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Date: May 14, 1997
Refer to: EM/ER:97-156

Mr. Benito Garcia
NMED-HRMB
P.O. Box 26110
Santa Fe, NM 87502

SUBJECT: QUARTERLY TECHNICAL REPORT

Dear Mr. Garcia:

Enclosed are two copies of the Environmental Restoration Project's Quarterly Technical Report, January-March 1997. The Quarterly Technical Report presents information from each field unit on the quarter's activities, including sampling, cleanups, and report writing. Also enclosed is a certification statement signed by the designee owner and operator for the Los Alamos National Laboratory.

If you have questions regarding this report, please contact Dave McInroy at (505) 667-0819 or Joe Mose at (505) 667-5808.

Sincerely,

Jorg Jansen, Program Manager
LANL/ER Project

Sincerely,

Theodore J. Taylor, Program Manager
DOE/LAAO

JJ/TT/ss

Enclosures: (1) Quarterly Technical Report, January–March 1997
(2) Certification

8153

Cy (w/ encs.):
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M. Boettner, EM/ER, MS M992 (2 copies)
J. Brown, FSS-16, MS F674
D. Broxton, EES-1, MS D462
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CERTIFICATION

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

Document Title: Quarterly Technical Report, January–March 1997

Name: _____ Date: 5-14-97

Jorg Jansen, Program Manager
Environmental Restoration Project
Los Alamos National Laboratory

or

Tom Baca, Program Director
Environmental Management
Los Alamos National Laboratory

Name: _____ Date: 5/14/97

Mathew Johansen,
Acting Assistant Area Manager of
Environmental Projects
Environment, Safety, and Health Branch
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Theodore J. Taylor
Program Manager
Environmental Restoration Program
DOE-Los Alamos Area Office

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Los Alamos National Laboratory

Environmental Restoration

A Department of Energy Environmental Cleanup Program

QUARTERLY TECHNICAL REPORT

JANUARY- MARCH 1997

May 14, 1997

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LIST OF ACRONYMS AND ABBREVIATIONS

CX	Categorical exclusion
DOE	US Department of Energy
EPA	US Environmental Protection Agency
ER	Environmental restoration
ESH	Environment, Safety, and Health (Division)
ESH-18	Water Quality and Hydrology Group
FSS	Facilities, Security, and Safeguards (Division)
FY	Fiscal year
HE	High explosives
HSWA	Hazardous and Solid Waste Amendments
LANL	Los Alamos National Laboratory
MDA	Material disposal area
NMED	New Mexico Environment Department
NOD	Notice of deficiency
OU	Operable unit
PRS	Potential release site
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
SAP	Sampling and analysis plan
SSHASP	Site-Specific Health and Safety Plan
SWMU	Solid waste management unit
TA	Technical area
VCA	Voluntary corrective action
VCM	Voluntary corrective measure
WCSF	Waste Characterization Strategy Form

QUARTERLY TECHNICAL REPORT
JANUARY–MARCH 1997
LOS ALAMOS NATIONAL LABORATORY
ENVIRONMENTAL RESTORATION PROJECT

ALBUQUERQUE OPERATIONS OFFICE

CONTRACTOR: University of California

PROJECT MANAGER: Jorg Jansen

NUMBER OF POTENTIAL RELEASE SITES: Approximately 2,000

POTENTIAL WASTE: Radionuclides, High Explosives, Metals, Organics

1.0 INTRODUCTION

This quarterly report describes the technical status of activities in the Los Alamos National Laboratory (the Laboratory) Environmental Restoration (ER) Project. The activities are divided according to field units and then by the technical area (TA) where the specific activity is located. The Hazardous and Solid Waste Amendments (HSWA) portion of the Laboratory's Hazardous Waste Facility Permit (Module VIII, Section P, Task V, C) requires the submission of a technical progress report on a quarterly basis. This report, submitted to fulfill the permit's requirement, summarizes much of the field work performed this quarter in the ER Project.

