



**SHARON STEEL SUPERFUND SITE  
OPERABLE UNIT 1  
EXPLANATION OF SIGNIFICANT DIFFERENCES  
July 2004**

**INTRODUCTION**

The purpose of this Explanation of Significant Differences (ESD) is to explain the significant differences between the remedy selected in the December 9, 1993 Record of Decision (ROD) for OU1 and the remedy subsequent to redevelopment of the Site. Changes to the remedy, as described in the OU1 ROD, will be required due to the redevelopment of the Site as set forth in the *Site Modification Plan for Redevelopment* (ERM, February 2004) prepared by the Development Group and accepted by the City of Midvale, Utah Department of Environmental Quality (UDEQ) and the U.S. Environmental Protection Agency (EPA). The Development Group is an investment group currently consisting of three members who have contracted with Jordan Bluffs, Inc., who recently purchased OU1 to redevelop the Site. These changes will not fundamentally alter the remedy for OU1. The remedy will remain protective of human health and the environment.

This ESD is prepared in fulfillment of EPA's public participation responsibilities under Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. Section 9601, et seq. (CERCLA or Superfund), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and Section 300.435(c)(2)(i) of the National Contingency Plan (NCP), 40 C.F.R. Part 300. These laws and regulations require an ESD when a remedy, described in a ROD, is significantly modified.

This ESD provides a brief history of the Site, describes the current remedy and explains the significant differences in the remedy as addressed by the *Site Modification Plan for Redevelopment* (SMP) for the Site. It also encourages public review and comment on the administrative record that includes this ESD and the supporting documentation such as the SMP.

**SUMMARY OF SITE HISTORY AND CURRENT REMEDY**

**Summary of Site History**

The Sharon Steel Superfund Site is located in Midvale, Utah, approximately 12 miles south of Salt Lake City and consists of two operable units. Operable Unit 1 (OU1) consists of approximately 260 undeveloped acres and is a primary source of contamination. OU1 included a mill, processing plants, outbuildings and the 10 million cubic yard waste tailings pile. OU1 underwent a cleanup remedy that capped the large contaminated soil and tailings pile and construction was declared complete in 1999. OU2 consists of approximately 200 acres of formerly contaminated residential and commercial properties adjacent to OU1. OU2's cleanup of almost 600 properties was completed in 1998. This ESD relates only to OU1.

The area is drained by the Jordan River that is used primarily for agricultural irrigation. The subsurface beneath Salt Lake Valley includes substantial groundwater resources, consisting of

shallow unconfined, confined, and deep confined aquifers some of which are used for domestic, agricultural, and industrial applications. Approximately 44,000 people live within a 2-mile radius of the Site.

The Site was previously the location of various ore processing operations. Various companies processed huge quantities of ore that had high concentrations of heavy metals from 1906 to 1971. Byproducts, with high levels of arsenic and lead from milling operations, were transported from the processing plant to a large waste tailings pile west of the mill, as well as to a small 2.3-acre area on the west side of the Jordan River. Sharon Steel Corporation signed an agreement to purchase the Site in 1979 and took ownership in November of 1981.

In 1982, UDEQ and EPA determined that there was a serious threat to public health and the environment in Midvale associated with the Sharon Steel Site. Investigations conducted by local, State, and Federal agencies from 1982 to 1990 determined that soils on the Sharon Steel property, as well as on nearby residential and commercial properties, had arsenic and lead concentrations at levels that posed unacceptable risks to residents. The Site was proposed for the National Priorities List (NPL) in 1984 and listed on the NPL on February 14, 1991.

The Remedial Investigation for the Site was completed in June of 1988. A more extensive groundwater investigation was also conducted from 1988 to 1990. The investigations determined that tailings from the Site were blowing into the surrounding communities and citizens were using the tailings as yard/garden fill. It was determined that a significant endangerment existed due to exposure to the tailings either from on-site direct contact, wind deposition and/or use as yard fill. In addition, arsenic and lead contamination in residential and commercial soils from historical smelting and milling presented a significant risk to human health. Several heavy metals were found in the shallow groundwater under the tailings, but arsenic was the primary metal of concern as it was the most mobile.

