



**Environmental Protection Division**  
**Environmental Compliance Programs (ENV-CP)**  
PO Box 1663, K490  
Los Alamos, New Mexico 87545  
(505) 667-0666

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

*Date:* **MAR 02 2015**  
*Symbol:* ENV-DO-15-0068  
*LA-UR:* 15-21407  
*Locates Action No.:* Not Applicable

Ms. Raquel Douglas  
U. S. Environmental Protection Agency, Region VI  
Enforcement Branch (6EN)  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

Mr. Bruce Yurdin  
New Mexico Environment Dept.  
Surface Water Quality Bureau  
Point Source Regulation Section  
Harold Runnels Building, N2050  
PO Box 5469  
Santa Fe, NM 87502-5469

Dear Ms. Douglas and Mr. Yurdin:

**SUBJECT: LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014**

On August 25-28, 2014 and September 12, 2014, New Mexico Environment Department, Surface Water Quality Bureau (NMED-SWQB) staff conducted, on behalf of EPA, a Compliance Evaluation Inspection (CEI) for the Los Alamos National Laboratory NPDES Stormwater Individual Permit (No. NM0030759). The Department of Energy (DOE) and Los Alamos National Security, LLC (LANS), as co-permittees on this Permit, submit the enclosed information (Enclosure 1) that documents the response to the CEI report. DOE and LANS are working to evaluate and address the CEI findings. Due to the unique and complex nature of the Permit, many of the CEI findings and corresponding responses are related to Permit interpretation. Therefore, DOE and LANS are actively working with NMED-SWQB staff to develop criteria and language for the new Permit that would clarify and resolve many of the CEI findings.

Please contact Terrill W. Lemke at (505) 665-2397 or David S. Rhodes at (505) 665-5325 if you have questions or if additional information would be helpful.

Sincerely,



Alison M. Dorries  
Division Leader  
Environmental Protection Division  
Los Alamos National Security, LLC

Sincerely,



Kimberly Davis Lebak  
Manager  
Los Alamos Field Office  
U.S. Department of Energy

AMD:KDL:TWL/lm

Enclosure 1: Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

Cy: Everett Spencer, USEPA/Region VI, Dallas, TX, (E-File)  
Brent Larsen, USEPA/Region VI, Dallas, TX, (E-File)  
Sarah Holcomb, NMED/SWQB, Santa Fe, NM, (E-File)  
Don Carlson, NMED/DOE/OB, Santa Fe, NM (E-File)  
Courtney Perkins, NMED/DOE/OB, Santa Fe, NM, (E-File)  
David Rhodes, NA-LA, (E-File)  
Karen Armijo, NA-LA, (E-File)  
Peter Maggiore, NA-LA, (E-File)  
Gene E. Turner, NA-LA, (E-File)  
Kirsten Laskey, NA-LA, (E-File)  
Michael A. Lansing, PADOPS, (E-File)  
Amy E. De Palma, PADOPS, (E-File)  
Michael T. Brandt, ADESH, (E-File)  
Raeanna Sharp-Geiger, (E-File)  
Alison M. Dorries, ENV-DO, (E-File)  
Michael Saladen, ENV-CP, (E-File)  
Terrill W. Lemke, ENV-CP, (E-File)  
Sam Loftin, ENV-CP, (E-File)  
Jeff Walterscheid, ER, (E-File)  
Steve Veenis, ER, (E-File)  
Susan McMichael, LC-ESH, (E-File)  
[lasomailbox@nnsa.doe.gov](mailto:lasomailbox@nnsa.doe.gov), (E-File)  
[locatesteam@lanl.gov](mailto:locatesteam@lanl.gov),  
[env-correspondence@lanl.gov](mailto:env-correspondence@lanl.gov)



**LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014**

NMED Comment Category	LANL Response
<b>Section A – Permit Verification</b>	
<p>During the Compliance Evaluation Inspection NMED visited 21 SMAs/48 Sites. Section A of the inspection report contains a discussion of each of the Sites visited. Several findings, primarily related to sampling representativeness, were common to each of these discussions. Within the “NMED Comment Category” column these findings are summarized and the LANL response for Section A addresses these common findings.</p>	
<p>Comment A1: Of the 250 SMAs, only 140 SMAs have been sampled.</p>	<p>Sample collection or lack of sample collection is influenced by the types of controls installed, level and frequency of precipitation events, and potential sampler malfunction. SMAs remaining to be sampled are reflective of these conditions.</p>
<p>Comment A2: Sites may not have been sampled representatively. Sampler locations may not be representative based on Consent Order soil sampling data.</p>	<p>Using the Permittees best professional judgment, the following criteria were used for original sampler placement:</p> <ul style="list-style-type: none"> <li>• As close as possible to the SWMU boundary</li> <li>• Avoidance/reduction of off-Site run-on</li> <li>• Most representative drainage discharging from the Site(s)</li> <li>• Safety, accessibility, and security considerations</li> </ul> <p>Geographical coordinates of sampling locations were then identified and incorporated into the permit.</p> <p>Since the issuance of the IP, the Permittees have acquired an increased knowledge of the Site history and characteristics, including the collection of soil data at many Sites. The Permittees, in conjunction with NMED, have been unable to identify a technically sound method to correlate soil sampling data values with water quality constituent levels.</p> <p>The Permittees are working with NMED and stakeholders to develop criteria and language for the new permit related to identifying POCs from soil sampling data and/or site</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
	<p>information and assessing impacts to water quality. This includes developing new criteria for defining point sources and determining representative sampler placement.</p>
<p>Comment A3:                      LANS/DOE used metals, radioactive materials and PCB background reports published after the effective date of the permit and unapproved by EPA to justify assertions that some Sites are not discharging Site-related pollution.</p>	<p>Part I.E.3. (a) states, <i>“Where Permittees believe they have installed measures to minimize pollutants in their storm water discharges as required by Part I.A of the Permit at a Site or Sites, but are unable to certify Completion of Corrective action under Sections E.2.(a) through E.2.(d) above (individually or collectively) due, for instance, to force majeure events, background concentrations of pollutants of concern, site conditions that make it impracticable to install further control measures, or pollutants of concern contributed by sources beyond the Permittees control, the Permittees may seek to place a site into Alternative Compliance, whereby Completion of Corrective Action will be accomplished on a case-by-case basis, and as necessary, pursuant to a individually tailored compliance schedule determined by EPA.”</i></p> <p>Background data were collected and evaluated to assess corrective action options and to support alternative compliance requests (ACR). The Permittees assume that submitted background data will be evaluated by EPA as part of the ACR process.</p> <p>The Permittees are working with NMED and stakeholders to develop language for the new permit to clarify the use of background data. The Permittees will also collaborate with NMED to develop technical requirements for generating background data.</p>
<p>Comment A4:                      Potential pollutants of concern discovered due to soil sampling have not been sampled in storm water.</p>	<p>The Permittees, in conjunction with NMED, have been unable to identify a technically sound method to correlate soil sampling data values with water quality constituent levels and are therefore unsure how to determine monitoring requirements from soil data. The Permittees are working with NMED and stakeholders to develop criteria and language for the new permit related to identifying POCs from soil sampling data and/or site information and assessing impacts to water quality. This would also include an annual review and modification as necessary of the site sampling under the permit.</p>

**LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014**

<b>NMED Comment Category</b>	<b>LANL Response</b>
<p>Comment A5: LANS/DOE did not update their SDPPPs for additional pollutants of concern discovered due to soil sampling.</p>	<p>The Permittees are working with NMED and stakeholders to develop criteria and language for the new permit related to identifying POCs from soil sampling data and/or site information. Additional pollutants of concern, as identified, will be added to future annual SDPPP updates.</p>
<p><b>Section B – Recordkeeping and Reporting</b></p>	
<p>Comment B1: The 2012 updated version of the Permittees’ SDPPP was missing from the LANS/DOE website. The 2011 and 2013 updates were available.</p>	<p>The link to the 2012 SDPPP was broken and has been repaired in January 2014.</p>
<p>Comment B2: At certain Sites, LANS/DOE personnel identified pollutants that were Site related that should be on the monitoring list. This list is included as Attachment C and is obtained from the Permittees’ permit reapplication package. This information should have been identified by the Permittees in the annual SDPPP updates and Annual Reports as the Permittees were aware of the additional pollutants of concern. This additional information should have resulted in revisions to Site sampling under the Permit.</p>	<p>Additional pollutants of concern, as identified, will be added to future annual SDPPP updates. There is currently no requirement for reporting new Potential Pollutant Sources in the Annual Report under Part 1.H.2., but consideration for inclusion is currently being evaluated. The Permittees are working with NMED and stakeholders to develop criteria and language for the new permit related to identifying POCs from soil sampling data and/or site information. This would also include an annual review and modification as necessary of the site sampling under the permit.</p>
<p>Comment B3: When reviewing SDPPP language for a Site from update to update, it was noted that in some cases, language describing the former activity at the Site was</p>	<p>The Site(s) language has evolved based on an increased understanding of the site history and activities. Since the IP requires Permittees to annually to document all changes made during the previous year and to reflect any changes projected for the following year, the</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>changed or deleted. Site descriptions are one of the ways that LANS/DOE, the public and regulatory agencies characterize a Site and the potential pollutants that could be generated. Keeping the pertinent information in the SDPPPs from year to year is important. However, if the plan is to revise Site histories, this is why all versions of the SDPPPs should be available on the website.</p>	<p>decision was made to focus the annual updates on what happened in the past year and planned for the next. This choice was made to assist the public in being able to find what happened in the past year. However, based on NMED's comment, a different format for updates to better clarify changes in the site information is being evaluated and planned for future annual updates.</p>
<p>Comment B4: While the Site maps contained in the SDPPPs were generally useful and detailed, there were a few instances where clarifications were needed. The direction of flow was not clear in some cases, and some Site features were not included that would be useful.</p>	<p>Part I.F.1.(b) of the IP states, <i>"The facility's SDPPP must include historical activities at each Site, precipitation information, general location map, and Site maps."</i></p> <p>The IP provides no guidance or requirements for the content of Site maps including such items as direction of flow indicators. Currently Site maps are updated as needed based on inspection findings. Additionally, a review of internal processes and procedures for map content and updates will be conducted.</p>
<p>Comment B5: Updates to SDPPPs are required annually by the permit. There was construction activity at two SMAs that were visited during this inspection. No information was included in the 2013 SDPPP update on construction related activities at Sites (specifically S-SMA-2 and CDV-SMA-1.7) and the requirements in Part I.E.5.a of the permit to restart sampling at those two SMAs. Construction began at S-SMA-2 approximately a month prior to this inspection, and construction at CDV-SMA-1.7 began shortly before the inspection as well.</p>	<p>As noted, updates to the SDPPP are required annually. Since construction at S-SMA-2 and CDV-SMA-1.7 started in 2014 information on these activities and will be included in the 2014 SDPPP update. Requirements in Part I.E.5.a will be adhered to.</p>
<p>Comment B6:</p>	

**LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014**

<b>NMED Comment Category</b>	<b>LANL Response</b>
<p>For the Sites detailed in Section A of this narrative, soil sampling under the Consent Order typically occurred for many Sites in the 2009-2010 time frame. As LANS/DOE obtained these soil sampling results, updates should have been made to the SDPPPs for each of these Sites to indicate that other potential pollutants could be discharged off of the Sites. This requirement is made in the Permit in Part I.F in the Summary of Potential Pollutant Sources, which did not appear to be updated with the new soils information, and is also required to be reported to EPA and NMED in the Annual Report required by Part I.H.2.</p>	<p>The Permittees, in conjunction with NMED, have been unable to identify a technically sound method to correlate soil sampling data values with water quality constituent levels and are therefore unsure how to determine potential impacts to water quality from soil data. The Permittees do not believe that soil data is a condition requiring initiation of corrective action. The Permittees are working with NMED and stakeholders to develop criteria and language for the new permit related to identifying POCs from soil sampling data and/or site information and assessing impacts to water quality.</p>
<p>Comment B7: Soils data are an example of information that is important and must be reported timely to the regulatory agencies. This would then result in important decisions on protection of water quality standards, and human health and the environment. Because of this lack of information, it is likely that these additional pollutants (metals, PAHs, and radionuclides) have been discharged into the environment without appropriate monitoring and remediation.</p>	<p>The Permittees, in conjunction with NMED, have been unable to identify a technically sound method to correlate soil sampling data values with water quality constituent levels and are therefore unsure how to determine potential impacts to water quality from soil data. The Permittees do not believe that soil data is a condition requiring initiation of corrective action. The Permittees are working with NMED and stakeholders to develop criteria and language for the new permit related to identifying POCs from soil sampling data and/or site information and assessing impacts to water quality.</p>
<p><b>Section C – Operations and Maintenance</b></p>	
<p>Comment C1:</p>	

