

Permit

**LOS ALAMOS NATIONAL LABORATORY  
NPDES PERMIT NO. NM0028355**

**NMED-SWQB/LANL MEETING  
MARCH 26, 1999**

**MEETING MINUTES**

On March 26, 1999, a meeting was held by the Laboratory's Water Quality and Hydrology Group (ESH-18) with the New Mexico Environment Department-Surface Water Quality Bureau (NMED-SWQB) at the ESH-18 Conference Room located at TA-59-117, Room 201. Following are minutes of the meeting.

**1.0 PURPOSE**

The purpose of the meeting was to discuss the Laboratory's response to comments received from the NMED-SWQB, dated February 2, 1999, regarding NMED-SWQB's review of the National Pollutant Discharge Elimination System (NPDES) Permit Re-Application for renewal of NPDES Permit No. NM0028355.

**2.0 ATTENDANCE**

Meeting attendees included staff from the NMED-SWQB and the Laboratory's ESH-18 Group and Legal Counsel-General Law (LC-GEN) Office. A list of attendees is provided as **Attachment 1.** *(No attachment attached)*

**3.0 INTRODUCTION**

The ESH-18 Group NPDES Outfall Team Leader chaired the meeting. Opening remarks included a greeting, introduction of attendees, and a statement regarding the purpose of the meeting. The Chairperson handed out a copy of the Laboratory's written response to attendees for reference (**See Attachment 2**). The Chairperson then stated that minutes of the meeting would be recorded to include issues discussed and any necessary follow-up action items. *(need)*

Following introduction of attendees, the NMED-SWQB expressed concern regarding the presence of a Laboratory staff attorney and the fact that they had not been notified prior to the meeting of the attorney's planned attendance. The NMED-SWQB stated that it was the NMED's policy to also have legal representation when such was the case with the hosting party. The NMED-SWQB added that the presence of a Laboratory attorney would constrain them from speaking freely on certain issues.



The ESH-18 Group Leader responded to the NMED-SWQB concern by indicating that the LC-GEN attorney present has been involved in the Laboratory's NPDES Permit Re-Application process and was present at the meeting only as an observer. He added that the if agreeable to the NMED-SWQB, the individual would be excused from the room when discussion of a "constraining" issue arose. The NMED-SWQB indicated that excusing the individual would not be necessary, although they wanted to emphasize again that the presence of the Laboratory attorney at the meeting would constrain the NMED-SWQB from discussing some issues.

Following introductions and opening remarks, discussion proceeded as follows:

#### 4.0 DISCUSSION

##### 4.1 NPDES PERMIT RE-APPLICATION PROCESS

The meeting Chairperson provided a chronology and brief overview of the documentation compiled and transmitted to-date to the U.S. Environmental Protection Agency (EPA), Region 6, and the NMED-SWQB, regarding the NPDES Permit Re-Application for renewal of the Laboratory's NPDES Permit No. NM0028355. Following is a summary of the chronology provided.

<u>Date</u>	<u>Description</u>
March 11, 1998	NPDES Permit Re-Application Project Implementation Plan
May 4, 1998	NPDES Permit Re-Application (3 Volume Set)
October 26, 1998	NPDES Permit Re-Application, Supplement I
January 20, 1999	NPDES Permit Re-Application, Supplement II
March 11, 1999	LANL Response to NMED-SWQB February 2, 1999, Comments Regarding the Laboratory's NPDES Permit Re-Application

##### 4.2 NPDES PERMITEES

The NMED-SWQB inquired as to whether the U. S. Department of Energy, Los Alamos Area Office (DOE/LAAO) would remain as one of the co-permittees on the Laboratory's NPDES Permit in the future.

The Laboratory responded that the issue had been raised by the DOE/LAAO in the fall of 1998, but that to-date no statements have been made by the DOE/LAAO confirming or denying the issue, ~~and~~ therefore, the Laboratory does not believe this to be an issue at this time.

