SECOND FIVE-YEAR REVIEW REPORT FOR ROCKWOOL INDUSTRIES INC. SUPERFUND SITE BELL COUNTY, TEXAS

SEPTEMBER 2018

2005 excavation at containment cell (left) and 2017 completed containment cell (right)

Prepared by

U.S. Environmental Protection Agency
Region 6
Dallas, Texas

SECOND FIVE-YEAR REVIEW REPORT
ROCKWOOL INDUSTRIES INC. SUPERFUND SITE
EPA ID#: TXD066379645
BELL COUNTY, TEXAS

This memorandum documents the U.S. Environmental Protection Agency's performance, determinations and approval of the Rockwool Industries Inc. Superfund site (Site) Second five-year review under Section 121 (c) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S. Code Section 9621 (c), as provided in the attached Second Five-Year Review Report.

Summary of the Second Five-Year Review Report

The remedy at the Site currently protects human health and the environment because contaminated soil and sediment were excavated and capped or covered, the Leon River bank was stabilized and backfilled, and several institutional controls are in place to prevent unacceptable exposures to soil and groundwater contamination. For the remedy to be protective over the long term, the issues identified in this five-year review need to be addressed.

Human Exposure Status: Current human exposures at the Site are under control.
Contaminated Groundwater Status: Groundwater migration is under control.
Site-wide Ready for Anticipated Use: Yes

Actions Needed

The following actions must be taken for the remedy to be protective over the long term:

- Continue to monitor seep water to the Leon River to ensure long term protectiveness of surface water (SW).
- Evaluate the MatCon containment cell asphalt cover and Site soil covers and consider whether there is a long term solution to the issues of asphalt cracking regarding long term performance.
- EPA and Texas Commission on Environmental Quality (TCEQ) will evaluate the appropriate standards to ensure that groundwater (GW) remediation goals remain protective and document any standard or remedy changes accordingly.
- Continue to monitor GW to evaluate any source of upward contaminant of concern (COC) GW trends, and determine if additional actions are needed to be protective of SW.
- Continue to monitor GW to ensure the COC contaminant plume is stable and the institutional controls are protective. Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.

Determination

I have determined that the remedy for the Rockwool Industries Inc. Superfund site is currently protective of human health and the environment. This Five-Year Review Report specifies the actions that need to be taken for the remedy to remain protective over the long term.

Pam Phillips for
Carl E. Edlund, P.E.
Director, Superfund Division
U.S. Environmental Protection Agency Region 6

8/23/18
Date

CONCURRENCES

SECOND FIVE-YEAR REVIEW REPORT
ROCKWOOL INDUSTRIES INC. SUPERFUND SITE
EPA ID#: TXD066379645
BELL COUNTY, TEXAS

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8/6/2018
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08/17/18
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8/23/18
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ISSUES/RECOMMENDATIONS

SECOND FIVE-YEAR REVIEW REPORT
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Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
OU2

Issues and Recommendations Identified in the FYR:

OU(s): 1	Issue Category: Monitoring			
	Issue: Standing seep water exceeds the Final Record of Decision (ROD) GW Preliminary Remediation Goals (PRGs) (Texas Surface Water Quality Standards [TSWQSs] or Maximum Contaminant Levels [MCLs]) for protection of GW. The 2003 Interim ROD developed GW PRGs for the groundwater to surface water pathway. Standing seep water does not exceed the Leon River Interim ROD GW PRGs for protection of SW.			
	Recommendation: Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	Issue Category: Operations and Maintenance			
	Issue: The MatCon containment cell asphalt cover has cracking beyond that reasonably anticipated. The MatCon cover is currently functional, but long term performance may be an issue.			
	Recommendation: Evaluate the MatCon containment cell asphalt cover and Site soil covers and consider whether there is a long term solution to the issues of asphalt cracking regarding long term performance.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	Issue Category: Monitoring
	Issue: Final ROD groundwater PRGs were based on the TSWQSs for arsenic and lead, and these standards have changed since the 2004 ROD. TCEQ currently compares GW data to the current arsenic TSWQS, but does not use the current lead TSWQS.

