

EP2012 - 0214

ERID-227669

COMMUNICATION RECORD FORM



Summarize technical issues and/or pertinent discussions.

Date: 8/30/2012	Time: 3:43 PM	Author / Org: Steve Paris CAP
Regulator Name/Customer (including organization): Michael Dale and Jerzy Kells		Type of Communication: <input type="checkbox"/> Meeting face-to-face <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Email <input type="checkbox"/> Other: _____

Project / Subject: Work Plan for Redevelopment of R-61- Sampling Requirement Revisions

Pre-Communication Coordination: (who, how, & when)	ADEP E&T Representative (if technical): _____	Date: _____
	ADEP Project Manager: <u>Steve Paris</u>	Date: _____
	ADEP Regulatory Manager: _____	Date: _____
	LASO Lead: _____	Date: _____

Summary of Discussion:

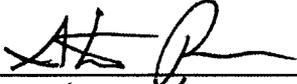
See attached e-mail

Action Items	Action Resolution/Completion
1.	1.
2.	2.
3.	3.

Post-Communication Coordination: (who, how, & when)	ADEP E&T Representative (if technical): _____	Date: _____
	ADEP Project Manager: _____	Date: _____
	ADEP Regulatory Manager: _____	Date: _____
	LASO Lead: _____	Date: _____

Distribution List:

Signatures Required:

Author's Signature:  Date: 9/12/12

Regulatory Manager:  Date: 9/17/12

Formalizing Communications with Regulators, SOP-5210	Los Alamos National Laboratory Environmental Programs
---	--

Transmit completed forms to William Alexander, BPS-DO, MS M992
 Date rec'd by Document Control: _____



Paris, Steven M

From: Kulis, Jerzy, NMENV [jerzy.kulis@state.nm.us]
Sent: Thursday, August 30, 2012 5:15 PM
To: Goering, Tim J; Dale, Michael, NMENV
Cc: Cobrain, Dave, NMENV; Paris, Steven M; Lynnes, Kate; Katzman, Danny; Shen, Hai; Pearson, Steven G
Subject: RE: Proposed Revisions to R-61 Redevelopment Work Plan

Tim,

This email serves as NMED approval of revisions to the Work Plan for the Redevelopment of Monitoring Well R-61, as proposed in your email received by NMED on August 30, 2012 at 3:43 pm. NMED understands that LANL will provide the results of preliminary water-quality sampling, any additional modifications to the approved work plan, and any additional information related to the redevelopment of well R-61 as soon as such information becomes available.

Sincerely,

Jerzy Kulis
Environmental Scientist
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505-6303
Phone: 505-476-6039
Fax: 505-476-6030

From: Goering, Tim J [<mailto:goering@lanl.gov>]
Sent: Thursday, August 30, 2012 3:43 PM
To: Dale, Michael, NMENV
Cc: Cobrain, Dave, NMENV; Paris, Steven M; Lynnes, Kate; Katzman, Danny; Kulis, Jerzy, NMENV; Shen, Hai; Pearson, Steven G
Subject: Proposed Revisions to R-61 Redevelopment Work Plan

Michael,

Attached is a table summarizing our proposed revisions to the Work Plan for the Redevelopment of Monitoring Well R-61. We are adding the collection of samples for organic analysis during specific capacity testing of each screen (prior to removal of the sampling system and redevelopment) to collect additional data on the compounds that may have impacted the well screen geochemistry. We are also reducing the total number of time-series samples to be collected for onsite analysis at GGRL, with most time-series samples to be collected during the latter part of the redevelopment effort (following the chlorine disinfection step), and during the cross-flow removal activities.

Please let us know whether these changes are acceptable as soon as possible, so we can provide timely direction to our field team for implementation of these changes.

Thank you.

