



United States Environmental Protection Agency
Washington, D. C. 20460

NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code 11 25 3 1100018355 11 12 7 0 4 2 3 17 Inspection Type 18 Inspector 19 R Fac Type 20 4

Remarks

Reserved Facility Evaluation Rating BI QA Reserved
67 69 70 3 71 W 72 N 73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected
Los Alamos National Laboratory
Los Alamos Area Office
Los Alamos NM 87544
Entry Time ☒ AM ☐ PM
8:00 4/23
Exit Time/Date
2:30 PM 4/24
Permit Effective Date
3/1/86
Permit Expiration Date
3/1/91
Name(s) of On-Site Representative(s)
Jim Phoenix
Charles Rylander
Title(s)
Chief - Technical Program Branch
LANL - Section Leader Regulatory Compliance
Phone No(s)
505-667-9288
505-665-0453
Name, Address of Responsible Official
Department of Energy
Los Alamos Area Office
Los Alamos NM 87544
Title
Harold Valencia - Area Manager
Phone No.
(505) 667-5105
Contacted
☐ Yes ☒ No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

| | | | |
|-------------------------------|------------------------------------|----------------------------------|-----------------------------------|
| <u>U</u> Permit | <u>S</u> Flow Measurement | <u>N</u> Pretreatment | <u>S</u> Operations & Maintenance |
| <u>S</u> Records/Reports | <u>S</u> Laboratory | <u>S</u> Compliance Schedules | <u>M</u> Sludge Disposal |
| <u>S</u> Facility Site Review | <u>S</u> Effluent/Receiving Waters | <u>S</u> Self-Monitoring Program | Other: |

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

Name(s) and Signature(s) of Inspector(s)
DELLA OTEIZA
Della Oteiza
Agency/Office/Telephone
EPA 6E-SC (214) 655-6446
Date
4/23-24/87

Signature of Reviewer
Charles Faultry
Agency/Office
EPA 6E-SC
Date
5-6-87

Action Taken
Regulatory Office Use Only
Date
Compliance Status
☐ Noncompliance
☐ Compliance



Sections F thru L: Complete on all inspections, as appropriate. N/A = Not Applicable

PERMIT NO.

NM0022355

SECTION F - Facility and Permit Background

ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY
(Including City, County and ZIP code)

DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE

FINDINGS

3/10/86
Laboratory, effluent/receiving
waters and self-monitoring
program, were found unsatisfactory.

SECTION G - Records and Reports

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.

☒ YES ☐ NO ☐ N/A (Further explanation attached _____)

DETAILS:

(a) ADEQUATE RECORDS MAINTAINED OF:

(i) SAMPLING DATE, TIME, EXACT LOCATION

☒ YES ☐ NO ☐ N/A

(ii) ANALYSES DATES, TIMES

☒ YES ☐ NO ☐ N/A

(iii) INDIVIDUAL PERFORMING ANALYSIS

☒ YES ☐ NO ☐ N/A

(iv) ANALYTICAL METHODS/TECHNIQUES USED

☒ YES ☐ NO ☐ N/A

(v) ANALYTICAL RESULTS (e.g., consistent with self-monitoring report data)

☒ YES ☐ NO ☐ N/A

(b) MONITORING RECORDS (e.g., flow, pH, D.O., etc.) MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g., continuous monitoring instrumentation, calibration and maintenance records).

☒ YES ☐ NO ☐ N/A

(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT.

☒ YES ☐ NO ☐ N/A

(d) FACILITY OPERATING RECORDS KEPT INCLUDING OPERATING LOGS FOR EACH TREATMENT UNIT.

☒ YES ☐ NO ☐ N/A

(e) QUALITY ASSURANCE RECORDS KEPT.

☒ YES ☐ NO ☐ N/A

(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES (and their compliance status) USING PUBLICLY OWNED TREATMENT WORKS.

