October 4, 2018

David Einan, Unit Manager
Environmental Protection Agency
825 Jadwin Avenue, Suite 210
Richland, WA 99352

Daryl F. Koch, FFA/CO Manager
Waste Management and Remediation Division
Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706-1222

SUBJECT: Transmittal of September 2018 Federal Facility Agreement and Consent Order
Monthly Report (CLN190040)

Dear Mr. Einan and Mr. Koch:

In accordance with Section XVII, Reporting of the Federal Facilities Agreement and Consent Order (FFA/CO), transmitted herewith are copies of the September 2018 FFA/CO Monthly Report.

If you have any questions, please contact me at (208) 526-5793.

Sincerely,

[Signature]

Nolan R. Jensen, FFA/CO Project Manager
Department of Energy, Idaho Operations Office


cc: S. D. Lee, MFC
C. Henvit, NR-IBO
F. P. Hughes, Fluor Idaho
M. Jewett, Fluor Idaho
B. Meagher, Fluor Idaho
ID DISTRIBUTION:

Email to: ! DOE-ID EDMS Correspondence (ASC)
Email to: ! Records Management
Jensen, Nolan R.
Malmo, James A.
Natoni, Christian
Watson, Will
Zimmerman, John P

RECORD NOTES:

1. This correspondence record belongs to: FY19 WDP RWMC.

2. This letter was prepared to transmit the September 2018 FFA/CO Monthly Report to the Agencies per the FFA/CO, Section 17.

3. This letter was prepared by Nolan Jensen

4. This letter/memo closes Zeus number: NA

5. The attached correspondence has no relation to the Naval Nuclear Propulsion Program.
IDAHO CLEANUP PROJECT

IDAHO NATIONAL LABORATORY
FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFA/CO)
MONTHLY REPORT

September 2018
FFA/CO Report

SCOPE
The Department of Energy – Idaho Operations Office (DOE-ID) through their contractors have responsibility for regulation-compliant characterization, assessment, and remediation of identified release sites listed in the Idaho National Engineering and Environmental Laboratory (INEEL) Federal Facility Agreement and Consent Order (FFA/CO). Planned cleanup activities include excavation, removal, treatment, stabilization, containment, long-term monitoring, and institutional controls, as required to meet regulatory commitments. Activities are structured to effectively and efficiently conduct characterization, assessment, and remediation of all Waste Area Groups (WAGs) and identified release sites listed in the FFA/CO for the Idaho National Laboratory (INL).

The environmental cleanup is structured along the following administrative units:

1. WAG 1 – Test Area North (TAN) Remediation
2. WAG 2 – Reactor Technology Complex (RTC) Remediation (formerly Test Reactor Area – [TRA])
3. WAG 3 – Idaho Nuclear Technology and Engineering Center (INTEC) Remediation
4. WAG 4 – Central Facilities Area (CFA) Remediation
5. WAG 5 – Power Burst Facility/Auxiliary Reactor Area (PBF/ARA) Remediation
6. WAG 7 – Radioactive Waste Management Complex (RWMC) Remediation
7. WAG 8 – Naval Reactors Facility (NRF)
8. WAG 9 – Materials and Fuels Complex (MFC) (formerly Argonne National Laboratory-West ANL-W)
9. WAG 6/10 – Miscellaneous Soil Areas and Groundwater and Long-term Stewardship (LTS)

September 2018 ACCOMPLISHMENTS

- Waste received at the ICDF for the fiscal month September 2018:
  - Solid waste received at landfill: 0.0 m³
  - Liquid waste received at the evaporation ponds: 1,934 gal
- Continued ARP VIII waste exhumation.
- Continued ARP IX preparations.
- Completed WAG 7 quarterly vapor sampling August 29th, 2018.
- Completed ICDF water levels and semi-annual groundwater sampling September 5th, 2018.
- Completed TAN monthly groundwater sampling September 10th, 2018.
- Completed WAG 3 semi-annual perched water level measurements September 13th, 2018.
- Completed WAG 4 vapor sampling September 13th, 2018.
- The WAG 7 Vapor Vacuum Extraction and Treatment (VVET) system removed and treated approximately 106 pounds of total volatile organic compounds (TVOCs) from the vadose zone during the period from August 27th, 2018 to September 30th, 2018.

Note: Summary totals may not agree with the sum of unit totals due to rounding.

<table>
<thead>
<tr>
<th>Organic Contamination in the Vadose Zone Remedial Action.</th>
<th>Since the beginning of operations in January of 1996, the following amounts of VOCs have been removed and treated.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Cumulative</strong></td>
<td><strong>Total Current Month</strong></td>
</tr>
<tr>
<td>approximately 255,101 lb of TVOC</td>
<td>approximately 106 lb of TVOC</td>
</tr>
<tr>
<td>approximately 142,672 lb of CCl₄</td>
<td>approximately 31 lb of CCl₄</td>
</tr>
</tbody>
</table>

The cumulative below represents the entire volume per unit since the initiation of operations in January 1996.
<table>
<thead>
<tr>
<th>Cumulative</th>
<th>Current Month</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit D</strong></td>
<td></td>
</tr>
<tr>
<td>53,345 lb TVOC</td>
<td>37 lb TVOC</td>
</tr>
<tr>
<td>22,635 lb CCl₄</td>
<td>7 lb CCl₄</td>
</tr>
<tr>
<td><strong>Unit E</strong></td>
<td></td>
</tr>
<tr>
<td>73,622 lb TVOC</td>
<td>29 lb TVOC</td>
</tr>
<tr>
<td>42,842 lb CCl₄</td>
<td>10 lb CCl₄</td>
</tr>
<tr>
<td><strong>Unit F</strong></td>
<td></td>
</tr>
<tr>
<td>128,134 lb TVOC</td>
<td>40 lb TVOC</td>
</tr>
<tr>
<td>77,195 lb CCl₄</td>
<td>14 lb CCl₄</td>
</tr>
</tbody>
</table>

FFA/CO Documents:
- Submitted the draft WAG 1 revised monitoring plan to the Agencies for review September 5th, 2018.

