Five-Year Review Report

Fourth Five-Year Review Report

for

Mountain View Mobile Home Estates
Superfund Site

Globe

Gila County, Arizona

September, 2010

PREPARED BY:

United States Environmental Protection Agency
Region IX
San Francisco, California
# Table of Contents

List of Acronyms ........................................................................................................................5

Executive Summary ........................................................................................................................6

Five-Year Review Summary Form .................................................................................................8

1. **Introduction** ..........................................................................................................................10

2. **Site Chronology** ....................................................................................................................11

3. **Background** ..........................................................................................................................12
   - Physical Characteristics ........................................................................................................12
   - Land and Resource Use .......................................................................................................12
   - History of Contamination ..................................................................................................13
   - Basis for Taking Action ....................................................................................................14

4. **Remedial Actions** ..................................................................................................................14
   - Remedy Selection and Remedial Action Objectives (RAOs) ...............................................14
   - Remedy Implementation ...................................................................................................15
   - Operation and Maintenance (O&M) ..................................................................................16

5. **Progress Since the Last Five-Year Review** ........................................................................16

6. **Five-Year Review Process** ....................................................................................................17
   - Administrative Components ..............................................................................................17
   - Community Notification and Involvement ........................................................................18
   - Document and ARARs Review ...........................................................................................19
   - Data Review .......................................................................................................................21
   - Site Inspection ....................................................................................................................21
   - Interviews ...........................................................................................................................22

7. **Technical Assessment** .........................................................................................................22
   - Question A: Is the remedy functioning as intended by the decision documents? .............22
   - Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial
     action objectives (RAOs) used at the time of the remedy selection still valid? ............23
   - Question C: Has any other information come to light that could call into question
     the protectiveness of the remedy? ......................................................................................24
   - Technical Assessment Summary .......................................................................................24

8. **Issues** ..................................................................................................................................24

9. **Recommendations and Follow-up Actions** ......................................................................25

10. **Protectiveness Statement** ..................................................................................................25
11. Next Review ......................................................................................................................................... 25

Figures and Maps........................................................................................................................................ following page 25

Figure 1 Map Showing Location of Mountain View Mobile Home Estates 
Superfund Site

Appendices.................................................................................................................................................. following page 26

Appendix A First Amended Superfund State Contract, October 2007
Appendix B Declaration of Environmental Use Restriction (DEUR), December 2007
Appendix C Public Notice of Five Year Review, April 14, 2010
Appendix D Community Interview Questionnaire
Appendix E Site Overview Fact Sheet Announcing Five Year Review, July 2010
Appendix F Community Interview Documentation
Appendix G Planning for the Future: Reuse Assessment, November 2008
Appendix H USACE Site Inspection Checklist
# List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADEQ</td>
<td>Arizona Department of Environmental Quality</td>
</tr>
<tr>
<td>ADES</td>
<td>Arizona Division of Emergency Services</td>
</tr>
<tr>
<td>ADHS</td>
<td>Arizona Department of Health Services</td>
</tr>
<tr>
<td>ARARs</td>
<td>Applicable or Relevant and Appropriate Requirements</td>
</tr>
<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
</tr>
<tr>
<td>CD</td>
<td>Consent Decree</td>
</tr>
<tr>
<td>CDC</td>
<td>U.S. Center for Disease Control</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation, and Liability Act</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CIC</td>
<td>Community Involvement Coordinator</td>
</tr>
<tr>
<td>DEUR</td>
<td>Declaration of Environmental Use Restriction</td>
</tr>
<tr>
<td>DOJ</td>
<td>U.S. Department of Justice</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>ESD</td>
<td>Explanation of Significant Differences</td>
</tr>
<tr>
<td>FS</td>
<td>Feasibility Study</td>
</tr>
<tr>
<td>HQ</td>
<td>Headquarters</td>
</tr>
<tr>
<td>IC</td>
<td>Institutional Control</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>NCP</td>
<td>National Oil and Hazardous Substances Pollution Contingency Plan</td>
</tr>
<tr>
<td>NPL</td>
<td>National Priorities List</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operations and Maintenance</td>
</tr>
<tr>
<td>OSC</td>
<td>On-Scene Coordinator</td>
</tr>
<tr>
<td>OU</td>
<td>Operable Unit</td>
</tr>
<tr>
<td>RA</td>
<td>Remedial Action</td>
</tr>
<tr>
<td>RAO</td>
<td>Remedial Action Objective, cleanup level</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>RD</td>
<td>Remedial Design</td>
</tr>
<tr>
<td>RI</td>
<td>Remedial Investigation</td>
</tr>
<tr>
<td>RI/FS</td>
<td>Remedial Investigation/Feasibility Study</td>
</tr>
<tr>
<td>ROD</td>
<td>Record of Decision</td>
</tr>
<tr>
<td>RPM</td>
<td>Remedial Project Manager</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act of 1986</td>
</tr>
<tr>
<td>SSC</td>
<td>State Superfund Contract</td>
</tr>
<tr>
<td>SPRR</td>
<td>Southern Pacific Railroad</td>
</tr>
<tr>
<td>USACE</td>
<td>U.S. Army Corps of Engineers</td>
</tr>
<tr>
<td>USFS</td>
<td>U.S. Forest Service</td>
</tr>
</tbody>
</table>
Executive Summary

This is the fourth Five-Year Review of the Mountain View Mobile Home Estates Superfund Site (Site) in the City of Globe, Gila County, Arizona. The purpose of this Five-Year Review is to review information from the previous five years to assess the maintenance of the capped asbestos contamination left on-site and determine whether or not the remedy remains protective of human health and the environment.

The 17-acre site was once the home of the former Metate Asbestos Corporation’s chrysotile asbestos mill. The property was subsequently used as a mobile home park from the period of 1973 until 1979. In 1979, local health officials discovered asbestos contamination during an inspection of the mobile home park’s sewage treatment plant. Asbestos mill tailings had been used as fill material and then been partially covered with topsoil. Small piles of asbestos mill tailings were found near the abandoned mill structures and the adjacent railroad tracks. The air and soils were contaminated with asbestos posing a potential health risk to the residents.

In 1980, the State of Arizona provided temporary housing for the 100-130 residents while the site was decontaminated. The old mill buildings were demolished, and topsoil was used to cover the asbestos contaminated soil. However, wind, water and public activity soon eroded this soil covering, resulting again in exposed asbestos.

In July 1982, Mountain Mobile Home Estates was added to the National Priorities (NPL). The Remediation Investigation/Feasibility Study (RI/FS) began in April 1983, and a RI/FS Report was published in May 1983. In June 1983, EPA signed a Record of Decision (ROD) selecting the following remedy for the site: permanently relocating the mobile home residents; burying and capping the asbestos contaminated soils at the site; demolishing and burying all the homes and the sewage treatment plant on-site; covering the site with a filter fabric; placing clean soil on top of the site; and periodically inspecting and maintaining the site. Permanent relocation of the residents was completed in 1985, and ownership of the purchased property was transferred to the State of Arizona.

In April 1987, EPA issued a Notice of Intent to delete the site from the NPL. The comment period ended in October 1987, and the final notice of deletion was published on April 18, 1988. The “Construction Complete” date for the Site is also listed as the same April 1988 date.

The Arizona Department of Environmental Quality (ADEQ) through a Superfund State Contract with EPA is responsible for the long-term operations and maintenance (O&M) of the remedy. In the intervening years, ADEQ has been maintaining the site, including conducting periodic inspections to confirm that the buried asbestos remains capped in place and that the perimeter fencing and signage are in good condition to prevent public access to the site.

Exposure to the remaining capped and buried asbestos contaminated soils and construction debris is adequately controlled by the protective cap put in place in 1985 by EPA and U.S. Army Corps of Engineers, and the additional protection of the land use restriction (Declaration of Environmental Use Restriction or DEUR) recorded on the property by ADEQ on December 20, 2007 by ADEQ, in accordance with the October 2007 First Amended Superfund State Contract.
The remedy at the Mountain View Mobile Home Estates Superfund Site currently protects human health and the environment because there is no current exposure to the contamination that remains at the Site. The placement of the DEUR in 2007 completed the requirement for this institutional control being in place and ensures long-term protectiveness. There are some minor landscaping and maintenance items that were identified during the 2010 site inspection; however, these maintenance items do not affect the protectiveness of the remedy.
## Five-Year Review Summary Form

### Site Identification
- **Site name (from WasteLAN):** Mountain View Mobile Home Estates
- **EPA ID (from WasteLAN):** AZ D980735724
- **Region:** IX
- **State:** AZ
- **City/County:** Globe / Gila County

### Site Status
- **NPL status:** ☑ Final ☐ Deleted ☐ Other (specify)
- **Remediation status** (choose all that apply): ☑ Under Construction ☐ Operating ☑ Complete
- **Multiple OUs?** ☐ YES ☑ NO  
  **Construction completion date:** April 18, 1988
- **Has site been put into reuse?** ☑ YES ☐ NO

### Review Status
- **Lead agency:** ☑ EPA ☐ State ☐ Tribe ☐ Other Federal Agency ______________________
- **Author name:** Andria Benner
- **Author title:** RPM
- **Author affiliation:** USEPA
- **Review period:** 04/01/2010 to 09/15/2010
- **Date(s) of site inspection:** 07/07/2010
- **Type of review:** ☑ Post-SARA ☐ Pre-SARA ☐ NPL-Removal only  
  ☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead ☐ Regional Discretion
- **Review number:** ☑ 1 (first) ☑ 2 (second) ☑ 3 (third) ☐ 4 (third) ☑ Other (specify) #4
- **Triggering action:**  
  ☑ Actual RA Onsite Construction at OU # ______  ☑ Actual RA Start at OU# ______  
  ☑ Construction Completion ☑ Previous Five-Year Review Report  
  ☑ Other (specify) Change in land use plans. Consideration of updated toxicity information.
- **Triggering action date (from WasteLAN):** September 28, 2005
- **Due date (five years after triggering action date):** September 28, 2010
Five-Year Review Summary Form, cont’d.

Issues:

There are no issues that affect protectiveness. All required Land Use Restrictions and other ICs are now fully in place.

Recommendations and Follow-up Actions:

EPA and ADEQ should ensure that the remedy decision documents are modified, as needed, to incorporate the institutional controls (DEUR).

Minor, recurring O&M landscaping and fencing issues at the Site require continual, on-going O&M. ADEQ currently plans to address these O&M deficiencies during 2010. These O&M actions do not affect the short-term or long-term protectiveness of the existing Site remedy.

Protectiveness Statement(s):

The remedy at the Mountain View Mobile Home Estates Superfund Site currently protects human health and the environment because there is no current exposure to the contamination that remains at the Site. A Declaration of Environmental Use Restriction (DEUR) to restrict use of property was recorded for the site in 2007. A title search confirmed that this institutional control is in place and effective to ensure long-term protectiveness.

There are some minor landscaping and maintenance items that were identified during the site inspection; however, these maintenance items do not affect the protectiveness of the remedy.
1. Introduction

The purpose of a Five-Year Review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review Reports. In addition, Five-Year Review Reports identify issues found during the review, if any, and recommendations to address them.

The Agency is preparing this Five-Year Review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA §121 states:

*If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The agency interpreted this requirement further in the NCP. 40 CFR §300.430(f)(ii) states:

*If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

EPA Region 9 in coordination with the Arizona Department of Environmental Quality (ADEQ) has conducted a Five-Year Review of the remedial actions implemented at the Mountain View Mobile Home Estates Superfund site (Site) in Globe, Gila County, Arizona. The entire Site comprises one Operable Unit (OU). This review was conducted from April 2010 through August 2010. This report documents the results of the review.

The June 2, 1983 Record of Decision (ROD) selected a remedy that allowed hazardous substances, pollutants, or contaminants to be left on-site at levels that would prohibit unlimited use and unrestricted exposure. A complete chronology of site events is included on Table 1. This Five-Year Review is therefore required by statute because the remedy allows buried and capped asbestos, including asbestos-contaminated soils and construction debris, to remain on the site indefinitely. This is the fourth Five-Year Review for the site. The triggering action for this statutory review is the signature date September 28, 2005, of the previous Five-Year Review Report, as shown in EPA’s CERCLIS database.
2. Site Chronology

Table 1 lists the chronology of events for the Site.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metate Asbestos Corp. operated an asbestos mill on the 17-acre property</td>
<td>1953-1973</td>
</tr>
<tr>
<td>Metate court-ordered to cease operations after air quality standard violations</td>
<td>1973</td>
</tr>
<tr>
<td>The property owner then built a mobile home subdivision on the former mill site</td>
<td>1973</td>
</tr>
<tr>
<td>Asbestos mill tailings and contaminated soil discovered on the site by ADHS</td>
<td>1979</td>
</tr>
<tr>
<td>State takes emergency action to decontaminate homes and cover the asbestos</td>
<td>1979</td>
</tr>
<tr>
<td>U.S. Center for Disease Control recommends evacuation of subdivision residents</td>
<td>Jan 1980</td>
</tr>
<tr>
<td>EPA lists Site on National Priorities List (NPL)</td>
<td>July 1982</td>
</tr>
<tr>
<td>Remedial Investigation/Feasibility Study (RI/FS) completed by EPA Region 9</td>
<td>May 1983</td>
</tr>
<tr>
<td>Public Meeting on proposed remedy conducted by EPA</td>
<td>May 1983</td>
</tr>
<tr>
<td>Record of Decision (ROD) signed by EPA HQ</td>
<td>June 1983</td>
</tr>
<tr>
<td>USACE given authority by EPA to construct remedy</td>
<td>Oct 1983</td>
</tr>
<tr>
<td>60% remedial design completed by USACE</td>
<td>Dec 1983</td>
</tr>
<tr>
<td>Final design and O&amp;M Manual completed by USACE</td>
<td>April 1984</td>
</tr>
<tr>
<td>Superfund State Contract for long-term O&amp;M signed by EPA, ADHS &amp; ADES</td>
<td>June 1984</td>
</tr>
<tr>
<td>Permanent relocation of mobile home residents conducted by ADES, with FEMA</td>
<td>1983-1985</td>
</tr>
<tr>
<td>Relocation of 47 families and all property acquisition completed</td>
<td>April 1985</td>
</tr>
<tr>
<td>Consent Decree signed by DOJ, EPA, State of AZ, Metate Asbestos &amp; Jaquays</td>
<td>April 1985</td>
</tr>
<tr>
<td>Construction contract awarded for remedial action to USACE</td>
<td>June 1985</td>
</tr>
<tr>
<td>Construction of remedy commenced by USACE</td>
<td>Aug 1985</td>
</tr>
<tr>
<td>Construction project and final reports completed by USACE</td>
<td>Jan 1986</td>
</tr>
<tr>
<td>Remedial Action Report completed by USACE</td>
<td>April 1986</td>
</tr>
<tr>
<td>Notice of Intent to Delete Site from NPL proposed by EPA</td>
<td>Nov 1987</td>
</tr>
<tr>
<td>Final rule for deletion of Site from NPL published by EPA</td>
<td>April 1988</td>
</tr>
<tr>
<td>Construction Complete determination by EPA</td>
<td>April 1988</td>
</tr>
<tr>
<td>First Five-Year Review completed by EPA</td>
<td>Sept 1991</td>
</tr>
<tr>
<td>Second Five-Year Review completed by EPA</td>
<td>Dec 1999</td>
</tr>
<tr>
<td>Third Five-Year Review completed by ADEQ</td>
<td>Sept 2005</td>
</tr>
<tr>
<td>First Amended Superfund State Contract signed by EPA and ADEQ</td>
<td>Oct 2007</td>
</tr>
<tr>
<td>Declaration of Environmental Use Restriction on Site Recorded by ADEQ</td>
<td>Dec 2007</td>
</tr>
<tr>
<td>Site-Wide Ready for Anticipated Use (SWRAU) Determination made by EPA</td>
<td>Mar 2008</td>
</tr>
<tr>
<td>Future Use Assessment Report for Site completed by EPA</td>
<td>Nov 2008</td>
</tr>
</tbody>
</table>
3. Background

Physical Characteristics

The Mountain View Mobile Homes Estates Superfund Site is located on a 17-acre parcel approximately one and one-half miles east of the City of Globe, approximately 75 miles east of Phoenix, Arizona, in Gila County. The Site is within the city limits and consists of seventeen acres of land contaminated with asbestos mill tailings and asbestos-contaminated construction debris and soils buried under a landfill cap. It is located in a relatively undeveloped area on the north side of Highway 70 where it meets State Route 77 (SR 77). The surrounding terrain is mountainous and primarily composed of federally-owned land. The Gila County Assessor parcel numbers of the property where the contamination is located are 102-28-014-A and 102-28-014-B (See Figure 1).

Since the completion of the remedial action in 1985, the Site has been fenced, locked, and posted with a public notice stating that hazardous substances are present. In addition to the fence, the site itself includes the following remedial components: a barrier fabric capped with 24-inch soil and 3-inch gravel cover, plus surface and subsurface drainage features to protect the cap from on-site and off-site erosion. The Site’s main access is located off Highway 70, with a secondary access located on the western boundary. The site is bordered along the northern perimeter by an active railroad line owned by Southern Pacific Railroad Transportation Company (SPRR). The Bureau of Land Management (BLM) owns the land to the north of the Site and the U.S. Forest Service (USFS) owns the land to the south of Highway 70.

According to the 2000 U.S. census, there were 7,486 people, 2,814 households, and 1,871 families residing in the city of Globe. The population density was 415.5 people per square mile (160.4/km²). There were 3,172 housing units at an average density of 176.0/sq mi (68.0/km²).

Land and Resource Use

The site contained three washes passing from north and west through the Site and passing under Highway 70 on the south. Two of the washes pass beneath the Southern Pacific railroad tracks in large arch culverts. Both of these drainage courses have relatively steep grades (approximately 5% slope) as they pass through the Site. The third major wash entered the site on the west property line and passed diagonally through the Site leaving the property line on the south side. Drainage studies quantified the storm water runoff that could be anticipated and the remedial action design planned a pipe and channel system that could carry a 100-year storm event.

The current drainage features include a concrete-lined surface swale and two subsurface drainage pipes. These conveyance systems are considered part of the remedy as they protect the cover from erosion from on-site and off-site drainage. As such, the drainage conveyance systems tend to divide the Site into three distinct areas:

(1) property southwest of the drainage swale,
(2) a central portion between the swale and the drainage pipe discharging near the main Site access, and
(3) property east of the main access gate on SR 70.

The land uses of the Site and surrounding area are essentially the same as they were during the third Five-Year Review in 2005. The site is located in an area zoned C-2, intermediate commercial. Regarding future land use, an EPA Headquarters Superfund Reuse/Revitalization contractor, E2, Inc., completed a reuse assessment, “Planning for the Future,” for the City of Globe in November 2008. The study identified and discussed the opportunities and the limitations of potential light industrial development of the Site. However, due to the economic conditions in the last few years, development options have not yet been pursued.

History of Contamination

In 1973, the Metate Asbestos Corporation, who operated a chrysotile asbestos mill, on the 17-acre Site, was found to be in violation of EPA Air Quality Standards was ordered to cease operations by the State of Arizona Air Quality Control District. Before the Air District’s temporary injunction became permanent in 1974, the owner of Metate Asbestos, Jack Neal, obtained a rezoning of the property to residential use. Metate asbestos tailings and contaminated soil were used as landfill to level the site and the area was subdivided into 55 lots. Of these lots, mobile homes were placed on 47 lots occupied by approximately 130 residents and the subdivision was named Mountain View Mobile Home Estates.

In October 1979, asbestos contamination of the soil of the subdivision was discovered by State and local health officials during an inspection of the mobile home park’s wastewater disposal system. Subsequent sampling of the air and sediment of the subdivision confirmed the presence of asbestos fibers posing a risk to public health.

In November 1979, The Arizona Department of Health Services (ADHS) sent the residents a letter notifying them of the health hazard. In December 1979, ADHS ordered Metate Asbestos Corp. and several other mills in the Globe area, including the Jaquays Mining and Equipment Corp. (an asbestos mill directly contiguous on the east to the Mountain View subdivision), to submit cleanup plans for their asbestos contamination. The U.S. Assistant Surgeon General, U.S. Public Health Service, determined that the chrysotile asbestos in the air and soils was hazardous to public health. In January 1980, the U.S. Center for Disease Control (CDC) recommended that all the residents of the Mountain View site be evacuated. Governor Bruce Babbitt of Arizona declared the Site to be a state of emergency on January 16, 1980. During the period of January through March 1980, the Arizona Division of Emergency Services provided temporary housing to the residents while their homes were decontaminated and the Metate Mill building was demolished and buried on-site with a soil cover.

In 1981, ADHS began to look at a more permanent remedy because the partial soil cover began eroding and exposing asbestos fibers. In July 1982, The Site was designated by the State as its highest priority site for cleanup under the federal Superfund law, the Comprehensive
In September 1982, the Site was referred to the U.S. Department of Justice (DOJ). In January 1983, after the property owner refused to accept responsibility for the cleanup, EPA began investigation of the site conditions. A remedial investigation and feasibility study (RI/FS) was completed under an accelerated schedule by May 1983. On May 13, 1983, DOJ filed a complaint in United States District Court for the State of Arizona against the Metate Asbestos Corp., Jaquays Mining Corp., and the developers of the Mountain View Mobile Home Estates.

The Remediation Investigation/Feasibility Study (RI/FS) began in April 1983, and a RI/FS Report was published in May 1983. On May 16, EPA Region 9 held a Public Meeting in Globe to present the RI/FS Report and hear public comments. The Arizona Division of Emergency Services (ADES), through an agreement with the Federal Emergency Management Agency (FEMA) also began a voluntary temporary relocation program in May 1983.

**Basis for Taking Action**

The results of EPA’s RI/FS Report indicated that the asbestos contamination posed an unacceptable threat to the resident of the subdivision. Chrysotile asbestos fibers were the only hazardous wastes identified at the Site. Airborne fibers were monitored at levels of concerns to health authorities. Asbestos mill tailings were also present in the surface and subsurface soil at the Site. Both of these conditions created potential health hazards for the residents, workers and the general public. Chrysotile asbestos is a human carcinogen and fibrogen that poses a substantial health risk when inhaled. EPA’s position was based on both animal experimentation and human epidemiological studies supported in publications of the World Health Organization International Agency for Research on Cancer, the National Institute for Occupational Safety and Health (NIOSH), and the CDC revised Recommended Standard for Occupational Exposure to Asbestos, among other studies.

4. **Remedial Actions**

**Remedy Selection and Remedial Action Objectives**

The ROD for the Site was signed in EPA Headquarters by Lee Thomas, the Acting Assistant Administrator, on June 2, 1983. The selected remedy was the following:
- Permanent relocation of Mountain View residents
- On-site burial of containerized mobile homes
- Site closure by capping, fencing and maintenance

The ROD states that the recommended alternative includes clearing the entire site and demolishing and burying all of the homes and the sewage treatment plant. Following the home burial, a non-woven fabric filter fabric would be placed over the entire site and the filter media would be covered by two feet of compacted earth fill. The surface of the earth would be sloped to drain and seeded with native grasses. Periodic inspection and maintenance of the cap would be required. Permanent relocation of the Mountain View residents would be conducted by direct
government purchase of the resident’s homes and property through the FEMA relocation program.

No Remedial Action Objectives (RAOs) were selected in the 1983 ROD, and no subsequent remedy changes have been made to this original decision document.

Remedy Implementation

After the June 1983 ROD was signed, ADES and FEMA began the permanent relocation of the Mountain View residents. The voluntary relocation of 47 families and all property acquisition was completed in March 1985. In August 1983, EPA executed an Interagency Agreement with the U.S. Army Corps of Engineers (USACE) to design the remedial action for the Site. In October 1983, USACE selected Cella Barr & Associates from Phoenix, Arizona to complete the design drawings. The USACE Los Angeles District office was the lead Construction District for the project.

In June 1984, EPA and ADEQ entered into a Superfund State Contract (SSC) to undertake response activities related to Site closure (construction), community involvement activities during construction, and long-term operations and maintenance activities post construction. The SSC defined the roles of EPA, and ADHS and ADES (the State agencies responsible for the site prior to the establishment of ADEQ) during and following remedy construction, as well as the cost-sharing responsibilities of each Agency.

