

Permit

**Los Alamos National Laboratory
NPDES Permit No. NM0028355
EPA/LANL Meeting
May 5, 1999**

1.0 INTRODUCTION

On May 5, 1999, a meeting was held by the Water Quality and Hydrology Group (ESH-18) of the Los Alamos National Laboratory (Laboratory) and the U.S. Department of Energy (DOE) with the U.S. Environmental Protection Agency (EPA), Region 6 in Dallas, Texas. Following are minutes of the meeting.

2.0 PURPOSE

The purpose of the meeting was to discuss the previous year's compliance summary for the Laboratory's National Pollutant Discharge Elimination System (NPDES) Permit No. NM0028355 and the status of the re-application for permit renewal by EPA. A copy of the meeting agenda is provided as **Attachment 1**.

3.0 ATTENDANCE

Meeting attendees included staff from the EPA's enforcement and permitting branches and the Laboratory's ESH-18 Group and Legal Counsel-General Law (LC-GEN) Office. A representative from the U.S. Department of Energy, Albuquerque Office (DOE/AL) was also in attendance. A list of attendees is provided as **Attachment 2**.

4.0 DISCUSSION

**4.1 LABORATORY'S COMPLIANCE SUMMARY FOR PERIOD
JANUARY 1, 1998 – MARCH 31, 1999**

Group ESH-18 provided an oral summary of the status of the Laboratory's NPDES Permit Program. The summary included NPDES Permit exceedances and status of corrective actions for NPDES Permit No. NM0028355 for the period January 1, 1998 through March 31, 1999. Below is a brief synopsis of the information discussed. A written summation was distributed to attendees for reference. See **Attachment 3** for details.

Outfall Reduction Program

It was noted by ESH-18 that the Laboratory has significantly reduced the number of NPDES permitted outfalls from 141 in 1993 to 34 currently. It was noted that the Laboratory is working to further eliminate one (1) Category 03A Outfall located at TA-48-1 and thirteen (13) Category 04A Outfalls associated with the Los Alamos County drinking water system.



15784

NPDES Permit Exceedances and Corrective Actions

The ESH-18 Group indicated that for the period January 1, 1998 through December 31, 1998, the Laboratory had a total of eight (8) NPDES effluent exceedances. The eight (8) total exceedances included seven (7) from industrial sources and one (1) from a sanitary source. This was equivalent to the eight (8) exceedances occurring during 1997. From January 1, 1999 through March 31, 1999, the Laboratory has exceeded industrial NPDES Permit limits on five (5) occasions bringing the total NPDES Permit exceedances from January 1, 1998 to-date to thirteen (13).

A copy of all non-compliance reports have been previously provided to EPA with the Discharge Monitoring Reports (DMRs) during the specific monitoring period when they occurred.

Corrective actions associated with modification of O&M manuals and inspection schedules, and operator training, have been completed. However, several corrective actions are still ongoing. These on-going corrective actions include:

- equipment upgrades to the TA-50 RLWTF;
- replacement of two (2) cooling towers at TA-53 with new units constructed of steel, fiberglass, and PVC;
- evaluation of BOD impacts from the MIOX disinfection system at the TA-46 Sanitary Wastewater Systems Facility; and,
- development of Lab-wide implementation guidance for waste acceptance criteria for effluent discharges to the Laboratory's wastewater treatment facilities.

Group ESH-18 indicated to EPA that if funding issues are resolved, Cooling Tower 62 and 64 located at TA-53 will be replaced during FY 2000. *Update: on June 1, 1999, the Laboratory transmitted to EPA a letter (ESH-DO:99-088 or ESH-18/WQ&H:99-0187) advising them of the status of the cooling tower replacement effort and assurance that interim measures are being conducted to comply with NPDES Permit requirements. (See Attachment 4).*

Group ESH-18 also indicated that on August 5, 1998, Administrative Order (AO) Docket No, VI-96-1236 and Federal Facilities Compliance Agreement (FFCA) Docket No. VI-96-1237 were closed-out by EPA. This AO and FFCA addressed the requirements for completion of the Waste Stream Characterization Program and Corrections Project and the construction and operation of the TA-16 High Explosives Wastewater Treatment Facility. These efforts were completed on March 1997 and September 1997, respectively, as required.

Group ESH-18 indicated that the Laboratory had not received the last few Significant Non-Compliance Reports and inquired about the Laboratory's status. EPA responded that the Laboratory was not listed on the most recent EPA quarterly non-compliance report.

4.2 DIOXIN – REQUEST FOR DELETION FROM PERMIT MONITORING REQUIREMENTS FOR NPDES OUTFALL 051

Group ESH-18 indicated to EPA that the Laboratory has previously submitted requests to EPA for the removal of dioxin (2,3,7,8-Tetrachlorodibenzo-p-dioxin) from the NPDES Permit Total Toxic Organic (TTO) monitoring requirements for NPDES Outfall 051 (TA-50 RLWTF), and that to-date the Laboratory had not received a response to the requests.

Group ESH-18 stated that historically, analytical data has indicated that dioxin has not been detected in any sample collected and that dioxin is not listed in the Laboratory's chemical inventory. Group ESH-18 stated further that the inventory reflects chemicals used at the Laboratory, and since dioxin was not in the inventory, that it is not expected to be present in the NPDES Outfall 051 effluent.

Group ESH-18 stated that documentation summarizing analytical results for dioxin since the issuance of the Laboratory's NPDES Permit in August 1994 have been previously provided to EPA, in addition to the Discharge Monitoring Reports (DMRs) during the specific monitoring period when they occurred. Copies of correspondence previously transmitted to EPA, dated March 21, 1997, November 18, 1998, and April 8, 1999, were provided by Group ESH-18 to the EPA for reference.

The EPA indicated that they would review the documentation and provide the Laboratory a response. *Update: on May 28, 1999, the Laboratory received a certified letter from Mr. Everett H. Spencer, EPA, Water Enforcement Branch to Steve Rae, Group Leader, ESH-18. The letter indicated that continued dioxin monitoring at NPDES Outfall 051 was not longer required. (See Attachment 5). EPA requested that the Laboratory produce for both EPA and Laboratory files, a TTO certification statement to the effect that dioxin is not present and would not be expected to be present. On June 8, 1999, the Laboratory transmitted to Mr. Everett Spencer a letter (ESH-18/WQ&H:99-0214) which provided the certification statement requested. (See Attachment 6).*

4.3 NPDES PERMIT RE-APPLICATION – STATUS

Transfer of Category 04A Outfalls to Los Alamos County

Group ESH-18 provided the following chronology associated with the transfer of 13 Category 04A Outfalls by the DOE to the Los Alamos County under a lease agreement.