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>As noted in Appendix A (overview of Sites) there are 78 SMAs that showed an exceedance of TALs in baseline monitoring, but are listed as needing corrective action. These Sites have been in need of corrective action anywhere from October of 2011 to November of 2013. Sites that need corrective action are required by the Permit as detailed above to be addressed "as soon as practicable." Although there is no specific timeframe for compliance with this requirement, it does not appear that delaying corrective action for three years is compliant with the requirement to implement corrective action as soon as practicable.</p>	<p>Following receipt of validated sample analyses showing one or more POCs greater than applicable MTAL (or applicable MQL, whichever is greater) the Permittees have initiated a screening process to determine the most appropriate corrective action option for the Site. The actions performed include assessing Site soil data and developing a plan that will result in the completion of corrective action.</p> <p>The Permittees are working diligently towards the implementation of corrective actions and this screening process and other related procedures will be reevaluated to ensure more timely initiation of corrective action.</p>
<p>Comment C2: Appendix H of this inspection report is a table showing the corrective action status of Sites as of December 2013.</p>	<p>The table in Appendix H, as provided by the NMED SWQB would indicate that deadlines for completion of Corrective Action were missed for the majority of the High Priority Sites listed in the table. However, Section I.E.5.e states <i>"If no confirmation sample could be collected during the applicable period from a measurable storm event, confirmation sampling shall continue until at least one sample is collected, and compliance with applicable target action levels for that particular Site or Sites will be determined based on the single result from the first successful confirmation sampling event. If the Permittees are unable to collect samples from a measurable storm event for a particular Site or Sites, the adjusted deadline for Completion of Corrective Action for the Site or Sites shall be 6 months after receipt of a single result from the first successful confirmation sampling event or the deadline specified under Section E.4 for that Site, whichever is later."</i> If no sample is collected by the original deadline, a new deadline will be established 6 months following validation of a single result from a successful confirmation sampling event.</p> <p>Section I.E.1(d) also states that if a confirmation sample for a High Priority Site cannot be collected due to lack of a measurable storm event the compliance deadlines for corrective</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
	action shall be extended for one year following the first successful confirmation sampling event. Many Sites listed in Appendix H are currently awaiting confirmation sampling or the results from confirmation sampling.
<b>Section D – Self-Monitoring</b>	
<p>Comment D1:</p> <p>There are approximately 110 SMAs for which no sample has been collected. The current permit requires that a sample is analyzed when there is enough volume to complete all required analyses, and if it has been 15 days since the prior rain event. In many cases, the BMPs installed at a Site (including large berms and/or retention basins) do not allow flow to pass to the sampler location.</p>	<p>Sample collection or lack of sample collection is influenced by the types of controls installed, level and frequency of precipitation events, and potential sampler malfunction. The SMAs remaining to be sampled are reflective of these conditions.</p>
<p>Comment D2:</p> <p>The permit states, as cited above, in Part I.E.5.c, that if there is evidence that a Site exhibits conditions that could lead to a discharge of contaminated runoff, the Permittees are required to initiate corrective action within 30 days of receiving notice of those conditions. As noted earlier in this report, the Permittees have conducted extensive soil sampling in accordance with their RCRA permit and this information informs the affected area of the Sites covered under this Clean Water Act permit. Much of the soil sampling was conducted for Investigation Reports in 2009-2010. It appears that the soil sampling results should have informed the Permittees' decisions on what the</p>	<p>The Permittees, in conjunction with NMED, have been unable to identify a technically sound method to correlate soil sampling data values with water quality constituent levels and are therefore unsure how to determine potential impacts to water quality from soil data. The Permittees do not believe that soil data is a condition requiring initiation of corrective action. The Permittees are working with NMED and stakeholders to develop criteria and language for the new permit related to identifying POCs from soil sampling data and/or site information and assessing impacts to water quality.</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>affected areas of these Sites were, and the Permittees should have taken action within 30 days to correct sampler locations and ensure the representativeness of those SMA locations.</p>	
<p>Comment D3:</p> <p>The permit states in Part I.E.5.f that when an SMA sampler location changes, regardless of whether it is a major or a minor change, that the Permittees must collect confirmation samples for all pollutants of concern at the Site. According to the Permittees' annual reports for 2012 and 2013, the following SMAs had minor changes in the associated SMA location. No confirmation sampling of the Sites listed below appears to have occurred.</p> <p><i>See Tables</i></p>	<p>Part I.E.5.f states, <i>"Monitoring Location Change. If the location of any SMA for any Site or Sites has been changed, confirmation samples must be analyzed for all pollutants of concern for that Site or Sites, as listed in Appendix B of the Permit"</i>.</p> <p>The Permittees believe the above statement to be referring to a situation where a SWMU/PRS boundary has been identified to be in the wrong location and the SMA boundary is modified to capture the new SWMU/PRS location. For such a condition confirmation samples are required. Minor adjustments to sampling locations due to changes in natural conditions (flow paths) would then be allowed without further confirmation samples.</p>