**4.3 TRANSFER OF DRINKING WATER SYSTEM TO LOS ALAMOS COUNTY**

The NMED-SWQB inquired as to the status of the Laboratory's transfer of the drinking water system to the Los Alamos County. The Laboratory noted that earlier on March 2, 1999, the ESH-18 Group delivered complete Form 2C and 2D applications to Los Alamos County for subsequent submittal to the EPA. Applications included information for permitting of existing and new category 04A NPDES Outfalls. The Laboratory indicated that to-date, the Los Alamos County had not transmitted the completed applications to EPA, although the Laboratory had been told by Los Alamos County officials that the applications would be sent sometime in April, 1999.

**4.4 SEPTIC/HOLDING TANKS AND WASTE ACCEPTANCE CRITERIA (WAC)**

Waste Acceptance Criteria/Waste Profile Process

The NMED-SWQB stated that they appreciated the Laboratory sending them a ~~new~~ <sup>updated</sup> ~~improved~~ septic/holding tank map in the Laboratory's March 11, 1999 ~~written response~~ <sup>written response</sup>. *pumping of the septic/holding tanks*

The NMED-SWQB then requested clarification regarding the frequency and method of ~~the~~ <sup>of</sup> characterizing the contents of the Laboratory's septic/holding tanks, and whether verification of contents are covered under the Waste Acceptance Criteria/Waste Profile Form (WAC/WPF) process.

The Laboratory proceeded to delineate the steps of the WAC/WPF process. The Laboratory added that the testing of septic/holding tanks was covered under the Laboratory's WAC/WPF process and that septic/holding tank waste streams were required to adhere to the TA-46 SWSC WAC/WPF process same as any other sanitary waste discharged to the treatment facility. The Laboratory added that the Laboratory's Utilities Program Group (F-4) was now monitoring the collection system and waste profile forms for adherence with the TA-46 SWSC WAC/WPF process.

The NMED-SWQB inquired as to how they could obtain copies of WPF information <sup>regarding septic/holding tanks.</sup> The Laboratory responded that the information was available from Julie Minton-Hughes or Bruce Swanton of the Laboratory's Environmental Management-Solid Waste Operations (EM-SWO) Group, located at TA-54.

Pumping Frequency and Records

The NMED-SWQB then inquired about the pumping frequency of ~~the~~ <sup>all</sup> septic/holding tanks. The Laboratory indicated that ~~although~~ there are many septic/holding tanks at the Laboratory, there are only a few that are routinely pumped each year as many of the Laboratory's septic/holding are located at remote locations with infrequent use thus receiving very little waste. The Laboratory added that these tanks are pumped only ~~as~~ <sup>on a</sup> ~~needed~~ and pumping records are submitted to the NMED District II Office every six months. *"as need basis"*

The NMED-SWQB requested that they be included on the distribution list for receipt of the pumping records. The Laboratory indicated that the NMED-SWQB would be added as requested.

#### Disposal of sewage pump trucks at TA-46 SWSC Facility

A discussion followed regarding the TA-46 SWSC Facility effluent by-pass incident which occurred on March 25, 1999. The bypass resulted in the discharge of partially treated wastewater to the nearby tributary of Canada del Buey. ESH-18 had provided verbal notification to the EPA and NMED. Written documentation will be provided as required by the NPDES Permit and New Mexico Water Quality Control Commission (NMWQCC) regulations.

In light of the by-pass incident, <sup>(date)</sup> the NMED-SWQB expressed concern regarding the Laboratory's practice of emptying of septic/holding tank pumping trucks into the area drain next to the TA-46 sludge drying beds. The NMED-SWQB recommended that a written procedure detailing the pumping truck discharge process be developed and implemented. The Laboratory indicated that a procedure for disposal of these discharges was in the process of being developed and would be available in time for inclusion in the 15-day corrective action spill report to be submitted to the NMED.

#### TA-21 Transfer Station

The NMED-SWQB inquired as to whether or not the Laboratory has or is planning to, discharge new sources to the TA-21 Transfer Station, ~~and requested information regarding the status of decontamination and decommissioning (D&D) activities at TA-21.~~ NMED inquired why enclosure 3, <sup>was liable to change</sup> <sub>(list of bldgs. contributing waste to TA-21 transfer Sta.)</sub> at any time.