In April 1985, FEMA certified that all the real estate acquisitions and relocation assistance work was completed by ADES and FEMA. The property was transferred into ownership by the State of Arizona. In May 1985, USACE Omaha District issued a request for bids for construction of the remedy. In June 1985, USACE awarded the $1,871,000 contract to a joint venture of Maitland-Hydro Corporation and Hydro-Dredge Corporation. In July 1985, the construction contractor received the notice to proceed and work commenced in August 1985. The site design provided two areas on the Site in which the demolished trailers were to be buried at a reasonable depth over a limited area, near the north edge of the site adjacent to the SPRR railroad right-of-way, utilizing the existing natural terrain on the site and within the railroad right-of-way. All crushed and demolished material was maintained within the property boundaries and buried on top of the pre-existing grade without excavation of pits or trenches into contaminated material. Rough grading and subgrade compaction efforts provided a stable, uniformly sloping site to place the non-woven filter fabric and final gravel and soil cap.

In January 1986, the construction work, including the storm drainage system, was completed by the contractor and a final construction inspection was completed by EPA Region 9, the State of Arizona, USACE and the contractor. Drainage structures (manholes, junction structures, outlet headwalls, channel, channel cut off walls, etc.) were installed on top of the filter fabric. Fence post foundations were also installed above the filter fabric in the cap or into the existing native materials with the SPRR easement. In April 1986, a Remedial Action Report was completed by USACE. In June 1986, final deficiency corrective actions were completed by the contractor. In November 1986, Cella Barr & Associates completed a revised Operations and
Maintenance Manual for the Site. In May 1987, EPA closed the construction contract with USACE.

This 1985 cleanup was the first Superfund remedial action for the State of Arizona and one of the first such cleanups in the United States to reach construction complete status. However, EPA did not prepare or sign a Preliminary Close Out Report (PCOR) for the Site.

In September 1987, EPA issued a Notice of Intent to delete the site from the NPL. The comment period ended in October 1987, and the final rule for deletion of the site published on April, 18, 1988. The “Construction Complete” date for the Site is also listed as the same April 1988 date.

During the intervening years, the First Five-Year Review was completed in September 1991, the Second Review in December 1999 and the Third Review in September 2005. This September 2010 review is the Fourth Five-Year Review.

In October 2007, EPA signed its First Amended Superfund State Contract with ADEQ for the on-going operation and maintenance of the Site (Appendix A). In accordance with the requirements of the SSC, a Declaration of Environmental Use Restriction (DEUR) was recorded by ADEQ for the Site in December 2007 (Appendix B). In March 2008, EPA made a Site-Wide Ready for Anticipated Use (SWRAU) determination for the Site. In November 2008, an EPA HQ Superfund Revitalization contractor, E2, Inc., completed a reuse study for the Site, entitled “Planning for the Future: Reuse Assessment for the Mobile Home Estates Superfund Site.”

Operation and Maintenance

In accordance with the terms of the SSC and because the State of Arizona is the owner of the Site, the State is responsible for the Site’s operations and maintenance (O&M). ADEQ has been the designated State Agency responsible for the O&M since the completion of the construction activities in 1986. The primary activities, as outlined in the revised November 1986 O&M Manual prepared by Cella Barr Associates, are:

- Visual inspection and repair of settlement or erosion of the soil/aggregate cap, as needed;
- Repair of fence damage resulting from vandalism or animals;
- Removing debris that accumulates along the perimeter fence;
- Removing built-up silts or debris from the channel or inside drainage pipes; and
- Replacing or repainting warning signs on the perimeter fence.

5. Progress Since the Last (Second) Five-Year Review

The 2005 Third Five Year Review for the Mountain View Mobile Home Estates Superfund Site concluded that:

“...The remedial action selected in the ROD, signed June 2, 1983, for the Mountain View Mobile Home Estates Superfund site remains protective of human health and the environment as long as the State of Arizona is still the owner. Currently, there are no
environmental exposure pathways that could result in unacceptable risks and none are expected as long as the engineered controls selected in the decision documents continue to be properly operated, monitored, and maintained, and the land use at the site allows for the integrity of the remedy to continue. The remedy remains protective in the short-term. In order for the remedy to remain protective in the long-term, follow-up actions may need to be taken. In the long-term, if the State of Arizona transfers the property, a DEUR or some sort of deed restriction will need to be implemented for the remedy to remain protective in the long-term."

The Third Five Year Review identified only one major issue potentially affecting current or future protectiveness,

“The State Superfund Contract (SSC) for the site expires in March 2006. During the SSC amendment process, a clause should be added that an institutional control mechanism needs to be implemented if the State transfers ownership (for example, a DEUR) and EPA and ADEQ should ensure that the remedy decision document includes the institutional controls mechanism, and modify the decision documents accordingly. ADEQ will work with the State of Arizona Lands Department to ensure that land transfer does not occur.”

The other issues identified in the Five Year Review were minor deficiencies in the Site O&M, as follows:

“Various maintenance issues were identified during the site inspection such as sediment and debris accumulation, excess vegetation, minor gaps in the fencing, etc.”

During the period since the 2005 Five-Year Review to the present, the following actions have been taken to address these issues:

- In October 2007, the First Amended SSC was signed by EPA and ADEQ;
- In November 2007, a DEUR was placed on the Mountain View Superfund Site;
- In March 2008, EPA made a Site-Wide Ready for Anticipated Use determination; and
- During the period of 2005-2009, the identified minor maintenance issues were addressed.

The following issue identified during the 2005 Five-Year Review has not yet been addressed:

- Remedy decision documents should be amended once the IC mechanism (DEUR) is put in place for the Site.

6. **Five-Year Review Process**

**Administrative Components**

Gila County representatives and the City of Globe community were formally notified of the initiation of the Five-Year Review process on April 14, 2010. The Five-Year Review was led by Andria Benner, EPA’s Remedial Project Manager (RPM) for the Mountain View Mobile Home Estates Superfund site with technical support from Wayne Schiemann, USACE Los Angeles District, and Ed Pond, ADEQ’s Project Manager for the Site.

The following EPA Site team members assisted in the review:
This Five-Year Review consisted of the following activities: coordination with State counterparts, community notification and involvement, a review of relevant documents and data, site inspection, and interviews with County and City officials, and other community members.

Community Notification and Involvement

In March 2010, EPA began coordination and outreach with ADEQ regarding the upcoming Five-Year Review process and EPA solicited input from ADEQ on a Site mailing list. In late March a newspaper notice announcing the forthcoming Five-Year Review was prepared by EPA’s CIC, David Cooper, and a copy was provided to ADEQ. The notice was published in the Copper Country News and in the Arizona Silver Belt on April 14, 2010 (Appendix C). The notice provided a brief background and other relevant information on the Site, explained the reason for the Five-Year Review, and requested that anyone interested in submitting comments regarding the performance of the remedy at the Site contact the EPA RPM at the phone number provided. No comments were received in response to this initial April 2010 notice.

On July 29-30, 2010, the EPA CIC and the EPA RPM conducted a series of community interviews. The questionnaire used for the interviews is attached as Appendix D. In preparation for the community interviews, in July 2010, EPA also prepared a Site Overview Fact Sheet (Appendix E).

A total of nine City of Globe and Gila County officials, business representatives and other interested stakeholders were interviewed as part of this 2010 review (Appendix F), as follows:

- Mayor, City of Globe
- President and Executive Director, Southern Gila County Economic Development Corporation
- Council Members, City of Globe
- Director, Globe-Miami Regional Chamber of Commerce
- Editor, Arizona Silver Belt Newspaper
- Adjacent Property Owner to Site, City of Globe
- Realtor, City of Globe

The responses of those interviewed were unusually uniform, perhaps in keeping with the age of the site. They noted no significant issues with the operation and maintenance of the site remedy (except litter), and no reports of vandalism or trespassing, although a few questioned the health risks that drove the original remedy decision. If they did have questions, most identified the State (ADEQ) as their first choice for initial contact.
Reuse and redevelopment was the only concern, due to the lack of large, reasonably flat, buildable sites in the mountainous town. Most stakeholders were familiar with the restrictions on the site due to the shallow cap over the asbestos contamination, and they had few ideas for development. Several people noted that the property has consistently been identified as completely unavailable for development. The most common proposal presented was for the future use of the Site as a college-level training facility for a “Renewable Sustainable Energy” program that was recently developed by Gila Community College. At the close of the interview, EPA gave the interviewees a copy of EPA’s November 2009 reuse assessment (Appendix G) and discussed the scope of the study and answered any questions. On July 30, EPA also provided the City of Globe Library with an updated binder containing copies of key site-specific decision documents and prior Five-Year Review Reports.

The interviewees were informed of EPA’s Mountain View Mobile Home Estates web site and the location of the local information repository. They were given copies of a site overview fact sheet and EPA’s reuse assessment. When asked about the best way to provide further information on the site, the universal answer was e-mail, although phone calls, the City’s web site and presentations to the City Council were noted by a few. All were told that the results of the Five-Year Review would be posted on EPA’s web site and a public notice would be placed in the local papers.

A final notice summarizing the results of the Five-Year Review will be published in the Copper Country News and the Silver Belt Newspaper upon the completion of the Report. The completed Five-Year Review Report will be available to the public at the following locations:

- Globe Public Library, 339 South Broad Street, Globe, AZ 85501-2607
  (928) 425-6111

- Arizona Department of Environmental Quality Records Management Center,
  1111 W. Washington Street, Phoenix, AZ 85007 (800) 234-5677 (toll free)

- EPA Records Center, 95 Hawthorne Street, Suite 403S, San Francisco, CA 94105
  (415) 820-4700

**Document and ARARs Review**

No Applicable, Relevant and Appropriate Requirements (ARARs) were identified in the 1983 ROD. Although ARARs are not necessary for the continued O&M of the 1983 selected remedy, if a proposal for future use would allow public access to the site or allow changes to the existing cap or stormwater management system, EPA may need to add ARARs to the remedy decision documents to assure that the integrity of the cap and the protectiveness of the remedy is retained.

The January 1986 closure documents for the construction of the Site remedy and the 1984 Superfund State Contract and the 2008 First Amended SSC for long-term O&M of the Site required that institutional controls (ICs) in the form of a deed restriction be placed on the Site. On December 20, 2007, ADEQ recorded a Declaration of Environmental Use Restriction
(DEUR) with the Gila County Recorders Office (Appendix B). The 2007 DEUR established both engineering controls and ICs.

The following engineering controls were constructed and in place as of January 7, 1986.

- Permanent relocation of subdivision residents
- Burial of contaminated mobile homes and other site structures
- Fencing of the perimeter of the site
- Provide signs identifying the site as restricted to public access;
- Provide for drainage of storm water thru the site;
- Grading and consolidation of contaminated soil and asbestos tailings;
- Capping of contaminated soil, tailings and contaminated structures with a filter fabric liner and two (2) to ten (10) feet of clean fill.

The institutional controls in the DEUR for maintenance of the Site are the following:

- Owner assures that the restricted area will not be subject to residential use as defined in Arizona Revised Statutes (A.R.S.) Section 49-151.
- The maintenance requirements described in the November 1986 Operation and Maintenance (O&M) Plan prepared by the USACE contractor, Cella Barr & Associates be implemented and maintained by the Site Owner, including:
  - Conduct semi-annual inspections of the site and after rainfall events of greater than one inch during a twenty-four hour period;
  - Fence maintenance;
  - Storm water open channel maintenance;
  - Storm water subsurface channel maintenance; and
  - Maintenance of site vegetation to prevent root penetrations of the filter fabric and to reduce fire danger.
- If any person desires to cancel or modify the engineering control or institutional control in the future, the person shall obtain the [ADEQ’s] prior written approval. Any modification of the engineering or institutional control without the [ADEQ's] prior written approval is void and a violation of this [DEUR].
- Owner hereby grants to the [ADEQ] and its representatives, authorized agents, attorneys, investigators, consultants, advisors, and contractors the right of access to the Property at all reasonable times to verify that the engineering control and institutional control are being maintained. The [ADEQ’s] right of access runs with the land. If access to the Property is restricted, Owner shall have any barrier to entry opened or removed at [ADEQ’s] request.
- Owner shall incorporate the terms of this [DEUR] into any lease, license or other agreement that is signed by Owner and that grants a right with respect to the Property. The incorporation may be made by reference.
- Owner agrees to provide a copy of the Engineering Control Plan document dated November 1986 (Operation & Maintenance Plan dated November 1986) to the subsequent purchaser of the property…
- …The engineering control plan and financial assurance mechanism is prescribed pursuant to A.R.S. § 49-152.01…A subsequent owner shall demonstrate financial assurance pursuant to A.R.S. § 49-152.01(B) within 30 days of the sale or transfer of the Property.
The financial assurance mechanism shall be sufficient to cover the cost of maintaining the engineering control for 30 years and restoring the engineering control if it fails.

- Because Owner has elected to use an engineering control and institutional control to satisfy the requirements of A.R.S. §§ 49-152 or 49-158, Owner shall maintain the controls to ensure that they continue to protect public health and the environment, and shall inspect the engineering control at least once each calendar year or more in accordance with the Engineering Control Plan Document (Operation & Maintenance Plan dated November 1986)…

Data Review

Because the site contains buried asbestos that is not to be disturbed and there is no known current air or groundwater contamination at the Site, there are no requirements to collect or review any sampling or analytical data during this or prior Five-Year Reviews for the Mountain View Mobile Home Estates Superfund Site.

Site Inspection

EPA Region 9 contracted with USACE to conduct a site inspection in July 2010 and complete the Five-Year Review checklist for the Site (Appendix H). Andria Benner, the EPA RPM, and Wayne Schiemann, of the USACE Los Angeles District Office (with an office in Phoenix), visited the Site on July 7, 2010. Ed Pond, the ADEQ Project Manager, also joined EPA and USACE for the Site inspection and he was interviewed by USACE on the Site O&M. The purpose of the inspection was to assess the protectiveness of the remedy by verifying that the integrity of the cap was maintained, the vegetation, fencing, signage, etc. was being well maintained, and to make sure that Site access was restricted, in accordance with the DEUR (IC).

No significant issues were identified as a result of the site inspections. The site was found to be in generally good condition, similar to the 2005 Five-Year Review inspection. However, the following minor, but recurring, O&M deficiencies were identified that need attention:

- Holes, breaks or damaged areas in portions of the fence along the primary drainage channel and the northern fence line;
- Bent and storm-damaged screening gates in the primary drainage channel cutting across the site;
- Silt, sediment and debris accumulation observed in the open channel and where piping reaches the Arizona Department of Transportation (ADOT) culverts;
- Shrubs and large vegetation needs more frequent mowing or cutting;
- Empty hydraulic fluid containers for mower discarded underneath shrubs (ADEQ confirmed the containers have subsequently been removed); and
- Skateboarders (trespassers) appear to be continuing to use the open drainage channel, although graffiti was greatly reduced from that observed during prior inspections.

The Site Inspection Checklist (See Appendix A) attached to this document contains photos documenting these observations during this 2010 Review.
Interviews

The attached Interview Documentation Form (See Appendix F) provides further details regarding the interviews conducted for this Five Year Review.

Community interviews were not conducted for the 1991 First Five-Year Review, the 1999 Second review or the 2005 Third Review. The community interviews conducted for this 2010 Fourth Review were the first community interviews conducted for the Site since the completion of the Site remedy.

EPA coordinated with the ADEQ project manager so that the project managers for both agencies could meet in Globe and oversee the site inspection conducted by the USACE Los Angeles District Office on July 7, 2010. EPA also invited the ADEQ project manager to participate in the community interviews on July 29-30. Although ADEQ did not accompany EPA on those interviews, EPA followed up with ADEQ on the general content of the interviews.

EPA’s Case Development Section has also conducted phone interviews with City of Globe and Gila County Recorder staff to verify the status of property deed restrictions and zoning for the Site.

7. Technical Assessment

A technical assessment of a site’s remedy is based on information gathered during the Five Year Review in response to the following three questions:

• Question A - Is the remedy functioning as intended by the decision documents?
• Question B - Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?
• Question C - Has any other information come to light that could call into question the protectiveness of the remedy?

These questions provide a framework for organizing and evaluating data and information and ensure that all relevant issues are considered when determining the protectiveness of the remedy.

The following conclusions support the determination that the remedy at the Site is protective of human health and the environment.

**Question A**: Is the remedy functioning as intended by the decision documents?

• Remedial Action Performance:
The review of documents and the results of the site inspection indicate that the remedy is functioning as intended by the ROD. The capping has prevented direct contact with the asbestos in the soil, debris and tailings.

• **System Operations/O&M:**
  Operation and maintenance of the cap and drainage structures has been effective. There were no areas or conditions of noncompliance with the goals of the remedial action at the Site. While periodic acts of vandalism have temporarily disturbed Site fencing, the repair of the drainage and site fencing should reduce future disruption.

• **Opportunities for Optimization:**
The capped and buried asbestos has been in place since the remedy was constructed over 25 years ago, in July 1985. Optimization is not applicable.

• **Early Indicators of Potential Issues:**
  No early indicators of potential remedy failure were noted during the review.

• **Implementation of Institutional Controls and Other Measures:**
  Fencing and signs limit access to the Site. A DEUR was recorded by ADEQ for the entire 17-acre site in November 2007. Site use is limited to the ADEQ site project manager and ADEQ’s landscape contractor who maintains the site, with the exception of infrequent site visits by the EPA RPM. The land is owned by the State of Arizona. As the owner and sole user, the State has been able to adequately ensure that no prohibited actions or uses under the DEUR have occurred.

**Question B:** Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

• **Changes in Standards and TBCs (To Be Considered):**
  There were no changes in standards since the ROD was signed in 1983.

• **Changes in Exposure Pathways:**
  No changes in Site conditions that affect exposure pathways were identified as part of the Five-Year Review. First, there are no current changes in land use. Second, no new contaminants, sources, or routes of exposure were identified as part of this Five-Year Review. And, finally, there have no changes in exposure pathways to ecological receptors identified during the review and inspection.

• **Changes in Toxicity and Other Contaminant Characteristics:**
  There were no changes in toxicity or other characteristics of the buried asbestos since the ROD was signed in 1983.

• **Changes in Risk Assessment Methods:**
  We have identified no changes in risk assessment methodologies since the time of the ROD Amendment which would call into question the protectiveness of the remedy.
**Expected Progress Toward Meeting RAOs:**
RAOs were not established at the time of the 1993 ROD. Because the remedy construction was completed in 1986, this question is not applicable. However, if a proposal for future should compromise the integrity of the remedy, then RAOs may need to be established.

**Question C:** Has any other information come to light that could call into question the protectiveness of the remedy?

No additional information has been identified that could call into question the protectiveness of the remedy.

**Technical Assessment Summary**

According to the review of relevant documents and data, site inspections, and interviews with ADEQ, City of Globe and Gila County personnel, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the Site that would affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

8. **Issues**

   **Explanation of Significant Difference to Document Remedy Decisions:** The one outstanding issue at the site is documentation of the recently implemented institutional controls on the site. EPA could incorporate the institutional control into the remedy decision documents by the completing an Explanation of Significant Difference (ESD) demonstrating that the ICs (DEUR) has been put in place, as identified in the prior 2005 Five-Year Review. When the ESD is prepared, EPA could evaluate the need for Site RAOs and/or ARARs (neither of which were identified at the time of the 1983 ROD). Additionally, because of the increased interest on the part of City and County officials and community members to see this Site put back into more productive future use, any future reuse or redevelopment plans will need to comply with the CERCLA process. For example, any engineering controls needed for future reuse of the Site should be identified and described in a remedy decision document and included in an amendment to the DEUR, as needed. EPA would need to coordinate and work closely with the State, as owner of the property, as well as other regulatory partners and stakeholders.

   **Correction of O&M Landscaping Deficiencies:** The minor, recurring O&M landscaping and fencing deficiencies identified during the Site inspection do not affect the current or future protectiveness of the Remedy. However, they need to be addressed as soon as possible by ADEQ. ADEQ is currently developing a Request for Bid (RFP) for a contract to address these O&M deficiencies during 2010.
9. Recommendations and Follow-Up Actions

EPA and ADEQ should ensure that the remedy decision documents are modified, as needed, to incorporate the institutional controls (DEUR). Future site reuse plans will need to comply with the CERCLA process, including evaluating ARARs and/or other requirements, as needed, to retain the integrity of the cap and maintain the protectiveness of the remedy.

The second follow-up action is that the recurring O&M landscaping and fencing issues at the Site require continual, on-going attention. ADEQ currently plans to address these O&M deficiencies during 2010. These O&M actions do not affect the short-term or long-term protectiveness of the existing Site remedy.

The Five Year Review process, including the site inspection and the community interviews, provided an opportunity for EPA, ADEQ, City of Globe and Gila County officials to discuss the Site. Other than some recurring O&M issues, no follow-up actions were identified to improve the efficiency of the ongoing O&M of the Site.

10. Protectiveness Statement

The remedy at the Mountain View Mobile Home Estates Superfund Site currently protects human health and the environment because there is no current exposure to the contamination that remains at the Site. In November 2007, a DEUR was recorded for the entire 17-acre Site for the single Operable Unit. A subsequent title search confirmed that this IC is in place and effective to ensure long-term protectiveness.

11. Next Review

This Site requires on-going Five-Year Reviews as a matter of statute, because the remedy does not allow for unrestricted use and unrestricted exposure. The next review will be conducted within five years of the completion of this Five-Year Review Report. The completion date will be the date of signature shown on the cover of this report.
FIGURES AND MAPS
Figure 1     Map Showing Location of Mountain View Mobile Home Estates Superfund Site
FIRST AMENDED SUPERFUND STATE CONTRACT
FOR SITE CLOSURE ACTIVITIES,
INCLUDING OPERATIONS & MAINTENANCE,
AT THE
MOUNTAIN VIEW MOBILE HOME ESTATES SITE
GLOBE, GILA COUNTY, ARIZONA
BY AND BETWEEN
THE STATE OF ARIZONA
AND THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

A. AUTHORITY

This First Amended Superfund State Contract ("Amended Contract") is entered pursuant to Sections 104 (a)(1), (c)(2), (c)(3), and (d)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 et seq. ("CERCLA" or "Superfund"); Executive Order 12316; 40 C.F.R. § 35 et seq. ("State and Local Assistance"); the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. § 300 et seq. ("NCP"); Arizona Revised Statutes §§ 26-301 et seq., 35-192, 49-104.7; Arizona Executive Order 79-4; and the Arizona Governor’s Emergency Proclamation dated May 11, 1983; and resolutions of the Arizona State Emergency Council dated February 17, 1983, and May 12, 1983. Pursuant to these authorities, and except as otherwise noted in this Amended Contract, this Amended Contract supersedes and replaces the prior, original Superfund State Contract ("Original Contract") executed on October 2, 1984 by the United States Environmental Protection Agency ("EPA") and the State of Arizona ("State") in regard to the Mountain View Mobile Home Estates Superfund Site ("Site").

B. PURPOSE

1. This Amended Contract is an agreement by and between the EPA and the State, acting through the Arizona Department of Environmental Quality ("ADEQ"), to continue operations and maintenance ("O&M") activities related to long-term monitoring at the Site and to implement institutional controls to assure the protectiveness of the remedy at the Site. This Amended Contract updates and supersedes the Original Contract between EPA, on the one hand, and the Arizona Department of Health Services ("ADHS") and the Arizona Division of Emergency Services ("ADES"), on the other. More specifically, this Amended Contract extends the term of the agreement and assures implementation and enforcement of appropriate institutional controls at the Site, including a Declaration of Environmental Use Restrictions, in order to protect public health, welfare and the environment for the life of the remedy.

2. Attached as Appendix A and incorporated herein by reference is a description of the Site and the response and O&M actions taken to date.
3. Attached as Appendix B and incorporated herein by reference is an *Operation & Maintenance Manual* ("O&M Manual"), dated March 1984 and revised in November 1986, which outlines the O&M activities related to long-term monitoring. The purpose of the O&M Manual is to prescribe measures necessary to preserve the integrity of response activities taken at the Site for the expected life of the remedy, including implementation and enforcement of institutional controls. For the purposes of this Amended Contract, Site O&M is defined to include all necessary operations, maintenance, and support activities following the completion of Site construction activities. Site O&M costs are defined to include the full costs of implementing such activities, including those costs associated with contractual services, contract administration, Site inspection, Site monitoring, and all other administrative support functions.

4. Attached as Appendix C and incorporated herein by reference is an amendment to the February 1984 Community Relations Plan ("CRP Amendment") for the Site, which outlines procedures and methods by which EPA or ADEQ, as agreed, provided timely, consistent and accurate information to interested agencies and the general public regarding implementation of the SOW for the original construction of the Site remedy in 1984, and will continue to do so for on-going Site O&M activities.