☐ YES ☐ NO ☒ N/A

SECTION H - Permit Verification

INSPECTION OBSERVATIONS VERIFY THE PERMIT.

☐ YES ☒ NO ☐ N/A (Further explanation attached yes)

DETAILS:

(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE.

☒ YES ☐ NO ☐ N/A

(b) FACILITY IS AS DESCRIBED IN PERMIT APPLICATION.

☒ YES ☐ NO ☐ N/A

(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION.

☒ YES ☐ NO ☐ N/A

(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION.

☒ YES ☐ NO ☐ N/A

(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES.

☐ YES ☒ NO ☐ N/A

(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED.

☐ YES ☐ NO ☒ N/A

(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT.

☒ YES ☐ NO ☐ N/A

(h) CORRECT NAME AND LOCATION OF RECEIVING WATERS.

☒ YES ☐ NO ☐ N/A

(i) ALL DISCHARGES ARE PERMITTED.

☒ YES ☐ NO ☐ N/A

SECTION I - Operation and Maintenance

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.

☒ YES ☐ NO ☐ N/A (Further explanation attached yes)

DETAILS:

(a) STANDBY POWER PROVIDED FOR EMERGENCY PROVISIONS PROVIDED.

☒ YES ☐ NO ☐ N/A

(b) ADEQUATE ALARM SYSTEM FOR EQUIPMENT FAILURES AVAILABLE.

☒ YES ☐ NO ☐ N/A

(c) REPORTS ON/ALTS SENT TO EPA/STATE AS REQUIRED BY PERMIT.

☐ YES ☐ NO ☒ N/A

(d) SLUDGES AND SOLIDS HANDLED. except at OLS

☒ YES ☐ NO ☐ N/A

(e) ALL TREATMENT UNITS

☒ YES ☐ NO ☐ N/A

(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS.

☒ YES ☐ NO ☐ N/A

(g) QUALIFIED OPERATING STAFF PROVIDED.

☒ YES ☐ NO ☐ N/A

(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS.

☒ YES ☐ NO ☐ N/A

(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS.

☒ YES ☐ NO ☐ N/A

(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT.

☒ YES ☐ NO ☐ N/A

(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED.

☒ YES ☐ NO ☐ N/A

(l) SPCC PLAN AVAILABLE.

☒ YES ☐ NO ☐ N/A

(m) REGULATORY AGENCY NOTIFIED OF BY PASSING. (Dates _____)

☐ YES ☐ NO ☒ N/A

(n) ANY BY-PASSING SINCE LAST INSPECTION.

☐ YES ☒ NO ☐ N/A

(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED.

☐ YES ☒ NO ☐ N/A

PERMIT NO.

NM0028355

SECTION J - Compliance Schedules

PERMITTEE IS MEETING COMPLIANCE SCHEDULE.

☒ YES ☐ NO ☐ N/A (Further explanation attached _____)

CHECK APPROPRIATE BOXES:

- ☐ (a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.
- ☐ (b) PROPER ARRANGEMENTS HAVE BEEN MADE FOR FINANCING (mortgage commitments, grants, etc.).
- ☐ (c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.
- ☐ (d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED.
- ☐ (e) CONSTRUCTION HAS COMMENCED.
- ☐ (f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.
- ☐ (g) CONSTRUCTION HAS BEEN COMPLETED.
- ☐ (h) START-UP HAS COMMENCED.
- ☐ (i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME.

Facility is in
compliance with the
Federal Facilities
Compliance Agreement
attached as a copy of latest
facility progress report.

SECTION K - Self-Monitoring Program

Part 1 - Flow measurement (Further explanation attached _____)

PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.