2.0 FIELD UNITS

2.1 Field Unit 1 — Technical Areas 0, 1, 3, 10, 19, 21, 26, 30, 31, 32, 43, 45, 59, 60, 61, 64, 73, and 74 (Field Project Leader: Garry Allen)

2.1.1 General Information for Field Unit 1

In the second quarter of 1997, Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) planning, notice of deficiency (NOD) response preparation, drilling activities, and sampling continued at TAs-0, -1, -10, -19, -21, and -73. In addition, voluntary corrective action (VCA) activities continued at TA-0, water sampling was completed at TA-21, and slope stabilization for Potential Release Site (PRS) 3-056(c) was re-evaluated.

RFI reports in preparation this quarter include

- the RFI report for TA-0, DP Road Storage area (PRS 0-027);
- the RFI report for TA-1, Aggregates N and P [PRSs 1-001(s,u) and 1-007(l)]; and
- the RFI report for the TA-21 Waste Water Treatment Plant [PRSs 21-013(a) and 21-026(a–c)].

VCA reports in preparation this quarter include

- the consolidated RFI/VCA report for PRSs 0-030(d,k) and C-0-043 and
- the VCA report for the Bayo Canyon landfill (PRS 10-009).

Interim action reports completed this quarter include

- the interim action report for PRS 21-011(k);
- the interim action report for the Central Area in Bayo Canyon; and
- the interim action report for PRS 1-001(d), Hillside 138.

NOD responses completed and submitted this quarter include

- the response to the NOD for the RFI report for PRS 0-030(g);
- the response to the NOD for the RFI report for PRSs 0-028(a,b); and
- the response to the New Mexico Environment Department's (NMED's) Request for Additional Information on the TA-31 VCA plan and report.

NOD responses in preparation this quarter include

- The response to the second NOD for the RFI report for Aggregate F [PRSs 1-001(d) and 1-006(h)];
- the response to the disapproval of the RFI Work Plan for Operable Unit (OU) 1114, Addendum 1; and
- the response to the NOD for the RFI report for TA-21, 1B and 1C, and the related addendum.

Work plans and sampling/analysis plans in preparation this quarter include

- the work plan for the DP Canyon Investigation;
- the modification of the RFI Work Plan for OU 1071 for PRSs 0-034(a,b); and
- the sampling plan for PRS 73-002 Phase II.

Other reports completed or in preparation this quarter include

- the TA-10 Bayo Canyon shrapnel report [PRSs 10-001(a–d)], completed;
- the draft sampling plan for the post-decontamination and decommissioning investigation at TA-21, Buildings 3 and 4, completed;
- the remedial action status report for PRS 1-001(d) on Hillside 138, completed and submitted to the US Department of Energy (DOE); and
- The Material Disposal Area (MDA) U surface sampling report [PRSs 21-017(a–c)], in preparation.

2.1.2 Technical Area Activities

2.1.2.1 TA-0

PRSs 0-003 and 0-012 The field team completed all work scheduled for FY97 at the Western Steam Plant (PRSs 0-003 and 0-012). Remaining work will resume in FY98.

PRS 0-016 The field unit implemented the Eco-Vac system to resume soil processing of the berm material at the former firing range (PRS 0-016). Eco-Vac, which uses a vacuum system to separate lightweight dirt and gravel from the lead and bullets, recovered approximately 5 000 to 6 000

pounds of lead and bullets. The pond water has been discharged and the pond liner has been removed.

PRS 0-019 The collection of outfall samples at the Central Wastewater Treatment Plant completed the field work at PRS 0-019. Final results are pending.

PRS 0-027 Though planning continues for the DP Road Investigation (PRS 0-027), work on the RFI report has been suspended while remediation alternatives are explored. Accelerated cleanup options are also being explored.

PRSs 0-030(d,k) and C-0-043 The RFI/VCA reports for PRSs 0-030(d,k) and C-0-043 have been combined. Data are now available in the Facility for Information Management, Analysis, and Display, and preparation for the combined report has begun.

PRS 0-030(j) The property holder has not granted access to the land encompassing PRS 0-030(j), the Sombrillo Nursing Facility septic tank; therefore, field work cannot begin.