5. This Amended Contract will become effective upon execution by the State and EPA and will not terminate for the life of the remedy, including long-term Site O&M, except upon mutual agreement by EPA and the State that each party has fulfilled its obligations under this Amended Contract, as prescribed by this paragraph and paragraphs D, E, G, and S of this Amended Contract. For the purposes of determining whether each party has completed its obligations under this Amended Contract, the work described in the O&M Manual shall be deemed completed only if the Site remedy is changed or amended by the State such that no waste remains on-Site, and, even then, only after EPA has reviewed and approved such change or amendment, consistent with CERCLA and the NCP. If any potential future remedy change includes leaving buried asbestos wastes on-Site, this Amended Contract shall remain in force and the State or responsible party shall prepare a Feasibility Study on the potential remedy change and otherwise comply with all relevant aspects of CERCLA and the NCP. All such actions shall be subject to EPA review and approval.

C. PARTIES

1. This Amended Contract is by and between EPA and the State (collectively, the "Parties").
2. EPA has designated Andria Benner, or her appointed successor, EPA Region IX, 75 Hawthorne Street, San Francisco, California 94105, (415) 972-3189, to serve as the EPA Project Officer for this Amended Contract.

3. ADEQ has designated Ed Pond, or his appointed successor, Arizona Department of Environmental Quality, 1110 W. Washington Street, Phoenix, Arizona 85007, (602) 771-4575, to serve as the ADEQ Project Officer for this Amended Contract.

4. The ADEQ Project Officer, in consultation with the EPA Project Officer, may make project management decisions necessary to successfully meet the objectives of this Amended Contract that do not enlarge the scope of the Site O&M activities or increase the cost of the activities.

D. STATE RESPONSIBILITIES

1. The State will pay one hundred percent (100%) of the cost of the Site O&M costs consistent with subparagraph G.2. Pursuant to subparagraph G.1. of this Amended Contract, the State is responsible for all contractual, supervisory, and compliance responsibilities for Site O&M throughout the expected life of the response action, unless the remedy is altered due to changes in future use as described in subparagraph B.5, above. ADEQ shall attempt to obtain from the Arizona Legislature necessary funding for Site O&M to fulfill its obligations under this Amended Contract, consistent with State law and the authorities of the ADEQ. ADEQ will promptly inform EPA if the Arizona Legislature fails to appropriate adequate funds to meet the State’s Site O&M responsibilities.

2. The State shall secure the services of agents, contractors, authorized representatives, or its employees to perform the work described in this Amended Contract. The State shall, at its own cost and expense, furnish the necessary personnel, materials, services, and facilities to perform its other responsibilities under this Amended Contract. ADEQ will coordinate the activities of other State agencies related to the Site.

3. ADEQ will consult with EPA on matters relating to the implementation or modification of work listed in the CRP, the CRP Amendment and the Site O&M Manual. If ADEQ proposes to deviate from activities prescribed in the CRP, the CRP Amendment or the Site O&M Manual, the EPA Project Officer shall be notified in writing in advance of ADEQ implementing any such modifications. The ADEQ Project Officer shall also prepare and submit annual written status reports to the EPA Project Officer regarding the status of State activities relating to implementation of the CRP, the CRP Amendment and the Site O&M Manual, including enforcement of institutional controls. These written annual progress reports shall commence with the signing of this Amended Contract and shall cease or
be amended if Site conditions change as described in subparagraph B.5, above.

4. Unless the Site’s remedy is changed consistent with subparagraph B.5, above, such that no waste is left on Site, ADEQ will consult with, prepare for, and submit to EPA for EPA’s review and approval a Five-Year Review Report pursuant to Section 121 (c) of CERCLA, 42 U.S.C. § 9621 (c), which evaluates the implementation of the overall response action, including on-going Site O&M, institutional controls, and protectiveness of the remedy. ADEQ completed the last Five-Year Review Report in September 2005, ADEQ shall prepare the next Five-Year Review Report by September 2010, and ADEQ shall prepare subsequent Five-Year Review Reports every 5 years thereafter for the life of the remedy.

5. If, after EPA review and approval, the State changes or amends the remedy for the Site, as described in subparagraph B.5, above, ADEQ shall notify EPA in writing of the date upon which it completes the work described in the O&M Manual.

E. EPA RESPONSIBILITIES

1. EPA responsibilities under this Amended Contract include consulting with ADEQ, its agents, or contractors on the response activities relating to implementation of the CRP, the CRP Amendment, and the Site O&M Manual, reviewing ADEQ’s written annual progress reports, and providing for the fulfillment of EPA’s obligations under this Amended Contract.

2. The EPA Project Officer, in consultation with the ADEQ Project Officer, may make decisions necessary to successfully meet the objectives of the approved Site O&M Manual throughout the period of the expected life of the response actions.

F. OFFSITE STORAGE, DESTRUCTION, TREATMENT OR DISPOSITION

1. At the present time the Parties do not anticipate any need for offsite storage, destruction, treatment, or secure disposition (“offsite disposition”) of hazardous wastes in connection with the implementation of the Site O&M.

2. If ADEQ proposes, and EPA approves, a change to the Site remedy to accommodate changes in future use, and if offsite disposition of hazardous waste is required to implement those activities, the State shall provide assurances regarding such off-site disposition, pursuant to Section 104 (c)(3)(B) of CERCLA, 42 U.S.C. § 9604 (c)(3)(B).
G. OPERATION AND MAINTENANCE

1. Pursuant to Section 104 (c)(3)(A) of CERCLA, 42 U.S.C. § 9604 (c)(3)(A), and the Original Contract, the State shall continue to provide for all Site O&M related to Site closure activities called for under the Original Contract and all Site O&M provided for under this Amended Contract, consistent with the approved O&M Manual, for as long as hazardous materials remain buried at the Site, except as otherwise specified in subparagraph B.5., subparagraph G.2., and paragraph S. Any State commitment to Site O&M shall be consistent with its lawful authority as described in paragraph D of this Amended Contract.

2. The State shall provide one hundred percent (100%) of the funding for Site O&M consistent with the approved O&M Manual, beginning with the date of completion of work described in the SOW to the Original Contract. Consistent with subparagraph B.5., above, and paragraph S, below, the State’s funding obligation for response activities and Site O&M shall not terminate for the life of the remedy, unless ADEQ, after EPA review and approval, changes or amends the remedy consistent with CERCLA and the NCP such that no waste remains at the Site.

H. PERMITS AND INSTITUTIONAL CONTROLS

As appropriate, the State will obtain and, to the extent allowable by law, shall be responsible for obtaining any permits, licenses, easements, or other authorizations or institutional controls which are necessary for the response activities, including Site O&M, and monitoring, oversight, and inspections of institutional controls, consistent with Federal and State law. Specifically, the State shall implement and maintain a Declaration of Environmental Use Restrictions on the Site which assures that the remedy will remain protective of public health, welfare and the environment. If EPA or its agents undertake to obtain such necessary permits, licenses, easements, Declarations of Environmental Use Restrictions, or other authorizations or institutional controls, the State, to the extent allowable by law, shall assist EPA or its agents in that process, and the State shall remain responsible for obtaining such necessary permits, licenses, easements, Declarations of Environmental Use Restrictions, or other authorizations or institutional controls.

I. EMERGENCY RESPONSE ACTION

Any emergency response activities conducted pursuant to the NCP, 40 C.F.R. Section 300.65, shall not be restricted by the terms of this Amended Contract. EPA, by written agreement with the ADEQ Project Officers, may suspend or modify the Site O&M activities described in this Amended Contract during and subsequent to the emergency response actions. In the event that any emergency actions change the
conditions under which this Amended Contract has been entered, this Amended Contract shall be amended again as necessary pursuant to paragraph R to reflect any new or changed site conditions.

J. ACCESS TO THE SITE

1. The ADEQ, to the extent allowable by State law, shall provide and secure Site access for EPA, its agents, representatives, contractors or subcontractors to perform any oversight activities, including inspections, emergency response actions, or any other remedial actions necessary to protect public health, welfare and the environment. The State shall not be responsible for any harm to any EPA representative or other person arising out of, or resulting from, any act or omission by EPA in the course of an on-Site visit.

2. Representatives of EPA and the State shall have access to the Site, upon reasonable notice, to conduct on-going Site O&M and shall comply with the State-approved Site Safety Plan. EPA shall not be responsible for any harm to any State representative or other person arising out of, or resulting from, any act or omission by the State in the course of an on-Site visit.

K. COMMUNITY RELATIONS PLAN

ADEQ, its agents or contractors, will implement the Original Contract’s Community Relations Plan (CRP) and this Amended Contract’s CRP Amendment, with EPA providing assistance as necessary. ADEQ will provide information relating to implementation of Site O&M to interested parties including local, State, and Federal agencies on the Regional and National Response Team, pursuant to the Original Contract’s CRP. The Original Contract’s CRP and the CRP Amendment specifically address how the State will consult with the public. The release of information shall be consistent with paragraph N.

L. NEGATION OF AGENCY

Nothing contained in this Amended Contract shall be construed to create, either expressly or by implication, the relationship of agency between EPA and the State. Any standards, procedures or protocols prescribed in this Amended Contract to be followed by the State, its agents, representatives, or contractors during the performance of its obligations under this Amended Contract are for assurance of the quality of the final product of the actions contemplated by the Amended Contract, and do not constitute a right to control the actions of the State. EPA (including its employees, agents, and contractors) is not authorized to represent or act on behalf of the State in any manner relating to the subject matter of this Amended Contract, and the State (including its employees, agents, and contractors) is not authorized to represent or act on behalf of EPA in any matter relating to the subject matter of this Amended Contract.
M. ENFORCEMENT AND COST RECOVERY

1. EPA and the State agree that each shall provide the other with thirty (30) days notice prior to settling with, or commencing judicial or administrative action against, any third person ("responsible party"), whether one or more, for CERCLA claims which each may be entitled to assert against such responsible party or parties for reimbursement of any services, materials, monies, or other thing of value expended by EPA or the State at the Site under this Amended Contract, or for any response activity at the Site under this Amended Contract. Neither party to the Amended Contract shall attempt to negotiate for, nor shall either party collect reimbursement of, any response costs on behalf of the other party, and authority to do so is hereby expressly negated and denied.

2. EPA and the State agree that they will cooperate in and coordinate efforts to recover their respective costs of response actions taken at the Site, including negotiation of settlement and filing and management of any judicial actions against responsible parties. This shall include coordination in the use of evidence and witnesses available to each in the preparation and presentation of any cost recovery action, except any documents or information which may be confidential or exempt from disclosure under State or Federal law.

N. INFORMATION ON THE SITE

1. At EPA’s request, and consistent with State law, the State shall make available any information in its possession concerning the Site. If EPA requests records (information or documents) from the State which the State claims are exempt from public disclosure or which are legally privileged, the State will so label and identify such records prior to release to EPA. EPA will treat such records in accordance with the Freedom of Information Act ("FOIA"), 40 C.F.R. Part 2. Absent such a claim, EPA may make said information available to the public without further notice.

2. Upon request, and consistent with Federal law and regulations, EPA shall make available to the State all records concerning the Site. If the State requests records from EPA which EPA claims as exempt from FOIA disclosure or which are legally privileged, EPA will so label and identify such requests prior to release to the State. The State will treat such records in accordance with State law, and Federal law if applicable.

3. If the State receives a request from a third party for records labeled FOIA exempt or legally privileged by EPA, the State agrees to determine prior to disclosure whether the records are exempt from public disclosure under State law. Upon receiving such a request from a third party, the State agrees to notify EPA in writing within five (5) days of the request.
4. If EPA receives a request from a third party for records labeled exempt from public disclosure or legally privileged by the State, EPA agrees to determine prior to disclosure whether the records, documents, or information are exempt from public disclosure under Federal law. Upon receiving such a request from a third party, EPA agrees to notify the State in writing within five (5) days of the request.

O. THIRD PARTIES

1. This Amended Contract is intended to benefit only the State and EPA. It extends no benefit or right to any third party not a signatory to this Amended Contract.

2. EPA does not assume any liability to third persons with respect to losses due to bodily injury or property damage that exceed the limitations contained in the provisions of 28 U.S.C. § 1346 (b). The State does not assume liability to any third person with respect to losses due to bodily injury or property damages that exceed the limitations of State law.

3. The State and EPA agree to notify the other party within ten (10) days of receipt of service of any action filed by a third party or parties against either the State or EPA, its employees or agents, as a result of actions attempted or accomplished pursuant to the terms of this Amended Contract.

P. RESPONSIBLE PARTY CLEAN-UP

If EPA and/or the State reach(es) an agreement with any responsible party to undertake all or part of the tasks described in the Original Contract’s SOW and/or O&M Manual or this Amended Contract’s O&M Manual, the SOW and/or the O&M Manual may be revised in accordance with paragraph R.

Q. FINANCIAL RECORDS

Upon request, the State shall provide to EPA copies of documentation pertaining to costs and work performed by the State or its agents or authorized representatives pursuant to and in accordance with the O&M Manual within sixty (60) days of completion of tasks described in the O&M Manual.

R. AMENDMENTS

Any change in this Amended Contract must be agreed to in writing by both Parties hereto, except as provided in subparagraph C.4. Any amendment to this Amended Contract pursuant to this paragraph shall also address the O&M requirements of Section 104 (c)(3) of CERCLA, 42 U.S.C. § 9604(c)(3).
S. TERMINATION OF THE AMENDED CONTRACT

This Amended Contract shall remain in effect for the entire duration of the remedy, including all long-term operation and maintenance of the remedy, unless the conditions outlined in subparagraph B.5, above, or in this paragraph S should occur. In any event, if the Parties mutually agree to terminate this Amended Contract, the Parties shall enter into a termination agreement which will establish the effective date of termination of this Amended Contract and the basis for settlement of termination costs. The basis for settlement of termination costs shall include all project costs incurred as well as any close-out costs, and the amount and date of any sums due either party. This Amended Contract may also be terminated subject to the provisions of Arizona Revised Statute § 38-511.

T. FAILURE TO COMPLY WITH THE TERMS OF THIS AMENDED CONTRACT

1. If the State fails to comply with the terms of this Amended Contract, EPA may proceed, after having given ADEQ sixty (60) days prior written notice of breach of contract, under the provisions of Section 104 (d)(2) of CERCLA, 42 U.S.C. § 9604(d)(2).

2. If EPA fails to comply with the terms of this Amended Contract, the State may seek to enforce the Amended Contract in the appropriate court of competent jurisdiction, after having given EPA sixty (60) days prior written notice of breach of contract.
In witness whereof, the Parties hereto have executed this Amended Contract in three (3) copies, each of which shall be deemed an original.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Keith Takata, Director
Superfund Division
U.S. Environmental Protection Agency, Region IX

Date
8-10-06

STATE OF ARIZONA

Amanda Stone, Director
Waste Programs Division
Arizona Department of Environmental Quality

Date
10/06/07
AMENDMENT TO APPENDIX A

Site Description and Response Actions To Date

Appendix A, *Site Description and Response Actions to Date*, to the Mountain View Mobile Home Estates Superfund Site's ("Site's") Original Superfund State Contract ("Original Contract"), dated September 29, 1984, describes the Site and response and enforcement actions taken between 1979 and 1984, when the Original Contract was signed.

The purpose of this Amendment to Appendix A is to describe the site conditions and actions taken during the period of 1984 to 2006, after the Original Contract was signed.

Description of Site

In late 1984, when the United States Environmental Protection Agency ("EPA") and the State of Arizona ("State") entered into the Original Contract for the federal-lead remedial action at the Site, the construction of the remedy had not yet begun. EPA's June 1983 Record of Decision ("ROD") selected abandonment of the Mountain View Mobile Home Estates subdivision, permanent relocation of all subdivision residents, and on Site burial of the mobile homes and all other contaminated physical structures as the Site remedy. EPA determined this to be the most practical and economical method of dealing with the asbestos problem because it achieved a greater degree of total decontamination.

The Army Corps of Engineers, Omaha District, was given authority to select an engineering firm to design the cleanup. In October 1983, Cellar Barr Associates ("CBA") of Phoenix/Tucson was selected to complete the design. CBA completed the design work in late spring 1984. The relocation of 47 families and all property acquisition was completed in March 1985. The Army Corps solicited bids on the project in spring of 1985, once the State of Arizona had acquired clear title to the entire Mountain View Mobile Home Estates subdivision. In June 1985, the Corps awarded a $1.87 million construction contract to a joint venture firm of Maitland and Hydro-Dredge to perform the cleanup work. On-Site construction began in August 1985 and was completed in January 1986. In 1986-1987, EPA and the Arizona Department of Health Services ("ADHS") conducted post-closure inspections and sampling to confirm that the surface asbestos contamination had been eliminated and to support delisting of the Site from the National Priorities List ("NPL"). In May 1987, EPA closed the contract with the Army Corps of Engineers for the remedial action. In September 1987, EPA published a Notice of Intent to Delete the Mountain View Mobile Home Estates from the NPL. In April 1988, EPA published the final rule for deleting the Site from the NPL.

The Original Contract between EPA and the State outlined cost-sharing provisions for the construction phase of the cleanup. After construction was completed, the Original Contract also provided for EPA to cost-share the operations and maintenance
("O&M") for one year. A 1984 O&M Manual for the Site was revised and implemented in November 1986. Initially, ADHS was responsible for one hundred percent of the O&M. Once the Arizona Department of Environmental Quality ("ADEQ") was established in 1986, ADEQ took over the long-term O&M for the State and continues to be responsible for O&M indefinitely as long as the buried asbestos remains in place and could pose a risk to the environment, public health and welfare.

**Operation and Maintenance and Future Site Use**

The 1986 O&M Manual states that any future uses for the Site should be reviewed and concurred with by EPA and any O&M agreement between the State and EPA should require review and approval of future uses. The 1986 O&M Manual also states that any future uses for the Site should consider the following:

- No excavation should occur below the fabric liner mat (i.e., two feet below the surface);
- Residential, commercial or industrial development should be carefully considered because all of these involve the installation of underground utility systems for water and sewers and foundations;
- Paved parking or large recreational use areas onsite should be discouraged because such areas with high storm water runoff factors might increase surface erosion on their downhill edges;
- Excavations for foundations, bases, posts, poles, landscaping, utilities, etc., must be shallow (i.e., less than two feet);
- Electrical power to the Site could be provided if it is not placed more than one (1) foot deep and properly protected to prevent piercing of the fabric liner;
- Cap material must not be subjected to erosion or vehicular traffic deterioration by future use;
- If land use requires excavation exceeding two (2) feet, the thickness of the soil cap must be increased in a corresponding manner to fully accommodate those excavations above the fabric liner to ensure its integrity; and
- Surface airborne asbestos contamination may continue as long as the existing mill remains nearby and future use should not be allowed unless localized atmospheric concentrations of asbestos fibers are determined to exist at or below acceptable background levels.

**Federal Enforcement**

Prior to the signing of the Original Contract in September 1984, the United States Department of Justice, on behalf of EPA, filed a complaint in Federal District Court against nine corporate and individual defendants in May 1983. The suit requested injunctive relief and recovery of costs. The Court subsequently granted a motion of the United States for a determination that asbestos is a hazardous substance under CERCLA and, therefore, that costs expended by the government for remediation of the Site are recoverable. In February 1984, a deed restriction was recorded in Gila County on the former Jaquays Asbestos Mill property located adjacent to the Mountain View Mobile Home Estates property. The Jaquays owners were required to decontaminate the facility...
by disposing of asbestos contaminated materials in a disposal trench on the property covered with approximately eight feet of uncontaminated material under a plastic barrier. On July 12, 1985, the District Court issued a final judgment against the Metate defendants (owners of Mountain View Mobile Home Estates) for all government costs (approximately $7 million) and against the Jaquays defendants requiring cleanup of the Jaquays site and burial of all exposed asbestos tailings.

Site Oversight and Current Activities

ADEQ and EPA have performed two Five Year Reviews (1991 and 2005) at the Site. Each review found the remedy to be protective of human health, public welfare, and the environment. However, the September 2005 Five-Year Review stated that although the remedy is protective in the short-term, follow-up actions need to be taken for the remedy to remain protective in the long-term. Specifically, the review recommended follow-up operation and maintenance activities, including grating repairs, sediment removal from open channels and subsurface drainage pipes, and confined-space entry repair inspections. The 2005 review also noted that the Original Contract would expire in March 2006 and should be amended. The review recommended that during the process of amending the Original Contract, a clause be added requiring imposition of an institutional control ("IC") mechanism (for example a Declaration of Environmental Use Restriction, or "DEUR"). Additionally, the review concluded that EPA and ADEQ should ensure that corresponding decision documents are modified to include the IC mechanism. During 2006, EPA and ADEQ plan to amend the Original Contract to extend the term of the agreement, to impose the IC requirement, and to modify related decision documents accordingly, among other things.

Additionally, in 2006, EPA and ADEQ plan to inspect the contiguous Jaquays Asbestos Mill property to confirm the asbestos remains properly buried and the cover material is maintained as required in the 1985 Consent Decree entered into by and between the Metate Corporation, the Jaquays Mining Corporation, and EPA, with the State of Arizona as an intervenor.
OPERATION & MAINTENANCE MANUAL

SUPERFUND SITE CLEANUP
FOR THE MOUNTAIN VIEW MOBILE HOME ESTATES
EPA I.D. #AZD 980735724
GLOBE, ARIZONA
1984

Prepared By
CELLA BARR ASSOCIATES
Phoenix, Arizona

For
U.S. ARMY ENGINEER DISTRICT, OMAHA
Corps of Engineers
Omaha, Nebraska
March, 1984

Revised November, 1986
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Site Remediation</td>
<td>1</td>
</tr>
<tr>
<td>Location Map</td>
<td>2</td>
</tr>
<tr>
<td>Design</td>
<td>3</td>
</tr>
<tr>
<td>Construction</td>
<td>3</td>
</tr>
<tr>
<td>As-Built Features</td>
<td>4</td>
</tr>
<tr>
<td>OPERATION AND MAINTENANCE</td>
<td>4</td>
</tr>
<tr>
<td>Responsibility</td>
<td>4</td>
</tr>
<tr>
<td>Inspection Frequency</td>
<td>5</td>
</tr>
<tr>
<td>Inspection Checklist</td>
<td>6</td>
</tr>
<tr>
<td>Maintenance Items</td>
<td>7</td>
</tr>
<tr>
<td>Maintenance Budget</td>
<td>8</td>
</tr>
<tr>
<td>FUTURE SITE USES</td>
<td>9</td>
</tr>
<tr>
<td>ATTACHMENTS</td>
<td></td>
</tr>
<tr>
<td>Site Plan</td>
<td></td>
</tr>
<tr>
<td>Inspection Form</td>
<td></td>
</tr>
<tr>
<td>Alternate Inspection Form</td>
<td></td>
</tr>
<tr>
<td>Example of Executed Inspection Report</td>
<td></td>
</tr>
<tr>
<td>Arizona Department of Transportation Permit (Copy)</td>
<td></td>
</tr>
<tr>
<td>Southern Pacific Transportation Co. Lease (Copy)</td>
<td></td>
</tr>
<tr>
<td>&quot;As-Built&quot; Drawings (Sheets 1/8 through 8/8, except 6/8)</td>
<td></td>
</tr>
<tr>
<td>CBA Drawings (Sheets 13, 14, 15, 22, 23, 24, 25, and 26)</td>
<td></td>
</tr>
</tbody>
</table>
INTRODUCTION

The history of the site begins with its use as an asbestos processing mill. The mill operated for approximately 20 years at this location. It was forced to close in 1973 because it could not meet the then-existing air quality standards. The owners of the property then decided to develop the site as a mobile home park.

In addition to the airborne asbestos fiber contamination, asbestos fiber is suspected to have been used as a filler in embankment material underlying the entire development and also as trench backfill during the installation of underground utilities or spread over large areas of the site to provide grades necessary for development and to allow for road construction. The land was subdivided and the development of the mobile home park occurred in 1973.

Two other asbestos mills were in operation nearby, to the east and south of the site, over a period of approximately 10 years during which the mobile home development had been in existence.

The mobile home residential development, located within the city limits and 1 1/2 miles east of the center of the City of Globe in Gila County, contained 45 homes with paved roads; utilities; landscaping; a sewage treatment plant and lagoon; and miscellaneous improvements including concrete patios, walls and storage sheds. The entire development was surrounded by fencing consisting of blocks, asbestos particle boards and barbed wire strands. The site consists of 17 acres on a hillside with a slope of approximately 4.5%, and is situated between a railroad track on the north and the two-lane, U.S. Highway 70 on the south (see location map).

Site Remediation.

The mobile home subdivision became a concern of the officials at the State of Arizona Health Department in 1979 following the discovery of asbestos contamination in the underlying soils. In January 1980, the U.S. Center for Disease Control (CDC) issued an advisory declaring that the subdivision should be evacuated. Eventually the mobile home subdivision site was placed on the national Superfund list.