Responding to the two questions, the Laboratory indicated that at the present time there are no plans to discharge new sources to the TA-21 Transfer Station and, that as D&D activities progress, existing sources discharging to the TA-21 Transfer Station will be eliminated, <sup>therefore, the list can change at any time.</sup>

#### **4.5 SOLID WASTE MANAGEMENT UNITS (SWMUs) AND POTENTIAL RELEASE SITES (PRSs) ASSOCIATED WITH NPDES OUTFALLS**

In the comments dated February 2, 1999, the NMED-SWQB requested a revised map delineating all SWMUs located above and below the NPDES outfalls remaining in the Laboratory's NPDES Permit.

In response to the NMED-SWQB's request for a revised map, the Laboratory provided one copy each of 34 color maps produced by the Laboratory's Facilities for Information Management, Analysis, and Display (FIMAD) Group (**Provided as Attachment 3**). The maps show the Laboratory's SWMUs and PRSs in relation to the 34 NPDES outfalls remaining in the Permit.

4.6 NPDES OUTFALL 051/TA-50 RLWTF

The NMED-SWQB indicated that during the October 1998, EPA site visit, it was noted that NPDES Outfall 051 located at TA-50 was experiencing erosion problems as a result of the batch type discharge. To address the erosion problem, the NMED-SWQB indicated that they would like to see the Laboratory reduce the flow rate or implement improved erosion controls or Best Management Practices (BMPs) at the outfall.

The Laboratory responded that this issue was being addressed under the Laboratory's AP 4.5 Process. ~~The NMED-SWQB responded that they are aware of the Laboratory's on-going effort but are also aware of the complexity of the AP 4.5 Process.~~ They added <sup>WQ</sup> ~~that they are still~~ concerned that the erosion problem may not be addressed soon enough since over the last two years, the Laboratory has been unsuccessful in bringing Facility Managers (FMs) into the process of implementing storm water BMPs.

The Laboratory responded that significant efforts have been made to bring Laboratory management into the process, <sup>by making sure</sup> ~~and that their involvement can be demonstrated by their commitment to ensuring that Storm Water Pollution Prevention Plans (SWPPs) for all facilities are submitted to ESH-18 by March 31, 1999.~~

*ESH-18 will continue to insure that fac.*

The ESH-18 Group Leader emphasized that the ESH-18 Group is continually developing a working relationship with the FMs, ~~and an example of this is the recent presentation given by ESH-18 to the Laboratory's Operations Working Group (OWG) on environmental compliance issues.~~ The ESH-18 Group Leader then added that he would personally address the NMED-SWQB's concern regarding the discharge at NPDES Outfall 051 with EM-RLW staff to implement corrective actions to either reduce the flow rate or implement improved BMPs.

~~With further~~ <sup>in</sup> ~~regard to~~ the TA-50 NPDES Outfall 051, ~~the~~ NMED-SWQB also expressed concern that the Laboratory has not been meeting the Derived Concentration Guidelines (DCGs) as required by DOE Order 5400.5.

The ESH-18 Group Leader responded that in the early 1990's, the DCGs became more stringent and the Laboratory has been slow in coming up to the new performance standards. He added that efforts are on-going to upgrade the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF).

The NMED-SWQB stated that they would like to see the Laboratory <sup>27 need</sup> ~~do more than just~~ meet the DCGs. ~~The NMED-SWQB then suggested that in order for the Laboratory to do so, it might be necessary for the Laboratory to increase the volume of waste drummed for storage at TA-54 and complete planned TA-50 RLWTF upgrades.~~

~~For more information~~

#### 4.7 NPDES OUTFALL 001/TA-3 POWER PLANT

The NMED-SWQB expressed concern regarding the high flow rate of discharge at the NPDES Outfall 001, located at the TA-3 Power Plant, and the potential impact to SWMUs (i.e., movement of contaminants and increased pollution). They suggested that the flow rate be reduced. ~~They added that an option to do so might be to relocate the discharge pipe a few feet in either direction to minimize the impact to the watercourse.~~ *LANL proposed the* ~~Further planning and discussion is needed, but this request will be considered by LANL.~~ *also indicated*