<p>Comment D4:</p> <p>During the inspection, NMED noted that some sampler locations – specifically the inlet and actuator to the sampler – were in such a location that some storm flows would not be sampled. For example, at CDB-SMA-0.55, there was a channel evidenced by erosion that routed flow around the sampler inlet (please see Appendix E for the photos showing this situation). Permittees' representatives indicated that they felt they were unable to move the sampler inlet location (at this and other Sites) because it would require a modification to the permit. However, as the permit states in Part I.D.2 above, minor changes are allowed with notification to EPA that they are</p>	<p>During field discussions, the Permittees stated that sampler locations are chosen to best represent potential runoff from SWMUs, that minor sampler intake moves are made in the field to capture storm water runoff paths and in some instances, the sampler location was adjusted requiring notification in the SDPPP update. Moves that result in sampling of storm water from an area significantly different are considered to be beyond a minor move and would require a permit modification.</p> <p>The ISCO sampler, inlet and actuator were not in the field during the Site visit to CDB-SMA-0.55 as can be seen in the photos in Appendix E. The Permittees are not sure which Site is being referenced in the example.</p> <p>The Permittees re-evaluate sampler intake locations prior to and during the sampling season and are adjusted as necessary to optimize sample collection. Sampler moves are</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>occurring, and followed by documentation in the SDPPP. Additionally, the Permittees document in the 2013 Annual Report that minor changes occurred at sampling locations (12 SMAs) and minor changes to Site boundaries did occur at 81 Sites.</p>	<p>documented in the SWPPP. A review of internal procedures for sampler operation and modification will also be conducted to ensure timely and appropriate changes occur.</p>
<p>Comment D5: For these four Sites, the NMED DOE-OB samplers appear to be more representative of the runoff from the Sites and affected area when taking available soil sampling data into account. The differences between the TAL exceedances indicate that the Permittees must reevaluate the representativeness of their current sampling location and should use all available information to inform that assessment.</p>	<p>During implementation of the Federal Facility Compliance Agreement (FFCA), prior to the Individual Permit, samplers at these four Sites were in the vicinity of the NMED DOE-OB samplers. Per verbal direction from NMED personnel during the transition from the FFCA to the IP, samplers were moved to their current location. The Permittees are working with NMED and stakeholders to develop new criteria for defining point sources and determining representative sampler placement.</p>
<p>Comment D6: Monitoring requirements under the permit mandate assessment of Sites for dissolved metals concentrations in accordance with the TALs designated in the permit. The approved methods for dissolved metals analysis in 40 CFR Part 136.3 that LANS/DOE utilizes is EPA Method 200.8. The method states that "for the determination of dissolved elements, the sample must be filtered through a 0.45 um pore diameter membrane filter at the time of collection or as soon thereafter as practically possible". In footnote 7 in Table II of 40 CFR Part 136.3, EPA notes "For dissolved metals, filter grab samples within 15 minutes of collection and before adding preservatives". LANS/DOE staff indicated that because there is approximately three days/ time</p>	<p>LANL underwent a process improvement to reduce the frequency of holding time exceedances during the fall/winter of 2011/2012. As stated by NMED, sampling hold time exceedances have improved since 2011. Internal monitoring processes and procedures will be further evaluated to assess retrieval times and ensure compliance with 40 CFR Part 136 requirements.</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>before field staff retrieves a sample after a triggering event, in-line filtering on ISCO collection devices was attempted. However, according to LANS/DOE staff, the filter clogged. As a result, samples are now collected and returned to the sample processing lab where they are then filtered and preserved, and sent offsite to the contract laboratory for analysis. With the delay in filtration of the sample, dissolved and suspended forms of the metals could change, therefore resulting in an inaccurate portrayal of that storm event's impact on the Site. At on Site, S-SMA-3.53, LANS staff did not retrieve the sample collected in August 2011 for eight days, at which time it was cooled and preserved. NMED SWQB does recognize that due to the large number of SMAs monitored under this permit, getting samples filtered and processed within 15 minutes is extremely unlikely, however, eight days is excessive. Excessive delays in analysis call the quality of the data into question.</p> <p>Information provided at the final exit interview on November 5, 2014 indicated that sampling hold time exceedances had improved since 2011.</p>	