- On September 14, 1998 (ESH-DO:98-268), the Laboratory notified the EPA of DOE's agreement with the Los Alamos County to assume operational responsibility for the Los Alamos Water Supply System. In the September 14, 1998 letter, and again on January 7, 1999 (ESH-DO:003), the Laboratory requested that EPA delete the 13 Category 04A outfalls associated with the water supply system from the Laboratory's NPDES Permit NM0028355. (See Attachment 7).

- In a response letter dated January 11, 1999 to the DOE/LAAO, the EPA indicated that they could not delete the outfalls from the Laboratory's NPDES Permit until Los Alamos County submitted NPDES applications to EPA to re-permit the outfalls. (See **Attachment 8**).
- The Los Alamos County was notified in a letter dated February 22, 1999 from the DOE/LAAO, that the EPA had determined that the Los Alamos County must submit its own application for the NPDES outfalls associated with the production wells at Los Alamos. In this letter, the DOE also encouraged the Los Alamos County to submit the NPDES Permit applications as soon as possible. (See **Attachment 9**).
- On March 2, 1999, to assist the Los Alamos County with preparing the EPA-required applications, the Group ESH-18 transmitted to the Los Alamos County application forms complete with discharge information for the outfalls, plus application instructions and miscellaneous support documentation. (See **Attachment 10**).

Group ESH-18 stated that it was their understanding that to-date, the Los Alamos County had not submitted these applications to EPA. Group ESH-18 indicated further that the Laboratory was concerned that in addition to not being able to delete the 13 outfalls from the permit, the Laboratory currently does not have operational control or responsibility for the outfalls. Group ESH-18 stated that the Laboratory currently samples and tests these outfall discharges for compliance purposes.

The EPA re-iterated that the Los Alamos County must submit the NPDES Permit applications. The EPA stated that they would transmit a letter to the Los Alamos County notifying them of the requirement to submit NPDES permit applications for legal coverage of the water supply wells. *Update: on May 28, 1999, the EPA transmitted a letter by certified mail to Mr. Joseph King, County Administrator, Los Alamos County. The letter indicated that because the County operates and maintains the wells, they should hold the NPDES Permit for the outfalls instead of LANL, and therefore, should apply to EPA for coverage using the appropriate EPA NPDES Permit applications. (See Attachment 11).*

Form 2D (03A199) – LANL CIC Request for New NPDES Outfall

Group ESH-18 hand-delivered to the EPA a Form 2D application and associated support documentation for the Computing, Information and Communications (CIC) Division's TA-3-1837 cooling tower effluent. The EPA NPDES Permit Writer indicated that he would review the Form 2D documentation in conjunction with the on-going review of the Laboratory-wide NPDES Permit Re-Application, and include the new outfall (03A199) in the Laboratory's umbrella NPDES Permit No. NM0028355. *Update: on June 2, 1999, the Laboratory transmitted to the New Mexico Environment Department and the EPA a Notice of Intent to Discharge (NOI) for the discharge from TA-3-1837 cooling tower. Additionally, EPA sent a letter dated May 28, 1999 addressed to Charles Slocumb, CIC Division Director. The letter indicated that the NPDES Form 2D Application for Outfall 03A199 had been received, was reviewed, and determined to be administratively*

complete in accordance with the Environmental Permit Regulations, 40 CFR 124.3(c), 54 FR 18785, May 2, 1989.

Supplemental DMR Summary Data

On April 21, 1999, via a phone call to ESH-18, the EPA requested additional information and or/clarification regarding the analytical laboratory's detection limits for the sample data for metal parameters which was reflected in the DMR summaries.

In response to the request, Group ESH-18 provided the Permit Writer with copies of analytical data details used for the compilation of the DMR summary for NPDES Outfall 001, located at TA-3-22. The information provided was intended to serve as an example of the raw data the Laboratory used to compile all the DMR summaries provided as part of the Laboratory's NPDES Permit Re-Application. The information given to the EPA included field notes, sample submittal information, sample results and certificate of analysis which listed the analytical laboratory's minimum quantification levels (MQLs). Group ESH-18 stated that upon return, they would compile a summary of the MQL information for the sampled parameters and transmit it to the EPA. *Update: on June 8, 1999, the Laboratory faxed to the EPA a listing of the MQLs for the analysis of NPDES Permit parameters. A hard copy listing is provided herein as Attachment 12.*

NMED Comments to LANL's NPDES Permit Re-Application dated February 2, 1999

Group ESH-18 provided EPA with a brief overview of the March 26, 1999 meeting held in Los Alamos with the New Mexico Environment Department, Surface Water Bureau (NMED-SWQB). The purpose of the meeting was to discuss the NMED-SWQB's comments dated February 2, 1999, regarding the Laboratory's NPDES Permit Re-Application. Group ESH-18 highlighted for EPA the major topics discussed at the NMED meeting.

A copy of the ESH-18's written response and minutes of the meeting were previously transmitted to the EPA on March 11, 1999, and April 22, 1999, respectively. The EPA acknowledged that they had received and reviewed the information, and that they did not have any questions or comments.

EPA Schedule: Permit Preparation and Issuance

Group ESH-18 inquired of EPA when a draft permit would be completed and if additional information was needed. The EPA Permit Writer responded that he was in the process of preparing a draft, and expected that it would be completed sometime early summer. The Permit Writer stated further that the only addition information he needed from the Laboratory was the current discharge flow rate from the TA-50 RLWTF. He stated that he planned to use the information to evaluate potential impacts from the discharge to Solid Waste Management Units (SWMUs)/Potential Release Sites (PRSs) located in Mortandad Canyon. He indicated that the NMED-SWQB had expressed concern regarding this issue. Group ESH-18 responded that they would provide the information to EPA upon return. *Update: on June 16, 1999, staff from the Laboratory's*

TA-50 RLWTF provided ESH-18 with the following information regarding the TA-50 wastewater effluent:

“Discharges made from the RLW facility are done on a batch/volume basis. There are two identical effluent tanks, connected by an overflow. An effluent tank is filled from the treatment process until it begins to overflow into the adjacent tank, the full tank is isolated and tested, and then it is discharged to the Mortandad Canyon via two transfer pumps. The pumps kick off automatically when the water level in the tank reaches a preset level. The volume of water between the overflow level and the preset pump-off level is 79,058 liters, or 20,885 gallons. It takes approximately 29.5 minutes to discharge a tank using the two transfer pumps - giving us a calculated average flow of 708 gpm. The flow meter that we have on the pipe going to the Mortandad Canyon generally reads within a range of plus or minus 10%, so a reasonable range from the meter reading would be 637 gpm to 779 gpm. We do not have any control over the flow rate beyond choosing whether to discharge with one or two pumps. Historically we have always used two. We can use one, which slows the flow down, probably not by half, but slower, anyway, than using two.”