Abandonment of the Mountain View Mobile Home Estates site was chosen as the most practical and economical method of dealing with the asbestos problem. The permanent relocation of all subdivision residents eliminated the need for any extensive future air monitoring programs, while the onsite burial of mobile homes and all other physical structures helped to: (1) Simplify the overall cleanup procedure, (2) economize site cleanup costs, and (3) achieve a greater degree of total decontamination.
LOCATION MAP
**Design.**

The Corps of Engineers' Omaha District was given authority to select an engineering firm to design the cleanup. In October 1983, Cella Barr Associates (CBA) of Phoenix/Tucson was selected to design the cleanup. CBA completed the design work in late spring of 1984. The Corps of Engineers bid the project in the spring of 1985 after several months delay in procuring all the properties. The entire project was completed in January 1986.

The project plan called for the onsite demolition and burial of all physical structures, posts, buildings and mobile homes. Their onsite containment, as well as the onsite containment of asbestos particles and fibers currently present in the soil was accomplished by means of installing a permanent cap composed of a two-foot compacted layer of soil and aggregate which had been obtained from a nearby borrow area. In addition, a non-woven filter fabric was placed beneath the soil cover to prevent the re-exposure through erosion of the cover material, thereby ensuring the complete immobilization of contaminated soils.

Storm drainage and runoff passing through the site was a major consideration since the site contained three washes passing from north and west, and outletting under the highway on the south. Two of the washes pass beneath the railroad in large concrete arch culverts. Both of these drainage courses were relatively steep grades as they passed through the site. The third major wash entered the site on the west property line and passed diagonally through the site, leaving the property line on the south side. Drainage studies were done of the area to determine the stormwater runoff that would be anticipated to pass through these washes. Two new underground drainage pipelines and one new open drainage channel were designed to carry the 100-year storm to reduce the likelihood of overflow and major erosion. One new pipeline replaces the open channel on the eastern portion of the site. The other new pipeline runs from the existing arch culvert near the northwest corner of the site and outlets in the new open drainage channel. The new open drainage channel follows the same alignment as the old channel, in the southwest corner of the site.

**Construction.**

The joint venture firm of Maitland and Hydro-Dredge was selected to perform the cleanup work. Nicholas Development Company from Globe, Arizona, supplied the aggregate. The source of this material was the Jones property, located seven miles north on State Highway 60/77. Barcon Construction Company of Miami, Arizona was the subcontractor who constructed the project's concrete features. American Fence Company of Phoenix installed the fence. Water for the fire hydrant is from the City of Globe high pressure transmission line. The original water service main for the demolished subdivision was used. Power for the monitoring station is from Arizona Public Service.
The site itself was protected from erosion by first clearing and leveling the site, adding a filter fabric liner on top of the leveled site, placing 21 inches of clean fill on top of the liner and compacting this fill to a minimum density of 90 percent. On top of this compacted layer was placed three inches of coarse (two-inch) aggregate compacted to 95 percent density. The intent of the liner is to serve as not only a barrier to the asbestos but to be an early warning signal if erosion does occur on the site at some future time. The white fabric will serve as a highly visible reminder that maintenance must be accomplished on the site.

**As-Built Features.**

The as-built drawings should be carefully reviewed prior to initiating any maintenance or repair work. Particular attention should be given to construction features involving elevations of the filter fabric liner, concrete structures, fence post foundations, etc.

Maintenance involving excavation in areas north of the mill property boundaries, but south of the site chainlink fence, should be undertaken with caution. As indicated on as-built drawing sheet 8/8, prepared by Gant & Associates of Globe, Arizona, the aggregate surface erosion protection cover extends beyond the filter fabric limits. Mill site monuments were reinstalled by the contractor at or below the soil-aggregate interface. These monuments should be located in conjunction with any proposed maintenance activity.

Chainlink fence post foundations along the west, south, and east ends of the project are installed above the filter fabric liner, except as noted on the as-built drawing sheet 8/8. The drainage channel, including inlet and outlet cutoff walls, is constructed above the filter fabric liner. Junction structures, manholes, and outlet structures installed for the two underground 42-inch reinforced concrete storm drains were installed above the filter fabric liner. Riprap was installed outside the mill site southerly boundary on native materials.

**OPERATION AND MAINTENANCE**

**Responsibility.**

The Arizona Department of Health Services (ADHS) is to be primarily responsible for the operation and maintenance of this Superfund cleanup site. The State may find it desirable to utilize its own equipment and personnel to provide for necessary operation and maintenance. For example, it would appear that the Arizona Department of Transportation might be a logical choice to assist in construction maintenance because they have equipment, material and a local maintenance office/yard.
In 1985, a formal Superfund State Contract was negotiated and executed between the ADHS and the U.S. Environmental Protection Agency (EPA) regarding this site. The contract outlined the State's operation and maintenance responsibilities and incorporated this manual by reference and attachment. The contract also provided for EPA cost-sharing in site operation and maintenance for the first year after construction completion. The cleanup site was proposed for delisting from the National Priorities List (NPL) in 1986.

The soils borrow site, located southwest of the cleanup site across the junction of Highway 70 and Highway 77, was provided by the Government and will remain the property of the U.S. Forest Service. The borrow site will require no maintenance or operating procedures by the State of Arizona. The contractor's construction yard which was located on the borrow site was cleaned up to the satisfaction of the U.S. Forest Service. The maintenance of the borrow site is not a part of this Operation and Maintenance Manual.

**Inspection Frequency.**

The project cleanup site is the property of the State of Arizona and operation and maintenance of the cleanup site is the State's responsibility. Security personnel will not be required after construction. The project has been designed to be as maintenance free as possible; however, minimal maintenance can be anticipated at this time. The site should be inspected bi-monthly for the first year and periodically thereafter (a minimum of semi-annually). In addition, an inspection should be made after every major rain storm for signs of erosion. It would be beneficial to maintain contact with local agencies regarding major rainfall events. For purposes of inspection, a major rain storm is defined as a storm in which one inch of rain or more falls in any twenty-four-hour period. As an aid in scheduling field trips or determining what periods intense rains may occur, the following is a summary of average rainfall measured in inches per month in the Globe area:

<table>
<thead>
<tr>
<th>Month</th>
<th>Average Rainfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>2.06 inches</td>
</tr>
<tr>
<td>February</td>
<td>1.25</td>
</tr>
<tr>
<td>March</td>
<td>1.78</td>
</tr>
<tr>
<td>April</td>
<td>0.66</td>
</tr>
<tr>
<td>May</td>
<td>0.25</td>
</tr>
<tr>
<td>June</td>
<td>0.26</td>
</tr>
<tr>
<td>July</td>
<td>2.34</td>
</tr>
<tr>
<td>August</td>
<td>2.33</td>
</tr>
<tr>
<td>September</td>
<td>1.53</td>
</tr>
<tr>
<td>October</td>
<td>1.07</td>
</tr>
<tr>
<td>November</td>
<td>1.12</td>
</tr>
<tr>
<td>December</td>
<td>1.40</td>
</tr>
</tbody>
</table>

**Annual Average Total** 16.05 inches
**Inspection Checklist.**

The Arizona Department of Health Services (or Arizona Department of Environmental Quality as of 7/1/87) will be responsible for inspecting the site periodically to check for maintenance needs. The following checklist should be used as a minimum on each inspection trip. An inspection form is attached for this purpose.

1. Check the gate lock.
2. Walk the entire perimeter inside the fence.
3. Look for damaged fence fabric, missing warning signs, or bent fence posts.
4. Look for any signs of beginning erosion.
5. Look for signs of settlement.
7. Traverse the interior of the site from east to west at no more than 150 feet distances checking for items (4), (5), and (6) above.
8. Look for indication of, or pools of, standing water in depressions.
9. Check that drainage manhole covers are in place and undisturbed.
10. Check for weed or shrub growth in the gravel.
11. Note any unusual condition or change to the site not listed above (i.e. animal burrows, etc.).
12. Inspect, operate and service fixed air monitoring station as required.
13. Lock the entrance gate and check exterior areas.
14. Check pipe outlet headwall (adjacent to gate on south) for cracks and settling.
15. Check pipe outlet channel to ADOT highway for signs of erosion, riprap displacement, or debris accumulation.
16. Check bank and channel protection in ADOT ROW for signs of erosion, riprap displacement or debris accumulation.
17. Check concrete drainage channel (including inlets and outlet) for cracks, undercutting and settling.
18. Check pipe outlet headwall in drainage channel for cracks and settling.
19. Look for debris accumulation in the drainage channel or storm pipe.
20. Check area south of the channel for items (3), (4), (5), (6), (7), (8), (10) and (11).
21. Check the dead end road on the west side of the project site for damage to the barricade or its reflective paint surface.
22. Check the railroad property between the tracks and the north fence of the project site for items (4), (5), (6), (8), (10) and (11) above.
23. Check for debris accumulated at the upstream (north side of railroad tracks) and downstream ends of the concrete box culverts underneath the railroad track.
24. Check track ballast for signs of erosion in the same areas as (23) above.
(25) Prepare a written report of the inspection.
(26) Photos may be taken to document serious deficiencies on any preceding item. Photos, if taken, should be dated and attached with site plan showing location and direction taken.

The written report should include comments on any of the above items that need attention, and any other concerns not listed above. A site plan should accompany the report indicating the location and dimensions of areas needing attention. A site plan is attached for this purpose. The report shall be signed and dated (both the date of inspection and date of report, if different). The report shall be reviewed and signed by the inspector's supervisor or department head. All fully-executed reports shall be kept on file in the office of the Arizona Department of Health Services. A copy of an executed inspection report is attached as an example.

Safety and protection of State personnel conducting inspections will be the responsibility of ADHS. However, an inspector may wish to have a paper mask, boots, Tyvek coverall and gloves in his possession in the event he desires to closely examine a suspected re-exposed area. This equipment should be properly disposed of if used.

**Maintenance Items.**

Maintenance that could be required includes but is not limited to the following:

1) Repair of fence damage as a result of vandalism or animals.
2) Picking-up or collecting debris which accumulates along the inside and outside perimeter fence.
3) Removing built-up silts or debris within the channel or inside pipes or storm structures.
4) Replacement and or repainting of warning signs on the perimeter fence.
5) Repair settlement or erosion of the soil/aggregate cap.

Settlement may occur in areas where debris is buried or possibly in the area of the treatment plant lagoon. Minor settlements (depressions less than six inches in depth) can be repaired by removing any accumulated standing water then filling with aggregate stockpiled on site or obtained from offsite. The aggregate shall be a gradation similar to the gradation used as the final site cover.

If erosion of the soil cap is found during the inspection, repair shall be made as follows: First, determine the point at which the erosion began, then determine the cause of the erosion occurrence. If it is a result of concentrated overland flow of area drainage, the eroded area should be filled with aggregate as outlined above for the areas in which settlement has occurred.
If erosion is determined at the top of the channel or where an area cannot be regraded, the placement of larger aggregate in the depression should occur to prevent further erosion.

6) Pumping of standing water may be required in areas where settlement has occurred, and may also require filling.

7) If damage or deterioration has occurred on the barricade, the structure must be restored to the condition existing at the time the site was completed (see attached plan sheets).

The monitoring of growth during inspection is provided only to note any change in the site. If vegetation is growing, it should at least be noted. Grass or small shrub growth should not be a problem and should actually be encouraged. However, large diameter (6 inches) desert trees could become established and could develop roots that would penetrate the fabric liner or contribute to openings in the soil/aggregate cover in which surface water could enter and begin erosion.

A single 14-foot wide gate is available at the old entrance road for access to the site itself.

A stockpile of approximately 120 cubic yards of the coarse aggregate material used in the cap is provided onsite. It is for future use in case of cap settlement or erosion.

**Maintenance Budget.**

The following annual budgeted amounts should be set aside for at least the first two years after construction. At that time a review of expenditures might be made (especially in the erosion repair item) with a view to reducing the amount:

- **Inspections:** 6/yr. @ $200.00 ea. = $1,200.00
- **Reports:** 6/yr. @ $50.00 ea. = 300.00
- **Refuse and debris removal:** 4 @ $200.00 ea. = 800.00
- **Fence repair (incl. lock):** 100LF @ $10/LF = 1,000.00
- **Erosion repair:** 6,000 SF x 1 FT x 1/27 ($12.00/CY) = 2,667.00
- **Road barricade repair:** = 200.00
- **Contract administration (for damage repair work)** = 300.00
- **Insurance premiums (liability coverage)** = 1,200.00
- **Air Monitoring (sample equipment, collection and analysis)** = 3,000.00
- **Soil Surface test (2 per year)** = 200.00

**Total** $10,867.00

Maintenance funds are expected to be required for this project for a 30-year period. It is assumed that the estimated cost of $10,867.00
per year will be the maximum amount needed, at least until two-year evaluation of this cost (as previously mentioned) takes place. Assuming $10,867.00 is the unit value of an annuity over a term of 30 years at an interest rate of 8%, and using the formula:

\[(1 + i)^n - 1/i\]

the amount of funds required is $10,867.00 x (113.283) = $1,231,046.00. The present value of this same annuity at the same interest rate, using the formula:

\[1 - (1 + i)^n/i\]

is $10,867.00 x (26.775) = $290,946.00.

FUTURE SITE USES

The State may desire to investigate future uses for the project cleanup site that are compatible with continued containment of asbestos contaminants. Any contemplated use should consider the following:

The primary restriction for any future uses of the site is that no excavation occur below the fabric liner mat (i.e. two feet below the surface). This will ensure containment of the contaminated soil and debris. Residential, commercial or industrial development should be considered carefully because all of these involve the installation of underground utility systems for water and sewers. Also, building foundation excavation will be required. Uses that encourage high intensities of people or vehicles should be considered carefully. Paved parking or large recreational use areas onsite should be discouraged. Such areas with high stormwater runoff factors might increase surface erosion on their downhill edges. However, small surface drainage channels could be constructed to take increased runoff to the site perimeter. Any paved impermeable surface or building roof onsite that would increase runoff must have a drainage (erosion control) system. Any excavations for foundations, bases, posts, poles, landscaping, utilities, etc., must be shallow (i.e. less than two feet).

Electrical power to the site, if required for a future use, could be brought in underground provided it is not placed more than one (1) foot deep and properly protected to prevent piercing of the fabric liner. Temporary type (self-contained) toilets could be used. Surface or very shallow (i.e. three-inch deep) drinking water systems could be installed from the newly installed offsite fire hydrant. The cap material must not be subjected to erosion or vehicular traffic deterioration by any future use. If a land use requiring excavation exceeding two (2) feet becomes necessary for any reason, the thickness of the soil cap should be increased in a corresponding manner to fully accommodate these excavations above the fabric liner so as to insure its continued integrity.
It should also be kept in mind that surface airborne asbestos contamination may continue as long as the existing mill remains nearby. Localized ambient atmospheric asbestos contamination may also persist from dispersed offsite, non-point sources as well. No future site usage should be contemplated nor allowed unless the localized atmospheric concentrations of asbestos fiber are determined to exist at or below acceptable background levels.

Any future uses of the site should be reviewed and concurred with by the U.S. Environmental Protection Agency. Any operation and/or maintenance agreement between the State of Arizona and the U.S. Environmental Protection Agency should require review and approval of future uses.
ALTERNATE
INSPECTION FORM
GLOBE, ARIZONA INSPECTION REPORT

<table>
<thead>
<tr>
<th>ITEM</th>
<th>GOOD</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (Interior Area)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Check the gate lock.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Walk the entire perimeter inside the fence.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Look for damaged fence fabric, missing warning signs, or bent fence posts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Look for any signs of beginning erosion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Look for signs of settlement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Look for exposed fabric liner mat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Traverse the interior of the site from east to west at no more than 150 feet distances checking for items (4), (5), and (6) above.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Look for indication of, or pools of, standing water in depressions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) Check that drainage manhole covers are in place and undisturbed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Check for weed or shrub growth in the gravel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11) Note any unusual condition or change to the site not listed above (i.e. animal burrows, etc.).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) Inspect, operate and service fixed air monitoring station as required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13) Lock the entrance gate and check exterior areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B (Along Highway 70 ROW on south)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14) Check pipe outlet headwall (adjacent to gate on south) for cracks and settling.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15) Check pipe outlet channel to ADOT highway for signs of erosion, riprap displacement, or debris accumulation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page One of Four
### EXAMPLE

**MTN. VIEW MOBILE HOME ESTATES INSPECTION REPORT**

**INSPECTION DATE:** 10-21-86  
**INSPECTOR:** DENNIS R. SIMMS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>GOOD</th>
<th>PROBLEM</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Check the gate lock</td>
<td>✔️</td>
<td>▄</td>
<td></td>
</tr>
<tr>
<td>2) Walk the entire perimeter inside the fence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Look for damaged fence fabric, missing warning signs, or bent fence posts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Look for any signs of beginning erosion.</td>
<td></td>
<td></td>
<td>SEE BELOW</td>
</tr>
<tr>
<td>5) Look for signs of settlement.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Look for exposed fabric liner mat.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Traverse the interior of the site from east to west at no more than 150 feet distances checking for items (4), (5), and (6) above.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Look for pools of standing water in depressions.</td>
<td></td>
<td></td>
<td>SEE BELOW</td>
</tr>
<tr>
<td>9) Check that drainage manhole covers are in place and undisturbed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Check for weed or shrub growth on the gravel.</td>
<td></td>
<td>WEED GROWTH CONCENTRATED AT FRAME LINE</td>
<td></td>
</tr>
<tr>
<td>11) Drainage structure head wall cracks or settling.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) Lock the entrance gate and check exterior areas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13) Check the dead end road on the west side of the project site for damage to the barricade or its reflectors.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14) Look for debris accumulation in the drainage channel or storm pipe.</td>
<td></td>
<td></td>
<td>SEE BELOW</td>
</tr>
<tr>
<td>15) Check the railroad property between the tracks and the north fence of the project site for items (4), (5), (6), (8), (10) and (11) above.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16) Check for debris accumulated at the upstream (north side of railroad tracks) and downstream ends of the concrete box culverts underneath the railroad tracks.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17) Check for track ballast erosion signs in the same areas as (16) above.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18) Take a surface sample to test for asbestos fiber accumulation. (One small area 3'x3' will be left without aggregate cover to facilitate the soil sampling.)</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19) Note any unusual condition or change to the site not listed above. (e.g. animal burrows, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20) Inspect, operate and service fixed air monitoring station as required.</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21) Prepare a written report of the inspection.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INSPECTOR'S COMMENTS:** (describe specific problems, its location and recommended action; and provide attached sketch)

1) **THERE ARE A FEW POINTS OF FLOW FROM THE RAILROAD ROW UNTIL THE PROJECT WITH SLIGHT EROSION. THERE IS SOME FLOW WITH SUSPT FROZON ON THE EAST RAILWAY THAT FLOWS UNDER FRANK STONEBRICK'S TRACT.**

2) **THERE IS EVIDENCE OF PREVIOUS STANDING WATER ON THE TRIMMED PARCEL.**

3) **THE EAST STORM PIPE IS CLEAR. THE WEST STORM PIPE HAS 6" TOP OF GRAVEL IN THE SOUTHEAST 1/3 OF THE SITE.**

**INSPECTOR'S SIGNATURE:** Denne R. Simms  
**REPORT DATE:** 10-22-86

**REVIEWER'S SIGNATURE:**  
**DATE:** 10-23-86

**TITLE:** Mgr., Revisited Projects
ADOT Permit #44836

US 70 MP 253.87 to 254.30+

Issued to State of Arizona
Arizona Division of Emergency Services
Dated: May 29, 1984

Purpose: Installation of bank protection, non-grouted rip rap, fire hydrant, entry road, etc.
June 1, 1984

Harley Grovesnor
U.S. Corps of Engineers
2721 N. Central #1030
Phoenix, AZ 85004

Dear Harley:

Enclosed is a copy of the ADOT permit.

Please review it and respond with your comments for changes. I'm sure you will recognize the need for an on-site visit to determine where the milepost signs are. I feel that the request to backfence north of Highway 70 is weak because it does not appear in the permit itself.

I will be on vacation until June 18, 1984, but Margaret Dugan can take care of your changes. I have also enclosed the copies of the offer letters which Tom Brock wanted.

Sincerely,

Michael P. Austin
Superfund Program Manager

MA:bd
Encs.
May 29, 1984

Michael Austin
Division of Emergency Services
5636 E McDowell
Phoenix, AZ  85008

RE: U.S. 70 M.P. 254
Mountain View Mobile Home Estates

Dear Mr. Austin:

Enclosed you will find a Permit for the anticipated work at subject site. For the record, we are requesting that you sign the Permit and return all copies to us. We will then distribute in our normal manner.

Your attention is drawn to the fact that one of the conditions calls for fencing the south and west boundaries of the excavation site prior to removal of existing State fence. Sheet 16 of the plans indicates this is optional with the Contractor. Correction is recommended.

Also, I would like to request that new fence be provided on the north side of U.S. 70 from the Cattleguard at Milepost 253.87 to the Cattleguard at 254.30. In conjunction with the development of this subdivision in 1972 the department issued a Permit allowing backfencing. Conditional on this, it appears that the existing fence was removed. Thus, I feel that replacement of our fence should be undertaken as part of the proposed contract.

Sincerely,

S. J. Guerrini
Area Engineer

SJG:rm

cc: G. B. Ohnesorgen
APPLICATION FOR PERMIT TO USE STATE HIGHWAY RIGHT OF WAY

(Print or Type)

Application is hereby made for a permit to enter in upon and use a portion of the State Highway.

Name of Owner: STATE OF ARIZONA

Address of Owner: Ptovienl, Arizona 85007

City: Phx State: AZ Zip: 85007

Mailing Address: 5636 E. McDowell Road

City: Phx State: AZ Zip: 85006

Phone: 244-0504

Signature of Applicant: ____________________________

(Applicant and Owner are responsible for conditions on permit)

City (in or near) Globe Project No. NON FA-022-4 (1957) A

Highway Route No. US 70 Approximately Feet Direction of Milepost No. 253.87 to 254.30+

Side of Highway (circle one) Highway Station

Purpose: Superfund site cleaning of Mountain View Mobile Home Estates.

FOR DEPARTMENTAL USE ONLY

THIS APPLICATION is approved with the following directions, requirements and specifications:

An approved set of drawings and approved permit showing specifications shall be present on job site during construction.

All work to be done in accordance with ADOT, standards and specifications and under the inspection of and fully coordinated with the appropriate designated ADOT, Highway Division personnel.

This permit covers encroachment upon ADOT right of way as needed to accomplish the work shown on attached plan sheets 11, 12, 16, 23, and 24, and other work incidental thereto.

A separate permit will be required for the proposed conveyor system for transporting material across the highway.

Before the right of way fence is cut, the wire shall be held in place by new strain posts set in concrete in accordance with ADOT, Highway Division standard C-12.20.

Any fence removal shall be replace with new fence conforming to ADOT standard drawing C-12.20.

No fence removal shall be undertaken until temporary fencing along the south and west boundaries of the borrow site is installed.
FOR AND IN CONSIDERATION of the granting of a permit or license for the purpose set forth herein the Licensee hereby agrees, covenants, and binds said Licensee as follows, to wit:

1. The Licensee hereby agrees to save and hold harmless the State, any of its departments, agencies, officers or employees from all cost and damage incurred by any of the above and from any other damage to any person or property whatsoever, which is caused by any activity, condition, or event arising out of the performance or non-performance of any provision of this agreement or the exercise of this permit or license by Licensee, any of its agents, or any of its independent contractors. The above cost incurred by the State, any of its departments, agencies, officers, or employees shall include in the event of an action, court costs, expenses of litigation and reasonable attorneys' fees. When any above cost, damage occurs as aforesaid, Licensee assumes the burden of proof that the above activity, condition, or event did not cause such cost, damage, or other damage.

2. That all work done shall be at the sole cost and expense of the Licensee, and shall be done at such time and in such manner as to be least inconvenient to the traveling public, and as directed by the agent of the Licensor. Work must be finished in the time specified on permit.

3. That when the proposed work is completed the Licensee shall repair the roadbed and replace the surfacing material thereon and will leave the said road in as good a condition as it is now, so far as the road is affected by the Licensee.

4. If the subject of the permit or license fails to pass final inspection, the Licensee will remove or replace the same within such time as specified by written notice from the Licensor; or if at any time hereafter, any material used by the Licensee in replacing or reconstructing any part of said highway proves defective, the Licensee will replace the same with the kind and quality of material which the Licensor shall specify.

5. That if the title and possession of any property placed upon the right of way by the Licensee remains in said Licensee, the Licensee shall and will promptly perform all necessary repair work upon written notice from the Licensor, and will not permit or allow any condition to exist which would be a hazard or source of danger to the traveling public.

