ERID-215001

Los Alamos NATIONAL LABORATORY EST.1943

Environmental Safety & Health
Environmental Protection Division
P.O. Box 1663, K491
Los Alamos, New Mexico 87545
(505) 665-6592/FAX (505) 665-3811

National Nuclear Security Administration
Los Alamos Site Office, A316
3747 West Jemez Road
Los Alamos, New Mexico 87545
(505) 667-5794/FAX (505) 667-5948

Date: APR 0 2 2012
Refer To: ENV-DO-12-0019
LAUR: 12-20151

Mr. Jerry Schoeppner, Acting Chief
Ground Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building, Room N2261
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502

Dear Mr. Schoeppner:

SUBJECT: SUPPLEMENTAL INFORMATION FOR DISCHARGE PERMIT APPLICATION DP-1132

On November 18, 2011, the New Mexico Environment Department (NMED) notified the U.S. Department of Energy and Los Alamos National Security, LLC (DOE/LANS) that a comprehensive, up-to-date application for the Technical Area 50 (TA-50) Radioactive Liquid Waste Treatment Facility (RLWTF) and the TA-52 Zero Liquid Discharge (ZLD) Solar Evaporation Tanks was required. On January 17, 2012, DOE/LANS submitted a request to NMED for a 45-day extension to submit information on the following three specific items of the application:

- Proposed processes for the operation, inspection, and maintenance for the facility as it pertains to collection lines, treatment units, and effluent-storage disposal units
- Procedures and corrective actions for addressing acute failures and long-term maintenance issues at the facility
- Proposed groundwater monitoring locations for groundwater sources most likely to be impacted by intentional or unintentional discharges from the RLWTF

In correspondence dated January 27, 2012, the NMED granted the requested 45-day extension.

The Discharge Permit DP-1132 application submitted by DOE/LANS on February 16, 2012 (ENV-DO-12-0005) for the TA-50 RLWTF and the TA-52 ZLD Solar Evaporation Tanks did not include the three

specific items referenced above. Enclosures 1, 2, and 3 to this letter provide the information excluded from the above-referenced application and thereby completes the required submission of a comprehensive application.

Please contact Bob Beers at (505) 667-7969 of the Water Quality and RCRA Group (ENV-RCRA) if you have questions.

Sincerely,

Alison M. Dorries
Division Leader
Environmental Protection Division
Los Alamos National Laboratory

Sincerely,

Gene E. Turner
Environmental Permitting Manager
Environmental Projects Office
Los Alamos Site Office
Department of Energy

AMD:GET:BB/lm

Enclosures: (1) Table of Revised Requested Information from the November 18, 2011, NMED letter.
(2) Supplemental Information, Discharge Permit Application DP-1132, B-7 – B-18.
(3) Supplemental Information, Discharge Permit Application DP-1132, Appendix G, Contingency Plan.

Cy: Joni Arends, Concerned Citizens for Nuclear Safety, Santa Fe, NM, w/enc.
Jonathan M. Block, New Mexico Environmental Law Center, Santa Fe, NM, w/enc.
James Bearzi, NMED/SWQB, Santa Fe, NM, w/enc.
John Kieling, NMED/HWB, Santa Fe, NM, w/enc.
Hai Shen, LASO-EPO, w/enc., A316, (E-File)
Kevin W. Smith, LASO-OOM, w/o enc., A316, (E-File)
Gene Turner, LASO-EPO, w/enc., A316, (E-File)
Steve Yanicak, LASO-GOV, w/enc., M894, (E-File)
Carl A. Beard, PADOPS, w/o enc., A102, (E-File)
Michael T. Brandt, ADESH, w/o enc., K491, (E-File)
Alison M. Dorries, ENV-DO, w/o enc., K491, (E-File)
Scotty Jones, ENV-DO, w/o enc., K491, (E-File)
Mike Saladen, ENV-RCRA, w/enc., K490, (E-File)
Bob Beers, ENV-RCRA, w/enc., K490
Bob Mason, TA-55 DO, w/o enc., E583, (E-File)
Cliff Kirkland, TA-55-RLW, w/enc., E505, (E-File)
Chris del Signore, TA-55-RLW, w/enc., E518, (E-File)
Victor Salazar, TA-55-RLW, w/o enc., E518, (E-File)
Randy Johnson, ENV-ES, w/enc., E500
Taylor Valdez, ENV-DO, w/o enc., K404, (E-File)
Linda Salazar, ADESH, w/o enc., K491, (E-File)
ENV-RCRA File, w/enc., M704
IRM-RMMSO, (U1200204), w/enc., A150, (E-File)