U.S. Fish and Wildlife Use Study

Group ESH-18 indicated that to-date they have not received a report from the U.S. Fish and Wildlife (USF&W) regarding the use study. Group ESH-18 provided a brief overview of the reporting deadlines set forth by the 1994 NPDES Permit Settlement Agreement. Group ESH-18 then indicated that the Laboratory intends to transmit a letter to the NMED and the U.S. F&W inquiring as to the status of the required report. It was noted by ESH-18 that the EPA would be listed on the letter's copy list for informational purposes.

5.0 CLOSING REMARKS/ACTION ITEMS

Following completion of discussion, ESH-18 provided brief closing comments. Group ESH-18 reviewed the meeting topics covered and the action items agreed upon. Group ESH-18 then re-iterated to the EPA that minutes of the meeting would be prepared and transmitted to them. Then in closing, ESH-18 thanked the EPA staff for agreeing to meet, and more importantly, thanked them for their feedback regarding the Laboratory's NPDES Permit Program activities. Additionally, ESH-18 extended an invitation to the EPA to visit the Laboratory to further discuss NPDES permit issues and tour NPDES outfall locations.

LOS ALAMOS NATIONAL LABORATORY
NPDES Permit No. NM0028355

Agenda for EPA Meeting
May 5, 1999
(8:30-12:00)

- (1) Laboratory's Compliance Summary for Period January 1, 1998 – March 31, 1999
 - NPDES Permit Exceedances
 - Corrective Actions

- (2) Dioxin – Request for Deletion from Permit Monitoring Requirements for NPDES Outfall 051

- (3) NPDES Permit Re-Application – Status
 - Transfer of Category 04A Outfalls to Los Alamos County
 - Form 2D (03A199) – CIC Request for New NPDES Outfall
 - Supplemental DMR Summary Data
 - NMED Comments to LANL's NPDES Permit Re-Application dated February 2, 1999
 - EPA Schedule: Permit Preparation and Issuance
 - Miscellaneous

- (4) Other

NPDES PERMIT PROGRAM

Los Alamos National Laboratory

NPDES Permit No. NM0028355

May 5, 1999

- 1 Power Plant Discharge (001)
- 1 Boiler Blowdown Discharge (02A)
- 15 Treated Cooling Water Discharge (03A)
- 13* Non-Contact Cooling Water Discharge (04A)
- 2 High Explosive Wastewater Discharge (05A)
- 1 Radioactive Wastewater Treatment Plant (051)
- 1 Sanitary Wastewater Treatment Plant (13S)

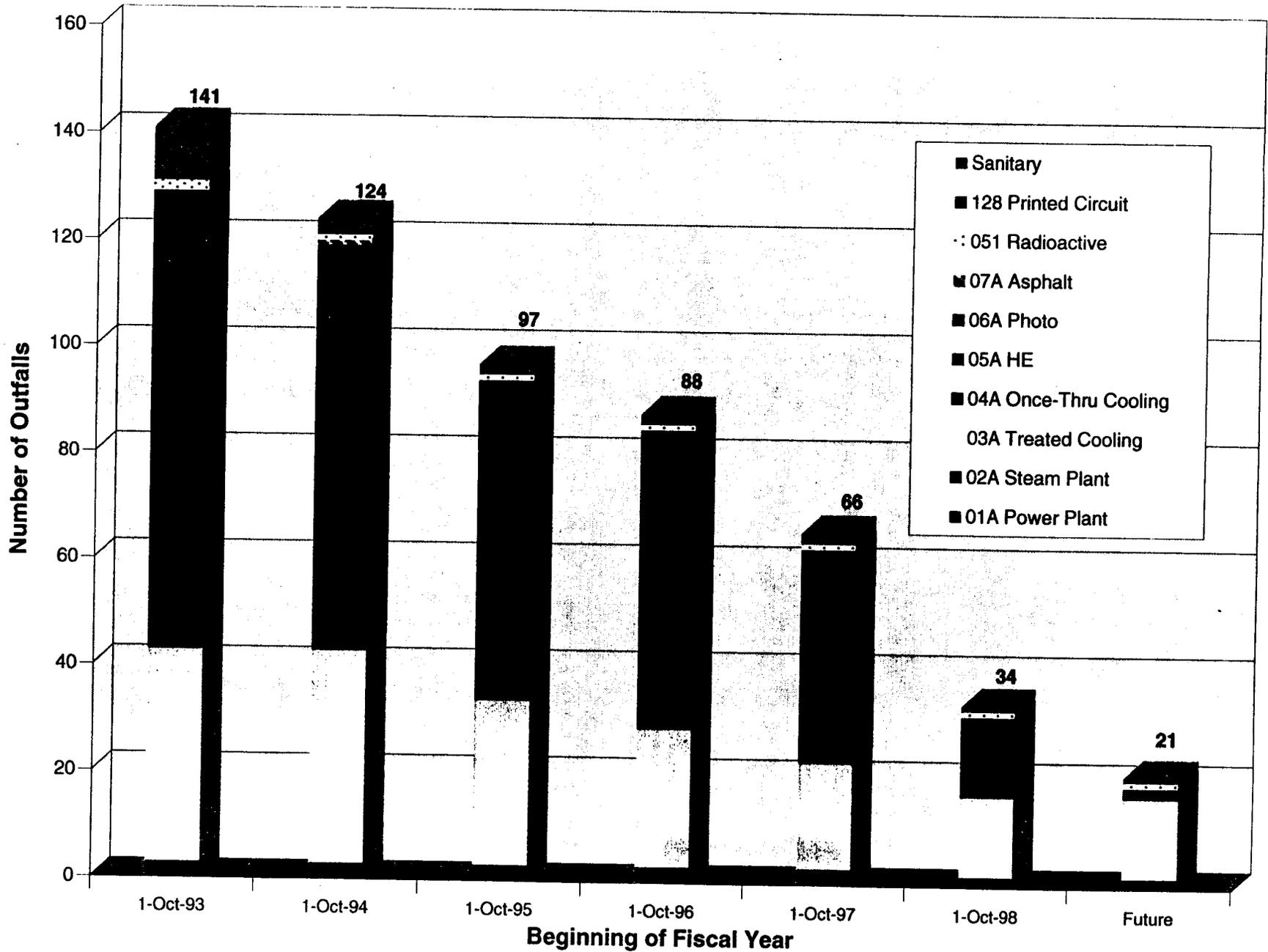
34 Total NPDES Outfalls

* Requested to be deleted from NPDES Permit on September 14, 1998

Los Alamos National Laboratory

NPDES Permit No. NM0028355

NPDES OUTFALL REDUCTION



Los Alamos National Laboratory
NPDES Permit No. NM0028355
NPDES Permit Exceedances and Corrective Actions
January 1, 1998 through March 31, 1999

