

# **Environmental Defense Institute**

**Troy, Idaho 83871-0220**

[www.environmental-defense-institute.org](http://www.environmental-defense-institute.org)

## **Attachments**

**to**

**Preliminary Comments on  
Department of Energy**

**Draft Hazardous Waste Management Act**

**Resource Conservation and Recovery Act**

**Storage Facility Partial Permit Renewal for the**

**Calcined Solids Storage Facility at the**

**Idaho Nuclear Technology & Engineering Center on the**

**Idaho National Laboratory, EPA ID# ID4890008952**

Submitted by

David B. McCoy and Chuck Broschious

on behalf of the Environmental Defense Institute

May 9, 2017 [Rev. S]

## **Attachments**

1. Calcine Bin Set Photos: Part A Permit Application for the INTEC Volume 22 WMA/RCRA CSSF Part B Permit Reapplication May 2016.
2. INTEC/ATRC Probable Maximum Flood, Figure 19, Water depth for the 1,902 cms flow rate at the INL Diversion Dam. This flow is approximately equal to the probable maximum flood flow of Koslow and Van Haaften (1986). Figure adapted from Ostenaar and O'Connell (2005).

**Attachment Number 4**

**EPA ID Number: ID4890008952**

Part A Permit Application for the

INTEC Volume 22 HWMA/RCRA CSSF Part B Permit Reapplication May 2016

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**ITEM 13.  
PHOTOGRAPHS CALCINED  
SOLIDS STORAGE FACILITY**



Bin Set #1. Looking at the aboveground blower/instrument building (CPP-639) and cooling air stack (CPP-732) for Bin Set #1. (The bin set vault itself is completely below grade.)

“Bin Set 1 is contained in a rectangular reinforced concrete vault. The vault is located underground and founded on bedrock. The vault is approximately 26 ft by 26 ft with a height of 40 ft. The vertical walls of the vault chamber are 2 ft 6 in. thick. Overlying the base slab is a 2-ft-thick concrete foundation that supports the bin radial support beams. The roof consists of three panels, two of which span between the vault walls and pre-cast beams; the third panel spans between the precast beams.” [pg. 1]

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PHOTOGRAPHS CALCINED  
SOLIDS STORAGE FACILITY**



Bin Set #2. Looking at the earthen berm surrounding the aboveground portion of the vault (CPP-742) from the south.

“Bin Set 2 is a cylindrical, reinforced concrete vault that is founded on bedrock and encases the seven steel bins inside vault. The vault is located predominantly underground, with 3 earth banked up against the aboveground portion. The vault is 62 ft high with a 50-ft diameter. The vault 4 walls are constructed of reinforced concrete measuring 2 ft thick. The concrete floor slab varies in thickness from 3 to 5 ft. The roof is composed of large pre-cast T-beams overlain with a field-poured concrete slab.” [pg.4]



Bin Set #3. Looking at the earthen berm surrounding the aboveground portion of the vault (CPP-746).

“Bin Set 3 is contained in a vault that is 67 ft high with a 50-ft diameter and founded on bedrock. The vault is located predominantly underground with earth banked up against the aboveground portion. The vault walls are constructed of reinforced concrete measuring 2 ft thick. The concrete floor slab varies in thickness from 3 ft to 5 ft. The roof is composed of large pre-cast T beams overlain with a field-poured concrete slab.” [pg.4]





Bin Set #4. Looking at the aboveground portion of the vault structure (CPP-760), along with the instrument building (CPP- 658), instrument vault (CPP-761), and cooling air stack atop of the vault structure, as seen from the south along Hemlock Street. "Bin Set 4 is contained in a cylindrical, reinforced concrete vault that is located partially underground and founded on bedrock. The vault is approximately 70 ft high and 36 ft in diameter. The vault floor is a concrete slab measuring 4 ft 6 in. thick. Vault walls are from 14 ft to 3 ft 6 in. thick. The roof is composed of pre-cast, reinforced concrete beams overlain with a field-poured concrete slab." [pg.4]



Bin Set #5. Looking at the aboveground portion of the vault structure (CPP-765), as seen from Hemlock St.

“Bin Set 5 is encased in a cylindrical, reinforced concrete vault that is founded on bedrock. Approximately half of the vault is located below ground level. The vault is approximately 82 ft high and 55 ft in diameter. The vault floor is a concrete slab measuring 5 ft thick. The vault walls are 4 ft thick. The vault roof is overlain with a field-poured concrete slab supported by pre-cast, reinforced concrete T-beams set on the vault walls.” [pg. 4]





Bin Set #6. Looking at the aboveground portion of the vault structure (CPP-791), as seen from the southwest along Hemlock Street. “Bin Set 6 is contained in a cylindrical, reinforced concrete vault that is founded on bedrock. Approximately half of the vault is located below ground level. The vault is approximately 93 ft high and 52 ft in diameter. The vault floor is a concrete slab measuring 6 ft 6 in. thick. The vault walls are 4 ft thick. Pre-cast, reinforced concrete panel forms support the vault roof that is overlain with a field-poured concrete slab.” [pg.4]