6. That if at any time hereafter the right of way, or any portion thereof, occupied and used by the Licensee may be needed or required by the Licensor, any permit or license granted in pursuance of this application, may be revoked by the Licensor and all right thereunder terminated, and upon sufficient notice, the Licensee shall and will remove all property belonging to said Licensee.

7. That in the event that the work to be done under the authority of the permit or license necessitates the creation of any hazard or source of danger to any person or vehicle using said highway, said Licensee shall and will maintain at all times during the existence of said hazard, sufficient barriers, danger signals, lanterns, detours, and shall and will take such other measures of precaution as the Licensor shall direct.

8. That if the work to be undertaken is of such a nature or character that the Licensor deems it necessary that said work be laid out, or inspected by the Licensor, said Licensee will defray any and all expenses incurred by said Licensor, and herein agrees to reimburse the Licensor, and for that purpose will deposit with the Licensor a sum of money in the amount necessary to cover all cost incurred by the Licensor.

9. All construction to be as per final plans approved with permit.

10. Licensee agrees to advise the state of any change of ownership.

---

**PERMIT AND LICENSE**

Permit No. 4 4 8 3 6

A permit and license is hereby issued to the foregoing licensee for the purpose contained in the application and upon the expressed condition that every agreement and covenant therein contained is faithfully performed, and said work to be performed in accordance with final approved plans and specifications. Construction is authorized only for period indicated below.

Dated May 29, 1984

Construction to be completed by:

Dec. 29, 1984

ARIZONA DEPARTMENT OF TRANSPORTATION

By _____________________________

Area Engineer

Maintenance Permit Engineer
Permit # 44836
U.S. 70 MP 253.87 to 254.30+

STATE OF ARIZONA
AZ Division of Emergency Services 244-0504
5636 E. McDowell Road
Phx, AZ 85008

All surplus earth and construction debris shall be removed from the immediate right of way area on completion of work covered by this permit.

Traffic shall be protected in accordance with ADOT, Highway Division Traffic Control Manual for highway construction and maintenance (as per MUTCD) for Streets and Highways. All signs, placement of signs and the necessity of using flagmen is the responsibility of the PERMITTEE.

PERMITTEE shall assume full responsibility for damage to any utility line. Call Blue Stake.

NOTIFY the Globe Office three (3) days in advance of construction and within three (3) days following completion for a final inspection. Phone: 425-3291, Floyd Livingood, Supervisor.
Southern Pacific Transportation Company
and
State of Arizona, Division of Emergency Services

permanent easements agreement.

Dated: November 15, 1984

1.a, 1.b, and 1.c
THIS INDENTURE, made this 15th day of November, 1984, by and
between SOUTHERN PACIFIC TRANSPORTATION COMPANY, a Delaware corporation,
herein termed "Railroad," and STATE OF ARIZONA, DIVISION OF EMERGENCY SERVICES,
5636 East McDowell Road, Phoenix, Arizona 85008, herein termed "Grantee"

WITNESSETH:

1. Railroad hereby grants to Grantee, subject to the reservations, covenants and conditions herein contained, easements for hazardous waste (asbestos) contamination containment purposes in, upon, along, across and beneath the property of Railroad, at or near Globe, in the County of Gila State of Arizona, as follows:

   (a) an easement for burying of soil contaminated by hazardous waste asbestos material within a strip of land approximately 30 feet by 1650 feet between and opposite Engineer's Stations 6367+70.4 and 6351+55.5, Mile Posts 1218.30 and 1217.99, in the location shown on the print of Railroad's Drawing A-670, Sheet No. 1 of 3, dated May 3, 1984, attached and made a part hereof. Grantee shall have the right to fence the property for safety and/or security purposes;

   (b) an easement to construct, reconstruct, maintain and operate a forty-two (42) inch storm drain at Engineer's Station 6358+73.3, Mile Post 1218.13, in the location shown on the print of Railroad's Drawing A-670, Sheet No. 2 of 3, dated May 3, 1984, also attached and made a part hereof; and

   (c) an easement to construct, reconstruct, maintain and operate a forty-two (42) inch storm drain at Engineer's Station 6367+10, Mile Post 1218.29, in the location shown on the print of Railroad's Drawing A-670, Sheet No. 3 of 3, dated May 3, 1984, also attached and made a part hereof.
2. Grantee shall, at its expense, comply with all applicable laws, regulations, rules and orders, regardless of when they become or became effective, including, without limitation, those relating to health, safety, noise, environmental protection, waste disposal, and water and air quality, and furnish satisfactory evidence of such compliance upon request of Railroad.

Should any discharge, leakage, spillage, emission, or pollution of any type occur upon or from the premises due to Grantee's exercise of rights granted herein, Grantee, at its expense, shall be obligated to clean the premises to the satisfaction of Railroad and any governmental body having jurisdiction thereover.

Insofar as it lawfully may, Grantee agrees to indemnify, hold harmless and defend Railroad against all liability, cost, and expense (including, without limitation, any fines, penalties, judgments, litigation costs and attorney fees) incurred by Railroad as a result of Grantee's breach of this section, or as a result of any such discharge, leakage, spillage, emission, or pollution, unless such liability, cost or expense is proximately caused solely by the active negligence of Railroad.

3. This grant is subject to all licenses, leases, easements, restrictions, conditions, covenants, encumbrances, liens and claims of title which may affect said property and the word "grant" as used herein shall not be construed as a covenant against the existence of any thereof.

4. Grantee shall bear all costs in connection with the work contemplated for the rights herein granted and agrees to reimburse Railroad for any cost and expense incurred by Railroad in connection therewith.

5. Grantee, its agents and employees, shall have the privilege of entry on said property for the purpose of performing the work contemplated; provided, however, that Grantee agrees to give Railroad five (5) days' written notice prior to commencement of any work on the premises, except emergency repairs, in which event Grantee shall notify Railroad's authorized representative by phone.

6. In the event any work upon or in connection with the easements herein granted, to be done upon or adjacent to the property of Railroad, should be let to a contractor by Grantee, such work shall not be begun until such contractor shall have first entered into an agreement with Railroad, satisfactory to Railroad, and indemnifying Railroad from and against all claims, liability, cost and expense growing out of the performance of the work to be done by such contractor.
7. Insofar as it lawfully may, Grantee agrees to investigate, release, defend and indemnify Railroad, its officers, employees, agents, successors and assigns from all claims, liability, cost and expense, howsoever same may be caused, including reasonable attorney fees, for loss of or damage to property and for injuries to or death of persons including, but not limited to, any environmental damage arising out of the rights herein granted, unless such liability, cost or expense is caused solely by the active negligence of Railroad. The term "Railroad" as used in this section shall be construed to include, in addition to Railroad, the successors, assigns and affiliated companies of Railroad and any other railroad company that may lawfully operating over and upon tracks at said location and the officers and employees thereof.

8. This indenture shall be binding upon and inure to the benefit of the successors and assigns of Railroad and the assigns of Grantee.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed in duplicate the day and year first herein written.

SOUTHERN PACIFIC TRANSPORTATION COMPANY,

By ____________________________
(Title) Manager - Miscellaneous Contracts

Attest: ____________________________
Assistant Secretary

STATE OF ARIZONA, DIVISION OF EMERGENCY SERVICES

By ____________________________
(Title) DIRECTOR

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed in duplicate the day and year first herein written.

STATE OF CALIFORNIA
City and County of San Francisco

On this __________ day of __________, in the year One Thousand Nine Hundred and Eighty __________, before me, J. E. JURGENS, Notary Public in and for the City and County of San Francisco, State of California, personally appeared W. F. Farlow and T. F. O'Donnell

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within instrument as HSR MISCELLANEOUS CONTRACT and Assistant Secretary or on behalf of the corporation therein named and acknowledged to me that the corporation executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in the City and County of San Francisco, the day and year in this certificate first above written.

My Commission Expires November 1, 1985

Notary Public in and for the City and County of San Francisco, State of California.
Route Symbol: AOA
Station: P1031
E.S.: 58 + 73.3 M.P.: 1218.13

Applicant: Arizona Dept. of Health Services
Address: 1740 West Adams
City: Phoenix
State: Arizona
Zip: 85007
Facility: Storm Drain
Purpose: Convey Storm water
Materials and installation as per CS

Is Pipe Under Pressure: No
Distance from bottom of tie to top of "Casing" 7"
If less than 3'-0" why?
If pipe carries flammable substances and has casing:
Number and location of vents
Materials: [Carrier Pipe, Casing, Carrier Pipe, Casing, Smooth Steel]
Diameter: [42" (in.)]

Pipe Wall Thickness:
*(Of casing, if used - 2 Corrugated Metal) "Gage"
Otherwise Carrier:
Carrier Pipe:

Pipe Length:
If Pipe is reinforced Conc. ASTM Class:
Designation:
If Pipe is cast iron AWWA Class:

Furnish Sketch 2
Plan, cross section and description of track or tracks under which proposed pipe is to be placed together with all necessary dimensions.
Where SP pipelines are involved utility crossing shall not be less than 2'-0" below SP pipelines.
Markers required for underground utilities

Reference to assigned blanket agreement No.
Underground signal line involved: Yes ☐ No ☐
SP Petroleum Products: Pipelines involved: [YES ☐ NO ☐]
Route Symbol BDA Station Final

Applicant Arizona Dept. of Health Services
Address 1740 West Adams
City Phoenix State Arizona Zip 85007
Facility Storm Drain
Purpose Convey Stormwater
Materials and Installation as per CE

Is Pipe Under Pressure No
Distance from bottom of tie to top of Casing 13'
If Less than 3'-0" why?

If pipe carries flammable substances and has Casing
Number and location of vents

Materials Carrier Pipe Casing
Diameter Carrier Pipe 4" Casing Smooth Steel
Pipe Wall Thickness (In.)

Pipe Wall Thickness *(If Casing, if used - 2 Corrugated Metal) (Gage)
Otherwise Carrier Casing

Pipe Length Carrier Pipe
If Pipe is reinforced Conc. ASTM Class
Designation
If Pipe is cast iron AWWA Class

Furnish Sketch 2 PLAN, CROSS SECTION AND DESCRIPTION OF TRACK OR TRACKS
UNDER WHICH PROPOSED PIPE IS TO BE PLACED TOGETHER
WITH ALL NECESSARY DIMENSIONS.
WHERE SP PIPELINES ARE INVOLVED UTILITY CROSSING SHALL
NOT BE LESS THAN 2'-0" BELOW SP PIPELINES.
MARKERS REQUIRED FOR UNDERGROUND UTILITIES

Reference to assigned blanket agreement No.
Underground signal line involved Yes No

SP Petroleum Products Pipelines involved YES NO
APPENDIX C

Community Relations Plan

Mountain View Mobile Home Estates

Globe, Arizona
FINAL
COMMUNITY RELATIONS PLAN

MOUNTAIN VIEW
MOBILE HOME ESTATES
GLOBE, ARIZONA

08.9V15.0

February 13, 1984
FINAL COMMUNITY RELATIONS PLAN
FOR DESIGN AND CONSTRUCTION ACTIVITIES

MOUNTAIN VIEW MOBILE HOME ESTATES
GLOBE, ARIZONA

SITE BACKGROUND AND HISTORY

Subdivision History

Mountain View Mobile Home Estates, a 17-acre subdivision located 75 miles east of Phoenix in east-central Arizona (see Figure 1), was built in 1973 on a former asbestos mill site. In 1953, Mr. Jack Neal formed the Metate Asbestos Corporation and built the mill at the site. In 1973, the Metate Asbestos Corporation was found to be in violation of EPA air quality standards, and the Gila County Superior Court issued a temporary injunction against Metate to cease operations. The temporary injunction had been requested by the Gila-Pinal Counties Air Quality Control District. In May 1974, the injunction against Metate was made permanent. Mr. Neal developed his property into a residential subdivision, and lots were sold and occupied.

Conversion of the site for residential use apparently included backfilling and leveling with old asbestos mill tailings. In addition, the site was partially covered with native soil.

Other asbestos operations in the vicinity of Mountain View Estates included the adjacent D. W. Jaquays Mining and Equipment Corporation and the "Town Mill" across U.S. Highway 70. The Town Mill was operated by Arizona Asbestos Company and was shut down in 1973. It has been sold twice since its closure and no longer processes asbestos. The adjacent Jaquays Mill still processes asbestos intermittently.

PDR996.013.1
Figure 1
PROJECT VICINITY
Mountain View
Mobile Home Estates
Past Actions

State and local officials first discovered asbestos contamination in the soil at Mountain View Estates in October 1979, while inspecting the Mountain View wastewater disposal system. Small piles of asbestos mill tailings lay against the abandoned mill structure, and contaminated soil was accessible to the residents.

Shortly thereafter, state officials took soil samples and confirmed the presence of chrysotile asbestos fibers. Air samples were also taken, and airborne asbestos fibers were measured in both indoor and outdoor environments.

State response to the discovery of asbestos contamination at the subdivision began when the Arizona Department of Health Services (ADHS) sent residents a letter in November 1979 apprising them of the health hazard and recommending that they take immediate measures to minimize their risk of personal exposure. In December 1979, the ADHS ordered Metate, Jaquays, and the Town Mill to submit plans for cleanup of their respective sites.

In January 1980, the Centers for Disease Control (CDC) issued an advisory that residents of the subdivision be evacuated from the site, and Governor Bruce Babbitt declared the site to be in a state of emergency. Two days later, a letter was sent to the residents with instructions for their temporary voluntary relocation to state-provided housing. The Arizona Division of Emergency Services provided this temporary housing from January 1980 through March 1980 while residents' homes were being decontaminated. During this time, other mitigation actions were taken, including demolition and onsite burial of the vacant Metate Mill building, the installation and seeding of a 6-inch-deep protective soil cap over a portion
of the subdivision, and the application of gunite along a short reach of the primary drainage system traversing the subdivision.

The soil cover was shallow and did not cover the area under the mobile homes or several lots. In the fall of 1981, reports that the partial soil cover was eroding and exposing asbestos fibers caused ADHS to look more intently at a more permanent remedy. Mountain View Mobile Home Estates appeared on the Superfund expanded Interim Priorities List in July 1982 as Arizona's highest priority site, and was included in the proposed National Priorities List of Superfund sites published in December 1982.

**Remedial Investigation/Feasibility Study**

Mountain View Estates was referred to the Department of Justice on September 30, 1982. EPA Region 9 requested remedial investigation/feasibility study (RI/FS) funds for a field investigation of the site to support the enforcement effort. Superfund monies were allocated in January 1983 for a 6-month RI/FS. In March 1983, the RI/FS was accelerated into a 30-day investigation.

The remedial investigation, which began in April 1983, included soil sampling to determine the extent of asbestos contamination of the soil and an assessment to determine the approximate value of the homes and property. The feasibility study evaluated three options for remedial action:

- **Alternative A. Site Abandonment.** Complete abandonment and sealing of the site and relocation of all residents.
• Alternative B. Site Rehabilitation With Asbestos Removal. Excavation and removal of asbestos-contaminated soil from the site and temporary relocation of all residents during rehabilitation operations.

• Alternative C. Site Rehabilitation With Deep Cap. Placement of a 10-foot deep cap over the site to seal the asbestos-contaminated soil beneath it, along with temporary relocation of all residents during the rehabilitation operations.

During the RI/FS activity, EPA and the Federal Emergency Management Agency (FEMA) offered to temporarily relocate Mountain View residents on a voluntary basis pending a decision on the permanent remedy for the site. Superfund monies were transferred to FEMA to fund the relocation, and a cooperative agreement between FEMA and the Arizona Division of Emergency Services (ADES) was negotiated to effect the voluntary relocation. Physical movement of residents requesting temporary relocation began the week of May 16.

The final draft RI/FS report was published May 6, 1983. The study concluded that Alternative A—permanent relocation—was the most cost-effective, technically feasible, and environmentally acceptable remedial action.

HISTORY OF COMMUNITY RELATIONS

Beginning in 1979, an Arizona Department of Health Services (ADHS) staff person has served as a primary contact with Mountain View residents. An important responsibility of the ADHS staff person was to ensure that all resident inquiries were directed to the proper agency. Emphasis was given to providing public health information and to keeping residents informed of state and EPA actions.
In 1979, an ad hoc committee of residents was formed. After the state mitigation measures in 1980, the committee disbanded. In early 1982, two members from this committee became representatives for the community. To streamline the transfer of information about the project, the ADHS staff person distributed information through these community representatives. The other residents were also contacted directly if appropriate. In addition, ADHS sent informational letters to all residents approximately four times a year.

A public meeting with residents was held in January 1982, when ADHS was actively seeking to secure placement of Mountain View Estates on the Superfund list. At that time, options and costs were presented to the residents. Approximately 80 people attended the meeting. A public meeting was also held in July 1982, when Dr. Sarn, director of ADHS, debated two Globe residents on the dangers of chrysotile asbestos.

ADHS also conducted several informal meetings at residents' homes. These were attended by from 10 to 25 people, and had no media present. A meeting held in January 1982 was attended by the ADHS staff person, the Globe City manager, and the Gila County health officer. Residents had prepared a list of questions and concerns that were addressed by the officials. Another meeting occurred in February 1983. It was to inform residents that Superfund funds had been obligated for an RI/FS and that a consultant would begin work in March or April.

ADHS also issued press releases at appropriate times and maintained contact with local and state officials through departmental correspondence or direct contact.
On April 7, 1983, EPA Region 9 met with local officials, concerned citizens, and Mountain View Estates residents in Globe to explain the RI/FS. The final draft RI/FS report were released to the public on May 9. Copies were distributed to Federal, State, and local officials, and several copies were sent to Mountain View Estates for distribution among the residents. Four repositories were established for public review of the report: the Globe City Hall; the Globe Public Library; the Arizona Department of Health Services Library in Phoenix; and the EPA Region 9 Library in San Francisco.

On April 14, EPA, FEMA, and ADES issued a press release stating that temporary voluntary relocation would be offered to residents of Mountain View. A press release issued by EPA on May 6 announced the availability of the RI/FS report, the repository locations, the public comment period of May 9 through May 23, and the public meeting on the report scheduled by EPA for May 16. Notice of the repository locations, the two-week comment period, and the May 16 public meeting were also included in cover letters accompanying the RI/FS report and in a letter sent to each Mountain View Estates resident.

On May 16, 1983, EPA Region 9 conducted a public meeting in Globe to present the feasibility study report, answer questions, and take public comment. Approximately 125-140 people attended. Eight persons made oral statements at the meeting, and 22 persons submitted written comments following the meeting. Generally, the comments fell into two categories:

- Persons who support permanent relocation of Mountain View Estates residents and urge EPA to implement relocation as soon as possible.
Persons who believe that Gila County asbestos is unique, not hazardous to health, and has not caused any adverse health effects in Gila County. These commentors urged EPA and the State to delay implementation of remedial action at Mountain View Estates until a health study of Gila County is conducted. Several persons felt that the governmental action was precipitated by emotional rather than scientific decision-making and were concerned about the negative impact of the government action on the economy of Gila County. They felt that no remedial activity should take place at Mountain View Estates.

The responsiveness summary prepared by EPA Region 9 contains the specific comments received and the agency response to them.

CURRENT STATUS

A Record of Decision for the Mountain View Mobile Home Estates site was issued by EPA in June 1983. The selected remedial action was Alternative A:

- Permanent relocation of Mountain View residents
- Onsite burial of containerized mobile homes
- Site closure by capping, fencing, and maintenance

Through an Interagency Agreement, funds for permanent relocation activities were transferred from EPA to FEMA. FEMA in turn signed a cooperative agreement with ADES to conduct...
relocation activities. ADES is also responsible for community relations relating to relocation. The temporary relocation offered to residents in April 1983 is continuing. Permanent relocation and acquisition of title to properties is currently underway and is expected to be completed by April 1, 1984.

Design and construction for final site closure will be managed by the U.S. Army Corps of Engineers (COE), under an Interagency Agreement with EPA. COE will be responsible for overall design and construction management, and may assist EPA with community relations.

Design work began in October 1983 (concurrent with permanent relocation activities) and will continue into March 1984. The projected contract award date for construction is May 1984. Provided that property acquisition and permanent relocation of residents have been accomplished, onsite construction is planned from July through December 1984.

COMMUNITY RELATIONS PARTICIPANTS AND ISSUES

Information about interested parties and about issues surrounding design and construction activities was derived from discussions with the following persons:

U.S. EPA Region 9

Jere Johnson, Project Officer
Steve Drew, Community Relations Coordinator

Arizona Department of Health Services

Philip King, Manager, Remedial Action Unit

PDR996.013.9
Arizona Division of Emergency Services

Michael Austin, Globe Asbestos Project Manager

1. Mountain View Residents

Mountain View residents will continue to receive information from ADES concerned permanent relocation activities. It is important that any public information released by EPA concerning design and construction is coordinated with ADES until permanent relocation activities are completed. This will:

- Ensure consistent information
- Avoid the confusion to residents that could result from multiple information sources
- Ensure that information does not interfere with relocation actions. (For example, publication of the proposed construction schedule must specify that it is contingent on the completion of permanent relocation.)

Residents who have not temporarily relocated and are still living at Mountain View will be interested in any onsite activities that occur during the design phase.

2. Local Elected Officials

The Gila County Board of Supervisors has expressed concern about the final use and appearance of the site. They prefer the site to have a low, unobtrusive fence so the site does not become a highly visible tourist attraction. The Mayor and City Council of Globe may have similar concerns. Local officials should have an opportunity for review and comment on the site design before it is made final.

PDR996.013.10
3. Globe Residents

Some Globe residents strongly opposed the remedial action decision. Agency staff members who were consulted for this plan believe the level of interest and involvement has since decreased, but could possibly increase again during design and construction activities.

4. Media

Media attention is likely to be very high during onsite construction, particularly at the beginning. National as well as regional and local media could be interested.

5. State and Federal Agencies

The State and Federal agencies involved with the site (see the Current Status section) include:

- U.S. EPA
- U.S. Army Corps of Engineers
- Federal Emergency Management Agency
- Arizona Division of Emergency Services
- Arizona Department of Health Services
- Centers for Disease Control (if any health-related issues or activities occur)
- U.S. Forest Service (owner of property adjacent to Mountain View Estates and of borrow pit)

6. State and Federal Elected Officials

State and Federal elected officials have shown interest in the site during the remedial investigation/feasibility study and the relocation process. They can be expected to have a continuing interest during design and construction. A mailing list of interested parties is attached.

PDR996.013.11
COMMUNITY RELATIONS OBJECTIVES

1. Provide information about the scope, schedule, and progress of design and construction activities to Mountain View and Globe residents, local officials, state and Federal elected officials, the media, and other interested parties.

2. Ensure that information is timely, consistent, and in a form that is useful and understandable to the general public.

3. Provide means for interested parties to express their concerns, make inquiries, and obtain further available information if requested.

4. Coordinate community relations activities with other involved state and Federal agencies as appropriate.

5. Monitor public concerns and information needs throughout design and construction activities; modify the community relations plan as necessary to respond to any change in community relations needs.

COMMUNITY RELATIONS TECHNIQUES/TASKS

The following techniques and tasks are designed to meet the objectives defined in the previous section. Community relations tasks are based on the project milestones listed below. Table 1 at the end of this plan shows the schedule for the project milestones and related community relations activities.
PROJECT MILESTONES

- 98% design report submitted by subcontractor to EPA, COE, ADHS, and ADES
- Final agency review conference for 98% design report
- Draft design report released for public review and comment
- Final design report published
- Construction contract awarded
- Start of construction
- Completion of construction

1. Central Information Contact

The following central information contact persons have been established by EPA. Their names, addresses, and telephone numbers will be included in press releases, fact sheets, and other correspondence with interested parties.

- Jere Johnson
  Project Officer
  U.S. EPA Region 9
  (415) 974-7515

- Al Zemsky
  Press Officer
  U.S. EPA Region 9
  (415) 974-8083
2. **Agency Coordination**

Community relations activities will be coordinated with the following state and federal agency contacts:

- **EPA Region 9**  
  Steve Drew, Community Relations Coordinator  
  Jere Johnson, Project Officer  

- **Arizona Department of Health Services**  
  Philip King, Manager, Remedial Action Unit  

- **Arizona Department of Emergency Services**  
  Michael Austin, Globe Asbestos Project Manager  

- **U.S. Army Corps of Engineers**  
  Harvey Grosvenor, Environmental Engineer  
  Paul Dappen, Project Manager  

Fact sheets, press releases, and other public information materials will be reviewed by these agency contacts. This will allow for their input and will also ensure that all involved agencies have consistent, up-to-date information about community relations activities. Agency staff members may also participate in community relations activities such as briefings or the press conference if appropriate.