In response, the ESH-18 Group Leader ~~stated~~ *stated* that \$600 K has been budgeted under the ESH-18 Storm Water Management Program for FMs to install BMPs Lab-wide including at NPDES Outfall 001. The Laboratory added that ~~the BMP's would not only include physical corrections but also operational modifications as well.~~ *this could be addressed with or other and that the BMP's would not only include physical corrections and also operational modifications as well.* ~~The Laboratory added that to address the NMED-SWQB's concern, the ESH-18 Group will ensure that the Laboratory evaluates and reviews options for reducing the flow rate at NPDES Outfall 001 and will provide feed back on the project to the NMED-SWQB at the Storm Water Action Team (SWAT) meetings. The Laboratory stated further that due to the recent EPA storm water inspection, storm water management issues have become a priority.~~

The NMED-SWQB re-iterated the need for the Laboratory to improve the attitude and understanding of FMs regarding the storm water BMP process. ~~They indicated that they thought this would be necessary in order for the NMED-SWQB to be more amenable to working with the Laboratory to resolve situations rather than to provide input via findings or violations.~~ *This approach would help resolve problems before they become issues.*

The Laboratory Legal representative added that the LC-GEN Office is working closely with Laboratory environmental groups to improve FM attitudes and understanding regarding environmental protection and compliance issues. The ESH-18 Group Leader concurred with the statement and the NMED-SWQB responded that the LC-GEN involvement ~~would~~ *could* be an asset.

#### 4.8 INTERNAL OUTFALLS

##### NPDES Outfall 001/TA-3 Power Plant

The NMED-SWQB expressed concern that effluent discharges at the TA-3 Power Plant discharging into NPDES Outfall 001 may constitute an internal outfall. The NMED-SWQB added that there is concern that the NPDES Outfall discharge is commingling with other sources ~~and that a dilution situation is occurring.~~ *are being diluted in the effluent flow.*

The NMED-SWQB added further that ~~the commingling of wastewater is the primary reason that the NMED is interested in the SWSC collection system and the potential introduction of what the NMED termed "industrial water" into the TA-46 sanitary treatment plant.~~ The NMED-SWQB emphasized that the Laboratory's re-use of the TA-

46 SWSC wastewater was a positive, although the concern remains as to whether or not the Laboratory is sampling the correct parameters at the 13S Outfall, and noting that de-chlorination is the final treatment at the NPDES Outfall 001. The Laboratory responded that the wastewater is being sampled at the NPDES Outfalls 13S and 001 for the specific parameters set forth by the NPDES Permit.

*not being discouraged*

*however NMED had*

*than sampling at the outfall did*

*not represent possible "internal outfall" input NMED-SWQB required verification of the "internal" outfall concern issue and will seek pursue the issue of proper sampling parameters at outfalls.*

NPDES Outfall 13S/TA-46 SWSC

The NMED-SWQB indicated that they ~~continue to be confused~~ regarding the NPDES Outfall 13S discharge points.

*still are not clear with to*

The Laboratory explained that the NPDES Outfall 13S is located at the chlorine contact chamber, and that 13S(b) is an EPA-authorized discharge point which is located below the TA-46 SWSC Facility. The Laboratory emphasized that only one outfall exists (13S) and that the 13S outfall discharges at two different locations including TA-3 Power Plant (NPDES Outfall 001) and below the TA-46 SWSC Facility (13S(b)).

The NMED-SWQB then recounted the October 1998, EPA site visit to the 13S(b) discharge point at TA-46 SWSC Facility where they believe water and "suspected grease" to have been evident at the time. The NMED-SWQB emphasized that they continue to believe that the "bath tub rings" were a result of a discharge containing grease and not the result of infiltration of surface/storm water and blowing Styrofoam balls from a nearby insulation installation project, as the Laboratory's investigation indicated. The NMED-SWQB stated further that they continue to believe that a discharge may have taken place at the site, and that it is the Laboratory's legal responsibility to monitor the site for discharges. The NMED-SWQB further added that if the site is in fact collecting snowmelt/stormwater, then periodic pumping of the water into the head works of the SWSC Facility along with development and implementation of formal procedures, and reporting of pumping volumes, may suffice.

*?? there should not be a discharge here.*

The Laboratory indicated that they would work with staff from F-4 and the TA-46 SWSC Facility (SWSC Task Force) to incorporate a pumping schedule into existing procedures and provide the NMED-SWQB with a copy of the procedures. The Laboratory added that the NMED-SWQB might consider involving the NMED/DOE Over-site Bureau in daily monitoring of the 13S(b).