Revised Requested Information

In response to the November 18, 2011 letter from NMED (See Appendix A), the requested items are addressed in the following locations:

1.	The estimated volumes, sources (technical area and building) and wastestream characteristics of all influent wastewater that LANL receives, or intends to receive, at the RLWTF.	A-8, A-10, B-1, Appendix B
2.	A description of the conveyance methods used to transport wastewater to the RLWTF for each source.	A-8, B-1, Appendix B
3.	A description of waste characterization and metering systems used to determine influent wastestream characteristics and volumes entering the RLWTF.	B-12
4.	A description of the review and amendment process for LANL's internal Waste Acceptance Criteria (WAC) for all incoming wastewater received at the RLWTF. This should include LANL's process for ensuring the WAC relates to the current treatment technologies and processes.	The amendment and review process for changes to LANL's Waste Acceptance Criteria (WAC) involves several reviews. A WAC facilitator distributes proposed WAC attachments to owners and reviewers, including regulatory Subject Matter Experts (SMEs). The facilitator will assist the owners to ensure that revisions are complete and that technical content is correct. Once revisions are agreed to, LANL's policy office conducts a final review, completes specific paperwork, and issues final WAC amendments. At RLWTF, the type of review will depend on the proposed WAC amendment, and can include review of the quality of treated wastewaters, revisions to state or federal discharge standards, the treatment process, including planned changes to process equipment, and administrative review.
5.	A description of operational procedures for receiving wastes from each generator.	B-7
6.	A schematic of the treatment process in its entirety for each wastestream (from collection to final disposal).	Appendix B
7.	Descriptions, locations, construction materials and sizing for each component of the treatment processes for each type of wastestream being treated at the RLWTF.	B-6, Appendix B
8.	Descriptions, locations and designs for all secondary storage and auxillary emergency units intended to receive, treat or store wastewater received at the facility.	B-6, Appendix B
9.	Proposed processes for the operation, inspection and maintenance for the facility as it pertains to the collection lines, treatment units and effluent storage disposal units.	B-7, B-8

10.	Procedures and corrective actions for addressing acute failures at the facility.	B-16, B-18
11.	Procedures and corrective actions for addressing long-term maintenance issues at the facility.	B-16, B-18
12.	Record drawings for all components of the facility, if available.	B-5
13.	Construction plans and specifications for all components of the facility which are under construction or are proposed for construction.	B-5
14.	A proposed effluent monitoring plan, identifying analytes and sample locations/frequency. The proposal should consider discharge frequencies, incoming waste characteristics and the constituents listed under 20.6.2.3103 NMAC and Subsection WW of 20.6.2.7 NMAC.	B-13
15.	Proposed flow and metering systems used to determine effluent discharge volumes for each of the discharge locations.	B-12
16.	Proposed ground water monitoring locations for ground water sources most likely to be impacted by intentional and unintentional discharges from the RLWTF. The proposal should identify geohydrology of the potentially impacted areas, existing monitoring well locations and construction.	B-14
17.	Actions which LANL would implement should partial or full closure of the facility occur.	B-19
18.	A scaled facility plan showing the facility's components including influent collection lines, storage units, major treatment units and disposal units.	Appendix B
19.	All other information sought in NMED's application for Discharge Permit Sections A through C. Please note that for the purposes of public notification, the "discharge site" as it relates to this facility encompasses the central collection system lines, the treatment and storage facilities and all discharge locations for the treated effluent.	See Attached Application

B-7. Operational Plan. Attach a detailed description of how you operate your processing, treatment, storage and/or disposal system.

Animal feeding operations: include stormwater management, nutrient management plans, method for mixing irrigation and wastewater.

Domestic wastewater treatment facilities: include pre-treatment, solids management, vegetation management for land application.

Facilities using reclaimed domestic wastewater above ground: include proposed water quality classification(s), effluent monitoring, setbacks, irrigation schedules, etc. that will result in protection of public health and the environment. Please refer to *NMED Ground Water Quality Bureau Guidance: Above-Ground Use of Reclaimed Domestic Wastewater* for further information. A copy of the guidance document is available on the NMED website www.nmenv.state.nm.us under "Ground Water Quality".