☒ YES ☐ NO ☐ N/A

DETAILS:

- (a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED. ☒ YES ☐ NO ☐ N/A
- TYPE OF DEVICE: ☒ WATER METER ☐ OR ☐ OTHER
- (b) CALIBRATION FREQUENCY ADEQUATE. ☒ YES ☐ NO ☐ N/A
- (c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED. ☒ YES ☐ NO ☐ N/A
- (d) SECONDARY INSTRUMENTS (WEIGHING SCALE, ETC.) PROPERLY OPERATED AND MAINTAINED. ☒ YES ☐ NO ☐ N/A
- (e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES. ☒ YES ☐ NO ☐ N/A

Part 2 - Sampling (Further explanation attached _____)

PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.

☒ YES ☐ NO ☐ N/A

DETAILS:

- (a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLING. ☒ YES ☐ NO ☐ N/A
- (b) PARAMETERS AND SAMPLING FREQUENCY ADEQUATE. ☒ YES ☐ NO ☐ N/A
- (c) PERMITTEE TRAINED PERSONNEL. ☒ YES ☐ NO ☐ N/A
- IF NO, ☐ UNABLE TO OBTAIN TRAINED PERSONNEL.
- (d) SAMPLE COLLECTION PROCEDURES ADEQUATE. ☒ YES ☐ NO ☐ N/A
- (I) SAMPLE PRESERVATION. ☒ YES ☐ NO ☐ N/A
- (II) SAMPLE STORAGE. ☒ YES ☐ NO ☐ N/A
- (III) FLOW PROXY MEASUREMENT. ☒ YES ☐ NO ☐ N/A
- (IV) SAMPLE ANALYSIS. ☒ YES ☐ NO ☐ N/A
- (e) MONITORING PROGRAM. ☒ YES ☐ NO ☐ N/A
- (f) IF (a) IS YES, ☒ YES ☐ NO ☐ N/A

Part 3 - Laboratory

PERMITTEE MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.

☒ YES ☐ NO ☐ N/A

DETAILS:

- (a) EPA APPROVED. ☒ YES ☐ NO ☐ N/A
- (b) IF ALTERNATE, ☒ YES ☐ NO ☐ N/A
- (c) PARAMETERS. ☒ YES ☐ NO ☐ N/A
- (d) SATISFACTORY. ☒ YES ☐ NO ☐ N/A
- (e) QUALITY CONTROL PROCEDURES USED. ☒ YES ☐ NO ☐ N/A
- (f) DUPLICATE SAMPLES ARE ANALYZED. ☒ YES ☐ NO ☐ N/A
- (g) SPIKED SAMPLES ARE USED. ☒ YES ☐ NO ☐ N/A
- (h) COMMERCIAL LABORATORY USED. ☒ YES ☐ NO ☐ N/A
- (i) COMMERCIAL LABORATORY STATE CERTIFIED. ☒ YES ☐ NO ☒ N/A

LAB NAME _____

LAB ADDRESS _____

PERMIT NO.
NA28355

SECTION L Effluent/Receiving Water Observations (Further explanation attached _____)

| OUTFALL NO. | OIL SHEEN | GREASE | TURBIDITY | VISIBLE FOAM | VISIBLE FLOAT SOL | COLOR | OTHER |
|--|-----------|--------|-----------|--------------|-------------------|-------|-------|
| During the inspection 23 outfalls were visited - no problems were observed | | | | | | | |
| Those outfalls that were discharging effluent were clear, with no oil sheen, turbidity, grease or visible solids observed. | | | | | | | |

(Sections M and N: Complete as appropriate for each type of sampling)

SECTION M: Sampling Inspection Procedures and Observations (Further explanation attached _____)

- ☐ GRAB SAMPLES OBTAINED
- ☐ COMPOSITE OBTAINED
- ☐ FLOW PROPORTIONED SAMPLE
- ☐ AUTOMATIC SAMPLER USED
- ☐ SAMPLE SPLIT WITH PERMITS
- ☐ CHAIN OF CUSTODY EMPLOYED
- ☐ SAMPLE OBTAINED FROM PORTABLE SAMPLING DEVICE

COMPOSITING FREQUENCY _____

SAMPLE REFRIGERATED DURING STORAGE ☐ YES ☐ NO

SAMPLE REPRESENTATIVE OF FLOW ☐ YES ☐ NO

SECTION N: Analytical Results (Further explanation attached _____)

Laboratory results for the last EPA inspection are attached.

