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Rev. 06

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFA/CO)
NEW SITE IDENTIFICATION (NSI)

Part A – NEW SITE IDENTIFICATION INFORMATION (To be completed by the Task Lead for New Site)	
1. **Site Title:** Soils under the CPP-637 and CPP-620 Facilities	**Site Code:** CPP-129 **NSI Evaluation Initiation Date:** January 23, 2006
2. **Task Lead For New Site:** Wendell Jolley	Phone: 526-5990
3. **NSI Coordinator:** Wendell Jolley	Phone: 526-5990
4. **Initiator or Initial Observer:**.Taryl Huebner	Phone: 526-1399

5. **Description of Suspected New Site and Location:**

This suspected new site consists of soil located beneath the former CPP-637 Process Improvement Facility and the CPP-620 Chemical Engineering Laboratory/Annex (see Figure 1). The Process Improvement Facility (CPP-637) contained offices and seven small-scale general chemistry laboratories and includes the Low Bay Laboratory and the High/Low Bay Laboratory. The Low Bay Laboratory and High/Low Bay Laboratory were located to the south and adjacent to CPP-637. These experimental facilities were used to test and evaluate equipment, processes, and process modifications and improvements, including the Cold Feed Makeup and Dissolution Facility and the 30-cm Calciner Pilot Plant System. The Chemical Engineering Laboratory/Annex (CPP-620) was used for testing and evaluating processes similar to those tested in CPP-637. Waste lines from the individual CPP-637 laboratories ran across the concrete laboratory floor and discharged into 4" PLA-2000 that was contained within the utility trench that runs between the laboratories. These concrete surfaces were not designed to provide secondary containment meeting the requirements of the Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA). In addition, the 3" PLA-106776 waste line and the module and fume hood drains located in the CPP-620 High/Low Bay were direct-buried beneath the concrete floor of the building with no secondary containment.

Both buildings have been removed from service and were decommissioned and deactiviated in December 2004 in conjunction with the HWMA/RCRA closure. The closure was conducted according to the HWMA/RCRA Closure Plan for the Process Improvement Facility (CPP-637)/Chemical Engineering Laboratory/Annex (CPP-620) Laboratory Piping System and Voluntary Consent Order Site-Tank-005 Tank Systems INTEC-087 and INTEC-091 (2005). As part of the closure actions, the overlying concrete slabs and the utility trench were removed and soil samples were collected from beneath the CPP-637 laboratory, utility trench, and the area immediately south of the utility trench. The direct-buried piping was excavated and samples were collected from beneath the piping under the CPP-620 High/Low Bay and the 3" PLA-106776 line. During closure activities, small releases from the piping occurred at two locations. In addition, following removal of wetted soil, samples were collected from the locations of the two releases. Sample locations are illustrated in Figure 2. Samples were analyzed for constituents of concern, which included metals, volatile organic compounds, and semivolatile organic compounds. Additional samples were collected and analyzed for Cs-137 in accordance with Notice of Soil Disturbance (NSD-04-01). All Cs-137 concentrations were found to be well below the 23-pCi/g remediation goal (see Figure 3)

As part of the HWMA/RCRA closure of this site, the Voluntary Consent Order Program performed a risk assessment to determine if the risk presented by the HWMA/RCRA-regulated contaminants exceeds a total cancer risk of 1E-06 or a hazard index of 1, which are considered the acceptable levels for clean closure certification for the site. Results of that risk assessment, presented in the HWMA/RCRA Closure Risk Assessment for Soils Associated with the Process Improvement Facility (CPP-637)/Chemical Engineering Laboratory/Annex (CPP-620) Laboratory Piping System and Voluntary Consent Order Soil SITE-TANK-005 Tank Systems INTEC-087 and INTEC-091, indicated a potential risk greater than 1E-06. Resulting risk is primarily from PAHs, with Benzo(a)pyrene being the largest contributor to the overall risk. Therefore, this New Site Identification Form is being prepared to satisfy the requirements from the HWMA/RCRA Closure Plan, and it provides a mechanism for inclusion of the site in the Federal Facility Agreement and Consent Order (FFA/CO).

Based on the above information, the CPP-129 site will be included in the FFA/CO as an Operable Unit (OU) 3-13 Group 3 site. The risk to human health and the environment posed by this site will be evaluated in the OU 3-13 Phase Group 3 II Work Plan (DOE/ID-11254). If remedial actions are determined to be necessary, they will be completed under OU 3-13.