The process description and schematic of the Facility are located in Appendix B (February 16, 2012 Discharge Permit Application for the TA-50 RLWTF). Waste streams are characterized by RLW generators using acceptable EPA characterization methods (sampling and analysis, acceptable knowledge, or both); this characterization data is entered by the generator onto a Waste Profile Form (WPF). The WPF is reviewed by a Waste Management Coordinator, a RCRA subject-matter expert, and RLWTF staff. The waste stream is acceptable for discharge to and treatment at the RLWTF if reviewers approve the WPF.

Influent samples are periodically collected and analyzed at the RLWTF for inorganic and radioactive constituents, as a waste characterization overcheck. Samples of low-level RLW influent are also periodically submitted to an outside chemistry laboratory for analysis of organic constituents.

Generators of low-level RLW prepare and submit a WPF. Once the WPF is approved, the generator is approved to discharge the RLW as generated via the low-level collection system.

If the low-level RLW is to be sent to the RLWTF via truck, the generator must also prepare and submit a Waste Disposal Request form. The Waste Disposal Request is reviewed by a Waste Management Coordinator, transportation, and RLWTF personnel. The shipment is acceptable for transport to the RLWTF if reviewers approve the Waste Disposal Request.

Generators of transuranic RLW also prepare and submit a WPF. In this case, the generator must sample and analyze each batch of transuranic RLW, then submit a request to the RLWTF to transfer that batch to the RLWTF. If analytical results are acceptable, a date and time for transfer is agreed upon. The transfer is controlled by RLWTF personnel who direct TA-55 personnel when to unlock and open the transfer valves; they monitor the level of the acid

waste or caustic waste tank as the transfer is in progress. The TA-55 personnel are directed when to close and lock transfer valves. Transfer valves remain closed and locked until authorized by RLWTF to be opened.

Detailed operating procedures are required for each treatment unit. Procedures are drafted by operators and engineers, then reviewed and approved by safety personnel and management. Before becoming effective, procedures must also be walked down and verified by operators (e.g., valve numbers and sequences). Approved procedures are controlled documents, available at a controlled document website.

Detailed operating procedures follow a mandatory outline, which currently has the following required topics:

- safety and controls
- prerequisite actions (prior to startup)
- detailed operating instructions
- administrative sections such as introduction, definitions, acronyms, references, and record keeping

Detailed operating sections provide step-by-step instructions for operating the treatment equipment, and identify valves by valve number (valves within the facility are labeled), electrical switches by number (electrical components are labeled), and the sequence for opening and closing valves and starting and stopping equipment (e.g., mixers, pumps).

The table below lists procedures currently used for treatment operations at the RLWTF. (The list varies over time, but procedures always exist for each unit operation.)

Operators also inspect equipment each operating day, both informally (as they operate equipment) and formally (as documented on daily inspection round sheets). Inspections include tank level checks, pump operability, alarm tests (horns and lights), leak inspections, levels of combustibles and wastes, and other items. Results of the formal inspections are reviewed with and signed off by management, and corrective maintenance work orders are initiated for deficiencies.

RLWTF Detailed Operating Procedures

Unit Operation	Detailed Operating Procedures
Main Treatment:	
M1 Collection System	Annual Inspection of the RLW Collection System Vaults
M2 Influent Storage	RLWTF Tank Management Sampling at the RLWTF
M3 Emergency Influent Storage	WMRM Facility Status Change WMRM System Alignment Checklist Sampling WMRM Tanks Transferring RLW Form WMRM to RLWTF
M4 Clarifiers	Clarifiers, Gravity Filter, and Gravity Filter Bypass Clarifier Chemicals and NaOH Operations
M5 Gravity Filter	Clarifiers, Gravity Filter, and Gravity Filter Bypass
M6 Pressure Filters	Pressure Filter Operations System Alignment Checklist for Pressure Filter Operations
M7 Perchlorate Ion Exchange	Re-Configure Flow Path through the IX Columns in Room 16
M8 Primary Reverse Osmosis	Reverse Osmosis Clean-in-Place System Membrane Maintenance
M9 Polishing Ion Exchange	System Alignment Checklist for RLWTF Effluent Disposition Ion Exchange Treatment of RLWTF Effluent
M10 Effluent Storage	System Alignment Checklist for RLWTF Effluent Disposition
M11 Solar Evaporation at TA-52	ZLD Facility Status Change Transferring Effluent from RLW to ZLD Tanks Sampling ZLD Tanks Transferring Effluent from ZLD Tanks to WMRM
M11 Outfall #051	Frac Tank Operations and Discharge of TK38 TK38 Operations