Overall, the effluent quality is good and meets the permit requirements.

Page 1 of 1

Date 4/23-24/87

Permit No. NA0023355

NPDES Compliance Inspection Report
Further Explanations

Page 2 of 4

Section H Part (a)

Detail _____

Attachment (1) i.e., explain why section (a) has been checked no. Facility is in the process of correcting and controlling the described problems.

Page 2 of 4

Section I Part (d)

Detail _____

During the inspection at abt/fall OIS (Sanitary) sludge was found stockpiled by drying beds. Sludge was removed from the grounds the same day and disposed appropriately. It is noted in this report to prevent in the future the same procedure of stockpiling sludge by the permittee.

Page _____ of 4

Section _____ Part _____

Detail _____



Post Office Box 968
Santa Fe, New Mexico 87504-0968
ENVIRONMENTAL IMPROVEMENT DIVISION

GARREY CARRUTHERS
Governor
LARRY GORDON
Secretary
CARLA L. MUTH
Deputy Secretary

April 7, 1987

Mr. Harold E. Valencia
Area Manager
DOE/Albuquerque Operations
Los Alamos Area Office
Los Alamos, New Mexico 87544



RE: National Pollutant Discharge Elimination System (NPDES) Permit NM0028355

Dear Mr. Valencia

I have received a copy of your March 12, 1987 letter to Michael Burkhart discussing your surface impoundment at Technical Area 16 (TA-16) and the discharge of barium from the NPDES outfall. Your letter states you treated the liquid to remove the barium and then discharged the effluent. Your letter further states that samples of the effluent indicate barium levels exceeding 100 mg/l. Your NPDES application dated April 7, 1986 stated no barium was expected to be found in the discharge.

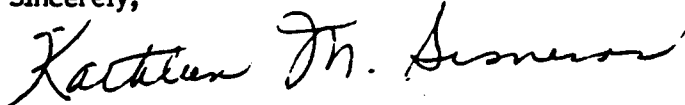
40 CFR 122.41(l)(8) states: "Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information." Our files do not contain a copy of such a notification. Please provide us with a copy of any related correspondence to the U.S. Environmental Protection Agency (EPA) you may have sent concerning the barium discharge.

Your letter also states that you have begun design work on an accumulation tank which would provide the ability to treat the effluent prior to the discharge. Part II, Section D.1.(a) and (b) contains requirements for reporting notification of planned changes. Part II, Section D.1.(b) specifically states notification is required when the alteration or addition could significantly change the nature [emphasis added] or increase the quantity of pollutants discharged." The notification requirement is applicable to pollutants which are not covered by effluent limitations in the permit. Be aware of this requirement and please notify EPA when your design work is complete. The language in the permit actually states "the permittee shall give notice to the Director as soon as possible . . ." Please send copies of any correspondence concerning this subject to Glenn Saums of my staff. If you have similar conditions

Mr. Harold E. Valencia
April 7, 1987
Page 2

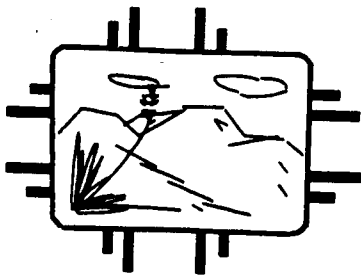
or instances of discharges of pollutants from other outfalls which may require notification to EPA, please notify EPA as soon as possible and send copies of that correspondence also to Mr. Saums.