The NMED-SWQB stated that they continue to be concerned about potential internal outfalls within the TA-46 SWSC collection and treatment system. They added that as part of the EPA's re-permitting process, they plan to exercise their authority and evaluate the discharges at TA-3 manholes more closely for potential internal outfalls and appropriate monitoring as a condition of certification.

*appropriate address monitoring at all outfalls as a condition of the certification.*

The NMED <sup>requested</sup> stated that they were interested in tracking <sup>of</sup> the Laboratory's characterization of sludge and requested specific analytical data for the TA-46 SWSC Facility sludge. The Laboratory indicated that the WPF's for sludge were maintained by the EM-SWO Group. The Laboratory further stated that the ESH-18 Group would transmit the sludge

*explain why 13S is 13S a + b in maps even though only "1" outfall exists*

*13S(b)*

characterization data requested by the NMED-SWQB, ~~although it was included in the~~ Laboratory's Ground Water Discharge Plan Report which is routinely transmitted to the NMED Ground Water Protection Bureau (GWPB) and the NMED-SWQB.

*This data ~~was already~~ is currently being submitted as part of the*

#### 4.9 HIGH EXPLOSIVES AT R-25 WELL

*Not sure we are settling this*

The NMED-SWQB expressed concern about the High Explosives Wastewater Treatment Facility (HEWTF), the monitoring plan at the treatment facility, and the recent findings of high explosives in the ground water at R-25 Well. The NMED-SWQB inquired as to why the EPA has never required the Laboratory to monitor for HE at previously NPDES-permitted 05A outfalls. The NMED-SWQB also stated that they have received questions and concern from the public regarding the HE found in ground water at the Laboratory, and that the NMED-SWQB will attempt to ensure HE limits are included in the Laboratory's new permit as a part of the NMED certification process.

The NMED-SWQB added that they believe the Laboratory's new Permit should be explicit and clear about how the routing of a discharge occurs so that compliance concerns and questions do constantly arise. The NMED-SWQB stated further that they intend to discuss this issue with the EPA Permit Writer and exercise their certification authority accordingly.

The Laboratory, NMED-SWQB, and the EPA will need to address these potential issues during the permit process.

#### 4.10 TTO's, Dioxin, and QA/QC

NMED-SWQB is concerned that Discharge Monitoring Reports (DMRs) for NPDES outfall 051 indicated 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) and that <sup>SWQB</sup> it was unclear as to what this means (e.g., which 2 of the 111 contributors are involved). The NMED also requested an explanation of what is meant by "estimated under laboratory QA/QC."

The Laboratory indicated that NPDES samples collected for TTO analysis are shipped to an outside Laboratory. The Laboratory further indicated that the analytical results provided by the laboratory indicated that the analytical results were estimated for two analyses because the holding times were exceeded. The Laboratory added that they will provide a more detailed explanation on the DMRs in the future to address this issue.

The Laboratory then proceeded to request assistance from the NMED-SWQB in requesting that EPA eliminate dioxin as a monitoring requirement from the Laboratory's NPDES Permit. The request for elimination of the monitoring requirement is that dioxin has been analyzed for years as required and to-date no dioxin has been analyzed in the Laboratory's NPDES permitted effluents. The Laboratory added that the analysis is expensive and that the expense is not warranted considering there has never been dioxin

detected, and that the money saved could be better spent elsewhere. The NMED-SWQB responded that the Laboratory's request would be considered.

The Laboratory added, that in response to the NMED-SWQB's February 2, 1999, request for Laboratory's quality assurance/quality control documentation for sample analysis, the NMED-SWQB should feel free to come on-site at any time to review available QA/QC documentation. The Laboratory added, that the documentation is too voluminous to copy.

4.11 NOI ISSUES

The NMED-SWQB were concerned that the Laboratory submitted a Generic Notice of Intent to Discharge (NOIs) for potable water discharges. The NMED-SWQB added that the NOIs are required by NNWQCC regulations but not by the EPA re-application process and therefore should not have been included in the NPDES Permit re-application.