Transuranic:	
T1 Collection System	WM-201/66/107 System Alignment Checklist Transuranic RLW Transfers from TA-55 to TA-50
T2 Influent Storage	Sampling of the WM66 Influent Tanks
T3 Treatment	Room 60/60A System Alignment Checklist Acid Waste Treatment Caustic Waste Treatment Operations Back flushing the Pressure Filter
T4 Drum Tumbling	Sampling TK-7A, Sludge Mixing, and Sludge Rinsing Water Addition to TK-7A Drum Tumbler Operations
T5 Effluent Storage	Transferring Material from TK3 to the 3K Tank
Secondary Treatment:	
S1 Secondary Reverse Osmosis	Secondary RO Operations Secondary RO Cleaning and Maintenance
S2 Rotary Vacuum Filter	Vacuum Filter System
S3 Bottoms Storage	Sampling TK-SE Loading Evaporator Bottoms into a Tanker

☐ Operational plan is attached.

☐ Operational plan was previously submitted. Submittal date(s): _____

B-8. **System Maintenance**. Attach a description of the operations and maintenance procedures which ensure that your processing, treatment and disposal system functions properly; e.g., inspections, pumping schedules, equipment maintenance, etc.

In addition to the procedures referenced in B-7, the RLWTF utilizes the following process for system maintenance. RLWTF management assesses equipment and facility condition both informally (on an on-going, day-to- day basis) and formally (scheduled meetings and discussions, and/or condition assessment projects). Assessment findings are captured and prioritized, typically on an annual basis, in the form of a three-year maintenance plan. That plan documents major facility and equipment needs, and provides focus for major replacement and refurbishment projects.

For fiscal year 2011, for example, the three-year plan prioritized the need to replace the tubular ultrafilter, restore Clarifier #1 to full service, install an effluent evaporator, and repair eight collection system alarms. All of those actions were accomplished.

☐ O & M procedures are attached.

☐ O & M procedures were previously submitted. Submittal date(s): _____

B-14. Ground Water Quality Monitoring. Discharge Permits typically require that ground water samples be collected quarterly from properly constructed monitoring wells located downgradient from discharge locations. The samples must be analyzed for contaminants of concern. For most domestic and agricultural Discharge Permits, the typical contaminants of concern are total Kjeldahl nitrogen (TKN), nitrate-nitrogen (NO_3-N), total dissolved solids (TDS) and chloride.

Optional: In the space below (or as an attachment), you may propose revisions or additions to the standard ground water monitoring requirements. If you do, provide the rationale for your proposal.

Groundwater monitoring will be conducted in Mortandad Canyon at four alluvial groundwater monitoring wells (MCO-3, MCO-4b, MCO-6, and MCO-7), three intermediate-depth wells (MCOI-4, MCOI-5, and MCOI-6), and two regional aquifer wells (R-1 and R-15) (For well locations, see Map #1, Appendix J, February 16, 2012 Discharge Permit Application for the TA-50 RLWTF). These nine wells are all downgradient of the discharge point, NPDES Outfall #051. Monitoring will be conducted in the alluvial wells quarterly because of the potential for a shorter response time to discharges from TA-50 RLWTF. Monitoring in the intermediate-depth and regional wells will be conducted annually to document changes to existing conditions in those zones as well as to monitor the long-term water quality associated with effluent releases that occur under this Discharge Permit. The table below presents the proposed monitoring plan for Mortandad Canyon groundwater.

Proposed Monitoring Plan for Mortandad Canyon Groundwater.