NPDES Outfall 03A113, TA-53 LEDA Cooling Tower:

The chlorine concentrations exceeded NPDES Permit limits at the TA-53 LEDA Cooling Tower on February 11, 1998. An occurrence investigation was conducted with personnel from the Laboratory's Occurrence Investigation Group (ESH-7), Water Quality and Hydrology Group (ESH-18), TA-53 Facility Management (FM) Office, and the Department of Energy, Los Alamos Area Office (DOE-LAAO). As a result of this incident, a review of the procedures and equipment was performed. The review revealed that the equipment and procedures were not consistent. TA-53 FM personnel updated the operating instructions for all TA-53 cooling towers. Routine inspections are conducted for mechanical deficiencies and corrective actions are implemented upon discovery.

NPDES Outfall 03A158, TA-21, Building 209 Cooling Tower:

The pH concentration exceeded the NPDES Permit limit at the TA-21, Building 209 Cooling Tower on May 28, 1998. A site investigation concluded that the source of the high pH was from a chiller evaporator pan. The water from the evaporator pan was leaking into the flow of the permitted outfall. The local water supply is rich in minerals and has a naturally high pH. The normal pH in the water is approximately 8.6 standard units. The concentration of minerals in the pan increases as the water evaporates, causing elevated pH. Site representatives have developed preventative maintenance procedures for the inspection of chiller evaporator pans. Additionally, the site operators developed a bleed system schedule for the chiller pans to prevent concentrations of minerals.

NPDES Outfall 03A022, TA-3, Building 127:

The Total Suspended Solids (TSS) concentrations exceeded NPDES Permit limits during routine clean-out of a cooling tower at TA-3-127 (03A022) on July 6, 1998. Upon discovery of excessive suspended solids in the compliance sample collected at the outfall, the cleaning operation discharge was shut down. A five-micron bag filter was used to filter out solids from the cleaning operations and the solids were containerized and disposed of through the Laboratory's waste profile form process. Additionally, the Laboratory shut down cleaning of cooling towers activities until the cooling tower operation and maintenance procedures were reviewed and amended to meet the Laboratory Implementation Requirement (LIR) for Heating and Cooling System Maintenance. Restart of cleaning of cooling towers resumed on January 11, 1999. A repeat NPDES compliance sample was collected on July 13, 1998 at Outfall 03A022 which documented that the discharge was compliant with the Laboratory's NPDES Permit.

NPDES Outfall 051, TA-50, Building 1:

The TA-50 Radioactive Liquid Wastewater Treatment Facility (TA-50 RLWTF) exceeded the NPDES limits at NPDES Outfall 051 for Total Suspended Solids (TSS) on December 14, 1998. An occurrence investigation was conducted on January 15, 1999 by the Laboratory's Radioactive Liquid Waste Group (EM-RLW), ESH-18, and DOE-LAAO personnel to discuss the findings and corrective actions. The TSS exceedance occurred during the test phase for the new reverse osmosis and ultra-filtration upgrades to the TA-50 RLWTF. This release was a one-time discharge of approximately 5000 gallons lasting about 25 minutes. Procedures have been implemented to collect future "test water" into 55 gallon containers for disposal at the TA-54 Treatment, Storage, and Disposal (TSD) facility. The TA-50 RLWTF upgrades will help bring the TA-50 RLWTF into compliance with the DOE Derived Concentration Guidelines, New Mexico Ground Water Standards and NPDES Permit limits.

NPDES Outfall 13S, TA-46 Sanitary Wastewater Systems (SWS) Facility:

The TA-46 SWS Facility exceeded the NPDES Permit limit for Biochemical Oxygen Demand (BOD) at NPDES Outfall 13S on December 15, 1998. On January 13, 1999, an occurrence investigation was conducted by the Facilities Group (F-4), Johnson Controls Northern New Mexico (JCNNM), ESH-7, ESH-18, and DOE-LAAO personnel to review the incident. An initial investigation did not identify any unusual or upset conditions. However, it has been documented that there has been an increase in toxicity at the influent to the TA-46 SWS Facility for the past two years. Interim corrective actions include monitoring of the sanitary collection system to identify the source of toxicity. Facility Management will take corrective actions for exceedances of the SWS Waste Acceptance Criteria (SWS-WAC), as necessary. A Laboratory-wide ESH Notice was issued on December 8, 1998, regarding the requirements for discharge to the TA-46 SWS Facility pursuant to LIR 404-00-01.2 Waste Acceptance, Characterization, and Certification Program, and Laboratory Implementing Guidance Document (LIG)404-00-03.0, Waste Profile Form Guidance. Additionally, on February 9-10, 1999, personnel from the New Mexico State University's Water Utility Technical Assistance Program (NMSU-WUTAP) conducted a Wastewater Treatment Facility Evaluation to further investigate the BOD exceedance. NMSU-WUTAP personnel reviewed TA-46 SWS Facility operations, compliance sampling techniques and procedures, and analytical methods. The SWS Facility evaluation report provided by NMSU-WUTAP indicated that the SWS Facility was being properly operated. However, investigation into the MIOX disinfection system was inconclusive and indicated further study may be warranted. Additionally, NMSU-WUTAP personnel made recommendations to improve BOD analytical techniques. JCNNM and ESH-18 are working together to improve analytical techniques for BOD, in accordance with EPA approved methods. Group ESH-18 and JCNNM are collecting monthly operational samples for BOD and submitting them to an outside laboratory for evaluation. JCNNM is also investigating potential BOD impacts from the MIOX disinfection system.

NPDES Outfall 03A113, TA 53, LEDA Cooling Tower:

On January 22, 1999, maintenance work was scheduled at the new LEDA cooling tower at TA-53. A leaking solenoid valve discharged water into the empty basin where the work was to be performed. To avoid delays in the scheduled work, a TA-53 employee drained the water directly to Outfall 03A113. The water by-passed the neutralization process causing a chlorine exceedance. The TA-53 facility was shut down, in part, because of the chlorine exceedances and other ES&H issues. Re-start of all work, including NPDES operation and maintenance activities required review of all Standard Operating Procedures (SOPs), Activity Hazard Analyses (AHA), Hazard Control Plans (HCPs), and training requirements. TA-53 personnel conducting work at the site were required to sign Employee Commitment Forms documenting that they reviewed and understood all applicable procedures and were properly trained to conduct the work. TA-53 Facility Management has authorized re-start of NPDES operations and maintenance activities on cooling towers at TA-53.