	Recommendation: EPA and TCEQ will evaluate the appropriate standards to ensure that GW remediation goals remain protective and document any standard or remedy changes accordingly.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	**Issue Category: Monitoring**			
	Issue: Groundwater COC concentrations indicate upward trends in the Central Property and Evaporation Lagoon Remediation Area.			
	Recommendation: Continue to monitor GW to evaluate any source of upward COC GW trends, and determine if additional actions are needed to be protective of SW.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	**Issue Category: Monitoring**			
	Issue: GW contaminant plume is currently stable but is not fully delineated in the Central Property Area, and the plume extends off-site to the Leon River in the North Property Area.			
	Recommendation: Continue to monitor GW to ensure the COC contaminant plume is stable and the institutional controls are protective. Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

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LIST OF ABBREVIATIONS & ACRONYMS

ALM	Adult Lead Model
ARAR	Applicable or Relevant and Appropriate Requirement
BEDC	Belton Economic Development
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Contaminant of Concern
EPA	United States Environmental Protection Agency
ERA	Ecological Risk Assessment
ESD	Explanation of Significant Differences
FM	Farm to Market Road
FWQC	Federal Water Quality Criteria
FYR	Five-Year Review
GSD	Geometric Standard Deviation
GW	Groundwater
HQ	Hazard Quotient
IC	Institutional Control
MatCon®	Modified Asphalt Technology for Waste Containment
µg/dL	Micrograms per Deciliter
µg/L	Micrograms Per Liter
MCL	Maximum Contaminant Level
mg/kg	Milligrams Per Kilogram
MSC	Medium-Specific Concentration
NCP	National Contingency Plan
NHANES	National Health and Nutrition Examination Survey
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PbB	Background Blood Lead Concentration
PRG	Preliminary Remediation Goal
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
RRS	Risk Reduction Standards
RSL	Regional Screening Level
RWI	Rockwool Industries Inc.
SW	Surface Water
SWMU	Solid Waste Management Unit
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TNRCC	Texas Natural Resources Conservation Commission
TSWQS	Texas Surface Water Quality Standard
UU/UE	Unlimited Use/Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 Code of Federal Regulations [CFR] Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Rockwool Industries Inc. Superfund site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site consists of two operable units (OUs). OU1 addresses the Central Property, the North Property, the Geer Property/Cemetery Area, and the non-process area (Figure 1). OU2 is a small tract of land that consists of two businesses, Engineered Composite Systems and Belco Manufacturing. Different parties own the OUs, and creation of the OUs was intended to aid in future cost recovery. No remedial action was conducted at OU2. This FYR addresses the remedial actions taken at OU1.

The FYR was led by Robert Sullivan, EPA Remedial Project Manager (RPM). Participants included Casey Luckett-Snyder, EPA Region 6 Superfund Redevelopment Coordinator; Marilyn Czimer Long, Texas Commission on Environmental Quality (TCEQ); Ben Camacho, Daniel B. Stephens & Associates, Inc., TCEQ contractor; and Eric Marsh and Kelly MacDonald of Skeo, EPA's FYR contractor. The review began on 10/5/2016.

Documents reviewed as part of this FYR are listed in Appendix A. The site chronology is provided in Appendix B.

Site Background

The approximately 100-acre Site is one mile east of downtown Belton, Bell County, Texas (Figure 1). Taylors Valley Road and Farm to Market Road (FM) 93 both run through the Site. The Leon River runs along the north side of the Site. Nolan Creek lies west/south/southwest of the Site. About 1,000 people live within one mile of the Site.[1] Nearby land uses are primarily industrial but also include commercial, agricultural and residential areas. Engineered Composite Systems operates on OU2; the rest of the Site is unused. The Belton Economic Development Corporation (BEDC) owns several site properties; it plans to sell them and facilitate their industrial use.

The Rockwool Industries, Inc. (RWI) facility operated from the mid-1950s until February 1987. RWI manufactured mineral wool. Spent iron shot was the main waste type generated during production. RWI piled this waste on site in the North Shot Pile, South Shot Pile and Cemetery Shot Pile. Shot material from the North Shot Pile contaminated the Leon River. During site operations, solid waste management units were also used to dispose of process wastes. Site maps are included in Appendix C. Figure C-2 shows the shot pile remediation areas.

