

Conclusions

The FFS developed a conceptual model and evaluated the results of the baseline risk assessment to determine how potential risks should be addressed by the proposed remedial actions. The FFS conceptual model is based on potential exposure pathways and human and ecological receptors for the wetland end use. The conceptual model assumes that estuarine and human recreational receptors exist at each Inboard Area site, and additional freshwater receptors exist at the Building 82/87/92/94 Area; the PDD Spoils Piles A, B, and N; and the PDD-unlined portion (see Appendix A). The need for remedial action was determined by evaluating whether or not the HI for a particular receptor exceeded 1.0. Three sites were excluded from evaluation in this FFS because they lacked at least one receptor having an HI greater than 1.0 and therefore did not require remedial action (see Table 5-1).

For each remaining site that required further evaluation, site-specific FFS COPCs were established based on the receptors that were expected to be present during the development and maturation of the wetland. A COPC is defined as a chemical with a human health or ecological HQ (hazard quotient) greater than 1.0 or a human health incremental lifetime cancer risk (ILCR) greater than 1×10^{-6} .

COCs were then identified from the list of site-specific FFS COPCs. All site-specific COPCs with 95 percent UCL concentrations that are greater than their comparator values were designated COCs, and the sites were identified for further analysis. The results of the analysis identified thirteen sites that did not have COCs (see Table 5-2).

These sites were designated for no further action.

The remaining 41 sites had at least one COC and were identified as requiring further remedial action. The remedial alternatives listed below were evaluated against the nine criteria set forth by the NCP to determine the appropriate remedial alternative for each site.

- Alternative 1 – No Further Action
- Alternative 2 – Institutional Controls
- Alternative 3 – Excavation and Offsite Disposal
- Alternative 4 – Excavation and Onsite Disposal

The remaining text of this section provides a summary of the rationale utilized to select the preferred remedial alternative for each site analyzed in Section 4.3.

5.1 Former Sewage Treatment Plant

Alternative 2 (Institutional Controls) is the preferred alternative for the FSTP. The institutional controls would protect the wetland environment by preventing exposure of human and ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- In 1998, the source area was removed from the former digester area and sludge drying beds to a depth ranging from 5 to 7 feet bgs (centered along the sludge drying beds).
- In 1998, the southeastern corner of this excavation was further excavated to a depth of 10 feet bgs.
- In 1999, a visible black sludge layer was removed to a depth of 4 feet bgs from the eastern side of the 1998 excavation.
- In 1998 and 1999, pesticides were detected above their comparator values at depths ranging from 2.5 to 10.5 feet bgs.
- The interim removal actions have been backfilled with clean material.
- COCs are present depths ranging from 2.5 to 10.5 feet bgs (beneath the backfill); therefore, there is no direct exposure pathway.
- The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.2 Building 26

Alternative 2 (Institutional Controls) is the preferred alternative for Building 26. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- The source of the contamination, a diesel UST, has been removed.
- Petroleum hydrocarbon measured as diesel has been detected above its comparator value at a depth ranging from 5 to 5.5 feet bgs on the southern and northeastern sides of the former UST excavation.
- The former UST excavation has been backfilled with clean material.
- COCs are present at depths ranging from 5 to 5.5 feet bgs (beneath the backfill); therefore, there is no direct exposure pathway.
- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.3 Building 35/39 Area

Alternative 2 (Institutional Controls) is the preferred alternative for the Building 35/39 Area. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- Two potential sources of contamination, ASTs 5 and 6, have been removed.
- In 1998, approximately 50 yd³ of soil were removed downslope of former AST 5 to a depth of 5 feet bgs.
- In 1999, approximately 444 yd³ of soil were removed near former ASTs 5 and 6 to a depth of 7.5 feet bgs.
- In 1999, total DDT concentration was detected above the comparator value in one sample located southeast of AST 6 at depths ranging from 3 to 4.5 feet bgs.
- The interim removal action excavations were backfilled with clean material.
- COCs are present at depths ranging from 3 to 4.5 feet bgs (beneath the backfill); therefore, there is no direct exposure pathway.
- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.4 Building 41 Area

Alternative 3 (Excavation and Offsite Disposal) is the preferred alternative for the Building 41 Area. Wetland restoration plans call for this building to be demolished during wetland construction; therefore, removal of contamination beneath Building 41 is necessary to protect future receptors. The following information was considered during the selection process:

- Two potential sources of contamination, diesel USTs northeast of Building 41, have been removed.
- Diesel has been detected above its comparator value west of Building 41 at depths ranging from 4 to 7.5 feet bgs.
- Diesel range hydrocarbons have been detected above the comparator value southwest of Building 40 at depths ranging from 2.5 to 6 feet bgs.
- The lateral extent of contamination has not been determined for diesel range hydrocarbons detected in confirmation sample CS-PSA4-03. The sample was collected at

a depth of 2.5 feet bgs on the east side excavation during the 1998 interim removal actions.