NPDES Outfall 051, TA-50 Building 1:

TA-50 RLWTF exceeded the NPDES loading limits at NPDES Outfall 051 for TSS on March 15 and 29, 1999. On April 6, 1999, an occurrence investigation was conducted by ESH-7, ESH-18, EM-RLW, and DOE-LAAO personnel to discuss the findings and corrective actions. The occurrence investigation is still on going. Operational samples collected at the facility prior to release of the non-compliant discharge were below effluent limits prior to discharge. Facility operators have relocated the operational sampling point to the effluent tank(s). Operational samples are collected from the effluent tanks prior to discharge. Water in the effluent tank that exceeds NPDES Permit limits is re-circulated through the treatment facility.

Additional corrective actions for NPDES effluent exceedances:

- (1) ESH-18 prepared a letter to Laboratory management regarding the NPDES exceedances on February 25, 1999. As a result, ESH-18 was requested to provide a briefing regarding recent effluent exceedances and TA-46 SWS influent toxicity to the Laboratory's Operation Working Group (OWG), comprised of Laboratory Division Directors. ESH-18 will provide recommendations to the OWG regarding corrective actions to mitigate future effluent exceedances. Additional corrective actions may be assigned to ESH-18 and respective operating groups by the OWG.
- (2) The Laboratory's Utilities and Infrastructure Group (F-4) and ESH-18 have drafted the Waste Acceptance Criteria (WAC) Implementation Plan (Document: PLAN-WASTEMGMT-002, R-2) for the TA-46 SWS Facility. The Implementation Plan was finalized on April 30, 1999. The Implementation Plan has been published on the Laboratory's Environmental Management WAC web site. ESH-18 is revising the Laboratory's sanitary signs to be placed on all sanitary sinks and drains. The new sanitary signs along with guidance document will be distributed to Master Management for implementation.

- (3) ESH-18 is developing training information regarding the waste acceptance criteria for the TA-46 SWS Facility and TA-50 RLWTF. WAC training will be provided by ESH-18, F-4, JCNNM, and TA-50 EM-RLW personnel to the Laboratory's waste management coordinators during their quarterly meeting(s). ESH-18 will provide monthly NPDES Effluent Limit Exceedance Reports to Laboratory Managers and DOE-LAAO.
- (4) ESH-18 is coordinating with ESA-FM regarding the development of the WAC Implementation Plan for the TA-16 High Explosives Wastewater Treatment Facility (HEWTF). The HEWTF's Implementation Plan should be completed in FY 99.

Miscellaneous:

- (1) On August 5, 1998, Administrative Order Docket No. VI-96-1236 and Federal Facilities Compliance Agreement Docket No. VI-96-1237 were closed out by EPA.
- (2) The current NPDES Permit expired at midnight on October 31, 1998. On May 4, 1998, the Laboratory completed and submitted the Laboratory's NPDES Permit Re-Application to EPA for the 33 outfalls expected to remain the NPDES Permit. The re-application was submitted to the EPA 180 days prior to the permit expiration, as required. On August 31, 1998, the Laboratory received written notification from EPA that the application had been reviewed and determined to be administratively complete. The Laboratory's NPDES Permit has been administratively continued until the new permit is issued by EPA pursuant to 40 CFR 122.6.
- (3) In November, 1997, the U. S. Fish and Wildlife (USF&W) Service completed the field portion of the Use Study as required by the 1993 Settlement Agreement between the NMED, DOE and LANL resulting from the Laboratory's appeal of the NMED's certification of the Laboratory's draft NPDES Permit. A final Use Study report is expected to be issued by the USF&W Service in late 1999.
- (4) TA-53, Cooling Tower 62, NPDES Outfall 03A048: On July 14, 1998, the Laboratory submitted a Notice of Changed Condition regarding the operations and treatment for arsenic problems at TA-53 Cooling Towers 62 (Outfall 03A048) and 64 (Outfall 03A049). It was estimated that Cooling Tower 62 would be replaced by the summer of 1999. Please note, that it is estimated that Cooling Tower 62 will not be replaced until June 2000. Formal notification will be provided to EPA.

**NPDES INDUSTRIAL WASTE DEVIATIONS
1999**

<u>DATE</u>	<u>TECH AREA</u>	<u>EPA ID</u>	<u>PARAMETER</u>	<u>RESULTS/LIMITS</u>	<u>UNITS</u>
January					
1/22/99	TA-53-952 (LEDA)	03A113	Cl ₂ (daily max.)	6.1/0.5	mg/l
11/1/98 – 11/31/99			(daily avg.)	3.1/0.2	mg/l
February					
No exceedances during monitoring period.					
March					
3/15/99	TA-50-1	051	TSS (daily max.)	78.3/62.6	lb/day
3/29/99	TA-50-1	051	TSS (daily max.)	81.2/62.6	lb/day
3/1/99-3/31/99	TA-50-1	051	TSS (daily avg.)	33.0/18.8	lb/day

**NPDES DOMESTIC WASTE DEVIATIONS
1999**

<u>DATE</u>	<u>TECH AREA</u>	<u>EPA ID</u>	<u>PARAMETER</u>	<u>RESULTS/LIMITS</u>	<u>UNITS</u>
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January
No exceedances during monitoring period.

February
No exceedances during monitoring period.

March
No exceedances during monitoring period.

1999 Domestic NPDES Permit Exceedances through March 1999 =0

**NPDES INDUSTRIAL WASTE DEVIATIONS
1998**

<u>DATE</u>	<u>TECH AREA</u>	<u>EPA ID</u>	<u>PARAMETER</u>	<u>RESULTS/LIMITS</u>	<u>UNITS</u>
January (75 analyses performed)* No exceedances during monitoring period.					
February (92 analyses performed)*					
2/11/98	TA-53-293,294,1032	03A113	Cl ₂ (daily max.)	4.1/0.5	mg/l
2/1/98 - 4/30/98			(daily avg.)	2.1/0.2	mg/l
March (88 analyses performed)* No exceedances during monitoring period.					
April (81 analyses performed)* No exceedances during monitoring period.					
May (77 analyses performed)*					
5/28/98	TA-21-209	03A158	pH (max.)	9.1/9.0	s.u.
June (100 analyses performed)* No exceedances during monitoring period.					
July (85 analyses performed)*					
7/6/98	TA-03-127	03A022	TSS (daily max.)	219.3/100	mg/l
5/1/98 - 7/31/98			(daily avg.)	75/30	mg/l
August (83 analyses performed)* No exceedances during monitoring period.					
September (85 analyses performed)* No exceedances during monitoring period.					
October (97 analyses performed)* No exceedances during monitoring period.					
November (85 analyses performed)* No exceedances during monitoring period.					
December (67 analyses performed)*					
12/14/98	TA-50-1	051	TSS (daily max.)	106.2/62.6	mg/l
			(daily avg.)	32.3/18.8	mg/l

1998 Industrial NPDES Permit Exceedances =7

*Total of 1015 analyses (industrial) performed. Does not include WQP analyses.