PRSs 0-034(a,b) Field Unit 1 personnel will modify the RFI Work Plan for OU 1071 (LANL 1992, 0781) because the interpretation of the 1946 aerial photos of PRSs 0-034(a,b) was incorrect. These two areas were used by construction contractors and were never used as disposal sites as originally thought. The field unit will prepare a report proposing both PRSs for no further action.

2.1.2.2 TA-1

PRSs 1-001(s,u) and 1-007 Information gathering continued for PRSs 1-001(s,u) and 1-007 (Aggregates N and P). The field team surveyed Los Alamos County septic manholes north of Trinity and found them to have the same rim and invert elevations as Western Sanitary Waste Line manholes #43 and #44. As a result, the field unit inferred that the septic manholes are the original manholes. Drawings of the Los Cerros apartments showed that the sewer line beneath Trinity Drive to Canyon Road and currently used by the County is the same pipe that was installed in the 1940s. Future exposure scenarios for the abandoned sewer line that is not presently accessible (but could be excavated by future construction activities) are being developed for the RFI report addressing PRSs 1-001(s,u) and 1-007.

2.1.2.3 TA-3

The Upper Sandia Canyon Investigation scoping process began. The field team conducted initial baseline water sampling to determine steady state contaminant levels. Sampling included the influent and effluent of the wetland and two locations upstream of the wetland for both mercury and polychlorinated biphenyls. Samples were not tested for organic constituents because the Water Quality and Hydrology Group (ESH-18) has previously sampled this area and has current information regarding this site. Analytical results are pending.

PRS 3-056(c) Personnel are re-evaluating the slope stabilization design for PRS 3-056(c) based on new information from the Facilities, Security, and Safeguards (FSS) Division regarding the TA-3 power plant. Effluent from a current outfall at the TA-3 power plant will be rerouted to another outfall, thereby eliminating the current outfall. This rerouting may affect the volume of water entering Sandia Canyon below the PRS.

2.1.2.4 TA-10

PRSs 10-002(a,b), 10-003(a–o), 10-004(a,b), 10-005, and 10-007 The results of soil and plant sampling have been incorporated into the interim action plan for the Central Area of Bayo Canyon [PRSs 10-002(a,b) 10-003(a–o), 10-004(a,b), 10-005, and 10-007]. The analytical results indicate that there is no current health risk to recreational users of the canyon. As a best management practice, the snow fencing surrounding the contaminated plants and soil was expanded and additional posting was placed around the fence. In addition, surface water runoff controls were installed around the fenced area.

PRS 10-009 The RFI and VCA will be conducted for the Bayo Canyon landfill using an accelerated approach. The initial phase of the VCA will include trenching and sample characterization for waste identification. The area will be remediated following soil characterization.

2.1.2.5 TA-19

PRSs 19-001, 19-003, and C-19-001 Field work at the Western Steam Plant (PRSs 19-001, 19-003, and C-19-001) was delayed because of February storms, which increased the ice and snow cover from January. Although the ground conditions permitted field work in March, Field Unit 1 deferred the investigation to a later time because of the reassessment of the FY97 budget. Personnel located a drawing of the septic tank design; as a result, they will slightly modify the original sampling approach for the Western Steam Plant.

2.1.2.6 TA-21

Work began on a mini work plan and sampling and analysis plan (SAP) for the DP Canyon Investigation. DP Canyon is a source term for the Los Alamos Canyon. DP Canyon was not considered a discrete entity before this fiscal year, though it was considered a part of TA-21.

The cliff stabilization study, conducted at TA-21, and work on the associated SAP have commenced.

PRS 21-003 The field team collected pilot study samples at PRS 21-003 and submitted them for evaluation of suitability for chemical destruction of the local contaminants. This destruction technology is being compared with more traditional remediation approaches for cost versus benefits.

PRSs 21-011(c), 21-016(a–c), and 21-028(a) The field team completed the investigation for MDA T [PRSs 21-011(c), 21-016(a–c), and 21-028(a)]. They drilled nineteen boreholes in the absorption beds, retrieval storage area, disposal shafts, and paleochannel (1 713 ft total). The nature and extent of contamination have been determined, and work will begin on the performance assessment once all of the data have been received. Samples were analyzed for RCRA and radioactive constituents. Several samples exceeded Department of Transportation limits for radioactivity, requiring special packaging and transportation.