- PAH have been detected above their comparator values in samples collected beneath Building 41 at depths ranging from 14.5 to 18.5 feet bgs. Diesel range hydrocarbons have been detected above the comparator value beneath the building at 18.5 feet bgs.
- The demolition of Building 41 during wetland construction would potentially create a complete exposure pathway to the contaminants detected beneath the building.

5.5 Building 82/87/92/94 Area and Building 86

Alternative 2 (Institutional Controls) is the preferred alternative for the Building 82/87/92/94 Area and Building 86. The institutional controls would protect the wetland environment by preventing exposure of human and ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- Barium, beryllium, chromium, and PAH have been detected above their comparator values in various locations throughout the Building 82/87/92/94 Area and at Building 86.
- Residual contamination is present beneath concrete and asphalt.
- COCs are present at depths ranging from 0.5 to 11.5 feet bgs.
- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.6 Perimeter Drainage Ditch

Alternative 2 (Institutional Controls) is the preferred alternative for the PDD. The institutional controls would protect the wetland environment by preventing exposure of human and ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- Total DDT concentration and beryllium have been detected above their comparator values in various locations along the unlined portion of the PDD at depths ranging from 0 to 1.5 feet bgs; dieldrin has been detected above its comparator value in one sample (PDD-SD02) at a depth of 1 to 1.5 feet bgs.
- COCs are present at depths ranging from 0 to 1.5 feet bgs.
- The PDD would be backfilled during wetland construction.

- Performance criteria for the final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.7 Perimeter Drainage Ditch Spoils Piles

The following alternatives are recommended for the PDD spoils piles for the following reasons:

- Spoils Pile A – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998, soil was removed from the footprint of the spoils pile to the approximate original grade during the removal actions.
 - Beryllium, zinc, and total DDT concentration have been detected above their comparator values in the confirmation sample (SS-PDSP-A01) at a depth of 1 foot bgs.
 - COCs are present at a depth of 1 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile B – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998 and 1999, soil was excavated during two separate removal actions (IT, 1999b and IT, 2000).
 - In 1998, cadmium, mercury, and zinc were detected above their comparator values in samples collected during the removal actions at a depth of 1 foot bgs.
 - In 1999, silver, endrin aldehyde, and total DDTs were detected above their comparator values in samples collected during the removal actions at depths ranging from 0 to 0.5 foot bgs.
 - COCs are present at depths ranging from 0 to 1 foot bgs.

- Performance criteria for the final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile D – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998, soil was removed from the footprint of the spoils pile to the approximate original grade during interim removal actions.
 - Total DDT concentration has been detected above the comparator value at a depth of 1 foot bgs.
 - COCs are present at a depth of 1 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile E – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998 and 1999, soil was excavated during two separate removal actions.
 - In 1998, the total DDT concentration was detected above the comparator value at a depth of 1 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile F – Alternative 3 (Excavation and Offsite Disposal) is the preferred alternative. The exact location of the spoils pile is unknown; therefore, a removal action would be conducted to protect human health and the environment. The following information was considered during the selection process:

- In 1995, metals, PAHs, and pesticides (total DDTs) were detected above their comparator values at a depth of 0.5 foot bgs during sampling.
- The exact location of the samples collected in 1995 is unknown.
- The estimated location of the spoils pile is within the designed channel cut; thus, all soils in the vicinity would ultimately be removed during wetland construction.
- Spoils Pile G – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998, soil was removed from the footprint of the spoils pile to the approximate original grade during the removal actions.
 - In 1998, the total DDT concentration was detected above the comparator value at a depth of 1 foot bgs.
 - COCs are present at a depth of 1 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile I – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998 and 1999, soil was excavated during two separate removal actions.
 - In 1998, beryllium was detected at its comparator value in one sample (SS-PDSP-I01) collected at a depth of 1 foot bgs. The concentration of beryllium was 1.1 mg/kg, and its comparator value is 1.0 mg/kg.
 - In 1998, the total DDT concentration was detected above the comparator value at a depth of 1 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile J – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of

