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

Pete Johansen, FFA/CO Program Supervisor
Waste Management and Remediation Division
Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706-1222

SUBJECT: Transmittal of August 2019 Federal Facility Agreement and Consent Order
Monthly Report (CLN191900)

Dear Mr. Einan and Mr. Johansen:

In accordance with Section XVII, Reporting of the Federal Facilities Agreement and Consent Order
(FFA/CO), transmitted herewith are copies of the August 2019 FFA/CO Monthly Report.

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

Sincerely,

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
    Erik Whitmore, 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: WDP/RWMC

2. This letter was prepared to transmit the August 2019 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: A

5. The attached correspondence has no relation to the Naval Nuclear Propulsion Program.
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)

August 2019 ACCOMPLISHMENTS

- Waste received at the ICDF for the fiscal month August 2019:
  - Solid waste received at landfill: 164.55 m³
  - Liquid waste received at the evaporation ponds: 392 gal
- Continued ARP IX exhumation.
- The WAG 7 Vapor Vacuum Extraction and Treatment (VVET) system removed and treated approximately 99 pounds of total volatile organic compounds (TVOCs) from the vadose zone during the period from July 22nd, 2019 through August 25th, 2019.
- Completed the TAN treatment injections on August 5th, 2019.
- Completed the WAG 4 FY 2019 annual groundwater sampling on August 22nd, 2019.
- Began field activities at CERCLA Site CPP-142 on August 22nd, 2019.
Note: Summary totals may not agree with the sum of unit totals due to rounding.

Organic Contamination in the Vadose Zone Remedial Action.
Since the beginning of operations in January of 1996, the following amounts of VOCs have been removed and treated.

<table>
<thead>
<tr>
<th>Total Cumulative</th>
<th>Total Current Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>approximately 256,371 lb of TVOC</td>
<td>approximately 99 lb of TVOC</td>
</tr>
<tr>
<td>approximately 143,015 lb of CCl₄</td>
<td>approximately 33 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>Unit D</td>
<td></td>
</tr>
<tr>
<td>53,971 lb TVOC</td>
<td>41 lb TVOC</td>
</tr>
<tr>
<td>22,729 lb CCl₄</td>
<td>9 lb CCl₄</td>
</tr>
<tr>
<td>Unit E</td>
<td></td>
</tr>
<tr>
<td>73,883 lb TVOC</td>
<td>25 lb TVOC</td>
</tr>
<tr>
<td>42,940 lb CCl₄</td>
<td>10 lb CCl₄</td>
</tr>
<tr>
<td>Unit F</td>
<td></td>
</tr>
<tr>
<td>128,517 lb TVOC</td>
<td>33 lb TVOC</td>
</tr>
<tr>
<td>77,346 lb CCl₄</td>
<td>14 lb CCl₄</td>
</tr>
</tbody>
</table>

FFA/CO Documents:
- Transmitted final NSI Part Bs for NSI-26019, NSI-26020, and NSI-26021 on July 24th, 2019.
- Transmitted final NSI Part A for NSI-26037 on August 8th, 2019.
- Transmitted the final FY18 IC and O&M annual report for FY 2018 on July 24th, 2019.
- Transmitted the final FY 2019 WAG 2 annual report on July 16th, 2019.
- Transmitted the final 100% design package for the SDA cap on August 15th, 2019.

Support Activities:
- Conducted routine operations at the NPTF, processed 2.2M gallons of water between July 22nd, and August 25th, 2019.
- Completed replacement of the air handling unit for OCVZ Unit D on July 25th, 2019.

ISSUES
None

90-DAY LOOK AHEAD

September
- Continue ICDF operations and maintenance as required.
- Receive and dispose of waste in the ICDF.
- Continue ARP facility minimum required maintenance.
- Continue ARP IX preparation and begin exhumation.
- Compile and report targeted waste retrieval and shipment data.
- Maintain CERCLA data management systems.
- Operate NPTF during weekdays to reduce TCE concentrations.
- Operate the VVET system 7 days a week, 24 hours a day.
- Apply fog/seal coat over the Tank Farm Phase I asphalt.
- Complete the annual check for the CPP-1792 lift station and CPP-1793 leak detection systems.
- Submit final FY 2018 WAG 3 Annual Report.
• Complete WAG 3 evaporation pond sampling event.
• Complete WAG 3 semi-annual perched water level measurements and data downloads.
• Complete FY 2019 O&M site maintenance.
• Continue Westbay well rehabilitation.
• Complete FY 2019 WAG 4 vapor port sampling.
• Complete field work for CPP-142.

October
• Continue ICDF operations and maintenance as required.
• Receive and dispose of waste in the ICDF.
• Continue ARP facility minimum required maintenance.
• Continue ARP IX exhumation operations.
• Compile and report targeted waste retrieval and shipment data.
• Maintain CERCLA data management systems.
• Operate NPTF during weekdays to reduce TCE concentrations.
• Operate the VVET system 7 days a week, 24 hours a day.
• Complete WAG 3 telemetry system maintenance
• Perform 1st quarter FY 20 Tank Farm remedy component inspection.
• Complete WAG 3 aquifer water level measurements.
• Submit OCVZ mass removal report.
• Complete annual OCVZ calibrations.
• Complete FY 2019 O&M activities and radiological surveys.
• Begin CERCLA Five Year Review.
• Continue Westbay well rehabilitation.
• Support October 24th CAB meeting for SDA cap design presentation.

November
• Continue ICDF operations and maintenance as required.
• Receive and dispose of waste in the ICDF.
• Continue ARP facility minimum required maintenance.
• Continue ARP IX exhumation operations.
• Compile and report targeted waste retrieval and shipment data.
• Maintain CERCLA data management systems.
• Operate NPTF during weekdays to reduce TCE concentrations.
• Operate the VVET system 7 days a week, 24 hours a day.
• Complete TAN ISB injections at TAN-1860.
• Complete TAN monthly sampling.
• Complete WAG 7 lysimeter sampling.
• Continue Westbay well rehabilitation.

Significant activities planned to occur in FY 2019:
• Perform annual institutional controls inspections. Complete
• Continue operation of Environmental Data Warehouse and GIS Database.
• Perform site-wide groundwater monitoring as required by field sampling plans. Complete
• Complete the FY 2018 OU 1-07B Annual Report. Complete
• Complete the Annual Groundwater Monitoring Report for WAG 2. Complete
- Complete remediation of site CPP-142.
- Complete the FY 2018 OU 3-14 Operations and Maintenance Report.
- 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 annual WAG 10 Annual Groundwater Monitoring Report.
- Complete the annual groundwater monitoring report for WAG 7.
- Complete the annual soil moisture monitoring and reporting for WAG 7. **Complete**
- Complete the Westbay wells rehabilitation.
- Complete CERCLA O&M site inspections. **Complete**
- Complete ISB injections at TAN. **Complete**
- Complete the FY 2018 Annual INL Site-Wide Institutional Controls and Operations and Maintenance Report. **Complete**
- Complete Part B determinations for sites PBF-39, TRA-83 and TRA-84. **Complete**
- Complete the SDA cap design. **Complete**