PRS 21-011(k) The field team collected water samples on March 19, 1997, from behind Knights of Columbus just east of the PRS 21-011(k) outfall. They collected these samples above the concrete slab north of PRS 21-011(k) and just before the confluence of streams in DP and Los Alamos Canyons. These samples are undergoing a long-term desorbtion study using synthetic rain water, synthetic ground water, and water obtained from a stream bed just north of PRS 21-011(k). The water was filtered through three different sizes of meshes to determine the size distribution of sediment particles being transported, and to determine the contribution of colloidal transport.

PRS 21-015 The subsurface replan for MDA B (PRS 21-015) has been reviewed, and comments are currently being incorporated.

PRS 21-024(l) The readiness review for Phase II sampling at the PRS 21-024(l) outfall was held in January 1997. The field team surveyed the outfall for sampling and developed fall protection measures. Phase II sampling began in February. The team uncovered a septic tank and sampled its contents. Radiological field screening was completed in March. Results show radiological, organic, and heavy metals contamination.

2.1.2.7 TA-32

PRS 32-002(a,b) Storm water controls continue to be inspected and maintained at the PRS 32-002 septic tanks and outfalls.

2.1.2.8 TA-73

PRSs 73-001(a,b,d) and 73-004(d) Information gathering continues in preparation for field work for the Los Alamos Airport, Solid Waste Management Unit (SWMU) Group 73-1 [PRSs 73-001(a,b,d) and 73-004(d)]. The field unit is preparing a matrix of various options for proceeding with the airport landfill, PRS 73-001(a). This matrix will support decisions pertaining to additional data needs, remedial action, and/or post-closure monitoring or treatment. There are still safety concerns about drilling into the landfill; Level B personal protection may be required.

PRSs 73-001(c), 73-002, 73-003, 73-004(c), 73-005, and 73-006 The field team conducted Phase 1B sampling at PRS 73-002 on January 2, 1997. The Phase II Sampling and Analysis Plan will be completed following analysis and assessment of the ash and soil samples. Personnel are gathering nformation in preparation for field work at SWMU Group 73-2 [73-001(c), 73-002, 73-003, 73-004(c), 73-005, and 73-006]. They have conducted additional interviews with former site workers, and have obtained engineering drawings from Laboratory engineering archives. Archival findings included drawings for the 1940s construction of the incinerator building, the steam cleaning plant, and the landfill. Engineering drawings of the former airport terminal building show that sanitary waste was discharged into a sewer line rather than a septic tank. Apparently PRS 73-004(c), a septic tank, was abandoned in 1964 after 18 years of use, and it may have been removed. The outfall of the septic tank could not be located, and there are no probable drainage channels where samples could be collected. Personnel are searching outside the Laboratory photo/video archives for aerial photographs to fill knowledge gaps regarding conditions and operations at airport sites.

2.2 Field Unit 2 — Technical Areas 12, 14, 15, 18, 20, 27, 36, 39, 53, 65, 67, 68, 71, and 72 (Field Project Leader: Gene Gould)

2.2.1 Technical Area Activities

2.2.2.1 TA-12, TA-14, and TA-15

Field unit personnel completed the following activities this quarter:

- Rewrote technical scope documents for all PRSs in TAs -12/67, -14, and -15.
- Gave a presentation to NMED on January 29 concerning VCAs for PRSs 14-003 and 15-012(b).
- Conducted a site tour on March 17 for the NMED Oversight Bureau to visit PRSs 14-001(f), 14-002(a), 14-003, 14-009, and 14-010.
- Wrote VCA and interim action plans for PRSs 12-001(b), 14-002(a), 14-010, 15-004(g), 15-008(c), 15-009(e), and 15-009(j) and submitted the plans for PRSs 12-001(b), 14-002(a), 14-010, and 15-009(e) for Laboratory review.

2.2.1.2 TA-18 and TA-27

Data from the December 1996 sampling of five shallow wells near PRS 18-003 indicate that no constituents were detected above New Mexico State Water Quality Commission standards in the ground water. The wells were constructed and sampled in conformance with the corrective action plan for that PRS. The field unit performed a second round of sampling in early March 1997 and will prepare a report by June 1997 describing the well construction and the results of the first two sampling events.