ecological receptors to COCs above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- In 1998 and 1999, soil was excavated during two separate removal actions.
 - In 1999, the total DDT concentration was detected above the comparator value at a depth of 0.5 foot bgs.
 - COCs are present at depths ranging from 0.5 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile K – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998, soil was removed from the footprint of the spoils pile to the approximate original grade during the removal actions.
 - In 1998, the total DDT concentration was detected above the comparator value at a depth of 1 foot bgs.
 - COCs are present at a depth of 1 foot bgs.
 - Performance criteria for the final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile L – Alternative 1 (No Further Action) is the preferred alternative. The following information was considered during the selection process:
 - In 1998 and 1999, soil was excavated during two separate removal actions.
 - Potential ecological risk was based on the confirmation sample SS-PDSP-L01 (collected during the 1998 interim removal actions), which detected metals above their comparator values; the sample area was excavated during the 1999 interim removal actions.
 - The 1999 confirmation sample did not detect analytes above their comparator values.
- Spoils Pile M – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of

ecological receptors to COCs above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- In 1998, soil was removed from the footprint of the spoils pile to the approximate original grade during the removal actions.
 - In 1998, the total DDT concentration was detected above the comparator value in two samples at a depth of 1 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Spoils Pile N - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - In 1998, soil was removed from the footprint of the spoils pile to the approximate original grade during the removal actions.
 - In 1998, the total DDT concentration was detected above the comparator value in two samples at a depth of 0.5 foot bgs. Lead was also detected above its comparator value in one sample at a depth of 0.5 foot bgs.
 - The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.8 Onshore Fuel Line – 54-Inch Line

Alternative 2 (Institutional Controls) is the preferred alternative for ONSFL – 54-Inch Line. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- The source of the contamination, the fuel line, has been removed.
- TPH measured as gasoline have been detected above the comparator value in samples at depths ranging from 3 to 11.5 ft bgs.

- COCs are present at a depth ranging from 3 to 11.5 ft bgs; therefore, there is no direct exposure pathway.
- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.9 Onshore Fuel Line – Hangar Segment

Alternative 2 (Institutional Controls) is the preferred alternative for ONSFL – Hangar Segment. The institutional controls would protect the wetland environment by preventing exposure of human and ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- The source of the contamination, the fuel line, has been removed.
- TPH measured as gasoline, ethylbenzene, xylenes, and PAHs have been detected above their comparator values in various locations along the hangar segment at depths ranging from 0.5 to 8.0 feet bgs.
- COCs are present at a depth of 0.5 to 8.0 feet bgs.
- The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.10 Onshore Fuel Line – Northern Segment

Alternative 2 (Institutional Controls) is the preferred alternative for ONSFL – Northern Segment. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- The source of contamination, the fuel line, has been removed.
- TPH measured as gasoline have been detected above their comparator values at depths ranging from 0.5 to 6.5 ft bgs along the entire length of the former fuel line.
- COCs are present at a depth of 0.5 to 6.5 feet bgs.
- The final wetland design would provide a minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.

- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.11 Northwest Runway Area

Alternative 2 (Institutional Controls) is the preferred alternative for the Northwest Runway Area. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:

- Beryllium and boron were detected above their comparator values at depths ranging from 5 to 15 feet bgs in soil samples collected from borings drilled to install temporary wells.
- This area would be a saline/freshwater transition zone, and the associated comparator values may be conservative.
- Beryllium and boron have been detected above their comparator values in a surface soil sample (Sample 23) collected from the southwest end of the runway.
- COCs are present at depths ranging from 0 to 15 feet bgs (beneath the backfill); therefore, there is no direct exposure pathway.
- The final wetland design would provide at minimum of 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

5.12 Revetment Area

The following preferred alternatives and reasons for selection are presented below for each of the revetments.

- Revetment 1 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Surface soil contamination has been detected alongside the revetment pad and beneath the concrete revetment.
 - Cadmium, lead, and PAH have been detected above their comparator values in surface soil samples REVT 1C and 1A.

- Barium has been detected above its comparator value in the sample collected beneath the revetment pad.
- The current exposure pathway is incomplete for contamination beneath the concrete pad.
- Performance criteria for the final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 2 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Surface soil contamination has been detected alongside the revetment pad and beneath the concrete revetment.
 - Cadmium, lead, and PAH have been detected above their comparator values in surface soil samples collected alongside the revetment pad.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 3 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Barium, copper, and manganese have been detected above their comparator values in one soil sample (REVT 3A) collected beneath the concrete revetment pad.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.

- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 4 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Cadmium, lead, and PAH have been detected above their comparator values in soil samples collected beneath the concrete revetment pad.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.
 - One sample (REVT4C) detected COCs above comparator values.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 6 – Alternative 3 (Excavation and Offsite Disposal) is the preferred alternative because the revetment is in the path of the proposed channel cut. The following information was considered during the selection process:
 - Gasoline range hydrocarbons and PAH have been detected above their comparator values in one soil sample collected beneath the concrete revetment pad.
 - Removal of the concrete or digging of the underlying soil would be prohibited until wetlands construction activities start.
- Revetment 7 – Alternative 3 (Excavation and Offsite Disposal) is the preferred alternative because the revetment is in the path of the proposed channel cut. The following information was considered during the selection process:
 - Lead and PAH have been detected above their comparator values in surface soil samples collected alongside the revetment pad.
 - Removal of the concrete or digging of the underlying soil would be prohibited until wetlands construction activities start.
- Revetment 11 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - This revetment is unpaved.

- Copper was detected in soil above its comparator value at depths ranging from 0.5 to 1.5 feet bgs.
- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 12 - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - This revetment is unpaved.
 - Copper was detected in soil above its comparator value at depths ranging from 0.5 to 1.5 feet bgs.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 13 - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of human and ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Cadmium, lead, and PAH were detected above their comparator values in surface soils surrounding the revetment.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 14 - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - TPH measured as diesel have been detected above their comparator values in one sample collected beneath the concrete revetment pad.

- The current exposure pathway is incomplete for contamination beneath the concrete pad.
- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 15 - Alternative 1 (No Further Action) is the preferred alternative. The following information was considered during the selection process:
 - The concentrations of cadmium (1.5 mg/kg) and lead (48.6 mg/kg) were detected at their comparator values of 1.2 mg/kg and 43.2 mg/kg, respectively, in only one of four samples; the detection was in a surface soil sample.
- Revetment 16 - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Barium was detected above its comparator value in a soil sample collected beneath the concrete pad.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 19 - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of human and ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Barium, copper, cadmium, lead, diesel, gasoline range hydrocarbons, and PAH have been detected above their comparator values alongside, beneath, and surrounding the concrete revetment.
 - COCs are present in surface soil.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.

- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 20 - Alternative 1 (No Further Action) is the preferred alternative. The following information was considered during the selection process:
 - Only one of seven samples detected COCs; the detections were beneath the concrete revetment.
 - The concentration of cadmium (1.5 mg/kg), phenanthrene (0.44 mg/kg), and pyrene (0.78 mg/kg) were detected at their comparator values, 1.2 mg/kg, 0.24 mg/kg, and 0.662 mg/kg, respectively.
- Revetment 21 - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Copper, vanadium, PAH, and diesel and gasoline range hydrocarbons have been detected above their comparator values in one soil sample collected beneath the concrete pad.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 22 - Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - PAH and diesel and gasoline range hydrocarbons have been detected above their comparator values in one soil sample collected beneath the concrete pad.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.

- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 23 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - The revetment is unpaved.
 - Copper has been detected above its comparator value at depths ranging from 0.5 to 1.5 feet bgs.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 25 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Barium and diesel range hydrocarbons have been detected above their comparator values in one soil sample collected beneath the concrete pad.
 - The current exposure pathway is incomplete for contamination beneath the concrete pad.
 - The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
 - Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.
- Revetment 26 – Alternative 2 (Institutional Controls) is the preferred alternative. The institutional controls would protect the wetland environment by preventing exposure of ecological receptors to COCs detected above chemical-specific RAOs during the development and maturation of the wetland. The following information was considered during the selection process:
 - Barium, boron, manganese, and diesel and gasoline range hydrocarbons have been detected above their comparator values in one soil sample collected beneath the concrete pad.

- The current exposure pathway is incomplete for contamination beneath the concrete pad.
- The final wetland design would maintain at least 3 feet of cover in areas where COCs are greater than chemical-specific RAOs.
- Performance criteria for the final wetland design would restrict excavation and erosion and monitor the depth of cover in areas where COCs are greater than chemical-specific RAOs.

Table 5-3 identifies the recommended alternatives for each of the Inboard Area sites. A total of 57 sites were considered in this FFS. During the evaluation of remedial alternatives, Building 86 was combined with the Building 82/87/92/94 Area to make the total number of sites 56. Results of the FFS screening process and comparative analysis resulted in the recommendation of 18 sites for no further action, 34 sites for institutional controls and management in-place, and four sites for excavation with offsite disposal.