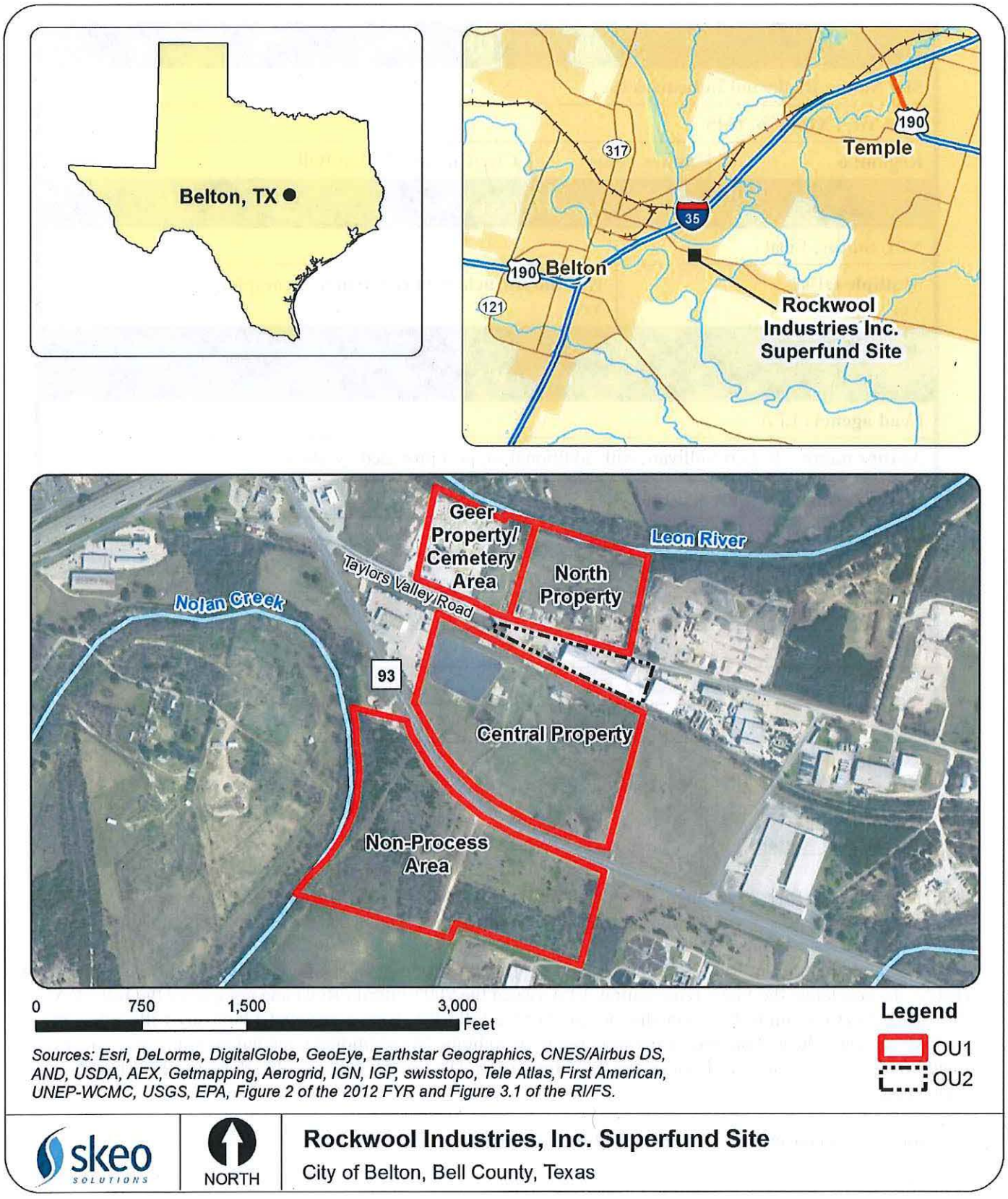
The uppermost water-bearing zone at the Site is perched; it occurs between 20 and 35 feet deep within coarse grain deposits of Quaternary alluvium and terrace deposits and weathered limestone. The 2004 Record of

[1] According to EPA's EnviroMapper, accessed 3/12/2017 at https://www.epa.gov/emefdata/em4ef.home.

Decision (ROD) stated that poor and unreliable yields make this zone an unlikely future drinking, irrigation or industrial water source. Groundwater north of Taylors Valley Road generally flows north-northeast, discharging through seeps to the Leon River. On the south side of Taylors Valley Road, groundwater flows to the south and southeast, discharging through seeps to Nolan Creek. Site investigations indicated that the groundwater-bearing perched zone at the Site does not appear to be hydraulically connected to any off-site water bearing units or the potable aquifer in the area. The industrial area around the Site is connected to city water from Lake Belton.