The field unit received an NOD from the New Mexico Hazardous and Radioactive Materials Bureau on the RFI report for PRSs in TA-18 and TA-27 (former OU 1093), which was submitted to the US Environmental Protection Agency (EPA) in November 1995. The comments were extensive regarding the sampling plans in the approved RFI work plan and the interpretation of the results presented in the RFI report. The bureau also had concerns about the extent of ground water characterization at nearly all PRSs addressed in the RFI report. Because the comments were extensive, the NMED granted a 30-day extension on the due date for the response to the NOD. Field unit personnel drafted comment responses and submitted them for Laboratory review.

2.2.1.3 TA-20, TA-53, and TA-72

The field unit drafted a response to an NOD received on the RFI report for former OU 1100 (TAs-20, -53, and -72). The response is due to NMED on April 23, 1997.

The field team identified integrity-testing methods for the active radioactive liquid waste storage tanks [PRSs 53-006(b–e)] and wrote a scope-of-work document to solicit a subcontractor to integrity-test the tanks.

2.2.1.4 TA-39

NMED denied the Laboratory's request for a 30-day extension on the due date for the RFI report for PRSs 39-001(a,b), 39-004(a-e), and 39-008. NMED required the submittal of the report by March 7. This deadline was met, but the report was submitted without the eco-risk assessment.

Field unit personnel wrote the VCA plan for PRS 39-002(a) and submitted it for Laboratory review. Following a readiness review, the field unit conducted the preliminary sampling described in the VCA plan to further define the nature and extent of contamination at PRS 39-002(a). Results are pending.

2.3 Field Unit 3 — Technical Areas 11, 13, 16, 24, 25, 28, 33, 37, 46, and 70 (Field Project Leader: Roy Michelotti)

2.3.1 Technical Area Activities

2.3.1.1 TA-16

TA-16 personnel evaluated data on samples taken at PRSs 16-021(c) and 16-003(k), the 260 Outfall and the sump that discharges to the outfall. As reported last quarter, the investigation at these PRSs yielded two unexpected results: (1) low levels of high explosives (HE) (< 10 ppm) were found at depth (~ 70 ft) in a borehole that intersects a surge bed roughly 85 ft from the outfall, and (2) a saturated zone was found at a depth of 17 ft in a borehole that intersects a surge bed beneath the HE pond. This saturated zone was contaminated with several thousand parts-per-million of HE. The field unit reported these results to the NMED. Data quality objectives for continued drilling at the 260 Outfall were modified to reflect these new data.

The field unit completed the planning for accelerated cleanup activities at V-Site and TA-16-27. Following a briefing on these activities, NMED requested that the cleanup proceed as a voluntary corrective measure (VCM), with their involvement. A public awareness meeting on the V-Site cleanup and the readiness review were held. The field unit completed the VCM plan and submitted it to the DOE Los Alamos Area Office and to the NMED.

2.3.1.2 TA-33

TA-33 personnel evaluated the data for the fall 1996 field campaign at TA-33 and prepared the draft report on the campaign; the document was reviewed internally. The field unit also received and responded to an NOD on the sampling and analysis plan for PRS 33-008(c), the Main Site Landfill. Wastes associated with the interim action in Chaquehui Canyon were disposed of.

2.4 Field Unit 4 — Technical Areas 2, 4, 5, 35, 41, 42, 48, 52, 55, 63, and 66 and Canyons (Field Project Leader: Allyn Pratt)

2.4.1 General Information for Field Unit 4

Waste management activities at Field Unit 4 continued this quarter. Personnel profiled all returned samples from TAs -2, -4, -5, -35, -41, -52, and -63 and then placed the samples into "lab packs" in accordance with the appropriate waste classification criteria for disposal off-site by Rollins Chem Pack. All waste (255 drums) from the TA-41 waste management area has been disposed in accordance with appropriate regulations, and the area has been decommissioned.