In June of 1988, a State Administrative Order directed the Potentially Responsible Parties (PRP's) to implement dust suppression by spraying the tailings with a polymer coating. In 1990 a Removal Action was performed to fence the Site and prohibit access.

Pursuant to Partial Consent Decrees (PCDs) entered by the United States District Court for the District of Utah in 1990, EPA settled with the three main Potentially Responsible Parties (Atlantic Richfield Company, UV Industries, Inc., UV Industries, Inc. Liquidating Trust, and Sharon Steel Corporation) in exchange for approximately \$64 million to assist with remedial action activities for both the Sharon Steel and the adjacent Midvale Slag Superfund Sites.

From May through June of 1991, EPA's Emergency Response Branch (ERB) removed dangerous chemicals and bottled gases from the remaining mill buildings on the Site. From September of 1992 through December of 1993, EPA's ERB demolished the remaining mill buildings. Building debris was placed on the tailings pile and eventually covered when the remedy for OU1 was completed in January 1999. The remedy for OU2 was completed in November 1998.

The RA for OU2 met all RA objectives as defined in the OU2 ROD and OU2 ESDs dated June 23, 1994 and December 1998. The RA eliminated the exposure to contaminated soil in residential and commercial properties by removing soil with contaminant concentrations exceeding health-based action levels for lead (500 mg/kg) and arsenic (70 mg/kg) and replacement of the soil with clean fill.

Institutional Controls for OU2 were originally implemented to provide special provisions for future excavation of contaminated soils due to construction and gardening. These controls were subsequently reevaluated in 1994 and were lifted because the remedy was deemed to be protective without the controls. This determination was documented in the first OU2 ESD (June 1994). A second ESD was issued for OU2 in December of 1998 (later confirmed in July 2003). EPA and UDEQ decided to (1) limit the scope and cost of the RA by not remediating selected city properties and transportation right-of-ways (this responsibility being delegated to Midvale City by EPA at the City's request) and (2) removing ICs associated with future residential construction.

#### **Summary of Current Remedy for OU1**

**Remedial Action.** The Remedial Action (RA) for OU1 was completed in accordance with the OU1 ROD dated December 9, 1993. The following remedial activities were conducted from May 1995 to January 1999:

- Tailings within 150 feet of the centerline of the Jordan River were excavated and distributed on top of the existing tailings pile. The tailings pile contained an estimated 10 million cubic yards of material and was up to 60 feet thick in places;
- The top two feet of soil in the mill building area was excavated and distributed on top of the existing tailings pile. Clean fill was brought in to replace the soil which was removed and the area was re-vegetated;
- Wetlands along the Jordan River were dredged to remove contaminated sediments. The dredged material was distributed on top of the existing tailings pile and the wetlands were returned to their natural state;
- Tailings on an area of 2.3 acres on the west bank of the Jordan River were excavated and distributed on top of the existing tailings pile;
- A RCRA-equivalent composite cap was installed over the entire tailings pile. The cap includes a geo-composite drain underlain by a flexible membrane liner that, in turn, is underlain by a geo-synthetic clay liner (GCL) that reduces the potential for water infiltration through the tailings pile. The cap is overlain by 18 inches of earth fill and 6 inches of top-soil and re-vegetation throughout. In case of slope failure, the cap is designed to contain tailings within a buffer zone to protect the Jordan River. The cap was also designed to allow access to pedestrian traffic;

- An interceptor trench was installed along the eastern edge of the tailings pile to control lateral shallow groundwater flow;
- The OU1 ROD called for the Galena Canal to be cleaned up and filled in. When the ROD was signed, information was missing that showed the flow in the Galena Canal had been discontinued and the canal decommissioned. According to the Remedial Action Report, the canal was removed and not rehabilitated. This was the only change in the remedy.
- Fifteen groundwater monitoring wells were installed on OU1;
- The OU2 ROD called for the placement of contaminated soils from the cleanup of 600 properties on the OU1 tailings pile. Contaminated soil from the Midvale Slag OU1 cleanup was also placed on the OU1 tailings pile.