<p>Comment D7:</p> <p>There are multiple Sites under the permit that, following the installation of enhanced controls, have been certified as Corrective Action Complete. These Sites have not collected confirmatory storm water samples, but rather have obtained a Certificate of Completion under NMED Hazardous Waste Bureau's Consent Order. In discussions with LANS/DOE staff at the time of this inspection, it appears that an</p>	<p>In Part I.E.1(b) of the Individual Permit it states, <i>"If the Permittees decide to achieve corrective action under this Section through demonstration that the Site has achieved RCRA "corrective action complete without controls/corrective action complete with controls" status or a Certificate of Completion under NMED's Consent Order, Permittees will be in compliance with this Permit at that Site once they have certified such results to EPA and provided the supporting documentation from NMED, and no further confirmation sampling is required except as provided by Section E.5( c) and Section 1.2(b)."</i></p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>interpretation has been made by the Permittees that when a Site does receive a CoC from NMED's Hazardous Waste Bureau, that corrective action is complete and that no more sampling needs to occur. However, NMED does not believe the permit intended to reflect that stormwater sampling could be terminated once a certificate of completion document was obtained.</p>	<p>If the Permittees have installed one or more enhanced controls at a Site but certify corrective action complete under Part I.E.2(d) not Part I.E.2(a) the additional sampling requirements in Part I.E.1(a) for certifying the completion of corrective action through the installation of enhanced controls do not apply.</p>
<p>Comment D8:</p> <p>When a baseline monitoring sample at a Site exceeds TALs, the permit specifically requires that enhanced controls meant to better address the conditions at the Site, and samples to confirm that those controls are working are collected. However, the Sites/SMAs listed below have been documented by the Permittees as having achieved Corrective Action Complete under this permit due to the receipt of a CoC from the NMED Hazardous Waste Bureau. The permit also requires that corrective action in response to a TAL exceedance is initiated within 30 days. There was no documentation available to show that this was achieved. As shown for the Sites in the table below, corrective action was not initiated within the 30 day deadline.</p>	<p>The Permittees initiate Corrective Action through implementation of a Corrective Action Screening Process which is initiated following identification of a TAL exceedance. As stated in Part I.E.1(b) receipt of a CoC is an acceptable method of required corrective action.</p> <p>As stated in Part I.E.1(b), receipt of a CoC is an acceptable method of required corrective action for a TAL exceedance. Additionally, in Part I.E.1(a) it is stated that corrective action must be initiated "as soon as practicable". There is no permit requirement to initiate this action within 30 days.</p>
<p>Comment D9:</p> <p>LANS/DOE has not provided any further documentation at the Sites that have obtained a Certificate of Completion to illustrate that the soil</p>	<p>As stated in Part I.E.1(b), receipt of a CoC is an acceptable method of required corrective action for a TAL exceedance. The Permittees are not required by the Individual Permit to provide any documentation at the Sites that have obtained a CoC.</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>concentrations of pollutants at the Site are protective of water quality standards.</p>	
<p>Comment D10:</p> <p>Additionally, many of the CoCs obtained for these Sites were issued as a Certificate of Completion WITH controls. These CoCs specifically require LANS/DOE to continue monitoring stormwater under the Individual Permit as a control under the RCRA process (indicated in the table below as “*“):</p> <p>See table</p> <p>Because of the written requirement under the Certificate of Completion to continue monitoring in accordance with the NPDES permit, a decision to discontinue monitoring appears to also create an issue with the CoC under the Consent Order.</p>	<p>The CoCs issued by the NMED-HWB does not specifically state that storm water samples must be collected. Instead, monitoring for potential off-site transport of residual contamination (i.e., off-site migration of contaminated sediments) can be accomplished by the inspections under the IP after completion of corrective actions through use of a CoC is certified.</p> <p>Although CoCs with requirements for storm water “monitoring” have been issued by the HWB, it should be noted that the scope of the Consent Order with respect to storm water discharges is very limited. As specified in Section VII.A of the Consent Order, the Consent Order does not provide for monitoring of discharges to surface water that are subject to an NPDES permit. The Consent Order does allow NMED to require corrective actions at a SWMU or AOC if NMED “determines, based on surface water monitoring data or other relevant information, that there has been a release of Contaminants into the environment at or from the SWMU or AOC and that corrective action is necessary to protect human health or the environment from such a release.” Such determinations have not been made by NMED for the IP Sites having CoCs with storm water monitoring controls and these controls would not constitute a corrective action under the Consent Order. No requirements related to storm water discharges would apply at these Sites beyond those specified in the IP.</p> <p>EPA’s March 27, 2014 response to alternative compliance request for S-SMA-2.0 states that “...[Site 03-056(c)] is considered in compliance with the completion of corrective action [under the Individual Permit] if it receives a Certificate of Completion...”. That is, no further storm water monitoring is required under the Individual Permit.</p>
<p>Comment D11:</p> <p>LANS/DOE’s assessment of the TAL in the permit for adjusted gross alpha has been to monitor for gross alpha due to the cost of the additional monitoring for</p>	<p>Evaluation of gross alpha takes into account constituents removed from the calculation of adjusted gross alpha which would effectively reduce the reported result.</p>

**LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014**

NMED Comment Category	LANL Response
<p>Radium 226+228 and Uranium. Permittee representatives also state that the adjustment would not make a significant difference in the value of adjusted gross alpha. Appendix G is the Permittees' report on why this adjustment is unnecessary to determine compliance with this permit.</p>	
<p>Comment D12:</p> <p>A complete analytical information package was reviewed for S-SMA-3.53. This packet included information on sampling/preservation procedures, sample processing at the Permittees' sample processing facility in Los Alamos, and information from the contract analytical laboratory. This narrative will also include a discussion of the Permittees' analytical validation program, which is employed before data is uploaded into the publicly accessible Intellus database. According to the permit, the original monitoring requirements for this Site are:</p> <p>See table</p> <p>Sampling results included with the 2013 SDPPP indicate that sampling information was completed for the required TALs, as noted above. The stormwater sample was collected on August 4, 2011 at 3:12pm. The sample was retrieved by LANS staff on August 12, 2011 at 12:30pm. The sample was received by GEL Laboratories on August 16, 2011. This delay in collection of the sample results in a missed hold time for extraction of the SVOC analytes. Additionally, this means that the sample was not filtered for dissolved metals until at least 8 days later.</p>	<p>LANL underwent a process improvement to reduce the frequency of holding time exceedances during the fall/winter of 2011/2012. Sampling hold time exceedances have improved since 2011. A review of internal procedures for sample retrieval and processing will also be conducted to evaluate opportunities for process improvement.</p>

**LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014**

NMED Comment Category	LANL Response
<p>Comment D13:</p> <p>No processing/laboratory information was received for PCB analysis at this Site. Collection and retrieval information were available, but the documentation failed to give details as to the type of bottle cap used to hold the PCB sample. 40 CFR Part 136.3 requires that PCBs are collected in a glass container with a fluoropolymer lined cap. The sample was collected in a 1 L glass bottle and was cooled accordingly.</p>	<p>The Permittees use Level 3 (pre-cleaned to EPA standards, with certificate of analysis) wide mouth amber glass bottles with PTFE-lined caps (EPA compliant).</p>
<p>Comment D14:</p> <p>Results for benzo(a)pyrene and hexachlorobenzene are significantly above the ATAL listed in the permit. The documentation in the SDPPP indicates that the "std value" used to determine compliance in these cases was 5 ug/L. LANS/DOE explains in the SDPPP introduction that the "std value" is the TAL value as listed in the permit.</p> <p>This characterization is not entirely correct, as the ATAL is much lower. The value substituted in this case is the MQL listed by EPA. This information is summarized in the table below.</p> <p>See table</p> <p>Permit language at Part I.C allows the Permittees to use the higher of the MQL or the MTAL or ATAL for assessment of benchmarks. EPA established a list of MQLs in the permit, but these MQLs are not protective of NM WQCC water quality standards. As seen in the discussion above, pollutants are being discharged from the Sites in excess of the water</p>	<p>As stated in NMED's report, Permit language at Part I.C allows the Permittees to use the higher of the MQL or the MTAL or ATAL for assessment of benchmarks which is why the Permittees use 5 ug/L. Values below the MQL could be reported as 0. The Permittees are using a method that provides results below the MQL, as required by the Permit, therefore this method is sufficiently sensitive in accordance with NMED comments.</p> <p>The Permittees are working with NMED to clarify this issue for the IP renewal process.</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<p>quality standards, and therefore could be causing or contributing to a violation of those standards. In addition, there are methods approved under 40 CFR Part 136 that do have more sensitive MDLs as listed in the table above.</p>	
<p><b>Section F - Laboratory</b></p>	
<p>Comment F1:                      For Radium-226, GEL is using EPA Method 904.0, which is not a 40 CFR Part 136 approved method. GEL is using EPA Method 903.1 for analysis of Radium-228. EPA Method 903.1 does also allow for analysis of Radium-226. It is unclear why the Permittees decided to use a separate method for analysis of Radium-226 that is not approved for NPDES analyses.</p>	<p>The Permittees' contract lab is using a 40 CFR Part 136 approved method for analysis of radium-226. Contracted analytical laboratories report three measurements for each requested "Radium-226 and Radium-228" analysis:</p> <ul style="list-style-type: none"> <li>• Radium-226 by EPA method 903.1,</li> <li>• Radium-228 by EPA method 904.0, and</li> <li>• "Radium-226 and Radium-228" by "Generic:Radium by Calculation".</li> </ul> <p>The permitted constituent "Ra-226 and Ra-228" is a calculated value from the sum of individual analyses of radium-226 and radium-228. 40 CFR Part 136 allows analysis of total radium by proportional counting using the screening method EPA 903.0 or analysis of radium-226 by scintillation counting under EPA method 903.1. Radium-228 and "Radium-226 and Radium-228" do not have approved radiologic test procedures in 40 CFR 136. EPA 903.0 is a screening method that requires the use of EPA method 903.1 when radium activity is above 5 pCi/L. Consequently, LANL chooses to perform analysis of Ra-226 using 40 CFR 136 approved EPA method 903.1 and analysis of Ra-228 using EPA method 904.0. The method "Generic:Radium by Calculation" identifies the calculated sum of the two individual analyses.</p>

LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014

NMED Comment Category	LANL Response
<b>Section G – Effluent/Receiving Waters</b>	
<p>Comment G1:</p> <p>Baseline monitoring for Sites show that there were many exceedances of applicable TALs. Because corrective action was and continues to be delayed on many Sites, these issues are not resolved. Additionally, the interpretation by the Permittees that the receipt of a CoC immediately results in the need for no further monitoring of the Site results in the delay of needed controls at these Sites. Pollutants could then continue to be carried downstream.</p>	<p>The Permittees initiate Corrective Action through implementation of a Corrective Action Screening Process which is initiated following identification of a TAL exceedance. As stated in Part 1.E.1(b) receipt of a CoC is an acceptable method of required corrective action.</p>
<b>Decision-Making to Turn Samplers Off</b>	
<p>Comment DM1:</p> <p>The only instance where the permit clearly allows the Permittees to turn off a sampler would be in the 15 day period after collection of a compliance sample.</p>	<p>IP Sections Part I.D.4 (a) &amp; (b) Confirmation Results below Target Action Levels and Part I.E.1(b) Confirmation Results above Target Action Levels, identify additional situations where the permit clearly allows samplers to be turned off.</p>
<p>Comment DM2:</p> <p>The Permittees state in internal documents that they will remove a sampler from a SMA if they have received a CoC from NMED Hazardous Waste Bureau for all Sites within a SMA. If that SMA still has not collected confirmation samples after installed enhanced controls, for example, then there is no surface water confirmation that discharges from the Site are meeting TALs.</p>	<p>In Part I.E.1(b) of the Individual Permit it states, <i>"If the Permittees decide to achieve corrective action under this Section through demonstration that the Site has achieved RCRA "corrective action complete without controls/corrective action complete with controls" status or a Certificate of Completion under NMED's Consent Order, Permittees will be in compliance with this Permit at that Site once they have certified such results to EPA and provided the supporting documentation from NMED, and no further confirmation sampling is required except as provided by Section E.5( c) and Section 1.2(b)."</i></p>

**LANL Response to the NMED Compliance Evaluation Inspection for NPDES Storm Water Individual Permit, NM0030759, August 25-28, 2014 and September 12, 2014**

<b>NMED Comment Category</b>	<b>LANL Response</b>
	If the Permittees have installed one or more enhanced controls at a Site but certify corrective action complete under Part I.E.2(d) not Part I.E.2(a) the additional sampling requirements in Part I.E.1(a) for certifying the completion of corrective action through the installation of enhanced controls do not apply.