The field unit completed the following miscellaneous activities:

- Worked with the ER Decision Support Council to prepare the draft guidance paper "Water Standards."
- Provided additional information on TA-35 sites to be included in the response to the notice of determination for the Requests for Permit Modification that were submitted in March and September 1995.
- Completed "ER Water Quality Assessment and Notification Checklists" for 17 sites in accordance with the draft LANL-ER-AP-4.5, "Evaluation and Notification of Potential Surface and Groundwater Concerns at Environmental Restoration Sites."
- Provided support to the Laboratory working group for DOE Work Smart Standards. The purpose of this activity was to identify ER Project decommissioning contract issues for health and safety requirements.
- Gave presentations on the canyons investigations to San Ildefonso Pueblo; to the Environmental Management Program Office; and at the executive meeting on the Indian Pueblo cooperative agreements.

2.4.2 Technical Area Activities

2.4.2.1 Canyons

Field Unit 4 personnel continued to work on the Canyons work plans. They completed the Core Document for Canyons Investigations and submitted it to the NMED on April 1, 1997. Field unit personnel continued to work on the Mortandad Canyon work plan.

The field unit received a categorical exclusion (CX) from the Los Alamos Area Office of the DOE. This CX excludes canyons work from the requirement to prepare National Environmental Policy Act documentation and to undergo a DOE review for each canyon system within the field unit.

The following activities were accomplished in support of the Canyons pilot study:

- Measured the water level of the monitoring wells in Los Alamos Canyon and Pueblo Canyon every month.

- Began research for source term evaluation of PRSs that may affect canyons investigations. Los Alamos Canyon and Pueblo Canyon are being evaluated first.

- Investigated the design of the air monitoring stations and recommended their future use in the canyons.

- Completed the Environment, Safety, and Health (ESH)-ID questionnaire for field activities planned for FY97.

- Initiated and received DOE approval of access agreements with Los Alamos County and San Ildefonso Pueblo for field activities scheduled for FY97.

2.4.2.2 TA-35

The following activities were completed this quarter at TA-35:

- Assessed data for the radiological addendum SAP for the PRSs at TA-35.

- Submitted the SAP for PRSs 35-008, 35-010(a through e), 35-014(e and g_3), 35-015(a), and 35-016(k, l, and o) for internal review; rewrote Section 2.2 and Section 2.3.

- Began updating TA-35 PRS boundaries.

- Developed photograph archives of TA-35, which include scanned photographs of construction sites from 1949 and 1950.

- Reviewed the analytical results from the samples collected underneath the Phase Separator Pit, PRS 35-003(misc.). Based on this review, Field Unit 4 personnel decided it was not necessary to pursue a voluntary corrective action at this site.

- Completed the ESH-ID questionnaire for field activities planned for FY97.

2.4.2.3 TA-48

The field team prepared the Site-Specific Health and Safety Plan (SSHASP), Waste Characterization Strategy Form (WCSF), and excavation permit for supplemental sampling activities. The readiness review was held on January 30, 1997, and all outstanding issues were resolved before field work began. The team also developed the scope of work to perform trenching activities identified in the SAP for PRSs 48-001, 48-002(e), 48-003, 48-005, 48-007(a, b, c, d, and f), and 48-010.

The field team completed all sampling and drilling activities on March 27, 1997; analytical results are pending.

2.4.2.4 TA-55

The field team prepared for field work at TA-55. Preparation of the SAP for PRS 55-009 continued. This included writing portions of the document, generating graphics, and preparing the document for submittal to DOE. The SSHASP short-form, excavation permit, ESH-ID questionnaire, access papers, and WCSF were also developed. The field team held a readiness review; no outstanding issues were identified.

The field activities were completed on March 20, 1997; analytical results are pending.

2.5 Field Unit 5 — Technical Areas 6, 7, 8, 9, 22, 23, 40, 49, 54, 57, 58, 62, and 69 (Field Project Leader: Don Krier)

2.5.1 General Information for Field Unit 5

Field unit personnel completed the Baseline Change Proposal in January 1997. Analytical data management, validation, and verification for existing data needed for all FY97 reports continued. Interaction with the Site-Wide Environmental Impact Statement office continued, with the transfer of several draft documents for consideration in the MDA G expansion issue.