3. **Mailing List**

A mailing list of interested individuals, agencies, elected officials, organizations, and the media is attached. This list will be updated throughout the project to include other interested parties.

*See mailing list for addresses and telephone numbers.
4. Public Comment Period

A 2-week public comment period will be provided for review of the draft design report. The dates of the comment period will be announced in Press Release A and Fact Sheet A.

5. Responsiveness Summary

A responsiveness summary of the comments received during the above public comment period and the agency response to them will be prepared. It will be attached to the final design report, and will be summarized in Fact Sheet B.

6. Briefing of Local Officials

The Mayor of Globe, the Globe City Council (through the Mayor), and the Gila County Board of Supervisors will be briefed about design and construction activities. The briefings will have three purposes:

- To inform local elected officials of design and construction scheduling, decisions, and activities
- To provide a means for local elected officials to comment and make inquiries
- To monitor community concerns and information needs, as identified by the elected officials

Task A: Send a letter to the Mayor of Globe and the Chairman of the County Board of Supervisors as soon as possible before the draft design report is released. The letter will inform them of the coming report and comment period; will outline other projected design and construction activities; and will provide the names and addresses of the EPA information contacts.
Task B: Send the city and county copies of the draft design report, along with a cover letter that again provides information about the comment period.

Task C: Send the city and county copies of the final design report. This report will include a responsiveness summary that outlines the comments received during the comment period and the agency response to them.

Task D: Brief the city and county by letter or telephone about the construction contract award.

Task E: Brief the city and county by letter or telephone before onsite construction activities begin.

Task F: Brief the city and county when construction is completed.

Local officials will also be briefed as necessary when other significant decisions or activities occur.

7. Information Repositories

Information repositories will be maintained at the following locations:

Globe City Hall
1700 W. Washington Street
Globe, Arizona 85501

Globe Public Library
Broad and Oak Streets
Globe, Arizona 85501
Task A: Place copies of draft design report in repositories.

Task B: Place copies of final design report (including responsiveness summary) in repositories.

Ongoing: Place fact sheets and other written materials in repositories for public review. Provide the name, address, and telephone of the EPA contact persons for further information.

8. Notification of Mountain View Residents

If any onsite activities are conducted before final relocation is completed, residents who own property in Mountain View will be given prior notice by letter. Notification will be coordinated with ADES.

9. Press Releases

Press releases will be the most effective means of providing information to the general public. Press releases will be issued when significant decisions or activities occur.
Task A: Issue a press release to announce availability of draft design report; announce the public comment period; outline coming design and construction activities; and designate information centers and central information contacts.

Task B: Issue a press release to announce availability of the final design report.

Task C: Issue a press release to announce the construction contract award.

Task D: Issue a press release to announce the beginning of onsite construction activities (in conjunction with press conference--Technique 11).

Task E: Issue a press release to announce construction completion.

Additional press releases will be issued during construction as necessary. Press releases will be coordinated with all involved agencies to ensure consistent, complete information about site activities.

10. Fact Sheets

Fact sheets will be prepared to provide more detailed information than press releases. They will be distributed to persons on the mailing list and will be available at the information repositories. They will be written in a style and format that is informative and understandable to the general public.
Task A: Distribute a fact sheet when the draft design report is released. This fact sheet will briefly describe the proposed site design; announce the public comment period; and identify the information repositories and central information contacts.

Task B: Distribute a fact sheet when the final design report is released to describe the final design decisions. This fact sheet will include a short responsiveness summary that outlines the comments received during the public comment period and the agency response to them. A brief schedule of upcoming construction activities will also be included.

Task C: Distribute a fact sheet to announce the beginning of onsite construction and outline construction activities.

Task D: Distribute a fact sheet to announce construction completion and other relevant information.

Ongoing: Prepare additional fact sheets as appropriate to convey information about construction activities.

11. Press Conference

Onsite construction activities are expected to generate considerable media interest. A press conference will be held in Globe before onsite construction begins. This will enable the media to obtain complete, accurate information from qualified spokespersons.
12. **Onsite Information Source**

Information about construction activities will be provided through press releases, fact sheets, briefings of local officials, and the press conference. However, considerable media and community interest is anticipated during onsite activities. An onsite information source will be required to answer questions and to coordinate media activities. A media information area will be designated to eliminate disruptions to construction activities.

The presence of the onsite information source may not be required at all times; this will be evaluated throughout construction activities.
<table>
<thead>
<tr>
<th>Project Milestones</th>
<th>Brief Reports to Public Information</th>
<th>Press Releases</th>
<th>Fact Sheets</th>
<th>Public Comment Period</th>
<th>Responsiveness Summary</th>
<th>Press Conference</th>
<th>On-Site Information Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Design (October 1983)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete 60% Design (5 December 1983)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60% Review Conference (13 December 1983)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start Final Design (14 December 1983)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit 98% Design (8 February 1984)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Review Conference (29 February 1984)</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(19-30 March)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Advertisement (2 April 1984)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid Opening Date (1 May 1984)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract Award Date (15 May 1984)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start Construction (17 July 1984)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Construction (17 December 1984)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PDR996.022.1
AGENCY COORDINATION
MAILING LIST
(GLOBE)

- Ms. Jere Johnson
  U.S. EPA, Region 9
  215 Fremont Street
  San Francisco, California 94105

- Mr. Phil King
  Arizona Department of Health Services
  1740 W. Adams Street
  Phoenix, Arizona 85007

- Mr. Michael Austin
  Program Manager
  Arizona Department of Emergency Services
  5636 E. McDowell Road
  Phoenix, Arizona 85008

- Mr. Harley Grosvenor
  Environmental Engineer
  U.S. Army Corps of Engineers
  AZ-NV Area Office
  2721 North Central Avenue, Rm. 1030
  Phoenix, Arizona 85004-1182

- Mr. Paul Dappen
  Department of the Army
  Omaha District Corps of Engineers
  6014 U.S. Post Office and Courthouse
  Omaha, Nebraska 68102
FEDERAL/STATE AGENCIES
MAILING LIST
(GLOBE)

• Mr. Donald B. Mathis
  Director
  Arizona Department of Health Services
  1740 W. Adams Street
  Phoenix, Arizona 85007

• Mr. Charles Pearson
  Attorney General's Office
  Civil Division
  1275 W. Washington
  Phoenix, Arizona 85007

• Mr. Charles Anders
  Director
  Division of Environmental Health Services
  Arizona Department of Health Services
  1740 W. Adams Street
  Phoenix, Arizona 85007

• Mr. Robert Tanguy
  Director
  Hazardous Materials
  Arizona Department of Emergency Services
  5636 E. McDowell
  Phoenix, Arizona 85008

• Mr. Jim Vieregg
  Attorney General's Office
  Civil Division
  1275 W. Washington
  Phoenix, Arizona 85007

• Centers for Disease Control
  Center for Environmental Health
  c/o James Ruttenber, M.D., Ph.D.
  Superfund Implementation Group
  Chronic Disease Branch
  Special Studies
  Atlanta, Georgia 30333

• Mr. Joseph G. DelMonte
  FEMA
  Building 105
  Presidio of San Francisco
  San Francisco, California 94129
FEDERAL/STATE OFFICIALS
MAILING LIST
(GLOBE)

- Senator Barry M. Goldwater
  4350 E. Camelback Road
  Suite 135F, Camel Square
  Phoenix, Arizona  85018

- Senator Dennis DeConcini
  Arizona Bank Building
  101 North First Avenue, Suite 2850
  Phoenix, Arizona 85003.

- Congressman Eldon Rudd
  6900 E. Camelback Road
  Suite 315
  Scottsdale, Arizona  85251

- Honorable A. V. Hardt
  Arizona State Senator
  Arizona State Legislature
  Senate Wing, Room 311
  1700 W. Washington
  Phoenix, Arizona 85007

- Honorable E. C. Rosenbaum
  Arizona State Representative
  Arizona State Legislature
  House Wing, Room 317
  1700 W. Washington
  Phoenix, Arizona  85007

- Honorable Edward G. Guerrero
  Arizona State Representative
  Arizona State Legislature
  House Wing, Room 335
  1700 W. Washington
  Phoenix, Arizona  85007

- Ms. Nancy Wrona
  OEPAD
  Office of the Governor
  1700 W. Washington
  Phoenix, Arizona  85007

- Mr. George Britton
  Executive Assistant
  Office of the Governor
  1700 W. Washington, 9th Floor
  Phoenix, Arizona 85007
LOCAL AGENCIES/OFFICIALS
MAILING LIST
(GLOBE)

- Mayor and Council
  City of Globe
  c/o Honorable Hank Williams
  Mayor of Globe
  150 N. Pine Street
  Globe, Arizona 85501

- Gila County Board of Supervisors
  Gila County Courthouse
  1400 E. Ash Street
  Globe, Arizona 85501

- Globe Chamber of Commerce
  1450 N. Broad Street
  Globe, AZ 85501

- Administrative Assistant
  Globe City Hall
  150 N. Pine Street
  Globe, Arizona 85501

- Mr. Martin Retrick
  Gila County Health Department
  Box 2880
  Globe, Arizona 85501

- Mr. Robert P. Casillas
  Supervisor
  Gila County Courthouse
  1400 E. Ash Street
  Globe, Arizona 85501
MEDIA
MAILING LIST
(GLOBE)

- Arizona Daily Star
  P.O. Box 26807
  Tucson, Arizona 85726
  Attn: Jane Kay

- Tucson Citizen
  P.O. Box 26767
  Tucson, Arizona 85726
  Attn: Tony Davis

- Silverbell
  P.O. Box 31
  Globe, Arizona 85501
  Attn: Ellen Kretsch

- Phoenix Gazette
  P.O. Box 1950
  Phoenix, Arizona 85001
  Attn: Tony Sommer

- The Arizona Republic
  P.O. Box 1950
  Phoenix, Arizona 85001
  Attn: Carol Sowers

- United Press Int. (UPI)
  P.O. Box 4066
  Commerce Station
  Phoenix, Arizona 85030

- Associated Press
  120 E. Van Buren
  Phoenix, Arizona 85004

- Scottsdale Daily Progress
  P.O. Box 1150
  Scottsdale, Arizona 85252
  Attn: Keith Bagwell

- Editor
  Arizona Capital Times
  P.O. Box 2260
  Phoenix, Arizona 85002

- Editor
  New Times
  P.O. Box 2510
  Phoenix, Arizona 85004
• News Director
  KIKO Radio
  Box 1543
  Globe, Arizona 85501

• News Director
  KSUN Radio
  3003 N. Central #704
  Phoenix, Arizona 85012

• Assignment Editor
  KTVK-TV/Channel 3
  3435 N. 16th Street
  Phoenix, Arizona 85016

• Assignment Editor
  KPNX-TV/Channel 12
  1101 N. Central Avenue
  Phoenix, Arizona 85004

• Assignment Editor
  KAZA-TV/Channel 11
  2445 N. Tucson Blvd.
  Tucson, Arizona 85716

• Assignment Editor
  KAET-TV/Channel 8
  ASU
  Tempe, Arizona 85281

• Assignment Editor
  KPHO-TV/Channel 5
  4016 N. Black Canyon
  Phoenix, Arizona 85017

• Assignment Editor
  KTSP-TV/Channel 10
  511 W. Adams
  Phoenix, Arizona 85003

• Assignment Editor
  KVOA-TV/Channel 4
  Box 5188
  Tucson, Arizona 85703

• News Director
  KGUN-TV/Channel 9
  Box 5707
  Tucson, Arizona 85703
• Assignment Editor
  KOLD-TV/Channel 13
  115 W. Drachman
  Tucson, AZ 85705

• News Director
  KKLT FM/KTAR AM
  P.O. Box 99
  Phoenix, Arizona 85001

• News Director
  KOY Radio
  840 N. Central
  Phoenix, AZ 85004
AMENDMENT TO APPENDIX C

Community Relations Plan

Appendix C, Community Relations Plan ("CRP"), to the Original Superfund State Contract ("Original SSC") for the Mountain View Mobile Home Estates Superfund Site ("Site"), dated September 19, 1984 and attached herewith, describes the history of community relations activities at the Site, community relations objectives, project milestones, and community relations contact information at the time the relocation of residents and construction of the remedy was underway. The purpose of this Amendment to the CRP ("CRP Amendment") is to update the objectives, tasks and agency contact information to be consistent with the long-term operations and maintenance ("Site O&M") activities currently on-going at the Site under State-lead.

This Community Relations Plan is amended as follows:

Community Relations Objectives

- Provide information to the public about the status and protectiveness of long-term operation and maintenance of the Site.
- All other objectives in the 1984 CRP remain the same.

Project Milestones

- Complete annual Project Status Reports, including status of Site O&M and institutional controls, by April 1 of the following year.
- Complete 5-Year Review Reports every five years with the next report due by September 30, 2010.

Agency Project Managers for Site Coordination

- Ed Pond
  Arizona Department of Environmental Quality
  1110 W. Washington Street
  Phoenix, AZ 85007

- Andria Benner
  U.S. Environmental Protection Agency
  Region 9
  75 Hawthorne Street
  San Francisco, CA 94015

Information Repositories

- U.S. Environmental Protection Agency
  Region 9
75 Hawthorne Street
San Francisco, CA 94015

- Arizona Department of Environmental Quality
  1110 W. Washington Street
  Phoenix, AZ 85007

- All other repository information in the 1984 CRP remains the same.
PARTIALLY SCANNED
OVERSIZE ITEM(S)

See document # 214/248 for partially scanned image(s).

For complete hardcopy version of the oversize document contact the Region IX Superfund Records Center at (415) 536-2000
Appendix B   Declaration of Environmental Use Restriction (DEUR), December 2007
When recorded, return to:

Arizona Department of Environmental Quality
Attention: Samantha L. Roberts
1110 West Washington
Phoenix, AZ 85007

DECLARATION OF ENVIRONMENTAL USE RESTRICTION
FOR PROPERTY WITH ENGINEERING CONTROL
AND NON-RESIDENTIAL RESTRICTION

CERCLA National Priorities List (NPL) Site
Mountain View Mobile Home Estates
Globe, Arizona

This Declaration of Environmental Use Restriction ("Declaration"), when recorded, is a covenant that runs with and burdens the Property, binds all owners and owners' heirs, successors and assigns, and inures to the benefit of the Arizona Department of Environmental Quality ("Department") and the State of Arizona.

This Declaration is executed and recorded by Louis B. Trammell, Director, Arizona Department of Emergency Management ("Owner").

DECLARATION

Owner covenants and agrees as follows:

A. Presence of Contamination. Environmental contaminants are present on all of real property located at the Mountain View Mobile Home Estates located on the north side of State Route 70 (SR 70) at the intersection of SR70 and SR77 in Globe, Arizona ("Property")

B. Warranty of Title. Owner is the only owner of, and holds equitable and legal title to, the Property and has authority to execute and record this Declaration.

C. Legal Description. Owner's deed setting forth the legal description of the Property at which the contamination is located is attached and marked "Exhibit 1. The Gila County Assessor parcel numbers for the property are 102-28-014-A and 102-28-014-B.

D. Maps. The location of the Property identified in "Exhibit 1" is depicted on a map attached and marked as "Exhibit 2".

E. Completion of Remediation. The date that remediation, remedial action, corrective action or response action was completed: January 7, 1986.

F. Environmental Contaminant Information. Complete the attached form "Exhibit 3, Environmental Contaminant Information," by providing a description of each environmental contaminant subject to a
remediation, remedial action, corrective action or response action, and the remaining contaminant concentrations. If this is being accomplished pursuant to Title 18, Chapter 7, Article 2, Arizona Administrative Code, Exhibit 3 need include only those concentrations that are above the predetermined residential soil remediation levels in Appendix A, referenced in R18-7-205. For risk assessments, provide the resulting site-specific cumulative excess lifetime cancer risk and hazard index. Indicate exposure pathways which have been eliminated or reduced.

G. Engineering/Institutional Control Statements. Because Owner is using an engineering control and an institutional control to satisfy the requirements of A.R.S. §§ 49-152 or 49-158, Owner agrees to the following:

1. The institutional control limits the use of the Property to non-residential use as defined in A.R.S. § 49-151 where natural persons are not reasonably expected to be in frequent contact with the soil. The engineering control consists of the following:
   - Permanent relocation of subdivision residents;
   - Burial of contaminated mobile homes and other site structures;
   - Fencing of the perimeter of the site;
   - Provide signs identifying the site as restricted to public access;
   - Provide for drainage of storm water thru the site;
   - Grading and consolidation of contaminated soil and asbestos tailings;
   - Capping of contaminated soil, tailings and contaminated structures with a filter fabric liner and two (2) to ten (10) feet of clean fill

2. The engineering control was constructed on January 7, 1986

3. The maintenance requirements of the institutional control are that Owner assure that the restricted area not be subject to residential use as defined by A.R.S. § 49-151. The maintenance requirements of the engineering control are described in the Operation & Maintenance Plan dated November 1986. Owner agrees to maintain the specified maintenance requirements and implement the procedures outlined in the plan which include the following:
   - Conduct semi-annual inspections of the site and after rainfall events of greater than one inch during a twenty-four hour period;
   - Fence maintenance;
   - Storm water open channel maintenance;
   - Storm water subsurface channel maintenance;
   - Maintenance of site vegetation to prevent root penetration of the filter fabric and to reduce fire danger;

4. In order to protect the public health and the environment, the engineering control and the institutional control must remain in place because contaminant levels exceed residential soil standards, and because:
   - To prevent exposure to the buried asbestos, asbestos-contaminated soil, asbestos tailings and asbestos-contaminated structures buried on site;
   - The Centers for Disease Control (CDC) has determined that chrysotile asbestos is both fibrogenic and carcinogenic and is a hazard to human health. Exposure to the contaminated soil and other materials exceeds a $1 \times 10^{-5}$ excess cancer risk;
   - Air quality sampling conducted on the un-capped site exceeded air quality standards
for asbestos;
- In April 1983 the CDC issued a public health advisory for the Mountain View Mobile Home Estates.

5. If any person desires to cancel or modify the engineering control or institutional control in the future, the person shall obtain the Department’s prior written approval. Any modification of the engineering or institutional control without the Department’s prior written approval is void and a violation of this Declaration.

6. Owner hereby grants to the Department and its representatives, authorized agents, attorneys, investigators, consultants, advisors, and contractors the right of access to the Property at all reasonable times to verify that the engineering control and institutional control are being maintained. The Department’s right of access is continuing and runs with the land. If access to the Property is restricted, Owner shall have any barrier to entry opened or removed at the Department’s request.

7. Owner shall incorporate the terms of this Declaration into any lease, license or other agreement that is signed by Owner and that grants a right with respect to the Property. The incorporation may be in full or by reference.

8. Owner agrees to provide a copy of the Engineering Control Plan document dated November 1986 (Operation & Maintenance Plan dated November 1986) to the subsequent purchaser of the property. Additional copies can be obtained through the ADEQ Remedial Projects Section.

H. Engineering Control Plans/Financial Assurance. The engineering control plan and financial assurance mechanism is prescribed pursuant to A.R.S. § 49-152.01. The financial mechanism approved by the Department shall remain in place until an alternate mechanism has been approved by the Department. A subsequent owner shall demonstrate financial assurance pursuant to A.R.S. § 49-152.01(B) within 30 days of the sale or the transfer of the Property. The financial assurance mechanism shall be sufficient to cover the cost of maintaining the engineering control for 30 years and restoring the engineering control if it fails.

I. Periodic Inspections and Reports. Because Owner has elected to use an engineering control and institutional control to satisfy the requirements of A.R.S. §§ 49-152 or 49-158, Owner shall maintain the controls to ensure that they continue to protect public health and the environment, and shall inspect the engineering control at least once each calendar year or more in accordance with the Engineering Control Plan Document (Operation & Maintenance Manual dated November 1986). Within thirty days after each inspection, Owner shall submit to the Department a written report that:

1. Describes the condition of the engineering control and the status of the institutional control and uses the inspection checklist contained in the Operation & Maintenance Manual dated November 1986;
2. States the nature and cost of all restoration made to the engineering control during the calendar year;
3. Includes current photographs of the engineering control; and
4. Describes the status of the financial assurance mechanism prescribed by A.R.S. § 49-152.01, and a certification that the financial assurance mechanism is being maintained.
J. **Additional Information.** More detailed information on the remediation is maintained and available at the Arizona Department of Environmental Quality, located at 1110 W. Washington Street, Phoenix, Arizona 85007.

K. **Release of this Declaration.** Request for the release of this Declaration pursuant to A.R.S. §§ 49-152(D) or 49-158(L) may be filed by owners holding all equitable and legal title to the Property or having legal authority to file the request. The release portion of the fee specified in R18-7-604 was [was not] circle one] paid for this Declaration. If Owner elected, pursuant to R18-7-605, not to pay the release portion with the original fee, a release will not be granted until the Department receives payment of the release portion of the fee specified in R18-7-604, which is in effect at the time of the release request.

L. **Sale or Transfer of the Property.** At least five working days before the sale or other transfer of title to or an interest in the property or any portion of the property, the Owner and buyer or transferee shall provide written notice and written commitment as required by A.R.S. §49-152.01(C).

M. **Failure to Comply.** If Owner fails to comply with this declaration or to implement the Engineering Control Plan document dated November 1986 (Operation & Maintenance Manual dated November 1986), the Department shall give Owner written notice by certified mail of the failure. If Owner fails to take the action specified in the Department’s notice, the Department may issue an order pursuant to A.R.S. §§ 49-152.02 and 49-158(I) and take any other action allowed by law.

N. **Related Rules.** If this Declaration is being used to comply with R18-12-263.01(B)(4)(d), the remaining information required by that rule is attached as Exhibits: *Not Applicable*
ARIZONA DEPARTMENT OF EMERGENCY MANAGEMENT,
an agency of the State of Arizona,

by: Louis B. Trammell, Director
Arizona Department of Emergency Management
5636 East McDowell Road
Phoenix, Arizona 85008

This Declaration of Environmental Use Restriction was subscribed and sworn before me this 3rd day of October, 2007, by Louis B. Trammell, Director of the Arizona Department of Emergency Management.

ROBERT E. ROONEY
Notary Public - Arizona
Maricopa County
Expires 04/15/2011

My commission expires: 4/15/2011
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, an agency of the State of Arizona,

by: Amanda E. Stone
Director, Waste Programs Division
Arizona Department of Environmental Quality

This Declaration of Environmental Use Restriction was subscribed and sworn to before me this 1st day of November, 2007, by Amanda E. Stone, Director of the Waste Programs Division, on behalf of Arizona Department of Environmental Quality:

FELICIA M. KRYWICKI
NOTARY PUBLIC - State of Arizona
MARICOPA COUNTY

My commission expires: Jan 19, 2009
EXHIBIT 1

Legal Description:

That portion of Section 5, Township 1 South, Range 16 East, Gila and Salt River Meridian (Unsurveyed), Gila County, Arizona, patented as Mineral Survey No. 4523, Arizona, on July 13, 1962, known as Central, Central No. 1 and Central No. 2 mill sites, and containing the following parcels of land:

Lots 1 – 44 and tracts A, B and D, Mountain View Mobile Home Estates, according to map No. 486, records of Gila County, Arizona.

Lots 45 – 50, replat of Tract C of Mountain View Mobile Home Estates subdivision, according to map 556, records of Gila County, Arizona.

That portion of Lot 1 of said Section 5 recorded in docket 637, page 243, records of Gila County, Arizona, described as follows:

Beginning at the southwest corner of said Lot 1,
Thence North 20°44'28" East along the West line of said Lot 1, a distance of 214.75 feet;
Thence South 58°28'58" East, a distance of 152.68 feet;
Thence South 20°44'28" West, parallel to the aforesaid West line, a distance of 192.75 feet to the South line of said Lot 1;
Thence North 67°26'21" West along said South line, a distance of 50.14 feet;
Thence North 66°25'21" West along said South line, a distance of 100 feet to the point of beginning.