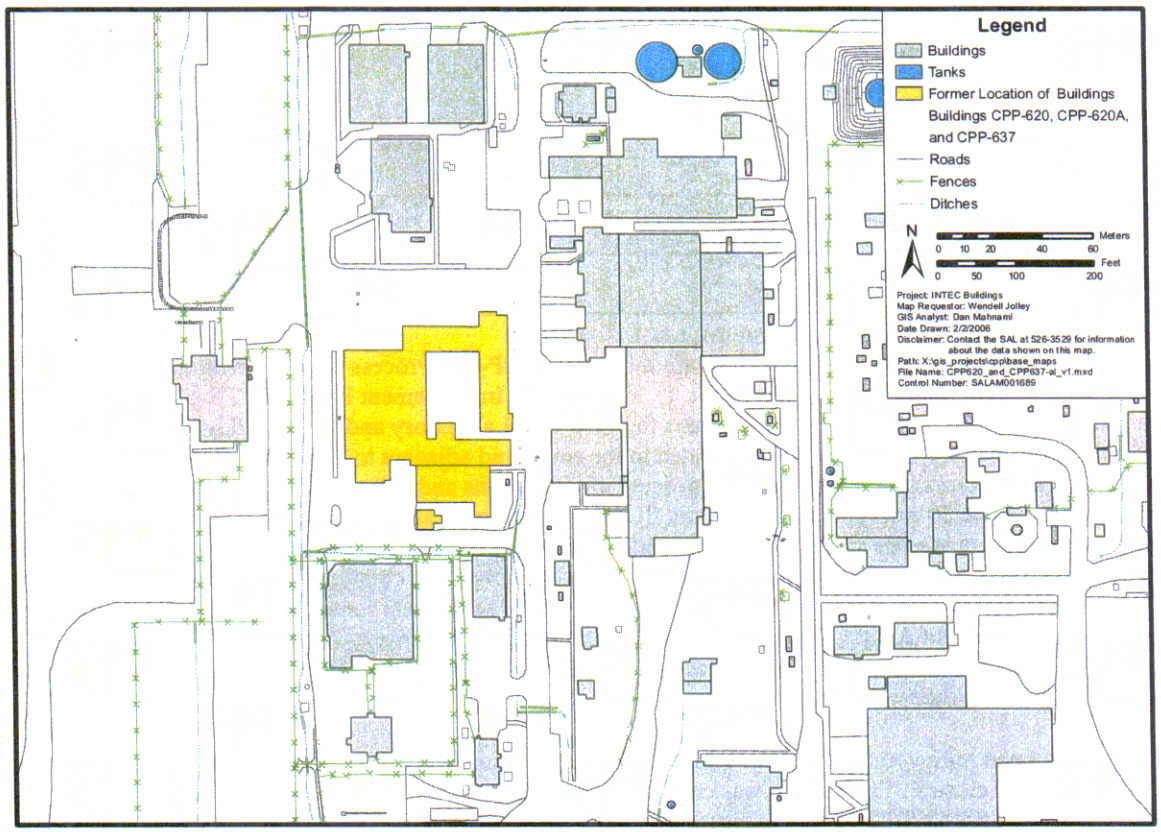

Figure 1. Locations of CPP-637 and CPP-620.

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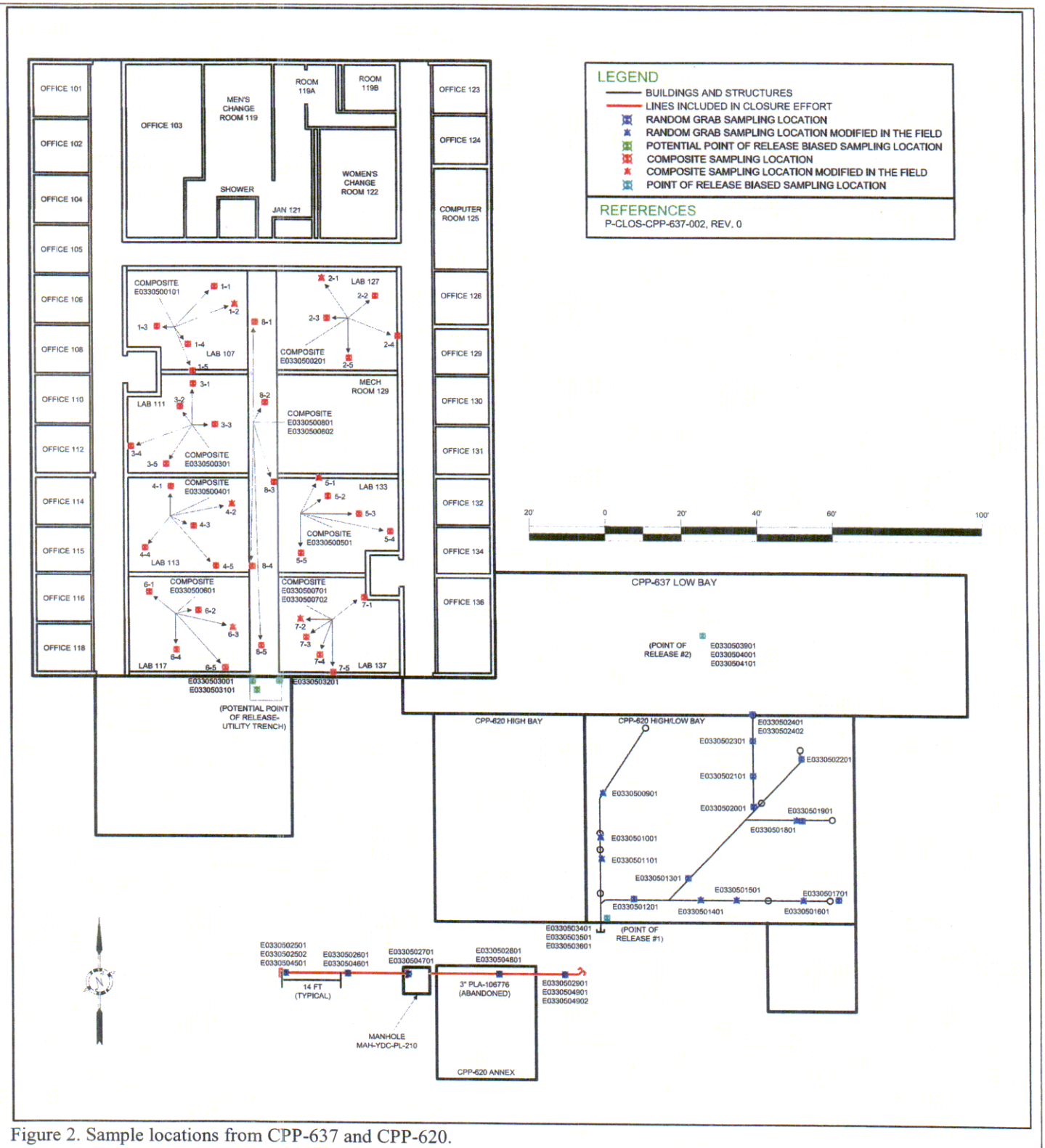