The field unit received an NOD from NMED for the March 15, 1996, RFI report for TA-8 and TA-9. Personnel began preparing a response regarding PRS C-8-010.

Work continued on the RFI report for PRSs to be recommended for no further action in the field unit's explosives area (in TAs-6, -7, -8, -22, and -40). PRSs covered in this report include 6-001(a,b), 6-003(a,c,f), 6-007(g), 6-008, C-6-019, 7-001(a,b,c,d), 8-002, 22-010(a,b), 22-014(a,b), 22-016, and 40-005. Resampling was required for two of the PRSs; therefore, completion of the report will be delayed until the third quarter of FY97. Resampling is scheduled for the week of April 10, 1997.

2.5.2 Technical Area Activities

2.5.2.1 TA-22

The SAP for PRSs 22-012 and 22-015(b,d,e), the explosives sumps and seepage pits, was completed this quarter, and DOE has approved it. All permits are completed. The field team will sample the sumps and pits to determine the need for VCA. The projected start of field activity is April 22, 1997.

2.5.2.2 TA-49

PRS 49-008(d) The field unit completed the VCA plan for PRS 49-008(d), the Bottle House; the plan will be sent for final DOE review during April. All permits are completed, and the projected start of field activity is April 28, 1997.

2.5.2.3 TA-50

PRSs 50-006(a,c), 50-007, and 50-008 The field unit is preparing an interim action report for the interim action at Ten-Site Canyon [PRS 50-006(a)]; the report, which discusses the transfer of RFI responsibility to the Field Unit 4 Canyons Study, will be submitted to DOE during the third quarter of FY97.

Field unit personnel submitted to NMED the response to the August 19, 1996, Request for Additional Information on Technical Area 50 Potential Release Sites [PRSs 50-006(a,c), 50-007, and 50-008].

PRS 50-009 Personnel have completed the drafts of all chapters of the Phase 1, Stage 1 report for PRS 50-009, MDA C. Decisions on proposed outcome options are pending.

2.5.2.4 TA-54

The draft of the MDA L RFI report has been completed and reviewed. The field unit is holding the document for possible revision pending a decision concerning application of screening action levels to subsurface core data.

Equipment problems delayed work on the MDA L Pilot Study this quarter. A drill rig, needed to clear a collapsed hole to be used in subsurface investigation of hydrologic properties in the region of the volatile organic compound plume, was unavailable. The goal of this work is to measure moisture

potentials in the vertical stratigraphic column in the volume beneath volatile organic liquid disposal sites.

The field team completed two sampling events at MDA L: one the week of February 11 (late first-quarter FY97 sampling) and one the week of March 3 for the second quarter. Data from the first-quarter samples indicate that the edge of the organic plume has not moved. There were no unexpected concentrations or locations of contaminants. Data from the second-quarter sampling event are pending.

3.0 CLOSURES AND REGULATORY COMPLIANCE — (Project Leader: David McInroy)

3.1 TA-16 — MDA P Landfill

NMED approved the closure plan for MDA P on February 18, 1997. The selection process continued for a contractor to perform the closure; the closure contract evaluation team has requested additional information from selected bidders.

Baseline rock and soil sample analysis is complete, and a report has been drafted.

The "Biological and Water Quality Assessments for the MDA P Project Area: 1995 and 1996" report was completed.

3.2 TA-35 — TSL 85 Surface Impoundment

No response has been received from the NMED on the closure report submitted to them at the end of September 1996.

3.3 TA-53 — Surface Impoundments

The original due date for the revised closure plan for the northern impoundments [PRS 53-002(a)] was suspended, pending agreement with NMED on the future land use scenario that will be used for risk assessment.

In July 1996, NMED notified the Laboratory that a closure plan must be developed for the southern impoundment [PRS 53-002(b)], with a due date of January 1997, or a Part B Application for a RCRA Permit must be submitted. Negotiations between the Laboratory and NMED continued concerning whether this surface impoundment should be regulated under RCRA. The draft closure plan was revised this quarter for the south surface impoundment.

4.0 REFERENCE

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1071," Los Alamos National Laboratory Report LA-UR-92-810, Los Alamos, New Mexico. (LANL 1992, 0781)