*as part of the re-application.*

The Laboratory explained why they had submitted NOIs for each of the 34 NPDES outfalls included in the NPDES Permit Re-Application. The Laboratory also indicated that the NOIs had previously been submitted to the NMED-SWQB and -GWPB under separate cover and that they were included in the NPDES Permit re-application document for informational purposes only. The Laboratory provided the NMED-SWQB a copy the letter ESH-18/WQ&H:98-0128, "NOI for Existing and New NPDES Outfalls at Los Alamos National Laboratory." (See Attachment 4)

*Generic*

*OMIT this is a different NOI, not the generic NOI for potable water*

The NMED-SWQB stated that the current "Administrative Reporting Procedure" and the "Generic NOI" processes seem to work well for the NMED-SWQB and the Laboratory, but that the EPA should make an NPDES Permit determination on these type of discharges independent of the NOI documentation.

The NMED-SWQB then inquired as to the status of the discussion between the EPA and the Laboratory regarding the NOIs. Responding to the question, the Laboratory stated that the EPA had indicated that as long as the NOI reporting process was acceptable with the Laboratory and the NMED, they (EPA) did see a need to address the NOI issue further.

~~STOP~~

4.12 MISCELLANEOUS

The NMED-SWQB stated that they have spent a significant amount of time reviewing the Laboratory's NPDES Permit re-application, because the NMED-SWQB does not want the new NPDES Permit to experience certification issues and problems similar to those experienced during the 1990-1994 EPA renewal process. The NMED-SWQB added that they and the public have concerns about storm water and outfall discharges impacting Laboratory SMWUs and PRSs and the potential for transporting contaminants off the DOE's property. This issue may be addressed by requesting

*and hopes that the*

*will be minimal,*

*also*

EPA to develop a stormwater permit specific to NMED-SWQB DOE/LANL,

Responding to this statement, the Laboratory stated that all information, issues, and concerns expressed by the NMED-SWQB regarding storm water, will be passed on to the ESH-18 Storm Water/SPCC Team for follow-up and management under the Laboratory's NPDES Storm Water Permit.



The Laboratory then inquired of the NMED-SWQB as to their knowledge of the status of the U.S. Fish and Wildlife (USF&W) Use Study and the direction of possibly designating Sandia Canyon, which is totally effluent dominated, as a fishery. The Laboratory further inquired whether the NMED-SWQB was concerned that water be kept in the Sandia Canyon or that just the NPDES parameters be met at the end of the pipe. The NMED-SWQB responded that they were not prepared to respond to the questions or to discuss the issues at the present time.

The Laboratory then requested that the NMED-SWQB copy ESH-18 on all routine State and EPA correspondence regarding the Laboratory's NPDES Permit. In turn, the NMED-SWQB requested that the Laboratory not transmit multiple copies of correspondence to the NMED. Rather, to only transmit one copy to ~~Ms. Barbara Heditschek~~ *Mr. Glenn Savins*, who in turn will ensure that other appropriate NMED personnel receive copies.

The Laboratory stated that they would be interested in continuing to meet monthly with the NMED to discuss environmental issues as long as there were sufficient agenda items to warrant a meeting. The NMED-SWQB agreed that regularly held meetings between the NMED and the Laboratory should continue.

## 5.0 CLOSING REMARKS/ACTION ITEMS

Following completion of discussion, the Laboratory provided brief closing remarks.

The Chairperson thanked the NMED-SWQB for attending the meeting and more importantly, thanked them for their comprehensive review of the re-application document, their extensive feedback, and the opportunity given the Laboratory to meet and discuss in more detail, the NMED-SWQB's comments and questions.

The Laboratory summarized briefly the issues covered and indicated that the procedures for disposal of septic/holding tank pumping trucks into the TA-46 SWSC Facility and new Operations and Maintenance Procedures will be provided under separate cover to the NMED-SWQB. Additionally, the Laboratory stated that all other comments, questions, and issues presented by the NMED-SWQB regarding the NPDES Permit Re-Application have been addressed.

The Laboratory then re-iterated to the NMED-SWQB that minutes of the meeting would be prepared and a draft would be transmitted to them for their review and comment. The Laboratory added that once the minutes were finalized, they would also be transmitted to meeting attendees, other Laboratory points of contact, the DOE/LAAO, and the EPA.