That portion of Lot 1 of said Section 5 recorded in docket 625, page 100, records of Gila County, Arizona, described as follows:

Commencing a the Southwest corner of said Lot 1,
Thence North 20°44'28" East along the West line of said Lot 1, a distance of 296.49 feet to a point on a nontangent curve having a radius of 995.65 feet, said point being the point of beginning;
Thence Easterly along said curve, a distance of 150.57 feet;
Thence South 20°44'28" West, parallel to the aforesaid West line, a distance of 98.92 feet;
Thence North 58°28'58" West, a distance of 152.68 feet to the aforesaid West line;
Thence North 20°44'28" East along the aforesaid West line, a distance of 81.74 feet to the point of beginning.
Know All Men by These Present:

WHEREAS, on the 21st day of January 1982 notice according to law was published in the Arizona Silver Belt a newspaper published in the County of Gila, State of Arizona, that application for a Treasurer's Deed to the premises assessed to Capper Real & Dev. Corp. hereinafter described had been made by the Grantee named herein, and that, unless redemption be had before the 10th day of May 1982 a Treasurer's Deed will issue to the said Grantee, and

WHEREAS, said property has not been redeemed from such sale, I therefore, pursuant to said notice and in conformity with the law have conveyed, and do hereby convey, unto said

State of Arizona

the following described premises situated in the County of Gila, State of Arizona, to wit:

Parcel Number 102-30-045 Mountain View Mobile Home Estate Tract A.

IN WITNESS WHEREOF, I, Priscilla M. L. Knechey Treasurer

of the County of Gila, State of Arizona, by virtue of Law, have hereunto set my hand and seal this 11th day of May 1982.

(Seal)

Treasurer of Gila County

STATE OF ARIZONA

County of Gila

This instrument was acknowledged before me this 11th day of May 1982, by Priscilla M. L. Knechey as Treasurer of the County of Gila, State of Arizona, who then and there stated to me that he executed the same for the purposes and consideration herein expressed.

My Commission Expires January 7, 1985
MOUNTAIN VIEW MOBILE HOME ESTATES

LOTS 1-44, TRACTS A, B AND D, MOUNTAIN VIEW MOBILE HOME ESTATES, ACCORDING TO MAP 486, RECORDS OF GILA COUNTY, ARIZONA; LOTS 45-51, TRACT C OF MOUNTAIN VIEW MOBILE HOME ESTATES SUBDIVISION, ACCORDING TO MAP 556, RECORDS OF GILA COUNTY, ARIZONA; TOGETHER WITH GILA COUNTY ASSESSOR'S PARCEL NUMBERS 102-28-014A AND 102-28-014B, LOCATED IN SECTION 5, T1S, R16E (UNSURVEYED) OF THE GILA AND SALT RIVER MERIDIAN, GILA COUNTY, ARIZONA
**EXHIBIT 3**

**ENVIRONMENTAL CONTAMINANT INFORMATION**

<table>
<thead>
<tr>
<th>Contaminant Name</th>
<th>Chemical Abstract No.</th>
<th>Concentration(1)</th>
<th>Exposure Pathway(s)(2)</th>
<th>Non-residential(3)</th>
<th>Residential(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Carc</td>
<td>Non-carc</td>
</tr>
<tr>
<td>Chrysotile and other forms of Asbestos</td>
<td>12001-29-5</td>
<td>&gt;600,000 mg/kg 44 subsurface samples ranging from 50,000 to 600,000 mg/kg asbestos</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chrysotile and other forms of asbestos</td>
<td>12001-29-5</td>
<td>86 surface samples ranging from 10,000 mg/kg to &gt;200,000 mg/kg asbestos</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total

*all exposure pathways have been eliminated through the engineering control cap*

(1) Units are mg/kg. The concentration is the maximum detected at the property, or the statistically determined value representative of the site-specific contaminant distribution in the area of concern. This value is not the exposure point determined by risk assessment methodology.

(2) Indicate all applicable complete exposure pathways as “O” for oral ingestion, “D” for dermal contact, and “I” for inhalation. One or more pathways may be eliminated by an institutional control, other than a restriction to non-residential uses. All three pathways are considered complete when the only restriction is limiting use of the Property to non-residential use.

(3) If a risk assessment has been conducted, list the calculated non-residential risk or hazard quotient for each contaminant. At the bottom of the carcinogen (carc) column, provide the cumulative excess lifetime cancer risk. At the bottom of the non-carcinogen (non-car) column, provide the hazard index.

(4) Optional information, unless one of the following conditions occur:

(a) A risk assessment evaluation for residential uses is required by the program;
(b) A risk assessment evaluation is conducted for residential use which requires implementation of any land use controls; or
(c) The Property use may change from non-residential to residential in the reasonably foreseeable future, and no risk assessment was conducted for residential use. Standard default residential exposure assumptions must be used to determine values for this column.
December 19, 2007

Hand Delivered

Judy Smrdel
Office Manager for the Gila County Recorder
1400 E. Ash St.
Globe, AZ 85501

Re: Recording of Declaration of Environmental Use Restriction for Mountain View in Globe Arizona.

Dear Ms. Smrdel,

The Arizona Department of Environmental Quality (ADEQ) has enclosed the signed Declaration of Environmental Use Restriction (DEUR) for the Mountain View site located on the north side of State Route 70 (SR70) at the intersection of SR70 and SR77 in Globe, Arizona.

On December 18, 2008, ADEQ’s contractor submitted the new surveyed plat map for this area to the Gila County Recorder’s office for recording. The new plat became Map 790. Please note this new map was a replat of Lot 1-44 of Plat Map 486, and Lots 45-51 and Tract C of Plat Map 556. Therefore, this signed DEUR is for the area known as Map 790 which use to be Lot 1-44 of Plat Map 486, and Lots 45-51 and Tract C of Plat Map 556.

Thank you very much for your time and effort in recording this DEUR for ADEQ. Should you have any questions or concerns please fill free to contact me at 602-771-4411.

Sincerely,

Julie Kiemenschneider
Manager
Remedial Projects Unit, ADEQ
Mountain View Mobile Home Estates 2010 Five Year Review

Appendix C  Public Notice of Five Year Review, April 2010
The United States Environmental Protection Agency (EPA) has begun the fourth five-year review of cleanup actions undertaken at the Mountain View Mobile Home Estates Superfund Site, in Globe, Arizona. The review will evaluate whether the cleanup actions for the Site remain protective of human health and the environment.

THE REVIEW PROCESS
When EPA's cleanup remedy leaves some waste in place, the Superfund law requires an evaluation of the protectiveness of remedial systems every five years, until the Site has been cleaned up sufficiently to allow unrestricted access. The purpose of the five-year review is to understand how the constructed remedy is operating and to measure the progress towards achieving the Site's cleanup objectives.

Specifically, EPA will look at the containment of the buried asbestos, the integrity and maintenance of the cap covering the buried asbestos, the application and monitoring of legal documents regarding property restrictions, and the integrity of fencing and barriers. The EPA project manager will talk with the Arizona Department of Environmental Quality (ADEQ) on-site manager, other regulatory authorities, EPA's scientific experts, and interested members of the public.

A copy of the final report will be placed in the information repository, and a notice will appear in the local paper announcing the completion of the Five-Year Review Report.

SITE HISTORY
The Mountain View Mobile Home Estates Site was formerly used for milling of asbestos and then for a residential mobile home community. The Site was placed on the National Priorities List (NPL) in 1983 to address health risks posed by the exposed asbestos tailings on the property. In 1983, EPA selected a remedy which included the permanent relocation of the mobile home residents, the demolishing and burying on-site of the homes and other structures, covering the asbestos contaminated soils, fencing and deed restrictions.

COMMUNITY INVOLVEMENT
If you have any issues or concerns about the operation and maintenance of remedy at the Mountain View Mobile Home Estates Superfund Site cleanup, EPA would like to talk with you. Please contact Andria Benner, EPA Remedial Project Manager, at the number below.

FOR MORE INFORMATION
To learn more about the Mountain View Mobile Home Estates, please visit EPA's website at: www.epa.gov/region9/MountainViewMobileHome, or contact the EPA representatives listed below.

CONTACT INFORMATION:
Andria Benner
Remedial Project Manager
75 Hawthorne St. (SFD-6-2)
San Francisco, CA 94105
(415) 972-3189
benner.andria@epa.gov

David Cooper
Community Involvement Coordinator
75 Hawthorne St. (SFD-6-3)
San Francisco, CA 94105
(800) 231-3075 or (415) 972-3245
cooper.david@epa.gov
Affidavit of Publication

State of Arizona
County of Gila

Sherri J. Davis, or her authorized representative being first duly sworn deposes
and says: That she is the General Manager of the Arizona Silver Belt, San Carlos
Apache Moccasin, and the Gila County Advantage newspapers, located at 298
North Pine Street, Globe, Arizona 85501, or mail: P.O. Box 31, Globe, Arizona
85502.

The above stated newspapers are published weekly in Globe, in the State of Ari­
zona, County of Gila and that the following described legal, or _v_advert­
ising was duly published.

PUBLIC NOTICE
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BEGINS THE FOURTH FIVE-YEAR REVIEW OF CLEANUP AT THE
MOUNTAIN VIEW MOBILE HOME ESTATES SUPERFUND SITE
The United State's Environmental Protection Agency (EPA) has begun the fourth five-year
review of cleanup actions undertaken at the Mountain View Mobile Home Estates Super­
fund Site, in Globe, Arizona. The review will evaluate whether the cleanup actions for
the Site remain protective of human health and the environment.

A printed copy of said legal or advertising is attached hereto and was published in
a regular weekly edition of said newspaper (and not a supplement thereof) for
_1_ consecutive weeks in the _v_ Arizona Silver Belt newspaper, and/or the
San Carlos Apache Moccasin newspaper, and/or the Gila County Ad­
vantage. The dates of
publication being as follows, to wit:

April 14, 2010

Sherri J. Davis
General Manager

State of Arizona )
) ss:
County of Gila )

The foregoing instrument was acknowledged before me April 14, 2010, by Sherri
J. Davis.

Notary Public

My Commission Expires:
December 31, 2011
to join them for an Open House Carolyn Cox. For example, it had learning experience in 2009.
Mountain View Mobile Home Estates 2010 Five Year Review

Appendix D  Community Interview Questionnaire
Mountain View 5 Year Review Questions

General Public:
Name:
Title/position:
Date:

1. What is your overall impression of the closed Superfund site?

2. Is the remedy (closed and capped landfill) functioning as expected?

3. Are you aware of any community concerns regarding the site or its operation and maintenance?

4. Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details.

5. Do you think there may be any opportunities for future reuse? Do you have any comments, suggestions or recommendations?

6. Do you have any comments, suggestions, or recommendations regarding the site’s management or operation?
7. Are you familiar with the EPA or ADEQ web sites? Do you know where to find information on the Mountain View Mobile Estates site?

8. Are you aware of the information repositories for the site? Have you ever used them to find information for the site?

9. Have you contacted ADEQ or EPA in the past to inquire about the site? If so, did you feel that your questions or concerns were answered to your satisfaction?

10. What is the best way for EPA or ADEQ to communicate with you about this site in the future?

11. Is there anyone else that you think might be useful for us to talk with about the site?
Mountain View Mobile Home Estates 2010 Five Year Review

Appendix E  Site Overview Fact Sheet Announcing Five Year Review, July 2010
Five Year Review Underway

The United States Environmental Protection Agency (EPA) is conducting a five-year review of the soils cleanup remedy that was completed in 1985 at the former Mountain View Mobile Home Estates Superfund Site in Globe, Arizona. The purpose of the review is to evaluate whether the remedy in place remains protective of human health and the environment.

EPA is requesting public involvement in the review process. See contact information on other side if you would like to relay information to EPA about the site.

Site Background

The 17-acre Mountain View Mobile Home Estates Superfund site is located on the eastern edge of the City of Globe, Arizona, where Highway 70 meets State Route 77. The property was once the home of the former Metate Asbestos Corporation's chrysotile asbestos mill.

The site was subsequently used as a mobile home park from the period of 1973 until 1979 when asbestos contamination was discovered by local health officials while inspecting the sewage treatment plant for the mobile homes. Asbestos mill tailings had been used as fill material and had then been partially covered with top soil. Small piles of asbestos mill tailings were found near the abandoned mill structures and the adjacent railroad tracks. The air and soils were contaminated with asbestos that posed a potential health risk to the residents of the mobile homes on the site.

In 1980, the State of Arizona provided temporary housing for the 100 to 130 residents while the site was being decontaminated. The old mill buildings were demolished, and topsoil was used to cover the contaminated soil. However, after the residents returned to their homes, wind, water, and public activity soon eroded this soil covering, which again exposed the asbestos tailings.

Five-Year Review

When hazardous substances, pollutants, or contaminants remain at a site, the Superfund law requires that the remedy be reviewed every five years. The Mountain View Mobile Home Estates Superfund site has undergone such reviews three times since the site was cleaned up. The site is now undergoing its fourth five-year review. During the review, EPA studies information about the site, conducts interviews and completes a site inspection. The methods, findings and conclusions of the review are documented in a five-year report and made available to the public at the site's information repository. A summary of the results of this 2010 five-year review will also be published in the Silver Belt newspaper.
Therefore, in 1983, EPA selected the following site remedy: permanently relocating the mobile home residents; burying and capping the asbestos contaminated soils at the site; demolishing and burying all the homes and sewage treatment plant on-site; covering the site with a filter fabric; placing clean soil on top of the site; fencing the area; and periodically inspecting and maintaining the site. Permanent relocation of all residents was completed in 1985, and ownership of the purchased property was transferred to the State. The State (Arizona Department of Environmental Quality) through a contractual agreement with EPA is responsible for the long term operations and maintenance (O&M) of the remedy. In the intervening years, ADEQ has been maintaining the site, including conducting periodic inspections to confirm that the buried asbestos remains capped and in place and that the perimeter fencing and signage is in good condition, so the public cannot access the site. In 1988, the site was deleted from EPA’s Superfund list of contaminated sites, the National Priority List (NPL). EPA’s initial five-year review was conducted in 1991, followed by a second review in 1999 and a third in 2005. EPA and the State of Arizona determined during each of these prior reviews that the cleanup remedy for the site continues to be protective of public health and the environment and that no further cleanup actions are required.

In 2008, EPA completed a reuse assessment for the site that evaluated the potential for redevelopment taking into consideration the constraints necessary to maintain the integrity of the cap over the buried asbestos. In the future, ADEQ will continue to maintain and monitor the site and the Agencies will continue to conduct five-year reviews as long as hazardous waste remains buried on the property.

For More Information

Copies of the cleanup decision-making document (Record of Decision or ROD), the three previous Five-year Reviews, and the site’s Reuse Assessment are located at the information repositories listed below. For further information or to relay any information that may be valuable for this review, please contact one of the EPA representatives listed below.

**Globe Public Library**
339 South Broad Street
Globe, AZ 85501-2607
(928) 425-6111

**EPA Superfund Records Center**
95 Hawthorne St.
San Francisco, CA 94105
(415) 536-2000

[Weblink for EPA Site Overview on Mountain View Mobile Home Estates](http://www.epa.gov/region09/MountainViewMobileHome)

Contact Information

**Andria Benner**
Remedial Project Manager
75 Hawthorne St. (SFD-6-2)
San Francisco, CA 94105
(415) 972-3189
benner.andria@epa.gov

**David Cooper**
Community Involvement Coordinator
75 Hawthorne St. (SFD-6-3)
San Francisco, CA 94105
(800) 231-3075 or (415) 972-3245
cooper.david@epa.gov
Mountain View Mobile Home Estates 2010 Five Year Review

Appendix F  Community Interview Documentation
COMMUNITY INTERVIEW DOCUMENTATION
MOUNTAIN VIEW MOBILE HOME ESTATES – 2010 FIVE-YEAR REVIEW

Interviews were conducted in person on July 29-30, 2010, by David Cooper, EPA Community Involvement Coordinator, and Andria Benner, EPA Remedial Project Manager, with the following stakeholders in conjunction with the Mountain View Mobile Home Estates Five Year Review Report.

Larry Alderman, Globe Councilman, District 6
Ellen Kretsch, Director, Globe-Miami Regional Chamber of Commerce & Economic Development Corp.
Larry LeCompte, Manager, Cal-Chem (former Jaquays Asbestos Mill Site)
Bill Long, Realtor, Globe
Jerry McCreary, Special Projects, Gila Community College, Globe
Fernando Shipley, Mayor, City of Globe
Holly Sow, Arizona Silver Belt Newspaper
Terrence Wheeler, Globe Councilman, District 1
Melissa Woodall, Executive Director, Southern Gila County Economic Development Corp.

VIA PHONE

Richard Haliburton, Sun Valley Land Company
Appendix G   Planning for the Future: Reuse Assessment, November 2008
Planning for the Future:
Reuse Assessment for the Mountain View Mobile Homes Estate Site
Globe, Arizona
FINAL

February 2009
EPA Region 9
Superfund Redevelopment Initiative

funded by
United States Environmental Protection Agency (EPA)

prepared for
Arizona Department of Environmental Quality
City of Globe

prepared by
E² Inc.
Forward

EPA's primary responsibility at Superfund sites is to ensure the protection of human health and the environment. Consideration of a site's potential future use is an important part of this responsibility under the National Contingency Plan (NCP). The Superfund Redevelopment Initiative (SRI) was created by EPA in 1999 to help communities and stakeholders in their efforts to return environmentally impaired sites to protective and productive use. Conducting a reuse assessment that engages site owners and other stakeholders in evaluating future use options for a site can help facilitate site stewardship and support the long-term effectiveness of remedy.
**Table of Contents**

I. Introduction                                    Page 3  
II. Reuse Goals and Remedial Design Objectives    Page 4  
III. Site Considerations                          Page 8  
IV. Future Use Scenarios                          Page 14  
V. Reuse Considerations and Recommendations       Page 17  

**List of Figures**

- Figure 1 - Site Context Map                      Page 2  
- Figure 2 - City of Globe Zoning Map              Page 5  
- Figure 3 - Remedial Components Map               Page 7  
- Figure 4 - Depth of Contamination                Page 9  
- Figure 5a - Average Depth of Cover               Page 10  
- Figure 5 - Depth of Cover                        Page 11  
- Figure 6 - Site Cross Section                    Page 12  
- Figure 7 - Grade Analysis                        Page 13  
- Figure 8 - Zoning Setbacks                       Page 14  
- Figure 9 - Potential Development Areas           Page 15  
- Figure 10 - Grading Options                      Page 16  

View of the Site's drainage features
Figure 1: Mountain View Mobile Home Estates Site is located to the east of downtown Globe, AZ. Aerial map Source: Google Earth, 2008
I. INTRODUCTION

Mountain View Mobile Home Estates (Site) is a 17-acre deleted National Priorities List site located outside the City of Globe, approximately 75 miles East of Phoenix. The Site is owned by the State of Arizona, and both the State and the City of Globe share an interest in returning the Site to productive use. Due to the surrounding mountainous terrain and abundance of federally owned land, the City of Globe has very little industrial-zoned land available to diversify the local economy. The Site could offer a viable economic development opportunity given the location on Highway 70 at the junction of Route 77.

The purpose of this reuse assessment is to evaluate the Site’s future use potential and identify a reasonable development scenario to inform near term Site planning efforts for EPA Region 9, the Arizona Department of Environmental Quality (ADEQ) and the City of Globe. This report summarizes the findings of the reuse assessment including, reuse goals, current development restrictions, market and zoning considerations, site features, future use scenarios and an outline of reuse considerations and potential next steps.

Entrance to the Site from Highway 70
II. REUSE GOALS and REMEDIAL DESIGN OBJECTIVES

In August 2008, E² Inc. conducted a Site visit to tour the Site and meet with the primary stakeholders. During initial discussions, EPA Region 9, ADEQ and the City of Globe outlined the following set of reuse goals:

Reuse Goals

- Diversify the local economy
- Improve community relations
- Minimize remedy disturbance
- Provide long-term stewardship
- Protect human health and the environment

While EPA Region 9, ADEQ and the City of Globe agree that returning the Site to productive reuse would benefit the Site and the community, all agree that development of the Site should not occur at the expense of the protection of human health and the environment. After discussing the range of potential development scenarios, from no remedy disturbance to unrestricted remedy disturbance, all parties agreed to explore a future use scenario that requires minimal to no remedy disturbance to minimize construction costs, construction management issues and community concerns. Therefore, this assessment focuses on identifying a minimal disturbance future development scenario that could offer a realistic market option for the City of Globe to pursue and return the Site to productive reuse.

Zoning and Market Considerations

The City of Globe has identified a preference for light industrial future use. The Site is currently zoned “intermediate commercial” which allows retail sales, office buildings and health services, but restricts all industrial uses. Globe includes a moderate amount of commercially zoned land, but currently no light industrial land and very little general industrial land. If the City of Globe would like to pursue a light industrial reuse scenario, they may need to coordinate with the State to rezone the property accordingly.

A preliminary market analysis indicated that the current market value of light industrial land in this location might run between $125,000 and $175,000 per acre. This land value could offer a valuable incentive to pursue a feasible reuse scenario for the Site, provided that development costs do not significantly exceed what would be expected at a site without contamination issues. Pursuing a future use scenario that minimizes remedy disturbance could help manage construction costs and preserve this incentive of below market value land.

<table>
<thead>
<tr>
<th>Zoning</th>
<th>Permitted Uses</th>
<th>Restricted</th>
<th>Current Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-2* Intermediate Commercial</td>
<td>Retail sales</td>
<td>All industrial uses</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>Office buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-3 Central Commercial</td>
<td>Retail sales</td>
<td>All industrial uses</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>Office buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food establishments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-1 Light Industrial</td>
<td>Manufacturing</td>
<td>Certain uses require</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Warehouses</td>
<td>conditional use permit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-2 General Industrial</td>
<td>Any use permitted in the</td>
<td>Certain uses require</td>
<td>Minor</td>
</tr>
<tr>
<td></td>
<td>M-1, C-2, or C-3 districts</td>
<td>conditional use permit</td>
<td></td>
</tr>
</tbody>
</table>

*current Site zoning
Figure 2: City of Globe Zoning Map
**Remedial Considerations**

As discussed previously, any future use of the Site must support the remedial objectives which include containment of the asbestos located under a soil and gravel cap throughout the Site. The remedial components of the Site are shown in Figure 3, and include a fence, a barrier fabric capped with a 24-inch soil and 3-inch gravel cover, plus surface and subsurface drainage features to protect the cap from on-site and off-site erosion.

Current development restrictions are outlined in page nine of the Operations and Maintenance Manual included in the Superfund State Contract. Some of the significant restrictions include:

- No excavation below the fabric liner;
- Footings or foundations allowed only within or on top of the two-foot cover;
- Utilities allowed only within or on top of the two-foot cover; and
- Impervious areas must include drainage conveyance to protect the cover.

Additionally, the Declaration of Environmental Use Restriction (DEUR) recorded with the property deed requires that the Site’s engineering and institutional controls remain in place and does not permit residential uses.

Given these development restrictions, the Site analysis summarized in the next section evaluates extent of contamination, depth of cover and grades to identify relatively flat areas that could be developed with the least amount of grading.
Figure 3: Remedial Components
III. SITE CONSIDERATIONS

E² Inc. evaluated remedy design plans, as-built site plans and the RI/FS\textsuperscript{1} to develop a site analysis of access and infrastructure, contamination, depth of cover and grades. This section describes the findings of this analysis in more detail.

Access and Infrastructure
As indicated in figure 3, the Site’s main access is located off Highway 70 with a secondary access located on the western boundary. The status and conditions of access easements across the adjacent commercial property is unknown at this time. Additional access if desired would need to be negotiated, and the proximity of the Site to the junction of US Highway 70 and State Route 77 will likely be a consideration.

Potable water is available to the Site as indicated by the existing fire hydrant. No public sewer is available to the Site. Given the restrictions against disturbing the remedy, sewer options such as an above grade holding tank or composting system would likely need to be considered.

The current drainage features include a concrete-lined surface swale and two subsurface drainage pipes. These conveyance systems are considered part of the remedy as they protect the cover from erosion from on-site and off-site drainage. The open drainage channel is approximately 24 feet wide and four feet deep. Given these substantial dimensions, converting the swale to a subsurface system is unfeasible without disturbing the cover system and incurring significant costs. As such the drainage conveyance systems tend to divide the Site into three distinct properties:

1) the property southwest of the drainage swale,
2) the central portion between the swale and the drainage pipe discharging near the main Site access, and
3) the remaining property east of the main access.

An active rail borders the back of the Site along the north edge of the property boundary. However, due to the grades of the Site discussed in more detail later, creating a rail spur to the Site with a level loading zone is likely impractical and cost-prohibitive.

Contamination
The RI/FS includes soil boring locations that document the extent of contamination on Site prior to the remedy. Figure 4 shows the boring locations color coded based on depth of contamination. The boring samples indicate that contamination was located throughout the Site at depths up to eleven feet. In reviewing the remedial design plans, the remedy did not include consolidating all Site contamination, and therefore contamination likely remains throughout the Site just below the cover system.