Sincerely,



Kathleen M. Sisneros
Chief
Surface Water Quality Bureau

cc: Kirkland Jones, Assistant Director
Richard Mitzelfelt/Kelly Crossman/GWHWB
Roger Hartung, EPA, Enforcement
Jack Ferguson, EPA, NPDES Permitting
Susan Stark, EPA, 6H-HS



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

RECEIVED

APR 07 1987

Post Office Box 968
Santa Fe, New Mexico 87504-0968

6W-LR HAZARDOUS WASTE SECTION
(505) 827-2929

Garrey Carruthers
Governor
Mark
Garry Gordon
Secretary
S. Fe.
Carla L. Muth
Deputy Secretary

Bob.
Discuss the
w/ Susan
before
trip to
4/15

Jimmy,
Looks
Important

Per
4/13

March 31, 1987

Ms. Susan Stark
U.S. EPA (6H-HS)
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Ms. ^{Susan}Stark:

The fifth paragraph of the attached DOE letter of March 12, 1987, claims an exclusion from RCRA for some Los Alamos National Laboratory treatment units which may be subject to NPDES permits under the Clean Water Act (CWA). We believe that the treatment units are subject to RCRA and ask your assistance in verifying our reasoning.

40 CFR 261.4 (a) (2) "comment" states that the NPDES exclusion does not include collection, storage or treatment prior to NPDES discharge.

40 CFR 264.1 (g) (6) excludes owners/operators of wastewater treatment units from RCRA Subpart A.

40 CFR 260.10 defines a wastewater treatment unit as part of a wastewater treatment facility which is subject to Section 402 of the CWA.

40 CFR 122.2 defines a facility as an NPDES point source or activity which is subject to regulation under the NPDES program.

40 CFR 122.41 (e) requires an NPDES permittee to properly operate and maintain facilities of treatment and control which are installed or used to achieve compliance with an NPDES permit.

There are no standards or requirements in 40 CFR 122 which apply to collection, storage or treatment of wastewaters prior to the NPDES discharge, except 122.45 (h)(1) and (2) requirements for internal waste streams.

The CWA does not define wastewater treatment facility under Title IV, Permits and Licenses. "Treatment Works" are defined under Title II, Section 212. (2) (A). Title IV Section 402. (a) (1) states that permits may be issued for the discharge of pollutants. Title III Section 306 (b) requires standards of performance for new sources.

Susan Stark
March 31, 1987
page 2

RCRA Sections 1003.(a) (4) and (5) state national policy for safe and proper management of hazardous wastes. Section 1004.(27) defines solid wastes and excludes solid or dissolved materials in discharges which are subject to Section 402 of the CWA. Section 1006 specifically allows the integration of RCRA and CWA as long as the requirements of the CWA are not compromised.

We have concluded that if a wastewater treatment unit is fully described and regulated under 40 CFR 122 (NPDES) then it should be excluded from RCRA. Further, if it is not identified and regulated under NPDES, then it is so under RCRA.

DOE's NPDES Permit Application of April 7, 1986, indicates no barium or nitrates are expected to be found in the discharge of any high explosive wastewater outfall. Therefore, we conclude that DOE did not intend for the barium nitrate in their effluent to be regulated under NPDES.

NPDES Permit NM 0028355 (page 9 of Part I) addresses outfalls in the explosives test areas. The regulated parameters for outfall 055 are pH, flow, chemical oxygen demand and total suspended solids. The Permit on page 4 of Part II addresses proper operation and maintenance of all facilities and systems without specifying any specific physical units or locations.

The NPDES permit application does not identify barium at hazardous waste levels, nor does the NPDES permit regulate or apply any effluent limits applicable to barium. Neither does the NPDES permit identify any specific collection, storage or treatment associated with NPDES outfall 055.

The regulations promulgated under the CWA do not address collection, storage or treatment by providing any operating or maintenance standards or requirements (other than "proper"). Therefore, the collection, storage and treatment prior to the discharge from outfall 055 are not subject to regulation under Section 402 of the CWA and do, therefore, fall under the requirements of RCRA.

We believe it was the intent of Congress and the EPA to protect the environment while avoiding the duplication of regulation under overlapping laws. DOE's assertion that the overlap between the CWA and RCRA precludes regulation of the high explosive area wastewaters under RCRA is not in consonance with this intent.