The primary surface water features near the Site are the Leon River and Nolan Creek. As of the 2004 ROD, the designated water uses of the Leon River are contact recreation, high-quality aquatic habitat, and public water supply. Recreational fishing is known to occur, but swimming is unlikely because of unsafe conditions such as high flow rates, unclear water, high brush along the river banks, and steep banks. Swimming, kayaking and other primary contact recreation activities occur in Nolan Creek.

Figure 1: Site Vicinity Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site. An EPA response action was not taken at the Non-Process Area or OU2.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Rockwool Industries Inc.		
EPA ID:TXD066379645		
Region: 6	**State:** Texas	**City/County:** Belton/Bell
SITE STATUS		
NPL Status: Final		
Multiple OUs? Yes	**Has the site achieved construction completion?** Yes	
REVIEW STATUS		
Lead agency: EPA		
Author name: Robert Sullivan, with additional support provided by Skeo		
Author affiliation: EPA Region 6		
Review period: 10/5/2016 – 9/21/2017		
Date of site inspection: 1/26/2017		
Type of review: Statutory		
Review number: 2		
Triggering action date: 9/21/2012		
Due date ***(five years after triggering action date)*****:** 9/21/2017		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

The Human Health Risk Assessment conducted for the 2003 Interim ROD determined that current fishers in the Leon River and future site workers could have non-carcinogenic health hazards from exposure to antimony.

Before issuing the Interim ROD, EPA completed the first three of eight steps for an Ecological Risk Assessment (ERA). To accelerate the Site's remediation, EPA issued the 2003 Interim ROD and completed the full ERA during the 2003 Interim ROD's remedial design. For the full ERA, EPA conducted a bioassay with sediment samples, which indicated the sediments were not toxic to biota. No additional remedial measures were necessary to address the ecological risks because the 2003 Interim ROD's remedy addressed both human health and ecological risks.

Contaminants of concern (COCs) are listed by media in Table 1.

Table 1: COCs by Media

COC	Groundwater	Surface Soil
Arsenic	X	X
Antimony	X	X
Lead	X	X

Response Actions

In the early 1980s, some North Shot Pile waste was disposed of off-site, and a dirt cover was placed over the remaining 2-acre pile. A French drain system was installed to intercept and collect leachate as it flowed toward the Leon River; collected leachate was directed to the lined evaporation lagoon.

In 1984, some spent shot material from the South Shot Pile was removed and recycled by mixing it with cement and baghouse dust to make bricks; these bricks were used as raw material feed for the furnace. Arsenic-contaminated baghouse dust from the manufacturing process was disposed of on site in the baghouse dust surface impoundment and a landfill; the impoundment was closed as a landfill in 1988. RWI proposed a closure plan for this on-site surface impoundment in April 1990. In 1991, the hazardous wastes were removed.

In October 1991, the Texas Natural Resources Conservation Commission (TNRCC), now TCEQ, issued a compliance plan and a Hazardous Waste Post-Closure Permit to RWI. The Permit allowed RWI to remove and dispose of contaminated soil, remove and stabilize sludge, and install clay covers where necessary. During remediation, RWI installed a groundwater recovery system to control and treat groundwater. Although RWI closed on-site solid waste management units (SWMUs) under its Resource Conservation and Recovery Act (RCRA) Part A permit, remediation of the baghouse dust surface impoundment and the on-site general plant refuse landfill was not completed. RWI shut down the groundwater recovery and treatment system in September 1994 due to financial problems. Iron shot piles remained on site.

EPA completed the preliminary assessment in December 1995 and the site investigation in October 1996. EPA proposed the Site to the National Priorities List (NPL) on March 6, 1998. EPA listed the Site on the NPL on September 29, 1998. The remedial investigation/feasibility study (RI/FS) started on September 30, 1998. EPA selected the Site's remedy in the 2003 Interim ROD and 2004 Final ROD.[2] After the 2003 Interim ROD, EPA determined that the selected interim remedy (beneficial reuse through excavation and recycling of the contaminated soil and Leon River sediments as road base material) would not be cost effective, due to the long distance the waste would have to be hauled for recycling. The 2004 Final ROD's selected remedy called for an on-site containment cell for disposal of the waste, while including the beneficial reuse as a secondary remedy.