**Land Use.** OU1 is defined by the former Sharon Steel property boundaries and is currently zoned by the City of Midvale as a specialized zone which recognizes its environmental status and provides opportunities for a wide range of uses as long as the protectiveness of the remedy is maintained. OU2 is comprised of residential, commercial and high use public areas adjacent to the former Sharon Steel property and encompasses part of the City of Midvale and surrounding areas. The land south and west of Midvale is primarily used for agricultural and commercial activities; the land north and east of Midvale is mostly urban.

**Institutional Controls.** The 1990 Partial Consent Decree (PCD) (Civil Action No. 86-C-924J, U.S. District Court of Utah) contained several institutional controls in the form of restrictive covenants, including the following:

- A grant of access to EPA and UDEQ at all reasonable times for purposes of conducting, supervising, supporting and monitoring the remedy, including operation or maintenance;
- A requirement that the property owners not interfere with, obstruct or disturb performance of the remedy, including any operation or maintenance activities, and not take any action which may affect the integrity or effectiveness of the remedy; and,
- A requirement that the property owner provide notice to later purchasers of the conditions of the PCD.

The OU1 ROD includes the following ICs:

- Only structures determined to be suitable for placement on the cap will be permitted in order to prevent breaches in the integrity of the cap and to ensure that erosion is prevented. The determination of the type and number of structures will be finalized by

EPA during remedial design; and,

- No domestic wells will be permitted onsite through deed restrictions to prevent any ingestion of contaminated groundwater. This is a restriction which is regulated by the State of Utah. Utah will retain final authority to restrict or appropriate groundwater use at this site.

Additional Institutional Controls will be applied through the Institutional Control Process Plan, described below, and corresponding modifications to the 1990 PCD.

**Operation and Maintenance.** Operation and Maintenance (O&M) activities are required to maintain and monitor the performance and protectiveness of the implemented remedy. The objectives of O&M for OU1 are to: 1) maintain the engineered cover and vegetation; 2) maintain the drainage systems and erosion protection features; 3) monitor the groundwater on an annual basis, and, if needed, institute a pump and treat program; 4) prevent the Jordan River from invading the Site and eroding the cap and/or tailings; 5) control future development and groundwater use at the Site; 6) provide reports to document conditions at the Site including problems, repairs and development activities.

The O&M activities are currently being conducted by UDEQ pursuant to a cooperative agreement with EPA and in accordance with the *Operation, Maintenance, and Monitoring Manual for Sharon Steel Superfund Site, Operable Unit 1* (USBR, October 2001). The groundwater is being monitored annually, and no pump and treatment is currently needed at the site. Quarterly site inspections are currently performed to monitor the remedy and detect maintenance needs. There are currently no structures over the composite cap and the remedy is functioning as intended.

#### **DESCRIPTION OF SIGNIFICANT DIFFERENCES**

The OU1 Remedial Design (1994) did not designate the type or number of structures that were allowed on the cap. Failing this, Jordan Bluffs, Inc., the recent purchaser of OU1 commissioned an Environmental Site Assessment in 2003 and developed the SMP that the EPA, UDEQ and City of Midvale have accepted. The SMP also establishes certain technical requirements for redevelopment activities on the Site, in order to assure remedy integrity and long term protectiveness. The author of the SMP, Environmental Resources Management (ERM), stated in the document that, "Based on the types of structures proposed for the Site and the available geotechnical data for the tailings and soil materials beneath the cap, ERM believes that the proposed redevelopment can be performed from a geotechnical perspective." The proposed redevelopment is a mixed land use community. The EPA, UDEQ, and City of Midvale concur in this assessment. The SMP for the Site and the letters confirming governmental acceptance of the SMP and this ESD are contained in the administrative record.