Susan Stark
March 31, 1987
page 3

We request your assistance to coordinate this within EPA for review and comment on the above reasoning and encourage you to provide us with any regulatory cite which may shed light on the above interpretation. In the meantime we will continue to claim that any collection, storage or treatment of hazardous wastes prior to the discharge point(s) identified in the NPDES permit are subject to regulation under RCRA.

Thank you for your assistance.



Richard Mitzenfelt
Chief
Ground Water & Hazardous Waste Bureau

RM/CKC/aw

cc:

Jayne Watson, EPA (6W-PI)
Roger Hartung, EPA (6W-EC) ✓
Kathy Sisneros, EID, Surface Water Bureau
Louis Rose, EID, Legal Counsel
Kirt Jones, EID, Director's office



Susan S.

Department of Energy
Albuquerque Operations
Los Alamos Area Office
Los Alamos, New Mexico 87544

MAR 12 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael Burkhardt, Director
New Mexico Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

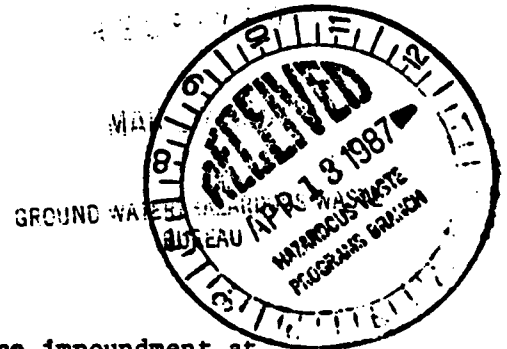
Dear Mr. Burkhardt:

The Los Alamos National Laboratory maintains a surface impoundment at Technical Area 16 (TA-16) to collect effluent from pressure vessels used to filter high explosives waste. This effluent is then discharged through a permitted National Pollutant Discharge Elimination System (NPDES) outfall. Last summer, after we discovered high levels of barium had accumulated in the impoundment, the Laboratory treated the liquid to remove the barium and discharged the effluent under the permit.

Because the barium level exceeded the criteria for toxicity under the New Mexico Hazardous Waste Management Regulations (NMHWMR-3) (100mg/l), the Environmental Improvement Division (EID) determined the Laboratory had stored and treated a hazardous waste in the impoundment. Although neither the Department of Energy nor the University of California has acquiesced in EID's determination, we have since submitted a closure plan (November 13, 1986) and continue to analyze the contents of the impoundment to insure that high levels of barium are not accumulating. In addition, we have ordered a broad spectrum analysis of the effluent to determine whether other hazardous constituents are present.

Following two sampling events on November 10 and 20, 1986, the Environmental Surveillance Group, HSE-8, notified The Design Engineering (WX) Division, the organization responsible for maintaining the impoundment, that they could discharge its contents under the Laboratory's NPDES permit (pH:6-9, COD:2000 g/l seven-day average, 1000 g/l daily average, and TSS:90 mg/l seven-day average, 60 mg/l daily average). Group HSE-8 based its approval on parameters for the NPDES permit having been met (pH:7.21 and 8.0, COD:135 +/- 27g/l and 126 +/- 25g/l) and on analytical results indicating barium levels of 60 and 59 mg/l respectively - well below the criteria for toxicity defined in NMHWMR-3.

At this juncture, WX Division discharged additional wastewater through the pressure vessels into the impoundment on December 12, 1986, and then proceeded to discharge from the impoundment under the permit. Subsequent analysis of effluent samples taken during discharge from the impoundment indicate barium levels exceeding 100 mg/l (specifically, 130 mg/l).



In response to this incident, the Laboratory sampled the soils below the discharge point and analyzed them for Extraction Process (EP) toxic levels of barium. We are currently awaiting these results and will submit them to EID following in-house review.

