

1705

**CERTIFICATION DESIGN LETTER  
AREA 1, PHASE I - SEDIMENT TRAPS 2 & 3**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT  
FERNALD, OHIO**



**AUGUST 1998**

**U.S. DEPARTMENT OF ENERGY  
FERNALD AREA OFFICE**

**20701-RP-0007  
REVISION C, PCN 1  
DRAFT**

REVISION SUMMARY

<u>Revision</u>	<u>Date</u>	<u>Description of Revision</u>
Rev. A	5-29-98	Original Document
Rev. B	6-2-98	Incorporated U.S. EPA and OEPA Comments
Rev. C	7-20-98	Incorporated U.S. EPA and OEPA Comments and included Figure 2
PCN 1	8-4-98	Incorporated Removal of Aroclor-1260 as an ASCOC in Change Pages 1 and 5

**EXECUTIVE SUMMARY**

This Certification Design Letter (CDL) describes the certification approach for the Area 1, Phase I (A1PI) Sediment Traps 2 & 3. The following information is included:

- A definition of the boundaries of the areas to be certified under the guidance of this CDL
- A review of relevant historical data, including A1PI certification results
- A discussion of the area-specific constituents of concern (ASCOC) selection process and list of ASCOCs assigned to the A1PI Sediment Traps 2 & 3
- A presentation of the certification unit (CU) boundaries and proposed sampling strategy
- The analytical requirements and the statistical methodology that will be employed
- The proposed schedule for the certification activities.

The scope of this CDL is limited to two sediment traps located in A1PI, in the northeastern portion of the Fernald Environmental Management Project (FEMP). Historical data and certification data collected from A1PI indicate no widespread contamination in the area of these sediment traps. Based on these data and scheduling limitations, no precertification scanning activities were conducted in A1PI Sediment Traps 2 & 3, and certification sampling will begin without conducting remedial excavations.

The certification design in this CDL follows the general approach outlined in Section 3.4 of the Sitewide Excavation Plan (SEP) (DOE 1998) and incorporates revisions based on U.S. Environmental Protection Agency (EPA) and Ohio Environmental Protection Agency (OEPA) comments. Three certification units (CUs) have been established in each sediment trap. The selection of A1PI ASCOCs was accomplished using the constituents of concern (COCs) listed in the Operable Unit 5 (OU5) Record of Decision (ROD), process knowledge of the site COCs and release history, and by comparing contract required detection limits (CRDLs) with final remediation levels (FRLs). The sitewide primary radiological COCs (total uranium, thorium-228, thorium-232, radium-226, radium-228) will be considered ASCOCs in every CU, as will two secondary COCs (arsenic, beryllium). Field work is scheduled to begin July 27, 1998, and the Certification Report will be issued November 2, 1998.

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3.0 AREA-SPECIFIC CONSTITUENTS OF CONCERN