**Land Use.** The SMP incorporates a wide range of uses including residential, office/commercial and business park/ clean industrial. Geotechnical and structural design studies will be

conducted in support of the development by the Development Group and submitted to Midvale City. All studies will be shared with the Agencies. The development is expected to incorporate mixed uses, including numerous parks and open spaces and a neighborhood town center.

**Institutional Controls.** The *Institutional Control Process Plan* (Midvale City, May 2004) (ICPP) is contained in Appendix A to this ESD. The ICPP establishes legal requirements to maintain protectiveness after redevelopment is completed. With redevelopment the Site will require the use of more diverse and complex ICs than originally planned in the OU1 ROD. Public and private ICs will be integrated to effectively address the various aspects of the proposed changes. The following IC responsibilities for three different entities were included in the Plan:

**Midvale City responsibilities:**

- Periodic inspection of covers and final barriers on the Site.
- Prohibition of water wells.
- Repair of covers and final barriers, if the Property Owners Association (POA) is unresponsive. City will enforce repair and collection of costs through Title 7 – Administrative Code Enforcement Program of the Midvale City Municipal Code.
- Review of site plan applications and issuance of final site plan approval.
- Review of road-cut permit applications and issuance of permits.
- Periodic inspections during initial site development and post-development construction to ensure compliance with construction permit including air quality monitoring plans.
- Oversight of landscaping activities of POA (or similar entity).
- Verification that private covenants and deed restrictions for developments include the requirements of the ICPP relating to landscaping and excavation.

**EPA and UDEQ Responsibilities:**

- Continue coordinating O&M activities as outlined in the O&M Manual to the extent practical.
- Review and approve promptly amendments to existing O&M Plan (if proposed).
- Review construction plans and documents as required by the SMP for compliance with SMP and provide any relevant comments promptly. Following receipt and incorporation of comments the plans and documents will be considered final.
- Provide oversight to monitor conformance with SMP for any activities which penetrate the Cap's synthetic membrane.

**Landowner/POA Responsibilities:**

- Control Site access as required by the PCD.
- Enforce compliance with the ICPP.
- Enforce compliance with provisions of construction permit, including air quality monitoring requirements, if any.
- Enforce compliance with the approved SMP.
- Ensure that imported fill conforms with Midvale City Standards and Construction Specifications and the SMP.
- Establish private covenants and deed restrictions requiring that future landowners comply

with applicable requirements set forth in the ICPP.

- Maintain and repair covers and barriers within their respective jurisdictional areas.
- Prohibit disturbances of monitoring wells.
- Oversee and enforce excavation and landscaping controls as required by the ICPP.
- Oversee maintenance of landscaped areas as required by the ICPP.

**Operation and Maintenance.** Although the objectives for O&M essentially remain the same, the scope of the O&M Manual will be modified by the redevelopment. Some responsibilities will be assumed by the POA, others by the City and still others by the State. Additional O&M activities may include monitoring of the composite cap for settlement, monitoring/maintenance of the cap barriers (new buildings, roads, sidewalks, parking lots and landscaping) and monitoring/maintenance of the storm water drainage system. Specifics for the additional and/or modified O&M activities will be defined in changes to the *Operation, Maintenance, and Monitoring Manual*. Roles and responsibilities for the various O&M activities would also be redefined in the O&M Manual.

## PUBLIC PARTICIPATION

The administrative record, which contains this ESD and the documentation supporting it, is available for public review and comment at the following locations:

EPA Superfund Records Center  
999 18th Street, 5th floor North Terrace  
Denver, Colorado 80202  
(303) 312-6473  
Hours: Monday through Friday, 8:00 AM to 4:30 PM

Utah Department of Environmental Quality  
Division of Environmental Response and Remediation  
168 North 1950 West  
Salt Lake City, Utah 84116  
Hours: Monday through Friday, 8:00 AM to 5:00 PM

A notice of availability and brief description of the ESD will be published in the Salt Lake Tribune and Deseret Morning News on July 9, 2004 as required by CERCLA Section 117(c). EPA and UDEQ will accept public comment on the proposed modifications to the OU1 remedy for a period of thirty days. The comment period will be from July 9, 2004 to August 8, 2004. Written comments should be submitted to:

Armando Saenz  
Project Manager  
Environmental Protection Agency - Region 8  
Mail Code: 8EPR-SR  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202

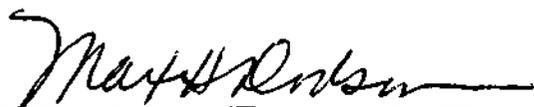
Significant comments received during the public comment period will be addressed and made part of this ESD as Appendix B, Responsiveness Summary.