LOCATION	PARAMETERS	NOTES	FREQUENCY
Alluvial Wells			
MCO-3	Total N, TDS, F, ClO4	1	Quarterly
MCO-4B	Total N, TDS, F, ClO4	1	Quarterly
MCO-6	Total N, TDS, F, ClO4	1	Quarterly
MCO-7	Total N, TDS, F, ClO4	1	Quarterly
Intermediate Wells			
MCOI-4	Total N, Metals, Inorganics, Organics	1, 2, 3, 4, 5, 6	Annual
MCOI-5	Total N, Metals, Inorganics, Organics	1, 2, 3, 4, 5, 6	Annual
MCOI-6	Total N, Metals, Inorganics, Organics	1, 2, 3, 4, 5, 6	Annual
Regional Wells			
R-1	Total N, Metals, Inorganics	1, 2, 3, 4, 6	Annual
R-15	Total N, Metals, Inorganics	1, 2, 3, 4, 6	Annual

**North & South Frac Tanks or TK38

NOTES:

1. Total Nitrogen (N): TKN, Ammonia, NO3+NO2-N
2. Human Health Standards (20.6.2.3103A): Ag, As, Ba, Cd, CN, Cr, F, Hg, NO3-N, Pb, Se, U
3. Domestic Water Supply Standards (20.6.2.3103B): Cl, CU, Fe, Mn, SO4, Zn, TDS, pH
4. Irrigation Standards (20.6.2.3103C): Al, B, Co, Mo, Ni
5. Volatile & Semivolatile Organics (20.6.2.7WW, 20.6.2.3103) by EPA Methods 624 and 625.
6. Perchlorate (ClO4)

See the DOE/LANS February 16, 2012, submittal for information pertaining to the well logs and well survey.

Additional monitoring may be conducted in coordination with the NMED Ground Water Quality Bureau.

B-15. Other Monitoring. In addition to discharge volumes, discharge quality monitoring and ground water sampling, Discharge Permits typically require the following monitoring, depending on the type of facility:

- inspection and pumping of septic tanks, grease tanks, lift stations
- inspection of leachfields
- inspection of lagoons
- process testing for treatment plants
- land application data sheets (LADS)
- tracking of chemical fertilizer applications to land application areas
- soil sampling (agricultural and selected other facilities land applying wastewater)
- harvested plant material testing (agricultural facilities)

Optional: In the space below (or as an attachment), you may propose revisions or additions to the other standard monitoring requirements for your type of facility. If you do, provide the rationale for your proposal.

The TA-52 Zero Liquid Discharge Solar Evaporation Tanks are two, free-standing, reinforced concrete tanks (concrete walls and floor) with two synthetic liners and a leak detection system. The depth to groundwater below the TA-52 Zero Liquid Discharge Solar Evaporation Tanks is approximately 1260 feet below ground surface. The leak collection system consists of a lineal leak water detector tape (HYDRO-TEMP™) between the primary and secondary synthetic liners; when activated by liquid, the tape will trigger a visual (red light) alarm. Operators will monitor the alarm weekly.

B-16. System Failure. Describe your contingency plan in the event there is a failure of your wastewater or discharge system (e.g., wastewater back-up, pump failure, pipe breaks, tank overflow, leachfield failure, saturated fields etc.)

See the RLWTF Contingency Plan – Appendix G.

B-18. Other Contingencies. Discharge Permits typically contain standard contingencies to address:

- exceeding wastewater quality limits
- violation of ground water or surface water standards
- spills or illegal releases of wastewater
- migration of soil nitrogen
- loading nitrogen above limit

Propose additional contingency plans, if appropriate:

See the RLWTF Contingency Plan – Appendix G.

APPENDIX G

TA-50 RLWTF

TA-52 ZLD Solar Evaporation Tanks

DP-1132

CONTINGENCY PLAN

Enclosure 3

April 2, 2012
LA-UR-12-20151
ENV-DO-12-0019

CONTINGENCY PLAN (DP-1132)

This Attachment represents contingency measures applicable at the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF) and the TA-52 Zero Liquid Discharge (ZLD) Solar Evaporation Tanks when there is a failure of the wastewater or discharge system resulting in an exceedance of Discharge Permit effluent limits, ground water quality standards, spills or releases of wastewater, and other applicable circumstances set forth in NMAC 20.6.2.3107.A . The Permittees shall implement the provisions of this Plan as described below:

I. Exceedance of Discharge Permit Effluent Limits (NPDES Outfall #051)

1. In the event that validated analytical results from a quarterly or annually monitored treated wastewater sample exceeds the limitations set forth in this Discharge Permit, the Permittees shall collect and analyze a second sample ("confirmatory sample") within 30 days of the initial sample to verify the initial results. If the validated confirmatory sample results indicate that the limitation for a constituent is continuing to be exceeded, the following contingency plan shall be enacted:

   a) Within 30 days of the validated confirmatory sample analysis date indicating that the limitation is continuing to be exceeded, the Permittees shall:

      i. Notify NMED that the contingency plan is being enacted, and
      ii. Submit a copy of the validated initial and confirmatory analytical results indicating an exceedance to NMED.

   b) The Permittees shall increase the frequency of sampling and analysis of treated wastewater for the constituent to the next two batch discharges.

   c) The Permittees shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational procedures.

   d) The Permittees shall conduct a physical inspection of the treatment system to detect and correct abnormalities.

   e) Within 90 days of the validated confirmatory sample analysis date, the Permittees shall submit a corrective action plan for NMED approval to address any operational procedures that require modification, correct abnormalities and/or to upgrade treatment processes as necessary to meet the effluent limits. The plan shall be enacted upon NMED approval.

   f) When analytical results from the validated confirmatory results from two consecutive batch discharges of wastewater sampling do not exceed the limitation, the Permittees are authorized to return to either quarterly or annual monitory frequency as required by this Permit. [NMSA 1978, § 74-6-5.D, Subsection B of 20.6.2.3109 NMAC, Subsection A of 20.6.2.3107 NMAC]

II. Exceedance of Ground Water Standards

1. Operational Period

In the event a validated ground water monitoring sample indicates that a ground water quality standard identified in Section 20.6.2.3103 NMAC is exceeded, the Permittees shall collect and analyze a confirmatory sample within 30 days of the initial validated sample analysis date to verify the initial results. In the event the validated confirmatory sample results indicate that the standard for a constituent is continuing to be exceeded, the following contingency plan shall be enacted:

a) Within 30 days of the validated confirmatory sample analysis date, the Permittees shall:

i. notify NMED that the contingency plan is being enacted, and

ii. Submit a copy of the validated initial and confirmatory ground water sample results to NMED.

b) Within 90 days of the validated confirmatory sample analysis date, the Permittees shall propose measures to ensure that the exceedance of the standard will be mitigated by submitting a corrective action plan to NMED for approval. The corrective action plan shall include a description of the proposed actions to control the source and an associated completion schedule. The plan shall be enacted upon NMED approval.

c) Once invoked (whether during the term of this Discharge Permit; or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements), this condition shall apply until the Permittees have fulfilled the requirements of this condition and ground water monitoring confirms for a minimum of two years of consecutive ground water sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded.

The Permittees may be required to abate water pollution pursuant to Sections 20.6.2.4000 though 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmed ground water contamination. [NMSA 1978, § 74-6-5.D, Subsection B of 20.6.2.3109 NMAC, Subsection A of 20.6.2.3107 NMAC]

2. Closure or Post-Closure Period

In the event a validated ground water monitoring sample indicates that one or more of the ground water standards of Section 20.6.2.3103 NMAC are violated as a result of the permitted discharge during the term of this Discharge Permit, upon closure of the facility or during post-closure monitoring, the Permittees shall collect a confirmatory sample from the monitoring well(s) within 30 days of the initial validated sample analysis date to verify the initial results. In the event the validated confirmatory sample results verify the exceedance of one or more

ground water standard of Section 20.6.2.3103 NMAC the following contingency plan shall be enacted:

a) Within 30 days of the validated confirmatory sample analysis date, the permittees shall:

i. Notify NMED that the contingency plan is being enacted, and

ii. Submit a copy of the validated initial and confirmatory ground water sample results to NMED.

b) Within 90 days of the validated confirmatory sample analysis date, the Permittees shall submit a corrective action plan for NMED approval that proposes measures to mitigate damage from the discharge including, at a minimum, source control measures and an implementation schedule. The plan shall be enacted upon NMED's approval. The Permittees may be required to abate water pollution pursuant to Sections 20.6.2.4000 though 20.6.2.4115 NMAC, if the corrective action plan will not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmed ground water contamination. [20.6.2.1203 NMAC, 20.6.2.4105.A(8) NMAC]

III. Spills

1. In the event that a release (commonly known as a "spill") occurs that is not authorized under this Discharge Permit in violation of 20.6.2.3104, the Permittees shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below.