**NPDES DOMESTIC WASTE DEVIATIONS
1998**

<u>DATE</u>	<u>TECH AREA</u>	<u>EPA ID</u>	<u>PARAMETER</u>	<u>RESULTS/LIMITS</u>	<u>UNITS</u>
January (13 analyses performed)* No exceedances during monitoring period.					
February (13 analyses performed)* No exceedances during monitoring period.					
March (13 analyses performed)* No exceedances during monitoring period.					
April (14 analyses performed)* No exceedances during monitoring period.					
May (13 analyses performed)* No exceedances during monitoring period.					
June (13 analyses performed)* No exceedances during monitoring period.					
July (14 analyses performed)* No exceedances during monitoring period.					
August (13 analyses performed)* No exceedances during monitoring period.					
September (14 analyses performed)* No exceedances during monitoring period.					
October (13 analyses performed)* No exceedances during monitoring period.					
November (14 analyses performed)* No exceedances during monitoring period.					
December (14 analyses performed)* 12/15/98	TA-46	13S	BOD (daily max.)	48.2/45	mg/l

1998 Domestic NPDES Permit Exceedances=1

Total of 161 analyses performed in 1998.

*This number does not include WQP analyses

**NPDES INDUSTRIAL WASTE DEVIATIONS
1998**

<u>DATE</u>	<u>TECH AREA</u>	<u>EPA ID</u>	<u>PARAMETER</u>	<u>RESULTS/LIMITS</u>	<u>UNITS</u>
January (75 analyses performed)* No exceedances during monitoring period.					
February (92 analyses performed)*					
2/11/98	TA-53-293,294,1032	03A113	Cl ₂ (daily max.)	4.1/0.5	mg/l
2/1/98 – 4/30/98			(daily avg.)	2.1/0.2	mg/l
March (88 analyses performed)* No exceedances during monitoring period.					
April (81 analyses performed)* No exceedances during monitoring period.					
May (77 analyses performed)*					
5/28/98	TA-21-209	03A158	pH (max.)	9.1/9.0	s.u.
June (100 analyses performed)* No exceedances during monitoring period.					
July (85 analyses performed)*					
7/6/98	TA-03-127	03A022	TSS (daily max.)	219.3/100	mg/l
5/1/98 – 7/31/98			(daily avg.)	75/30	mg/l
August (83 analyses performed)* No exceedances during monitoring period.					
September (85 analyses performed)* No exceedances during monitoring period.					
October (97 analyses performed)* No exceedances during monitoring period.					
November (85 analyses performed)* No exceedances during monitoring period.					
December (67 analyses performed)*					
12/14/98	TA-50-1	051	TSS (daily max.)	106.2/62.6	mg/l
			(daily avg.)	32.3/18.8	mg/l

1998 Industrial NPDES Permit Exceedances =7

*Total of 1015 analyses (industrial) performed. Does not include WQP analyses.

**NPDES DOMESTIC WASTE DEVIATIONS
1998**

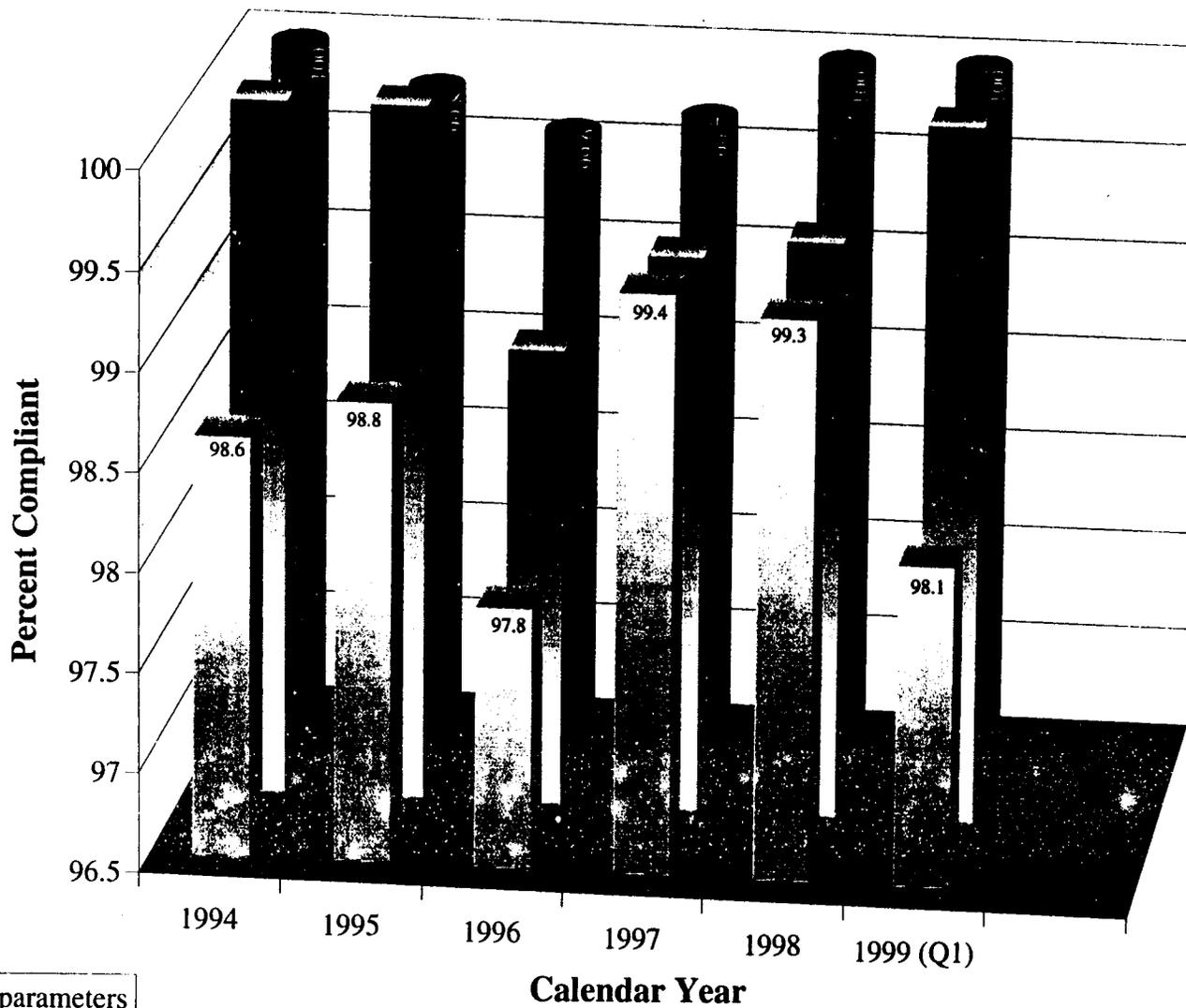
<u>DATE</u>	<u>TECH AREA</u>	<u>EPA ID</u>	<u>PARAMETER</u>	<u>RESULTS/LIMITS</u>	<u>UNITS</u>
January (13 analyses performed)* No exceedances during monitoring period.					
February (13 analyses performed)* No exceedances during monitoring period.					
March (13 analyses performed)* No exceedances during monitoring period.					
April (14 analyses performed)* No exceedances during monitoring period.					
May (13 analyses performed)* No exceedances during monitoring period.					
June (13 analyses performed)* No exceedances during monitoring period.					
July (14 analyses performed)* No exceedances during monitoring period.					
August (13 analyses performed)* No exceedances during monitoring period.					
September (14 analyses performed)* No exceedances during monitoring period.					
October (13 analyses performed)* No exceedances during monitoring period.					
November (14 analyses performed)* No exceedances during monitoring period.					
December (14 analyses performed)* 12/15/98	TA-46	13S	BOD (daily max.)	48.2/45	mg/l

