

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:

- 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.