Within 24 hours following discovery of the unauthorized discharge, the Permittees shall verbally notify NMED and provide the following information:

a) The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility.

b) The name and address of the facility.

c) The date, time, location, and duration of the unauthorized discharge.

d) The source and cause of unauthorized discharge.

e) A description of the unauthorized discharge, including its estimated chemical composition.

f) The estimated volume of the unauthorized discharge.

g) Any actions taken to mitigate immediate damage from the unauthorized discharge.

2. In the event of a release, corrective measures to mitigate damage shall require, as applicable, the following:

   a) Immediate correction action to contain and clean up the spill as necessary to prevent further release;

   b) Inspection of the treatment system to detect any abnormalities; and

   c) Repair or replacement of failed components, tanks, or equipment as soon as possible.

3. Within 14 days following discovery of the discharge, the Permittees shall submit written report to NMED verifying the oral notification with the information listed above under III.1 and 2, along with any pertinent updates.

4. Within 30 days following discovery of the discharge, the Permittees shall submit a corrective action report/plan for NMED approval describing any corrective actions taken and/or to be taken relative to the unauthorized discharge that includes the following:

   a) A description of proposed actions to mitigate damage from the unauthorized discharge.

   b) A description of proposed actions to prevent future unauthorized discharges of this nature.

   c) A schedule for completion of proposed actions.

5. In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, the Permittees may be required to abate water pollution pursuant to Sections 20.6.2.4000 though 20.6.2.4115 NMAC. Nothing in this condition shall be construed as relieving the Permittees of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC. [NMSA 1978, § 74-6-5.D, Subsection B of 20.6.2.3109 NMAC, 20.6.2.1203 NMAC]

IV. Other Conditions

1. Any liquid detected in any of the leak detections systems associated with RLWTF treatment systems (including the collection system and structures at TA-50), shall be removed, sampled, and characterized to determine the source of a liquid. Based on analysis of the sample, if the liquid appears to result from a leak in the leak detection system, the Permittees shall investigate the source of the leak and submit a corrective action plan to NMED within 30 days of discovery. All analytical results of liquid samples shall be provided to NMED for review. [20.6.2.1203 NMAC]

2. In the event that an inspection reveals a failure of the RLWTF collection lines, treatment units, zero liquid discharge tanks and tank system that may adversely

impact the environment, the Permittees shall enact the following contingency plan:

a) Within 24 hours of the discovered failure, the Permittees shall notify NMED of the failure.

b) Within 30 days the Permittees shall submit a corrective action plan for NMED approval to address the failure and propose methods of correction. The corrective action plan shall be implemented immediately upon NMED approval. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]

3. In the event that information available to NMED indicates that a well(s) is no longer able to provide representative data because of new physical problems or because of other conditions indicative of degradation in the well(s), the Permittees shall submit to the NMED a corrective action plan for well replacement or rehabilitation. The corrective action plan shall be approved by NMED prior to the initiation of corrective actions by the Permittees. If a new well is installed, construction and lithologic logs shall be submitted to NMED within 30 days of well completion. Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. The well(s) shall be plugged and abandoned in accordance with the abandonment details in the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011, and any applicable local, state, and federal regulations. Documentation describing the plugging and abandonment procedures, including photographic documentation, shall be submitted to NMED within 30 days of completed well abandonment. [20.6.2.3107 NMAC]

4. If a facility is required to enact the contingency plan more than two times in a 12-month period, the Permittees shall propose to modify operational procedures and/or upgrade the treatment process to achieve consistent compliance with effluent limitations by submitting a corrective action plan for NMED approval. The plan shall include a schedule for completion of corrective actions and shall be submitted within 60 days following the second sample analysis date. The plan shall be enacted upon NMED approval. [NMSA 1978, § 74-6-5.D, Subsections B and C of 20.6.2.3109 NMAC, Subsection A of 20.6.2.3107 NMAC]

5. In the event NMED or the Permittees identifies any other failures of the discharge plan or system not specifically noted herein, NMED may require the Permittees to develop for NMED approval contingency plans and schedules to cope with the failures. [20.6.2.3107(A)10 NMAC]