\textsuperscript{1} Maitland-Hydro Joint Venture, January 1986 “As Builts,” Sheets 1-8; Cella Barr Assoc./U.S. Army Corps of Engineers, March 1985, Sheets 1-27; RI/FS, May 1983, Figure B-1 Boring Locations and Results
Figure 4: Depth of Contamination
Depth of Cover

The depth of cover specified in the remedy documents is 24 inches of soil plus 3 inches of gravel. Figure 5 illustrates the depth of cover at construction completion. \(E^2\) Inc. calculated these depths by subtracting the filter fabric elevations from the finished grade elevations prior to adding the gravel cover as recorded in the 1986 as-built documents. This figure illustrates that the majority of the Site contains a two-foot cover, and in several locations the cover may actually be less than two feet. Figure 5a shows depth of cover less than three feet and greater than three feet. There are only a few isolated locations, for example along the drainage conveyance pipe, where the cover is deeper than two feet. This minimal depth of cover indicates that very little grading can occur without compromising the filter fabric.

The as-built records show that the 24 inches of clean fill was compacted to 90% compaction standards and the 3-inch gravel cover was compacted to 95% compaction standards. Given these compaction results, a compaction study is deemed unnecessary at this time.

Figure 5a: Average Depth of Cover
Figure 5: Depth of Cover
III. SITE CONSIDERATIONS (continued)

Grades
The Site slopes from north to south, from the rail line to the road, at an average grade of five percent. As the cross section in figure 6 illustrates, considerable fill would be needed to create a level building pad for most of the Site.

However, the grade analysis shown in figure 7 highlights that there are pockets of relatively level grade at less than three percent. The grade analysis characterizes the Site in terms of grades five percent or greater, grades of three to five percent, and grades less than three percent. The majority of the grades at less than three percent occur in the southwest portion of the property near the highway.
Figure 7: Grade Analysis
IV. FUTURE USE SCENARIOS

Potential Development Areas
Based on the Site analysis, E² Inc. developed a future development scenario that would minimize remedy disturbance on the Site. Figure 9 outlines four potential development areas with conceptual building pad footprints. Potential building pad footprints were identified as areas with contiguous level grade (defined as three percent or less) with adjacency to the highway for potential access. Adding a buffer to each of the building pads creates development areas B, C and D. These potential development areas would require less grading and fill to create level development pads. Development area “A” also outlined in the figure has steeper grades, but was identified based on the existing access. Area A could potentially provide parking or staging for Area B.

Note that these potential development areas are conceptual, and intended to provide a starting point for outlining more detailed proposals. However, in general, the potential development areas range in size from approximately ½ acre to 1-½ acres with building footprints ranging from approximately 5,000 square feet to 35,000 square feet as summarized below:

<table>
<thead>
<tr>
<th>Development Area</th>
<th>Acreage</th>
<th>Building footprint</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>¾ acre</td>
<td>None</td>
<td>Potential easement</td>
</tr>
<tr>
<td>B</td>
<td>1 acre</td>
<td>20,000 sf</td>
<td>None currently</td>
</tr>
<tr>
<td>C</td>
<td>1½ acres</td>
<td>33,400 sf</td>
<td>None currently</td>
</tr>
<tr>
<td>D</td>
<td>½ acre</td>
<td>4,800 sf</td>
<td>Existing access</td>
</tr>
</tbody>
</table>

While development area D has an existing access route, access would need to be confirmed for development area A, and access would need to be negotiated if new parcels were created for development areas B and C.

In summary, a realistic development scenario might consider the Site in terms of three to four separate parcels ranging in size from ¼ acre to 1-1/2 acres. These parcels could be operated by one business or three separate businesses.

Given these potentially smaller development areas, zoning setbacks could further reduce possible building footprint zones. The zoning setbacks highlighted in figure 8 illustrate that setbacks for heavy industrial zoning could significantly reduce the building footprints for development areas A and B.

Figure 8: Zoning Setbacks
Figure 9: Potential Development Areas
Grading Options
To further minimize construction costs and potential disturbance to the remedy, E² Inc. explored several grading options including a) full cut, b) balance cut and fill, and c) clean fill for a 150-foot by 150-foot building. Grading options need to be carefully considered to limit cost as well as remedy disturbance. These options are further described below and in the summary table.

Option A
A full cut scenario with a 150-foot by 150-foot prototypical building would require a minimum of 972 cubic yards of contaminated soil to be hauled to an appropriate disposal facility. This scenario could cost an estimated $86,000 given a local estimate of $88 per cubic yard of contaminated soil. This estimate does not include costs associated with air quality monitoring and implementing a health and safety plan.

Option B
The balance cut and fill option would require moving asbestos on site for buildings greater than 100 feet wide north to south. To balance cut and fill for the same sized prototypical building, an estimated 300 cubic yards of contaminated soil would need to be moved on Site and capped with a building pad. Again, this option would include costs associated with air quality monitoring and implementing a health and safety plan.

Option C
The clean fill option for the prototypical building would require a minimum of 1,800 cubic yards of clean fill, which could cost approximately $40,000 given a local clean fill estimate of $22 per cubic yard. This estimate does not account for fill needed for staging, vehicular access, footings and utilities. This option would likely be the most cost-effective given the reduced construction management costs that could be associated with exposing the on-site contamination.

Summary of Grading Options and Costs
Estimates for a 150-foot x 150-foot building on 3% grade

<table>
<thead>
<tr>
<th>Grading Options</th>
<th>Cubic yard estimate</th>
<th>Unit cost estimate (per cubic yard)</th>
<th>Estimated cut and fill cost</th>
<th>Additional monitoring and safety costs</th>
<th>Estimated total costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Full cut</td>
<td>972</td>
<td>$88</td>
<td>$86,000</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>B) Balance cut and fill</td>
<td>300</td>
<td>NA</td>
<td>NA</td>
<td>medium</td>
<td>medium</td>
</tr>
<tr>
<td>C) Fill only</td>
<td>1800</td>
<td>$22</td>
<td>$40,000</td>
<td>low</td>
<td>low</td>
</tr>
</tbody>
</table>

Figure 10: Grading Options
V. REUSE CONSIDERATIONS AND RECOMMENDATIONS

In summary, given the Site’s prime location adjacent to Highway 70, the need for additional light industrial in the community, and the relatively high market value of light industrial land, the Mountain View Mobile Home Estate Site could be returned to productive reuse with the right development proposal. A reasonable future use of the Mountain View Mobile Home Estates Site could focus on several smaller parcels, ranging from ¼ acre to 1-1/2 acres, adjacent to the highway. Targeting existing level areas of the site with grades three percent or less could minimize construction costs, construction management issues associated with remedy disturbance and community concern. This section outlines additional reuse considerations and potential next steps for returning the Site to productive reuse.

Construction Management
Due to the contamination on Site, any development will need a health and safety plan, as well as an air quality monitoring plan. The degree of monitoring required will depend on the level of disturbance expected. Any contaminated soil removed from the Site will require special handling and disposal. Therefore, development proposals that seek to minimize remedy disturbance will reduce the significant costs associated with exposed contamination.

Community Involvement
Due to the history of the Site which included the relocation of residents and removal of residences during the remedial action, this site in particular could benefit from early community involvement regarding potential future use scenarios. Early discussion of the benefits of reuse, along with the expected land disturbance, health and safety plan, and air monitoring plan will increase the likelihood of community support of the productive reuse of the Site.

Regulatory Considerations
Any development of the Site will need to be consistent with the regulatory restrictions. Coordination with EPA Region 9 early in the reuse process will ensure that development plans align with any regulatory process necessary to support the productive reuse of the Site. A prospective user of the property may have to request a Record of Decision amendment and renegotiate the Declaration of Environmental Use Restriction (DEUR) recorded with the property deed, for anything but the most minimal disturbance.

Utility Considerations
As discussed previously, due to the limited depth of cover, utilities will need special attention on this Site. Above ground septic options, such as composting or holding tank systems could be explored based on the expected use and capacity of the future development scenario. Special provisions may need to be negotiated to approve limited water line or other utility location below the protective fabric layer.

Additional Site Planning
Depending on the reuse proposal developed by the City of Globe, EPA Region 9 and ADEQ may want to evaluate additional reuse options for the steeper areas of the site. Reuse options could be identified that do not require a level base or any disturbance below the two-foot cap. If desired, additional future uses for the remainder of the Site could compliment commercial and light industrial uses along the highway.

Recommended Next Steps
During a site meeting in October 2008, EPA Region 9, ADEQ and the City of Globe agreed that the City of Globe can take the next step in transitioning the Site into productive reuse by developing a reuse proposal for consideration by ADEQ and EPA Region 9. The development scenario outlined in this reuse assessment could serve as a useful starting point for exploring commercial or light industrial uses suitable for the development areas outlined for the Site. The reuse proposal could include a more detailed plan including any potential phasing and proposed locations for buildings, parking and utilities. As a first step in this process, the City of Globe should meet with Arizona Department of Transportation to identify feasible access options to the Site from Highway 70, and outline associated costs, conditions and review and approval timelines.
For more information:

E² Inc.
2417 Northfield Road
Charlottesville, VA 22901

www.e2inc.com
434-975-6700
Mountain View Mobile Home Estates 2010 Five Year Review

Appendix H  USACE Site Inspection Checklist
Please note that “O&M” is referred to throughout this checklist. At sites where Long-Term Response Actions are in progress, O&M activities may be referred to as “system operations” since these sites are not considered to be in the O&M phase while being remediated under the Superfund program.

**Five-Year Review Site Inspection Checklist (Template)**

(Working document for site inspection. Information may be completed by hand and attached to the Five-Year Review report as supporting documentation of site status. “N/A” refers to “not applicable.”)

<table>
<thead>
<tr>
<th>I. SITE INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Site name:</strong> Madison View Mobile Home Estates</td>
</tr>
<tr>
<td><strong>Location and Region:</strong> Globe, AZ Region IX</td>
</tr>
<tr>
<td><strong>Agency, office, or company leading the five-year review:</strong> EPA Region IX RPM - Andrew Bonner</td>
</tr>
<tr>
<td><strong>Remedy Includes:</strong> (Check all that apply)</td>
</tr>
<tr>
<td>✔ Landfill cover/containment</td>
</tr>
<tr>
<td>✔ Access controls</td>
</tr>
<tr>
<td>✔ Institutional controls</td>
</tr>
<tr>
<td>✔ Institutional controls</td>
</tr>
<tr>
<td>✔ Institutional controls</td>
</tr>
<tr>
<td><strong>Attachments:</strong> Inspection team roster attached</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. INTERVIEWS (Check all that apply)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. O&amp;M site manager ADEQ - Ed Pond</td>
</tr>
<tr>
<td>Interviewed at site</td>
</tr>
<tr>
<td>Problems, suggestions</td>
</tr>
<tr>
<td>2. O&amp;M staff ADEQ Contact</td>
</tr>
<tr>
<td>Interviewed at site</td>
</tr>
<tr>
<td>Problems, suggestions</td>
</tr>
</tbody>
</table>

Ed Pond @ ADEQ 602-771-4575
3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Contact</th>
<th>Name</th>
<th>Title</th>
<th>Date</th>
<th>Phone no.</th>
<th>Problems; suggestions; Report attached</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **Other interviews** (optional)  Report attached.
### III. ON-SITE DOCUMENTS & RECORDS VERIFIED

(Update all that apply)

<table>
<thead>
<tr>
<th>No.</th>
<th>Document Type</th>
<th>Availability</th>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>O&amp;M Documents</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>O&amp;M manual</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>As-built drawings</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Maintenance logs</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Site-Specific Health and Safety Plan</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Contingency plan/emergency response plan</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>O&amp;M and OSHA Training Records</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Permits and Service Agreements</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Air discharge permit</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Effluent discharge</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Waste disposal, POTW</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Other permits</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gas Generation Records</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Settlement Monument Records</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Groundwater Monitoring Records</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Leachate Extraction Records</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Discharge Compliance Records</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Air</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Water (effluent)</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Daily Access/Security Logs</td>
<td>Readily available</td>
<td>Up to date</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td><em>Not Provided</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### IV. O&M COSTS

1. **O&M Organization**
   - State in-house
   - Contractor for State
   - PRP in-house
   - Contractor for PRP
   - Federal Facility in-house
   - Contractor for Federal Facility
   - Other

2. **O&M Cost Records**
   - Not Provided
   - Readily available
   - Up to date
   - Funding mechanism/agreement in place
   - Original O&M cost estimate
   - Breakdown attached

   **Total annual cost by year for review period if available**

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Date</th>
<th>Date</th>
<th>Total cost</th>
<th>Breakdown attached</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Unanticipated or Unusually High O&M Costs During Review Period**
   - Describe costs and reasons: **P/A**

### V. ACCESS AND INSTITUTIONAL CONTROLS

<table>
<thead>
<tr>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
</table>

**A. Fencing**

1. **Fencing damaged**
   - Location shown on site map
   - Gates secured
   - N/A

   **Remarks**
   - Damage from storms, mowing equip & trespassers / vandals

**B. Other Access Restrictions**

1. **Signs and other security measures**
   - Location shown on site map
   - N/A

   **Remarks**
   - In place and intact
## C. Institutional Controls (ICs)

### 1. Implementation and enforcement

| Site conditions imply ICs not properly implemented | Yes | No | N/A |
| Site conditions imply ICs not being fully enforced | Yes | No | N/A |

**Type of monitoring** (e.g., self-reporting, drive by)

**Frequency**

**Responsible party/agency**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Date</th>
<th>Phone no.</th>
</tr>
</thead>
</table>

**Contact**

- **Name:** Ed Peel
- **Title:** ADEC
- **Date:** 7-7-2010
- **Phone no.:** 622-721-4575

**Remarks**

- Reporting is up-to-date: Yes
- Reports are verified by the lead agency: Yes
- Specific requirements in deed or decision documents have been met: Yes
- Violations have been reported: Yes
- Other problems or suggestions: Report attached

### 2. Adequacy

<table>
<thead>
<tr>
<th>ICs are adequate</th>
<th>ICs are inadequate</th>
<th>N/A</th>
</tr>
</thead>
</table>

**Remarks**

### D. General

#### 1. Vandalism/trespassing

<table>
<thead>
<tr>
<th>Location shown on site map</th>
<th>No vandalism evident</th>
</tr>
</thead>
</table>

**Remarks**

#### 2. Land use changes on site

<table>
<thead>
<tr>
<th>None</th>
</tr>
</thead>
</table>

**Remarks**

#### 3. Land use changes off site

<table>
<thead>
<tr>
<th>None noted</th>
</tr>
</thead>
</table>

**Remarks**

### VI. GENERAL SITE CONDITIONS

#### A. Roads

<table>
<thead>
<tr>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
</table>

#### 1. Roads damaged

| Location shown on site map | Roads adequate | N/A |

**Remarks**

- Access road satisfactory conditions
### B. Other Site Conditions

<table>
<thead>
<tr>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

### VII. LANDFILL COVERS

#### A. Landfill Surface

<table>
<thead>
<tr>
<th>Condition</th>
<th>Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settlement</td>
<td>Location shown on site map</td>
<td>Settlement not evident</td>
</tr>
<tr>
<td>Areal extent</td>
<td>Depth</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cracks</td>
<td>Location shown on site map</td>
<td>Cracking not evident</td>
</tr>
<tr>
<td>Lengths</td>
<td>Widths</td>
<td>Depths</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erosion</td>
<td>Location shown on site map</td>
<td>Erosion not evident</td>
</tr>
<tr>
<td>Areal extent</td>
<td>Depth</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holes</td>
<td>Location shown on site map</td>
<td>Holes not evident</td>
</tr>
<tr>
<td>Areal extent</td>
<td>Depth</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetative Cover</td>
<td>Grass</td>
<td>Cover properly established No signs of stress</td>
</tr>
<tr>
<td>Trees/Shrubs</td>
<td>(indicate size and locations on a diagram)</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative Cover</td>
<td>armored rock, concrete, etc.</td>
<td>N/A</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulges</td>
<td>Location shown on site map</td>
<td>Bulges not evident</td>
</tr>
<tr>
<td>Areal extent</td>
<td>Height</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wet Areas/Water Damage</td>
<td>Wet areas/water damage not evident</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Location shown on site map</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Areal extent</td>
</tr>
<tr>
<td></td>
<td>Wet areas</td>
<td>Location shown on site map</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Areal extent</td>
</tr>
<tr>
<td></td>
<td>Ponding</td>
<td>Location shown on site map</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Areal extent</td>
</tr>
<tr>
<td></td>
<td>Seeps</td>
<td>Location shown on site map</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Areal extent</td>
</tr>
<tr>
<td></td>
<td>Soft subgrade</td>
<td>Location shown on site map</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Areal extent</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Slope Instability</th>
<th>Slides</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Location shown on site map</td>
<td>No evidence of slope instability</td>
</tr>
<tr>
<td></td>
<td>Areal extent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

**B. Benches**

<table>
<thead>
<tr>
<th></th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Flows Bypass Bench</th>
<th>Location shown on site map</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N/A or okay</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Bench Breached</th>
<th>Location shown on site map</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N/A or okay</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Bench Overtopped</th>
<th>Location shown on site map</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N/A or okay</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

**C. Letdown Channels**

<table>
<thead>
<tr>
<th></th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Settlement</th>
<th>Location shown on site map</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No evidence of settlement</td>
</tr>
<tr>
<td></td>
<td>Areal extent</td>
<td>Depth</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Material Degradation</th>
<th>Location shown on site map</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No evidence of degradation</td>
</tr>
<tr>
<td></td>
<td>Material type</td>
<td>Areal extent</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Erosion</th>
<th>Location shown on site map</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No evidence of erosion</td>
</tr>
<tr>
<td></td>
<td>Areal extent</td>
<td>Depth</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>
4. **Undercutting**
   - Location shown on site map: No evidence of undercutting
   - Areal extent: 
   - Depth: 
   - Remarks: 

5. **Obstructions**
   - Type: No obstructions
   - Location shown on site map: 
   - Areal extent: 
   - Size: 
   - Remarks: 

6. **Excessive Vegetative Growth**
   - Type: No evidence of excessive growth
   - Vegetation in channels does not obstruct flow
   - Location shown on site map: 
   - Areal extent: 
   - Remarks: 

### D. Cover Penetrations
- **Applicable**: N/A

1. **Gas Vents**
   - Properly secured/locked: 
   - Functioning: 
   - Routinely sampled: 
   - Good condition: 
   - Evidence of leakage at penetration: 
   - Needs Maintenance: 
   - Remarks: 

2. **Gas Monitoring Probes**
   - Properly secured/locked: 
   - Functioning: 
   - Routinely sampled: 
   - Good condition: 
   - Needs Maintenance: 
   - N/A: 
   - Remarks: 

3. **Monitoring Wells** (within surface area of landfill)
   - Properly secured/locked: 
   - Functioning: 
   - Routinely sampled: 
   - Good condition: 
   - Evidence of leakage at penetration: 
   - Needs Maintenance: 
   - N/A: 
   - Remarks: 

4. **Leachate Extraction Wells**
   - Properly secured/locked: 
   - Functioning: 
   - Routinely sampled: 
   - Good condition: 
   - Evidence of leakage at penetration: 
   - Needs Maintenance: 
   - N/A: 
   - Remarks: 

5. **Settlement Monuments**
   - Located: Routinely surveyed: N/A: 
   - Remarks: 

D-14
<table>
<thead>
<tr>
<th>E. Gas Collection and Treatment</th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gas Treatment Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flaring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermal destruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needs Maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection for reuse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. Cover Drainage Layer</th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Outlet Pipes Inspected</td>
<td>Functioning</td>
<td>N/A</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G. Detention/Sedimentation Ponds</th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Siltation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Areal extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siltation not evident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Erosion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Areal extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erosion not evident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Outlet Works</td>
<td>Functioning</td>
<td>N/A</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Dam</td>
<td>Functioning</td>
<td>N/A</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Retaining Walls</td>
<td>Applicable</td>
<td>N/A</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>1. Deformations</td>
<td>Location shown on site map</td>
<td>Deformation not evident</td>
</tr>
<tr>
<td></td>
<td>Horizontal displacement</td>
<td>Vertical displacement</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>2. Degradation</td>
<td>Location shown on site map</td>
<td>Degradation not evident</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I. Perimeter Ditches/Off-Site Discharge</th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Siltation</td>
<td>Location shown on site map</td>
<td>Siltation not evident</td>
</tr>
<tr>
<td></td>
<td>Areal extent</td>
<td>Depth</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>2. Vegetative Growth</td>
<td>Location shown on site map</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Vegetation does not impede flow</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Areal extent</td>
<td>Type</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>3. Erosion</td>
<td>Location shown on site map</td>
<td>Erosion not evident</td>
</tr>
<tr>
<td></td>
<td>Areal extent</td>
<td>Depth</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>4. Discharge Structure</td>
<td>Functioning</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VIII. VERTICAL BARRIER WALLS</th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Settlement</td>
<td>Location shown on site map</td>
<td>Settlement not evident</td>
</tr>
<tr>
<td></td>
<td>Areal extent</td>
<td>Depth</td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>2. Performance Monitoring</td>
<td>Type of monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance not monitored</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Evidence of breaching</td>
</tr>
<tr>
<td></td>
<td>Head differential</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>
### IX. GROUNDWATER/SURFACE WATER REMEDIES

<table>
<thead>
<tr>
<th>A. Groundwater Extraction Wells, Pumps, and Pipelines</th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Pumps, Wellhead Plumbing, and Electrical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good condition</td>
<td>All required wells properly operating</td>
<td>Needs Maintenance</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good condition</td>
<td>Needs Maintenance</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Spare Parts and Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readily available</td>
<td>Good condition</td>
<td>Requires upgrade</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Surface Water Collection Structures, Pumps, and Pipelines</th>
<th>Applicable</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Collection Structures, Pumps, and Electrical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good condition</td>
<td>Needs Maintenance</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances</strong></td>
<td>periodic sedimentation</td>
<td></td>
</tr>
<tr>
<td>Good condition</td>
<td>Needs Maintenance</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Spare Parts and Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readily available</td>
<td>Good condition</td>
<td>Requires upgrade</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### C. Treatment System

#### 1. Treatment Train (Check components that apply)
- Metals removal
- Oil/water separation
- Air stripping
- Carbon adsorbers
- Filters
- Additive (e.g., chelation agent, flocculent)
- Others

<table>
<thead>
<tr>
<th>Good condition</th>
<th>Needs Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling ports properly marked and functional</td>
<td></td>
</tr>
<tr>
<td>Sampling/maintenance log displayed and up to date</td>
<td></td>
</tr>
<tr>
<td>Equipment properly identified</td>
<td></td>
</tr>
<tr>
<td>Quantity of groundwater treated annually</td>
<td></td>
</tr>
<tr>
<td>Quantity of surface water treated annually</td>
<td></td>
</tr>
</tbody>
</table>

**Remarks**

#### 2. Electrical Enclosures and Panels (properly rated and functional)
- N/A
- Good condition
- Needs Maintenance

**Remarks**

#### 3. Tanks, Vaults, Storage Vessels
- N/A
- Good condition
- Proper secondary containment
- Needs Maintenance

**Remarks**

#### 4. Discharge Structure and Appurtenances
- N/A
- Good condition
- Needs Maintenance

**Remarks**

#### 5. Treatment Building(s)
- N/A
- Good condition (esp. roof and doorways)
- Needs repair

Chemicals and equipment properly stored

**Remarks**

#### 6. Monitoring Wells (pump and treatment remedy)
- Properly secured/locked
- Functioning
- Routinely sampled
- Good condition
- All required wells located
- Needs Maintenance
- N/A

**Remarks**

### D. Monitoring Data

#### 1. Monitoring Data
- Is routinely submitted on time
- Is of acceptable quality

#### 2. Monitoring data suggests:
- Groundwater plume is effectively contained
- Contaminant concentrations are declining
D. Monitored Natural Attenuation

1. Monitoring Wells (natural attenuation remedy)
   - Properly secured/locked
   - Functioning
   - Routinely sampled
   - All required wells located
   - Good condition
   - Needs Maintenance

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

The site remedy included on-site demobilizing, burial, and capping of all physical structures and asbestos contaminated soils. The selected remedy is functioning as designed.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

The current O&M is performed by ADEQ contractors. O&M is adequate; however, several issues were observed which require attention. This includes repair of fences damaged by members, storm events, and vandals. Also, diversion channels and storm drains require the removal of silt and debris. Regular monitoring is performed to minimize growth of large plants. Site maintenance contractors appear to be using the site for improper storage/disposal of used hydraulic fluid containers. Fences and drainage greater need repair to maintain site access control. (See Photos).
C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

| Storm drainage pipe should be checked for possible plugs upgradient of the RK gravel (pipeline #1) |

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.