1998 Domestic NPDES Permit Exceedances=1

Total of 161 analyses performed in 1998.

*This number does not include WQP analyses

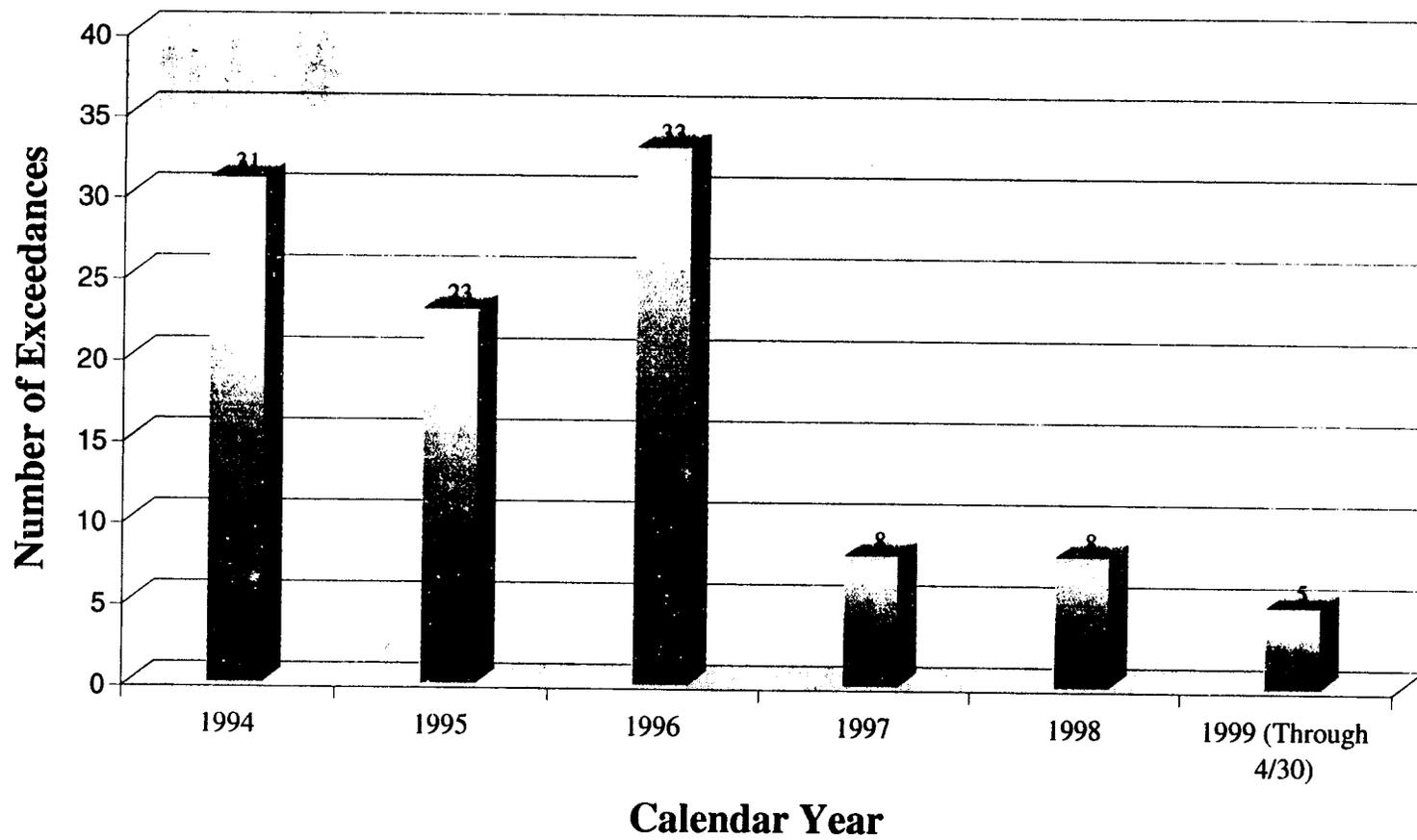
**LOS ALAMOS NATIONAL LABORATORY
 NPDES Permit No. NM0028355
 Percent Compliance**



- Industrial NPDES parameters
- Sanitary NPDES parameters
- WQ parameters (Ind.+San.)

**LOS ALAMOS NATIONAL LABORATORY
NPDES Permit No. NM0028355**

NPDES PERMIT EXCEEDANCES



Mr. G. J.
cc NPDES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

MAY 28 1999

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (P 110 335 995)

Mr. Steve Rae, Group Leader
Water Quality and Hydrology Group
Los Alamos National Laboratory
P.O. Box 1663, Mail Stop K497
Los Alamos, NM 87545

Re: Monthly Dioxin Monitoring
NPDES Permit No. NM0028355

Dear Mr. Rae:

I met with Mike Saladen and others of your staff on May 5, 1999. We discussed, among many items, the Dioxin Monitoring that Los Alamos National Laboratory has been performing at Outfall 051 under the Total Toxic Organic (TTO) requirements in the Laboratory's NPDES Permit No. NM0028355. We concluded that continued Dioxin Monitoring at Outfall 051 is not required. This decision is based on the data accumulated, chemical inventory at the lab, and the language in 40 CFR 433.12. I requested that Mr. Saladen produce and include in his files and ours, a TTO certification statement to the effect that Dioxin is not present and would not be expected to be present.