Figure 2. Sample locations from CPP-637 and CPP-620.

Figure 3. Map of Cesium-137 profile measurements at CPP-637 and CPP-620.

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6. **Is the site a Solid Waste Management Unit (SWMU) as defined in OSWER Directive 9502.00-6?** ☐ **Yes** ☒ **No**

7. **Recommendation**

☐ Recommend not including as a new FFA/CO site. This site DOES NOT warrant further investigation, does not meet the criteria for acceptance, and should not be included under FFA/CO Action Plan.

☒ Recommend including as new FFA/CO site. This site DOES meet the criteria for acceptance, may warrant further investigation, and should be included under FFA/CO Action Plan.

Recommended Waste Area Group (WAG) and Operable Unit to which site should be assigned:

WAG: 3 Operable Unit: 3-13

Recommended action for this site:

☐ No Action ☐ No Further Action ☒ Remedial Action under Existing ROD ☐ Track 2 ☐ RI/FS

8. **Responsible Manager Signature:**

Name: Lane Butler Signature: _____ Date: 3/22/06

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PART B – FFA/CO RESPONSIBLE PROGRAM MANAGERS (RPM'S) CONCURRENCE

Site Title:	Site Code:
Soils under the CPP-637 and CPP-620 facilities	CPP-129

DOE-ID FFA/CO RPM Concurrence: ☒ Concur with recommendation. ☐ Do not concur with the recommendation.

Signature: John R. Jensen Date:

Explanation:

Given the fact that the calculated risk for this release site is in the 10^{-6} range, it is likely that only limited, if any, remedial action will be necessary. However, adding the site to the FFA/CO and addressing/dispositioning the site under the OU 3-13, Group 3, Phase II Work Plan is an appropriate mechanism to finally ~~and~~ evaluate and disposition the site. Therefore, I concur with the recommendations.

EPA FFA/CO RPM Concurrence: ☒ Concur with recommendation. ☐ Do not concur with the recommendation.

Signature: Date: 5/8/06

Explanation:

OU 3-13, Group 3, Phase II Work plan will provide an appropriate mechanism to disposition CPP-129 site.

State of Idaho
FFA/CO RPM Concurrence: ☒ Concur with recommendation. ☐ Do not concur with the recommendation.

Signature: Daryl F. Koch Date: May 3, 2006

Explanation:

All Cs-137 concentrations were found to be below the 23-pCi/g remediation goal. As part of the HWMA/RCRA closure, the VCO program performed a risk assessment. The risk presented by the HWMA/RCRA-regulated contaminants exceeds a total cancer risk of 1E-06 or a hazard index of 1. The resulting risk is primarily from PAHs, with Benzo(a)pyrene being the largest contributor. If remedial action is necessary, the WAG 3-13 ROD does list many PAHs (including Benzo(a)pryene) as contaminants of concern. Adding CPP-129 to the OU 3-13, Group 3, Phase II Work Plan for investigation/ disposition is in compliance with the FFA/CO New Site Discovery Process.