Tim Goering

LANL Engineering & Technology
Tel 665-0996

Proposed Revision to the Work Plan for Redevelopment of Monitoring Well R-61

Technical Approach Step	Work Plan Text	Proposed Revisions
<p><i>Baski Sampling System Removal</i></p>	<p>Short-term step tests will be conducted before well redevelopment to determine the specific capacity of each screened interval. The results will be used to estimate the cross-flow between screens 1 and 2 that will occur when the Baski sampling system is removed and will be used to assess the overall effectiveness of the redevelopment effort. Pumping during the step tests will also remove water containing excess iron in solution and solids, potentially facilitating the chemical treatment described below.</p> <p>Water samples will be collected for on-site chemical analysis at the Geochemistry and Geomaterials Research Laboratory (GGRL). Samples will be collected at the beginning, the middle, and the end of the step test in each screen. Analytical data from these samples will be used as a baseline for tracking the effectiveness of the redevelopment activities and for removing chemical products introduced into the well during rehabilitation.</p>	<p>REPLACE WITH: Short-term step tests will be conducted before well redevelopment to determine the specific capacity of each screened interval. The results will be used to estimate the cross-flow between screens 1 and 2 that will occur when the Baski sampling system is removed and will be used to assess the overall effectiveness of the redevelopment effort. Pumping during the step tests will also remove water containing excess iron in solution and solids, potentially facilitating the chemical treatment described below.</p> <p>Samples will be collected for organic analysis during specific capacity testing to collect additional data on the compounds that may have impacted the well screen geochemistry. Samples will be collected for analysis of gasoline range organics, diesel range organics, volatile organic compounds, and semivolatile organic compounds. Tentatively identified compounds analysis will be requested with the data. The samples will be collected from each well screen once the drop pipe and 1 CV have been purged.</p>
<p><i>Final Pumping (Clean Up) and Time-Series Sampling</i></p>	<p>Both well screens will be pumped to remove all residual chemical agents and to restore geochemical conditions to representative conditions. The pumping rate will be determined based on the hydraulic properties of each screen, primarily specific capacity data measured during step testing. At a minimum, the quantity of water pumped will be sufficient to remove the introduced chemical treatment agent and the calculated cross-flow between screens 1 and 2 during redevelopment.</p> <p>During pumping, discharge will be monitored for pH, temperature, conductivity, oxidation/reduction potential, and DO using a flow-through cell and a YSI 556 MPS multiparameter meter, or equivalent, unit. Turbidity will be measured using a Hach 2100P turbidimeter or equivalent unit, and dissolved iron will be measure using a Hach test kit to provide real-time data. Chlorine will be monitored using a colorimetric test kit, free chlorine test strips, or equivalent.</p>	<p>REPLACE WITH: Both well screens will be pumped to remove all residual chemical agents and to restore geochemical conditions to representative conditions. The pumping rate will be determined based on the hydraulic properties of each screen, primarily specific capacity data measured during step testing. At a minimum, the quantity of water pumped will be sufficient to remove the introduced chemical treatment agent and the calculated cross-flow between screens 1 and 2 during redevelopment.</p> <p>During pumping, discharge will be monitored for pH, temperature, conductivity, oxidation-reduction potential, and DO using a flow-through cell and a YSI 556 MPS multiparameter meter, or equivalent, unit. Turbidity will be measured using a Hach 2100P turbidimeter or equivalent unit, and dissolved iron will be measured following the chlorine treatment step using a Hach test kit to provide real-time data. Chlorine will be monitored following the chlorine treatment step using a colorimetric test kit, free chlorine test strips, or equivalent.</p>

Technical Approach Step	Work Plan Text	Proposed Revisions
<p><i>Final Pumping (Clean Up) and Time-Series Sampling (continued)</i></p>	<p>Time-series samples will be collected every 2 h during pumping to monitor key indicators for removing the introduced chemical treatment agents and for stable DO measurements. Samples will be analyzed at GGRL for anions, metals, TOC, alkalinity, pH, sulfide, and total suspended solids.</p> <p>Field parameters, chlorine data, and time-series data will be evaluated to assess the effectiveness of the well redevelopment activities and the geochemical conditions in each screen. Redevelopment activities at either screen may be terminated if field parameters and time-series water-quality data show inadequate progress for yielding representative and stable water-quality parameters. The New Mexico Environment Department (NMED) will be consulted if field parameters and time-series data indicate additional redevelopment or other actions are needed.</p>	<p>Time-series samples will be collected every 4 h during pumping following the chlorine treatment to monitor indicators for evaluating the effectiveness of the well redevelopment activities. Samples will be analyzed at the Geochemistry and Geomaterials Research Laboratory (GGRL) for anions, metals, TOC, alkalinity, pH, and sulfide.</p> <p>The field parameter data, chlorine data, and time-series metals data will be evaluated to assess the effectiveness of the well redevelopment activities and to assess the geochemical conditions in each screen. Redevelopment activities at either screen may be terminated if field parameters and time-series water-quality data show inadequate progress for yielding representative and stable water-quality parameters. The New Mexico Environment Department (NMED) will be consulted if field parameters and time-series data indicate additional redevelopment or other actions are needed.</p>
<p><i>Post-Treatment Video Logging and Baski Sampling System Reinstallation</i></p>	<p>Once the field parameter, chlorine, and time-series data indicate the water quality in each screen is representative and no residual chlorine remains in either screen, the pump/packer assembly will be removed, and a well video log will be made to document the well condition and to compare it with the video log made before well redevelopment.</p> <p>The Baski sampling system will then be reinstalled, and the Baski pump will be used to remove any cross-flow that may have occurred between screens after the redevelopment tools were removed and the Baski sampling system was reinstalled. Time-series samples will be collected every 2 h during pumping to monitor key indicators for removing cross-flow and for stable geochemical conditions. The samples will be analyzed at GGRL for anions, metals, TOC, alkalinity, and pH. Data from these samples will be used as the basis for identifying any rebounding of nonrepresentative water-quality parameters in future samples.</p>	<p>REPLACE WITH: Once the field data indicate the water quality in each screen is representative and no residual chlorine remains in either screen, the pump/packer assembly will be removed, and a well video log will be made to document the well condition and to compare it with the video log made before well redevelopment.</p> <p>The Baski sampling system will then be reinstalled, and the Baski pump will be used to remove any cross-flow that may have occurred between screens after the redevelopment tools were removed and the Baski sampling system was reinstalled. Time-series samples will be collected every 4 h during pumping and will be analyzed at GGRL for anions, metals, TOC, alkalinity, and pH. Data from these samples will be used as the basis for identifying any rebounding of nonrepresentative water-quality parameters in future samples.</p>