The Laboratory immediately initiated steps to preclude the recurrence of such an incident. Specifically, we have begun design work on an accumulation tank which would provide the ability to treat the effluent prior to its discharge under the permit. Because discharge under the permit is subject to Section 402 and 307(b) of the Clean Water Act, and because the treatment vessel will meet the definition of a wastewater treatment tank, the unit will not require a Resource Conservation and Recovery Act (RCRA) permit [40CFR264.1(g)(6) and NMHWMR-3 Section 206.A.4.f].

The Laboratory can feasibly have the accumulation tank in place and operational by August or September of this year because the tank will not require a permit for its installation and use. Meanwhile, we are treating potentially high barium liquid prior to transfer to the pressure vessels. This treatment will take place in sumps which meet the definition of wastewater treatment units. In addition, prior to any discharge of liquid from the impoundment, samples will be collected and analyzed to assure compliance with all regulatory requirements, specifically NMHWMR-3 and NPDES Permit limitations.

We hope our efforts to provide a solution to this problem meet with your approval. If you should have any questions regarding this matter, please call James Phoenix at 667-5288.

Sincerely,


Harold E. Valencia
Area Manager

6513A

APR 28 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

P656 475 250

Mr. Myron Knudson, Director
Water Management Division, 6W
U. S. Environmental Protection Agency
Region VI
Allied Bank Tower
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Mr. Knudson:

NPDES PERMIT NM0028355-FFCA QUARTERLY REPORT

The Federal Facilities Compliance Agreement (FFCA) regarding National Pollutant Discharge Elimination System (NPDES) Permit NM0028355 requires quarterly progress reporting beginning October 1, 1986. The progress reports are to include, but not be limited to, all construction activities that have been completed, and an update of those activities to be completed. The report that follows is organized according to the compliance schedule included in FFCA Attachment 1.C.

Outfall 01A

| | |
|--|-----------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Completion | Completed |
| In Compliance with Final Limits | Completed |

Outfall 03A

| | |
|--|-----------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Completion | Completed |
| In Compliance with Final Limits | Completed |

| CONCURRENCES | |
|---------------|----------|
| RTG SYMBOL | LTP |
| INITIALS/SIG. | Baca |
| DATE | 4-20-87 |
| RTG SYMBOL | LTP |
| INITIALS/SIG. | Rush |
| DATE | 4-21-87 |
| RTG SYMBOL | LTP |
| INITIALS/SIG. | V. J. 22 |
| DATE | 4-21-87 |
| RTG SYMBOL | LTP |
| INITIALS/SIG. | Gallegos |
| DATE | 4-21-87 |
| RTG SYMBOL | LTP |
| INITIALS/SIG. | Phoenix |
| DATE | 4-22-87 |
| RTG SYMBOL | LTP |
| INITIALS/SIG. | Valencia |
| DATE | 4-22-87 |
| RTG SYMBOL | |
| INITIALS/SIG. | |
| DATE | |
| RTG SYMBOL | |
| INITIALS/SIG. | |
| DATE | |

Outfall 05A

| | |
|--|-----------|
| Final Design | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Completion | May 1987 |
| In Compliance with Final Limits | June 1987 |

Tasks involving Outfall 05A are progressing on schedule. Compliance improvements regarding this Outfall category include the addition of aeration treatment. During September 1986, a flume was constructed on Outfall 05A by Pan American World Services, Inc. The aeration treatment provided by the flume utilizes principles of hydraulic jump and cascading to treat the wastewater with no additional energy costs. Further construction will be undertaken to complete the project during April and May 1987.

Outfall 01S

| | |
|--|-------------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Completion | May 1987 |
| In Compliance with Final Limits | August 1987 |

Tasks involving Outfall 01S are progressing well ahead of schedule. Construction activities were awarded to Pan American World Services, Inc., prior to the scheduled milestone and construction activities are more than 90 percent complete. It is anticipated that testing for compliance with final limits will be performed well ahead of the August 1987 milestone.