Support Activities:
- Processed 3.5 M gallons of water at NPTF.
- Continued Westbay wells rehabilitation.
- WAG 3 performed leak detection survey on INTEC fire hydrants on September 4th, 2018.
- Completed the Pad A quarterly inspection September 20th, 2018.
- Completed the installation of telemetry equipment at well ICPP-2195 on September 25th, 2018.

ISSUES
None

90-DAY LOOK AHEAD

October
- Continue ICDF operations and maintenance as required.
- Receive and dispose of waste in the ICDF.
- Continue ARP facility minimum required maintenance.
- Continue ARP VIII exhumation operations.
- Compile and report targeted waste retrieval and shipment data.
- Complete WAG 2 annual groundwater sampling.
- Complete WAG 3 aquifer water level measurements.
- Conduct testing of new fire water booster pump flow meter at INTEC.
- Maintain CERCLA data management systems.
- Continue Westbay wells rehabilitation.
- Complete TAN quarterly sampling.
- Complete WAG 7 annual lysimeter sampling.
- Continue operations and maintenance of the New Pump and Treat Facility at TAN.
- Continue operations and maintenance of the vapor vacuum extraction system in the Subsurface Disposal Area.
- Complete the OCVZ monthly well sampling and transmit monthly report to the Agencies.
- Complete NSI forms as necessary.
November
- Continue ICDF operations and maintenance as required.
- Receive and dispose of waste in the ICDF.
- Continue ARP facility minimum required maintenance.
- Continue ARP VIII exhumation operations.
- Compile and report targeted waste retrieval and shipment data.
- Maintain CERCLA data management systems.
- Complete TAN monthly sampling.
- Complete an ISB injection at TAN.
- Continue operations and maintenance of the New Pump and Treat Facility at TAN.
- Continue operations and maintenance of the vapor vacuum extraction system in the Subsurface Disposal Area.
- Complete the OCVZ monthly well sampling and transmit monthly report to the Agencies.
- Complete NSI forms as necessary.

December
- Continue ICDF operations and maintenance as required.
- Receive and dispose of waste in the ICDF.
- Continue ARP facility minimum required maintenance.
- Continue ARP VIII exhumation operations.
- Compile and report targeted waste retrieval and shipment data.
- Maintain CERCLA data management systems.
- Complete TAN monthly sampling.
- Agencies review of the draft 90% design for the SDA cap.
- Perform Pad A quarterly inspection.
- Continue operations and maintenance of the New Pump and Treat Facility at TAN.
- Continue operations and maintenance of the vapor vacuum extraction system in the Subsurface Disposal Area.
- Complete the OCVZ monthly well sampling and transmit monthly report to the Agencies.
- Complete NSI forms as necessary.

Significant activities planned to occur in FY 2018:
- Perform annual institutional controls inspections - Complete
- Continue operation of Environmental Data Warehouse and GIS Database - Complete
- Perform site-wide groundwater monitoring as required by field sampling plans - Complete
- Complete the FY 2017 OU 1-07B Annual Report - Complete
- Complete the Annual Groundwater Monitoring Report for WAG 2 - Complete
- Complete the Annual Monitoring Report for WAG 4 - Complete
- Complete the FY 2017 OU 3-14 Operations and Maintenance Report - Complete
- Complete the revised WAG 3 Interim Remedial Action Report - Complete
- Complete the revised WAG 3 O&M Plan - Complete
- Complete site MISC-50 report and Part B determination - Complete
- Complete the Annual Groundwater Monitoring Report for WAG 4 - Complete
• Complete annual letter report for OU 7-13/14 Operations and Maintenance - Complete
• Complete the revised INL Site-wide Institutional Controls, and Operations and Maintenance Plan for CERCLA - Complete
• Complete the annual WAG 10 Annual Groundwater Monitoring Report - Complete
• Complete the annual groundwater monitoring report for WAG 7 - Complete
• Complete the annual soil moisture monitoring and reporting for WAG 7 - Complete
• Complete the Westbay Rehabilitation Sampling and Analysis Plan - Complete
• Complete CERCLA O&M site inspections - Complete
• Complete ISB injections at TAN - Complete
• Complete the FY 2017 Annual INL Site-Wide Institutional Controls and Operations and Maintenance Report - Complete
• Complete Part B determinations for sites TRA-79, -80, and -61/82 at the ATRx - Complete
• Complete the Long-Term Monitoring Plan report for WAG 7 - Complete
• Complete the Vadose Zone Rebound Study Plan for WAG 7 - Complete
• Complete the Technical and Functional Requirements for the SDA cap design - Complete
• Complete the 30% Preliminary Design for the SDA cap - Complete