TABLE 1

EVALUATION OF REMEDIAL ALTERNATIVES AOI-01 -

PCB AREA

TEXTILEATHER RCRA CORRECTIVE ACTION

TOLEDO, OHIO

| | No Action | Containment | Treatment | Removal | Comments |
|---|-----------------------------------|--------------|--------------|--------------|--|
| Remedy Performance Standards | | | | | |
| 1. Protect Human Health and the Environment | \checkmark | \checkmark | \checkmark | \checkmark | See Text |
| 2. Achieve Media Cleanup Objectives | _ | ✓ | ✓ | ~ | See Text |
| 3. Remediate Sources of Releases | _ | ✓ | ✓ | ~ | See Text |
| Balancing Criteria | | | | | |
| 1. Long-term Effectiveness | | | | | Containment and removal are proven technologies with a record of reliability and effectiveness. In-situ treatment, particularly below the water table in low-permeability soils, is not a proven reliable and effective technology. |
| 2. Reduction of Toxicity, Mobility or Volume | | | | | In-situ treatment and removal both reduce the toxicity, mobility and volume of PCBs. Containment reduces the mobility of PCBs, however this approach does not reduce their toxicity or volume. |
| 3. Short-term Effectiveness | e Orteria | | | | In-situ treatment would be effective in the short-term by extracting PCBs from the subsurface. This alternative represents a low short-term risk because of it does not require significant subsurface disturbance and therefore has a low risk to workers and the community. Containment would also be effective in the short-term by eliminating exposures through engineering controls, but carries a higher risk of worker and community safety because of increased subsurface disturbance that requiring the use of heavy equipment on-site and on roadways. Removal is also effective in the short-term by removing PCBs from the subsurface but carries a higher short-term risk from significant subsurface disturbance using heavy equipment and truck travel on roadways. |
| 4. Implementability | Does Not Meet Performance Otteria | | | | Containment and removal are both proven technologies that are implementable. In-situ treatment is implementable however it is not known whether it would significantly reduce PCB concentrations at this Site. |
| 5. Cost | Does Not | | | \$578,000 | The lowest capital cost alternative would be containment and the highest capital cost alternatives would be removal or treatment. The lowest long-term cost would be removal because it does not require long-term O&M. |
| 6. Community Acceptance | | | | | The Site is currently idle. The community has expressed an interest in economic development of the Site to enhance the area businesses. The removal option would facilitate re-development of the Site. |
| 7. State Acceptance | | | | | The removal option addresses the source material and presents the highest surety of completion. The State is also interested in the redevelopment of the property for industry. |

Notes: ✓ Meets Criterion – Does Not Meet Criterion



Alternative best addresses criterion compared to other options. Alternative moderately addresses criterion compared to other options. Alternative least effective at addressing criterion compared to other options.