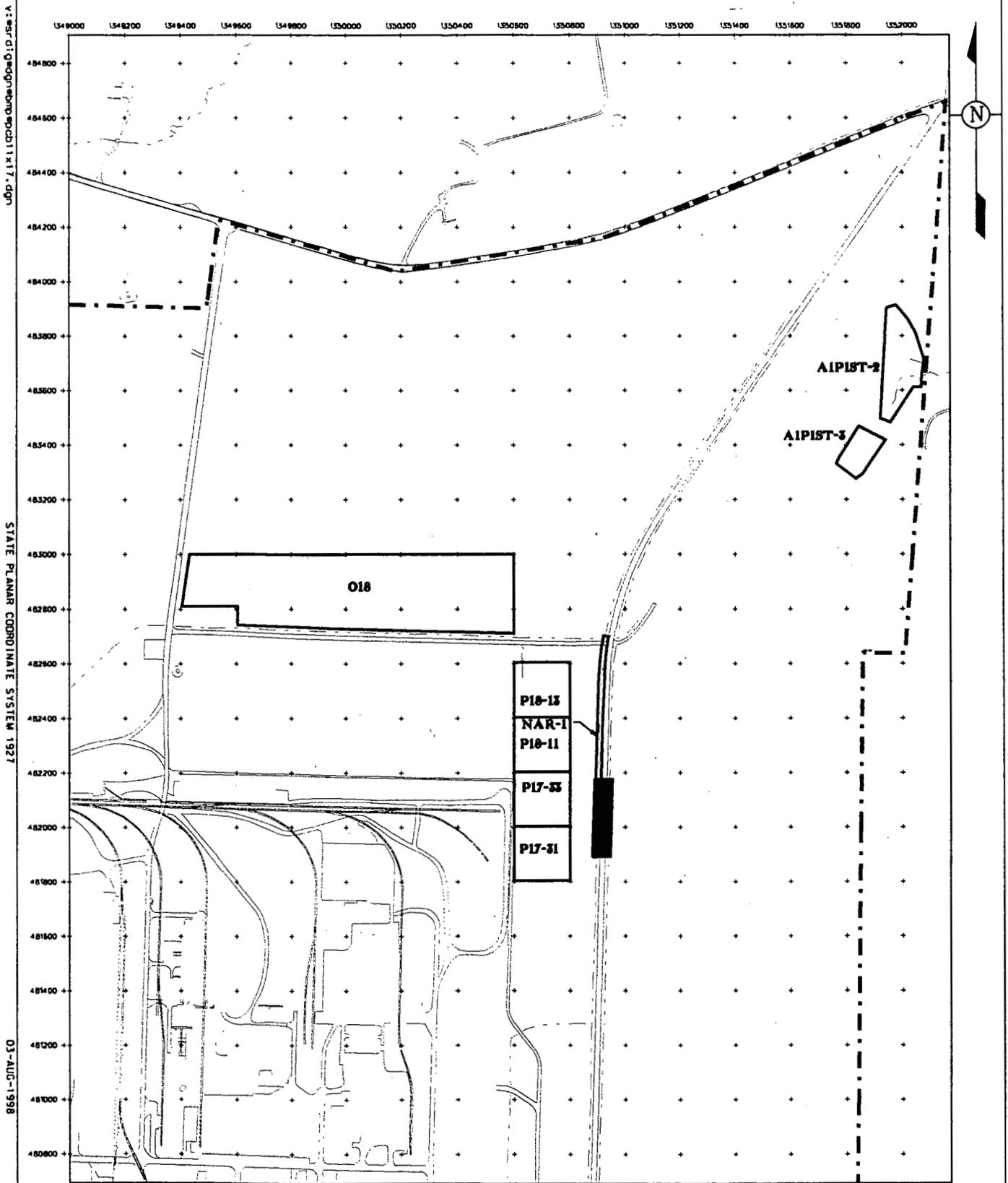
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Since the ASCOC selection process for A1PI included A1PI-ST-2 and A1PI-ST-3, these areas will be certified using the A1PI ASCOC list, except for thorium-230, aroclor-1260, and cesium-137. While these analytes were part of the A1PI ASCOC list, further review of historical data shows no above-FRL concentrations for thorium-230, aroclor-1260, or cesium-137 in the subject areas. Furthermore, in all A1PI CUs, these analytes passed all the certification criteria. Benchmark toxicity value (BTV) analytes in this area are not a concern per Appendix C of the SEP (DOE 1998).

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TABLE 1  
ASCOC LIST

Primary ASCOC	FRL	Secondary ASCOCs	FRL
Total Uranium	82 mg/Kg	Arsenic	12.0 mg/Kg
Thorium-232	1.5 pCi/g	Beryllium	1.5 mg/Kg
Thorium-228	1.7 pCi/g		
Radium-226	1.7 pCi/g		
Radium-228	1.8 pCi/g		



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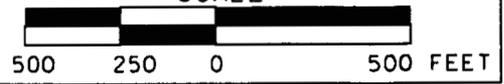
STATE PLANAR COORDINATE SYSTEM 1987

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**LEGEND:**

- PORTION OF NAR NOT INCLUDED IN A1PI CERTIFICATION REPORT
- FEMP BOUNDARY

**SCALE**



**DRAFT**

FIGURE 1. A1P1 PCB CERTIFICATION UNITS AND A1PIST2 AND A1PI-ST3