of Intent (NOI) in the application should be addressed as a state WQCC issue and not a federal NPDES issue. It is suggested that it be removed from the reapplication.

11. NEPA

 The reapplication states that NEPA documents were written for outfalls which were removed from the NPDES application. Does DOE plan to submit a NEPA for the remaining outfalls? If not, please explain.

12. Outfalls

- NMED-SWQB requests LANL provide a schedule for any proposed "future" outfall elimination.
- Has LANL addressed all outfalls associated with arsenic problems (e.g. all 03A outfalls proposed in the application)? Please provide information clarifying this issue. Identify any outfalls that still have arsenic problems, and indicate when the problem will be resolved.
- NMED-SWQB requests that outfalls associated with cooling towers be monitored for chromium 6(Cr6).
 Data from samples collected from Sandia wetlands have found to contain high levels of Chromium (4,000 ppm). This may imply that the high volume of cooling tower water being discharged from outfall 001 may have contained Cr6.

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> Identify all outfalls (permitted and closed) which were associated with the 10 old wastewater treatment plants. What volumes of storm water have/do they receive?

13. WAC

- How will LANL ensure that the WAC is properly implemented? Describe the procedure/process used to assure compliance with the WAC. When will EPA or NMED-SWQB be notified if the WAC is violated?
- NMED has received some, but not all, WACs and the Waste Management Policy. Comments are not included in this letter, but will be addressed under separate cover.
- NMED would appreciate further information regarding the composition of the SWSC task force (e.g., what groups are represented). We believe inclusion of this information would be beneficial.

14. Miscellaneous

- No form 2C was included in the reapplication as indicated per Volume 1 page 12 of the reapplication.
- Please provide a copy or explanation of the NPDES sampling protocol.
- Appendix M (Sludge Handling Procedure) does not address current sludge disposal practices (e.g. language in the application states that LANL will dispose of sludge pursuant to TOSCA regulations). NMED also requests the following information regarding this disposal be provided during the life of the permit: volumes disposed, PCB analysis associated with those volumes, and location of disposal site.
- Please provide information concerning testing results and disposal volumes of grit and

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screenings. Also, provide language in the reapplication indicating LANL's commitment to provide this information in the future.

- As indicated on pages 5-7 of the reapplication, "The regional aquifer of the Los Alamos area occurs at the depth of 1200 ft along the western edge of the plateau, and 600 ft along the eastern edge". Please provide information clarifying if the distance provided to the regional aquifer is measured from a mesa top or canyon bottom. Also, since LANL has defined the depth of the regional aquifer it would be appropriate to address the depth to all alluvial, intermediate perched or regional ground water occurrences and this relates to NPDES outfall discharges.
- Please describe the QA/QC protocols that LANL uses at it's internal laboratory (the lab which provides the information for the Environmental Surveillance report). Also, provide information that all other laboratories that are/were used employ adequate QA/QC procedures.