### FIVE YEAR REVIEWS

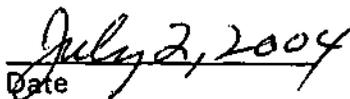
Pursuant to CERCLA section 121(c), 42 U.S.C. 9621(c), five-year reviews are required at sites with remaining hazardous substances, pollutants, or contaminants above levels that allow for unlimited use and unrestricted exposure. Hazardous substances above health-based levels were left on-site and, therefore, five-year reviews are required at this Site. The second five-year review is due in August of 2004.

### AFFIRMATION OF STATUTORY DETERMINATIONS

Considering the changes that would need to be made to the current remedy due to the redevelopment of the Site, EPA, UDEQ and Midvale believe that the modified remedy would remain protective of human health and the environment, would continue to comply with all pertinent local, state and federal requirements that are applicable or relevant and appropriate to the current remedy and would be cost-effective for the public at large.



Max H. Dodson  
Assistant Regional Administrator  
Office of Ecosystems Protection and Remediation  
U.S. Environmental Protection Agency, Region 8

  
Date

## LIST OF ACRONYMS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
ERB	Emergency Response Branch
ESD	Explanation of Significant Differences
GCL	Geo-synthetic Clay Liner
IC	Institutional Control
MCL	Safe Drinking Water Act Maximum Contaminant Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
OU	Operable Unit
O&M	Operation and Maintenance
PCD	Partial Consent Decree
RA	Remedial Action
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act of 1986
SMP	Site Modification Plan for Redevelopment
UDEQ	Utah Department of Environmental Quality

## APPENDICES

- Appendix A Institutional Control Process Plan, Operable Unit 1, Sharon Steel, Midvale, Utah (Midvale City, May 3, 2004)
- Appendix B Responsiveness Summary (if necessary)

# **Appendix A**

## **Institutional Control Process Plan**

## INSTITUTIONAL CONTROL PROCESS PLAN

Operable Unit No. 1  
Sharon Steel  
Midvale, Utah

### I. INTRODUCTION

This Institutional Control Process Plan ("Plan") has been prepared to document the requirements and procedures for the Institutional Controls ("ICs") for the capped portion of Operable Unit No. 1 ("OU1") and areas where monitoring wells are present in the Sharon Steel Superfund Site (the "Site") as illustrated in Figure 1. This Plan does not supercede any federal, state, or local statutes, regulations, or ordinances pertaining to the environment and current and future holders of interests of property within the Site will remain obligated to comply with the same. This document will be used to facilitate the redevelopment of the Site in compliance with the Explanation of Significant Differences ("ESD") (Exhibit A) and the accepted Site Modification Plan ("SMP") (Exhibit B) which has been prepared to outline general construction practices for redevelopment of the Site and future management thereof. The primary purposes of these controls are (i) to limit or prohibit exposure of people and the environment to subsurface contaminants remaining at the Site by ensuring the protection and maintenance of the three piece membrane remedy which was constructed per the Record of Decision ("ROD") for the Site (the "Cap"); (ii) to prevent or limit activities in certain areas of the Site that may increase the risk of damage to the Cap; and (iii) to manage stormwater and irrigation water to prevent unacceptable impact to the cap and underlying groundwater. Public controls may be imposed, for example, through building permits, subdivision regulations, excavation permits, or zoning ordinances. Private controls are typically imposed through covenants, deed restrictions on the land, or contractual agreements between the property owner or lessee and regulatory agencies. This plan is not intended to impose or require private controls.