TABLE 2

EVALUATION OFREMEDIAL ALTERNATIVES AOI-15 -SOUTH AST FARM (PZ-31 NAPL AREA) TEXTILEATHER RCRA CORRECTIVE ACTION

TOLEDO, OHIO

| | No Action | Containment | Treatment | Removal | Comments |
|---|------------------------------------|--------------|--------------|--------------|--|
| Remedy Performance Standards | | | | | |
| 1. Protect Human Health and the Environment | \checkmark | \checkmark | \checkmark | \checkmark | See Text |
| 2. Achieve Media Cleanup Objectives | - | ~ | ✓ | ~ | See Text |
| 3. Remediate Sources of Releases | - | ~ | ~ | ~ | See Text |
| Balancing Criteria | | | | | |
| 1. Long-term Effectiveness | Does Not Meet Performance Criteria | | | | Containment, treatment and removal are proven technologies with a record of reliability and effectiveness. |
| 2. Reduction of Toxicity, Mobility or Volume | | | | | Treatment and removal both reduce the toxicity, mobility and volume of LNAPL, although the treatment option would result in residual contamination in soil after remedy completion. Containment reduces the mobility of LNAPLs. However, this approach does not reduce contaminant toxicity or volume. |
| 3. Short-term Effectiveness | | | | | Treatment would be effective in the short-term by extracting LNAPL from the subsurface. This alternative has low short-term risk to workers but does not require significant subsurface disturbance and, therefore has a low exposure risk from fugitive releases to workers and the surrounding community. Containment would also be effective in the short-term by eliminating exposures through engineering controls, but this approach has a higher risk of worker and community exposure and safety from increased subsurface disturbance and potential for fugitive releases, and the need for heavy equipment on-site and on roadways. Removal would also be effective in the short-term by removing PCBs from the subsurface, but this approach has a higher short-term risk from subsurface disturbance using heavy equipment and truck travel on roadways. |
| 4. Implementability | | | | | All options evaluated are proven technologies that are implementable however there is some uncertainty associated with the treatment alternative. |
| 5. Cost | | | | \$155,000 | The lowest capital cost alternative would be containment, while the highest capital cost alternative would be treatment. The lowest long-term cost would be removal because it does not require long-term operations and maintenance. |
| 6. Community Acceptance | | | | | The Site is currently idle. The community has expressed an interest in returning the property to an economic re-use for the area businesses. The removal option would better facilitate re-development of the Site. |
| 7. State Acceptance | | | | | The removal option addresses the source material and presents the most reliable option. The State is also interested in the redevelopment of the property for industry. |

Notes: ✓ Meets Criterion – Does Not Meet Criterion



Alternative best addresses criterion compared to other options. Alternative moderately addresses criterion compared to other options. Alternative least effective at addressing criterion compared to other options.

TABLE 3 EVALUATION OF REMEDIAL ALTERNATIVES A0I-28 – FORMER SAMPLE PRINT MACHINES

TEXTILEATHER RCRA CORRECTIVE ACTION

TOLEDO, OHIO

| | No Action | Containment | Treatment | Removal | Comments |
|---|------------------------------------|--------------|--------------|----------|--|
| Remedy Performance Standards | | | | 1 | |
| 1. Protect Human Health and the Environment | \checkmark | \checkmark | \checkmark | ✓ | See Text |
| 2. Achieve Media Cleanup Objectives | _ | \checkmark | ✓ | ~ | See Text |
| 3. Remediate Sources of Releases | _ | \checkmark | \checkmark | ~ | See Text |
| Balancing Criteria | | | | | |
| 1. Long-term Effectiveness | Does Not Meet Performance Criteria | | | | Containment and removal are proven technologies with a record of reliability and effectiveness. In-situ treatment, particularly in the low-permeability soils beneath the Site, may not be effective at reducing contaminant concentrations. |
| 2. Reduction of Toxicity, Mobility or Volume | | | | | Treatment and removal both reduce the toxicity, mobility and volume of contaminants, although the treatment option may result in residual soil contamination after remedy completion. Containment reduces the mobility of contaminants; however, this approach does not reduce its toxicity or significantly reduce contaminant volume. |
| 3. Short-term Effectiveness | | | | | Treatment would be effective in the short-term by destroying contaminants in the subsurface. This approach has a low short-term risk because it does not require significant subsurface disturbance and therefore has a low risk to workers and the community. Containment would also be effective in the short-term by eliminating exposures through engineering controls, and would also have a low risk of worker and community safety. Removal is also effective in the short-term by removing contaminated media from the subsurface, but this approach has a higher short-term risk by requiring subsurface disturbance from using heavy equipment and truck travel on roadways. |
| 4. Implementability | | | | | All options evaluated are proven technologies that are implementable. |
| 5. Cost | | | | \$16,000 | The lowest capital cost alternative would be containment, while the highest capital cost alternative would be treatment. The lowest long-term cost would be removal because this approach does not require long-term operations and maintenance. |
| 6. Community Acceptance | | | | | The Site is currently idle. The community has expressed an interest in returning the property to an economic re-use for the area businesses. The removal option would better facilitate re-development of the Site. |
| 7. State Acceptance | | | | | The removal option addresses the source material and presents the highest surety of completion. The State is also interested in the redevelopment of the property for industry. |

Notes: ✓ Meets Criterion – Does Not Meet Criterion



Alternative best addresses criterion compared to other options. Alternative moderately addresses criterion compared to other options. Alternative least effective at addressing criterion compared to other