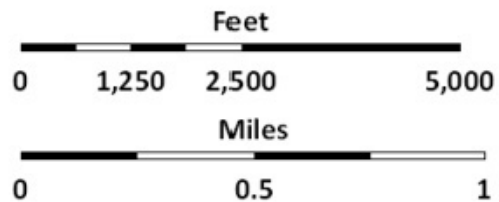
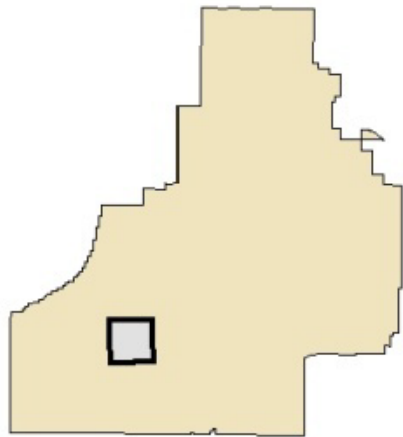
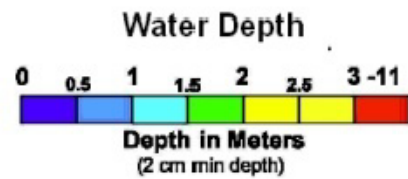
Bin Set #7. Looking at the aboveground portion of the vault structure (CPP-795), as seen from Hemlock Street. “Bin Set 7 is contained in a cylindrical, reinforced concrete vault that is founded on bedrock. Approximately half of the vault is located below ground level. The vault is approximately 94 ft high and 56 ft in diameter. The vault floor is a concrete slab measuring 6 ft 6 in. thick. The vault walls are 4 ft thick. Pre-cast, reinforced concrete panel forms support the vault roof that is overlain with a field-poured concrete slab.” [pg.4]



# INL PMF Floodplain near INTEC and ATR-C Facilities

## Legend

- Paved or Light-Duty Roads
- Candidate Site
- Big Lost River



GIS Analyst: Randy Lee  
Date Drawn: 2/23/2010  
Path: X:\gis\_projects\llw\_pit\_siting\_maps  
File Name: PMF\_Floodplain\_Zoom\_Map-at-Sites\_5\_34-v1.mxd

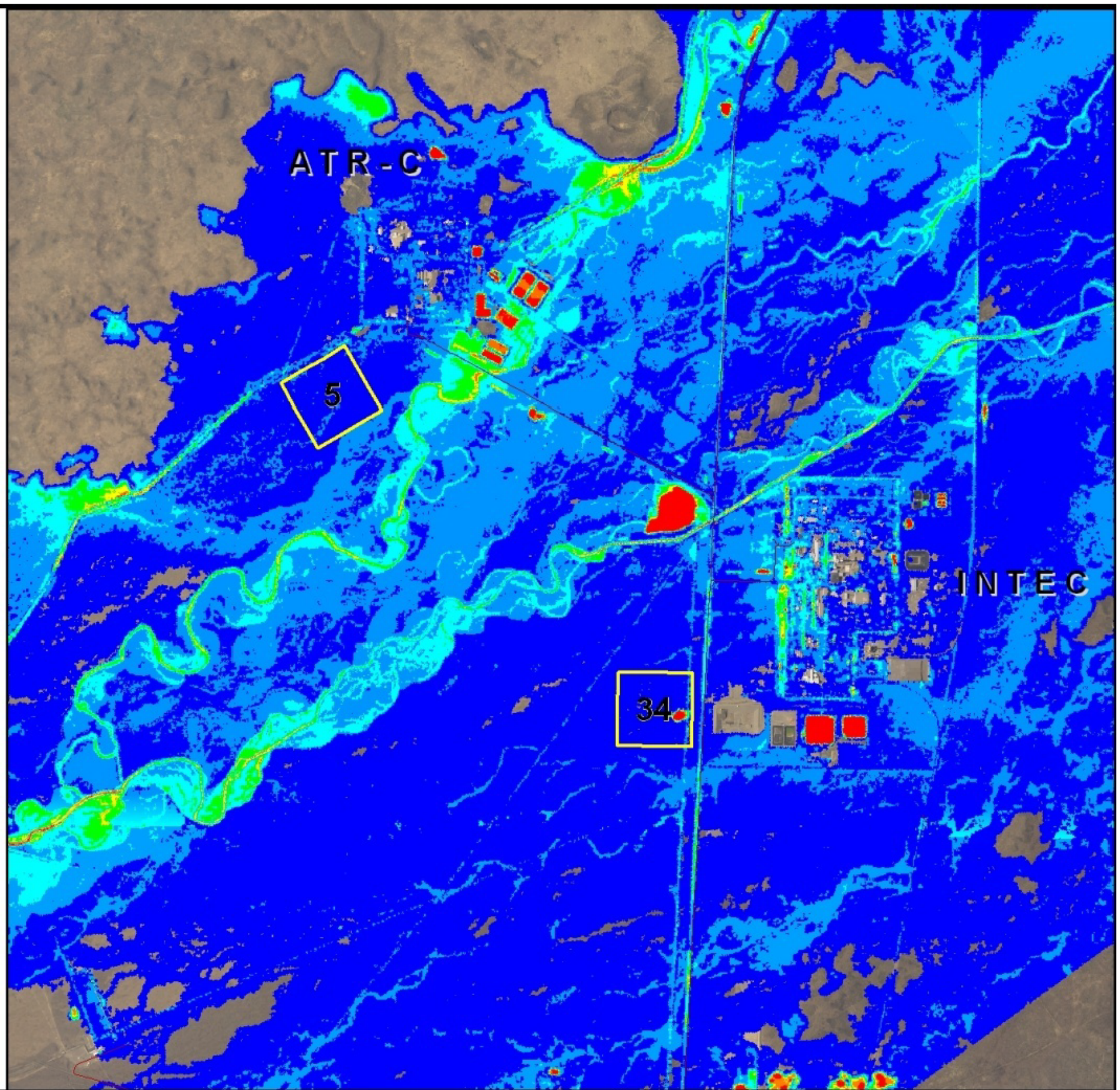


Figure 19. Water depth for the 1,902-cms flow rate at the INL Diversion Dam. This flow is approximately equal to the probable maximum flood flow of Koslow and Van Haaften (1986). Figure adapted from Ostenaa and O'Connell (2005). INL/EXT-10-18191