This Plan has been prepared as a mechanism to assure that consistent and effective inspection and maintenance and enforcement activities are occurring and will occur in the future throughout the Site. These objectives and those detailed below will be achieved primarily through the implementation of ICs defined in this Plan. Future owners of any portion of the Site will be bound by the provisions of this Plan that are relevant to the portion of the property they own or control on the Site.

The specific objectives of this Plan are as follows:

- To describe the process through which binding and enforceable ICs will be developed and implemented that will facilitate future construction activities on the Site while at the same time maintaining

the short-term and long-term effectiveness of the remedy established in the ROD.

- To establish controls on future and post construction-related activities (deep excavations, borings, or foundations) to prevent damage to the Cap within the defined area of the Site.
- To establish controls on groundwater use.
- To establish the requirements through which development including single family residential uses will be allowed.
- To identify the specific mechanisms (such as City of Midvale ("City") ordinance(s), building permit and inspection requirements, deed restrictions, etc.) that will be used to establish and enforce the ICs established in this Plan.
- To identify the roles and responsibilities that private parties and federal, state, local, and municipal entities will perform and undertake in order to implement this Plan, including oversight and enforcement.

## **II. COVERS AND MATERIALS MANAGEMENT**

To reduce the risk of exposure to contaminants through the redevelopment process at the Site, the SMP has been prepared by the developers and reviewed and accepted by the Utah Department of Environmental Quality ("DEQ") and US Environmental Protection Agency ("EPA"). The SMP establishes the requirements for handling of materials and soil covers during redevelopment and will be referenced when related issues arise during the redevelopment process. A summary of the objectives of the SMP relating to soil covers and solid media left at the site are as follows:

- To minimize human exposure, during and after construction to wastes remaining in place.
- To maintain the integrity of the Cap.
- To effectively manage excavated material, including wastes, during construction and ensure appropriate handling of all wastes.
- To ensure that appropriate final covers are installed, inspected and maintained during and after Site redevelopment.

### **A. Description of Specific Institutional Controls:**

1. Site plan approval as required by chapter 17-7-3 and regulated by 17-7-10 of the Midvale City Zoning Ordinance and Title 16, Subdivisions shall be obtained before initial Site development,

future redevelopment or change in land use. Applications shall be made available through the City Community and Economic Development Department. In conjunction with the submittal of the preliminary site plan application, the applicant shall submit documentation that shall include an attestation that the applicant is aware of the current Site condition and will comply with all Institutional Controls. Applicant submittals and requirements under the site plan approval process are summarized below which are in addition to and in conjunction with the requirements identified in 17-7-3 and 17-7-10 of the Midvale City Zoning Ordinance:

- (a) Applicant shall submit a plan illustrating the proposed construction and development. Preliminary and final site plans for development shall be submitted for review and approval. Preliminary and final development plans shall specify the amount of existing and proposed soil cover over the Cap as well as any proposed penetrations or alterations of the Cap. Any proposal which includes penetrations or alterations of the Cap must include detailed plans for repairing the Cap in accordance with the SMP.
  - (b) Grading and drainage plans are required and shall specifically assure the protection of soil covers from erosion over the Cap membranes and provide adequate drainage to prevent accumulation of water on the Cap.
  - (c) Alterations to the existing Operations and Maintenance plan may be proposed by the applicant, the City or other party. EPA and DEQ shall consider alterations to assure the proposed development site will be maintained in a manner which shall preserve the effectiveness of the Cap.
  - (d) An air quality monitoring and dust suppression plan shall be provided. The plan must ensure that National Ambient Air Quality Standards and state and local air quality requirements are met for site contaminants at the boundary between the construction area and the developed areas. Applicant may request a waiver of the air monitoring requirements by submitting relevant data demonstrating compliance with all air quality standards under similar circumstances (similar weather conditions, construction operations, site materials, etc.).
2. If any intrusive exploratory activities (such as excavations, borings, CPT soundings) or foundations (including piles or drilled shafts) are proposed for the Cap Area (as defined in Exhibit C) at depths that penetrate the Cap, approval must first be obtained from the City of

Midvale. The request for approval must include a detailed description of the proposed exploration or construction activity as well as the mechanism(s) that will be used to prevent contamination of the aquifer and release of contaminated material. In addition, the plan shall be in conformance with the accepted SMP. The request must be approved by the City of Midvale prior to implementation of the work.