During the first quarter of 1987 a study of the chlorination system was completed. It is anticipated that chlorination equipment will be upgraded to enhance treatment efficiency on this Outfall. Additionally, studies regarding re-circulation rates and patterns, and trickling filter media will be done during the next quarter with the goal of further improvement of wastewater treatment.

| | |
|--|---------------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Complete | December 1987 |
| In Compliance with Final Limits | January 1988 |

Although tasks involving Outfall 04S were not scheduled to be reported until January 1987, design work during the third quarter of 1986 uncovered a major source of infiltration. Subsequently, a construction project using normal maintenance funds was initiated that involved replacing approximately

100 feet of sewer trunk line. Pending further testing and/or completion of further design work, compliance improvements envisioned for this Outfall are anticipated to be completed significantly ahead of the scheduled milestones.

During the second quarter of 1987, further engineering studies will be made regarding this treatment plant and Outfall so as to initiate and complete any further treatment system improvements prior to the final compliance date.

Outfall 038

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|--|--------------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Completion | January 1988 |
| In Compliance with Final Limits | May 1988 |

Compliance improvements at Outfall 038 are significantly ahead of schedule. The construction contract was awarded to Pan American World Services, Inc., prior to the milestone date and actual construction is 90 percent complete. It is anticipated that construction completion and testing for compliance with final limits will be achieved during the second quarter of 1987, well in advance of the scheduled milestones.

Outfall 066

| | |
|--|----------------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | August 1986 |
| Construction Completion | August 1987 |
| In Compliance with Final Limits | September 1987 |

Compliance improvements at this Outfall had been delayed due to negotiations with a potential contractor. The contractor selected by the San Francisco Department of Public Works to negotiate on the sewer trunk line project was not available to negotiate on the sewer trunk line project.

to the University of California, Berkeley required that the project undergo legal review prior to releasing it for bid.

As of this date, the UC Office of General Counsel has authorized the Laboratory to proceed with establishment of a bid due date and seek bids. Because of the series of delays, it is anticipated that the final two milestones will not be completed on the scheduled dates. However, the time slippage is not anticipated to be excessive. As soon as the contract for this project is awarded, and firm construction schedules established, DOE will request any necessary amendments to the compliance schedule.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

NOV 17 1986

Mary Carol Williams
Los Alamos National Laboratory
Health and Environmental Chemistry (HSE-9/86-299)
Mail Stop, E518
Los Alamos, New Mexico 87545

Dear Ms. Williams:

We have reviewed your correspondence requesting approval of EPA Method 350.1 without distillation. You have provided data which indicates significant improvement in recovery and satisfactory precision.

Therefore, Los Alamos National Laboratory is granted limited approval to delete the distillation step from Method 350.1, provided that spike recoveries of discharge samples are monitored regularly and remain at acceptable levels, for NPDES permit number N.M. 0028355.

Sincerely yours,


Frances E. Phillips
Acting Regional Administrator (6A)

Outfall 10S

| | |
|--|-----------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Completion | Completed |
| In Compliance with Final Limits | Completed |

Outfall 11S

| | |
|--|-----------|
| Final Design Complete | Completed |
| Advertisement of Construction Contract | Completed |
| Award of Construction Contract | Completed |
| Construction Complete | Completed |
| In Compliance with Final Limits | Completed |

I trust that this report satisfies the FFCA quarterly reporting requirements. Should you have any further questions concerning this report, please feel free to contact James Phoenix (FTS 843-5288) of my staff.

Sincerely,

Original signed by
Harold E. Valencia

Harold E. Valencia
Area Manager

6720A

cc:

Kathleen Sisneros, NMEID, Santa Fe, NM *P656 475 251*
Hazel Shofner, USEPA, Region VI, (6W-EAM) *P656 475 252*
Lou Cathey, USEPA, Region VI, (6W-EAM) *P656 475 253*

bcc:

A. Tiedman, LANL, ADS, MS A120
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