This has been reviewed and discussed for two years with the lab, I am pleased that it is finally resolved. Please call if there are any comments or questions at (214) 665-8060.

Sincerely,

Everett H. Spencer
Environmental Scientist
Water Enforcement Branch

cc: Dr. Jim Davis
Bureau Chief
Surface Water Quality Bureau
New Mexico Environment Department

Mr. Mike Saladen
Water Quality and Hydrology Group
Los Alamos National Laboratory
P.O. Box 1663, Mail Stop K497
Los Alamos, NM 87545

Mr. Joe Vozella
Department Of Energy
Los Alamos Area Operations
MS A316
Los Alamos, NM 87544

Ms. Karen Azogino
Department Of Energy-Area Legal
P.O. Box 5400
Albuquerque, NM 87185-5400

Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

Date: June 8, 1999
In Reply Refer To: ESH-18/WQ&H:99-0214
Mail Stop: K497
Telephone: (505) 665-1859

Mr. Everett Spencer
Environmental Specialist
Water Enforcement Branch (6W-EN)
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

SUBJECT: ELIMINATION OF DIOXIN (2,3,7,8- TETRACHLORODIBENZO-P-DIOXIN) FROM THE NPDES PERMIT MONITORING REQUIREMENTS, OUTFALL 051, NPDES PERMIT NO. NM0028355

Dear Mr. Spencer:

On May 5, 1999, representatives from Los Alamos National Laboratory (the Laboratory) and the U. S. Department of Energy, Albuquerque Area Office (DOE/AL) met with you and Mr. Scott Wilson of your office. During this meeting, we discussed eliminating the dioxin (2,3,7,8-Tetrachlorodibenzo-p-dioxin) monitoring requirement at the Laboratory's TA-50 Radioactive Liquid Waste Treatment Facility (TA-50 RLWTF), NPDES Outfall 051. Dioxin is one of the 111 constituents of the Total Toxic Organics (TTO) test that is sampled for monthly at NPDES Outfall 051.

On May 28, 1999, you sent a letter concluding that dioxin monitoring would no longer be required at NPDES Outfall 051. This decision was based on historical analytical data for dioxin, the chemical inventory at the Laboratory, and the language in 40 CFR 433.12. In addition, EPA required that the Laboratory submit a certification letter stating that dioxin is not present and would not be expected at NPDES Outfall 051.

Per your request, I have enclosed a table summarizing the analytical results for dioxin since the issuance of the Laboratory's NPDES Permit in August, 1994. Dioxin has not been detected in any of the samples collected. In addition, dioxin is not listed on the Laboratory's Chemical Inventory List, and therefore, to the best of my knowledge and belief, dioxin is not available at the Laboratory or present in the TA-50 RLWTF effluent.

Thank you for your review and concurrence in the deletion of the dioxin monitoring requirement from the Laboratory's NPDES Permit for NPDES Outfall 051. Please contact me at (505) 665-1859 or Mike Saladen at (505) 665-6085, if additional information would be helpful.

Sincerely,



Steven R. Rae
Group Leader
Water Quality and Hydrology Group

June 8, 1999

SR:MS/mm

Enclosure: a/s

Cy: C. Ritchey, USEPA, Region VI, Dallas, Texas, w/enc.
D. Gamble, USEPA, Region VI, Dallas, Texas, w/enc.
S. Wilson, USEPA, Region VI, Dallas, Texas, w/enc.
J. Davis, NMED-SWQB, Santa Fe, New Mexico, w/enc.
K. Agogino DOE/AL, w/enc., MS A316
J. Vozella, DOE/LAAO, w/enc., MS A316
B. Enz, DOE/LAAO, w/enc., MS A316
D. Erickson, ESH-DO, w/enc., MS K491
M. Saladen, ESH-18, w/enc., MS K497
T. Sandoval, ESH-18, w/enc., MS K497
C. Jacquez, ESH-18, w/enc., MS K497
M. Bailey, ESH-18, w/enc., MS K497
S. Hanson, EM-RLW, w/enc., MS E518
WQ&H File, w/enc., MS K497
CIC-10, w/enc., MS A150

LOS ALAMOS NATIONAL LABORATORY

**SUMMARY OF DIOXIN (2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN) RESULTS
FOR OUTFALL 051, NPDES PERMIT NO. NM0028355
August 1, 1994 to May 31, 1999**

MONTH/YEAR SAMPLED	DIOXIN RESULT	COMMENTS
8/94	< 2.0 ug/l	
9/94	< 2.0 ug/l	QA/QC Report Unavailable
10/94	Unknown	QA/QC Report Unavailable
11/94	Not detected	Not Available, No QA/QC
12/94	< 2 ng/l	Screen only performed, No QA/QC
1/95	< 2 ng/l	
2/95	< 1 ng/l	
3/95	< 1 ng/l	
4/95	< 2 ng/l	
5/95	< 2 ng/l	
6/95	< 2 ng/l	
7/95	< 2 ng/l	
8/95	< 2 ng/l	
9/95	< 1.905 ng/l	Problems with Analysis
10/95	< 2 ng/l	
11/95	< 2 ng/l	
12/95	< 2 ng/l	
1/96	< 2 ng/l	
2/96	< 1 ng/l	
3/96	< 1 ng/l	
4/96	< 2 ng/l	
5/96	< 2 ng/l	
6/96	< 2 ng/l	
7/96	< 2 ng/l	
8/96	< 2 ng/l	
9/96	< 2 ng/l	
10/96	< 2 ng/l	
11/96	< 2 ng/l	
12/96	< 2 ng/l	
1/97	< 2 ng/l	
2/97	< 2 ng/l	
3/97	< 2 ng/l	
4/97	< 2 ng/l	
5/97	< 2 ng/l	
6/97	< 2 ng/l	
7/97	< 2 ng/l	
8/97	< 2 ng/l	
9/97	< 1 ng/l	
10/97	< 1 ng/l	
11/97	< 1 ng/l	
12/97	< 1 ng/l	
1/98	< 1 ng/l	
2/98	Unknown	Analysis Failed
3/98	< 2 ng/l	
4/98	< 2 ng/l	
5/98	< 2 ng/l	
6/98	< 1 ng/l	
7/98	< 1 ng/l	
8/98	< 2 ng/l	
9/98	<10 ng/l	
10/98	<0.06 ng/l	
11/98	<1.75 ng/l	
12/98	<0.1 pg/l	
1/99	<0.2 pg/l	
2/99	<0.6 pg/l	
3/99	<0.7 pg/l	
4/99	<0.6 pg/l	