3. A road cut permit shall be required for any work in the public right-of-way, per ordinance 12.12.150 of the Midvale City Municipal Code.
4. All property within the Site will be included within one or more Property Owner's Association(s) ("POA"). The POA will be established by the owner or authorized representative prior to subdivision plat approval for the Site. Membership in any and all POAs is a condition of development on the Site. The POA shall be responsible for maintenance and repair of the Cap (including soil covers) beneath property within its boundaries. The City shall make necessary repairs to covers and barriers if the landowner or POA fails to do so in a timely or appropriate manner. In that event, the City shall have the right to recover its costs from the landowner or POA. The City shall also have the right, in its sole discretion, to charge the landowner a surcharge for the costs of the City's work related to the property, in an amount established by ordinance.
5. Reasonable efforts must be used to minimize penetration of the Cap. Excess soil or tailings generated from underneath the Cap either during development or after development will be managed in accordance with the accepted SMP.

**B. Mechanism of implementation:**

1. Sections 17-7-3 and 17-7-10 of the Midvale City Zoning Ordinance will be amended by Ordinance of the City Council to include the provisions of Sections II.A.1 and 4 of this Plan.
2. Section 12.12.150 of the Midvale City Municipal Code will be amended by Ordinance of the City Council to include the Site within the control area currently identified as Sharon Steel OU2 in accordance with Section II.A.3 of this Plan. 3. Section 12.12.150 of the Midvale City Municipal Code will be amended by Ordinance of the City Council to provide that all construction and redevelopment activities within the Site shall be in accordance with the accepted SMP including all notification requirements in accordance with Section II.A.2 of this Plan.

### **III. WATER MANAGEMENT**

The shallow aquifer beneath the Site is contaminated with some heavy metals, primarily arsenic. Water management on the Site will focus on preventing new sources of water from infiltrating the Cap and tailings and eroding soil covers over the Cap.

The objectives of the ICs relating to water management are as follows:

- To minimize human and environmental exposure to contaminated groundwater.
- To minimize the possibility of damage to the Cap that could introduce water which travels through contaminated tailings and introduces new contaminants to the shallow ground water aquifer.
- To effectively manage storm water.

#### **A. Description of Specific Institutional Controls:**

1. Prohibit all water wells on the Site (excluding groundwater monitoring wells).
2. Prohibit the disturbance of existing groundwater monitoring wells without prior approval by UDEQ. A rehabilitation or well replacement plan must accompany any request to disturb a monitoring well. Access to monitoring wells, the interceptor drain, and the interceptor trench outfall by the regulatory agencies shall be maintained.
3. Prohibit utilities underneath the Cap
4. Insure effectiveness of the Cap as per section II of this Plan.
5. Have all future construction including storm water management comply with the SMP.

#### **B. Mechanism of Implementation:**

1. Sections 17-7-3 and 17-7-10 of the Midvale City Zoning Ordinance will be amended by Ordinance of the City Council to include the provisions of Section III.A. 1 of this Plan. This provision will also include a requirement that private covenants and deed restrictions will acknowledge this Plan and require compliance therewith.
2. The Midvale City Standard Construction Specifications will be amended by Ordinance of the City Council to include the provisions of Section III.A.2-5 of this Plan.

#### **IV. MEASURES TO ALLOW DEVELOPMENT**

The ROD and ESD prepared by EPA and DEQ do not prohibit development including residential development. Such development may require the placement of additional soils above the existing Cap as outlined in the SMP. The following controls have been developed to permit development on the Site.

With respect to any and all structures that will be constructed on the Site the POA shall oversee all landscaped areas. A range of controls may be included within the responsibilities of the POA.

Property improvements after initial construction involving excavations deeper than 24-inches shall be controlled by a POA (or similar entity). Any excavations which penetrate the Cap (membrane) shall require a permit from Midvale City, and be performed in compliance with the SMP.

All landscaping shall be completed and maintained by the POA in accordance with the SMP. A list of approved plants has been included as part of the SMP.

##### **A. Specific Institutional Controls:**

1. With respect to any and all development that will be constructed on the Site, the POA shall oversee all landscaped areas. A range of controls may be included within the responsibilities of the POA. At a minimum the controls shall include: For areas with less than three (3) feet of cover soil over the cap, the POA shall take responsibility for any and all landscape installation and maintenance. For areas with greater than three (3) feet thickness of soil covers, the POA may allow individual property owners to install and maintain landscaping insofar as regrading of the property does not occur. All landscape plans on individual properties shall be reviewed and approved by the POA to ensure adequate soil covers, appropriate irrigation, and approved planting plans.
2. All plants must be on the approved list contained in the SMP.

##### **B. Mechanism of Implementation:**

1. Section 17-7-10 of the Midvale City Zoning Ordinance will be amended by Ordinance of the City Council to include the provisions of Section IV A, 1 of this Plan. This amendment will include a provision limiting development only where POAs (or similar entities) are created to oversee all landscaped areas and prohibiting excavation over 24" deep except by the association. The POA may have a range of controls in place. In addition, the amendment will include language to require the use of landscaping per the approved plant list in the SMP.

## **V. OVERSIGHT AND ENFORCEMENT ROLES AND RESPONSIBILITIES**

Midvale City (the City) Department of Community and Economic Development will be the primary enforcement and oversight agency. Compliance with the ICs is the responsibility of the landowner, contractors and subcontractors working within the Site. This IC Process Plan may be revised to reflect requirements that may change over time. The landowner(s), Midvale City, DEQ, or EPA may propose changes to this plan. All proposed changes will be reviewed by the landowner(s), Midvale City, DEQ and EPA prior to finalization. Revised pages will be sent to all entities with oversight and enforcement roles and responsibilities listed below. The type and frequency of inspections and required maintenance of remedy components, including an on-site repository (if established) and related Site security will be detailed in amendments to the existing O&M Manual (if necessary).

### **A. Midvale City responsibilities:**

- Periodic inspection of covers and final barriers on the Site.
- Prohibition of water wells.
- Repair of covers and final barriers, if the POA is unresponsive. City will enforce repair and collection of costs through Title 7 – Administrative Code Enforcement Program of the Midvale City Municipal Code.
- Review of site plan applications and issuance of final site plan approval.
- Review of road cut permit applications and issuance of permits.
- Periodic inspections during initial site development and post-development construction to ensure compliance with construction permit including air quality monitoring plans.
- Oversight of landscaping activities of POA (or similar entity).
- Verification of private covenants and deed restrictions for developments include the requirements of this Plan relating to landscaping and excavation.

### **A. EPA and UDEQ Responsibilities:**

- Continue coordinating O&M activities as outlined in the O&M Manual to the extent practical.
- Review and approval promptly of amendments to existing O&M Plan (if proposed).
- Review construction plans and documents, as required by the SMP, for compliance with SMP and provide any relevant comments promptly. Following receipt and incorporation of comments the plans and documents will be considered final.
- Provide oversight to monitor conformance with SMP for any activities which penetrate the Cap's synthetic membrane.

### **A. Landowner/POA Responsibilities:**

ADOPTED  
May 4, 2004

- Control Site access.
- Enforce compliance with the Plan.
- Enforce compliance with provisions of construction permit, including air quality monitoring requirements.
- Enforce compliance with the approved SMP.
- Ensure that imported fill conforms with Midvale City Standards and Construction Specifications and the SMP.
- Establish private covenants and deed restrictions requiring that future landowners comply with applicable requirements set forth in this Plan.
- Maintain and repair covers and barriers (within their respective jurisdictional areas).
- Prohibit disturbances of monitoring wells.
- Oversee and enforce excavation and landscaping controls.
- Oversee maintenance of landscaped areas.