The 2004 Final ROD selected the following remedial action objectives (RAOs) for surface/subsurface soils and groundwater:

- Prevent direct human contact (site workers) with surface soil/waste containing arsenic at concentrations above 200 milligrams per kilogram (mg/kg).
- Prevent direct human contact (site workers) with surface soil/waste containing antimony at concentrations above 310 mg/kg.
- Prevent direct human contact (site workers) with surface soil/waste containing lead at concentrations above 1,754 mg/kg.
- Prevent leaching and migration of arsenic from surface/subsurface soils/waste into groundwater and surface water resulting in arsenic concentrations exceeding 50 micrograms per liter (µg/L).[3]

[2] Both RODs address both OUs. OU2 was created due to separate property ownership rather than separate remedial requirements.

[3] The current Maximum Contaminant Level (MCL) for arsenic in groundwater is 10 µg/L.

- Prevent leaching and migration of antimony from surface/subsurface soils/waste into groundwater and surface water resulting in antimony concentrations exceeding 6 µg/L.
- Prevent leaching and migration of lead from surface/subsurface soils/waste into groundwater and surface water resulting in lead concentrations exceeding 5 µg/L.
- Prevent the migration of contaminated soil/waste into the Leon River through surface runoff and erosion.

The ROD stated that no COCs, RAOs or preliminary remediation goals (PRGs) were identified or developed for surface water because the contaminants detected were within EPA's acceptable risk range for human risk. EPA also did not identify COCs for sediment because a direct pathway for human health exposure was not present. However, risk estimates indicated a potential human health risk through consumption of fish from the Leon River. EPA developed an RAO to address human health risks posed by sediment through ingestion of fish:

- Remove sediment containing COCs at concentrations exceeding the sediment PRGs and prevent the transport of waste and contaminated material into the Leon River to an extent that the applicable surface water quality standards are not exceeded. Sediment PRGs were to be developed during the Remedial Design (RD) phase. However, bioassay during the RD showed that the sediments (site wastes washed into the Leon River) are not toxic to biota; no PRGs were needed. To be protective, EPA planned to remove all visible sediments in the Leon River next to the Site.

The 2004 Final ROD's selected remedy specified the following components:

- Excavation of soil in areas where antimony concentrations exceeded the calculated PRGs, including the Cemetery Shot Pile, North Property, Central Property and sediment along the south bank of the Leon River. Consolidation of excavated soil in an on-site industrial multilayer containment cell, to prevent materials from leaching into the groundwater.
- Installation of clay cover over the excavated and contoured Cemetery Shot Pile and North Property to control further runoff of the waste material to the Leon River, and to control surface water infiltration and subsequent leaching of contaminants to groundwater.
- Installation of a culvert and other drainage control features near the Cemetery Shot Pile boundary to control surface drainage and prevent surface water runoff from contacting and transporting any materials remaining on Site that do not exceed Site PRGs.
- Minimization of the erosion of additional contamination to prevent it from contacting the Leon River, contaminating sediment and aquatic life.
- Implementation of institutional controls to protect the integrity of the containment cell, clay caps, monitoring wells, culverts and interceptor trenches, and to prevent exposure to contaminated groundwater in the shallow water-bearing zone. Current and future owners of the Site must agree to provide deed restrictions to the affected property, as appropriate or as allowed by law, that address soil and groundwater.

During remedy implementation, EPA found the volume of contaminated material was larger than estimated. The planned containment cell did not have enough capacity. EPA issued an Explanation of Significant Differences (ESD) in August 2005, which modified the remedy for the Central Property and OU2 Area from removal of contaminated soil and consolidation in the on-site containment cell to a partial removal and capping of the remaining contaminated waste and soil in the Central Property/OU2 Area. Because this modification left contaminated soil in additional areas, institutional controls for these areas were also required.

Cleanup goals for surface soil are listed in Table 2.

Table 2: Surface Soil PRGs for Direct Human Health Exposure

Surface Soil COC	ROD Cleanup Goal (mg/kg)
Arsenic	200
Antimony	310
Lead	1,754
Source: 2003 Interim ROD and 2004 Final ROD, Remedial Action Objectives.	

The 2004 Final ROD's groundwater PRGs are listed in the Site's RAOs and are included below in Table 3.

Table 3: 2004 Final ROD Groundwater PRGs

Groundwater COC	2004 Final ROD PRG (µg/L)
Arsenic	50[a]
Antimony	6[b]
Lead	5[a]
Source: 2004 Final ROD, Remedial Action Objectives. [a] Cleanup goal based on Texas Surface Water Quality Standards (TSWQSs). The lower values of the aquatic life protection/human health criteria were selected. [b] Cleanup goal based on the EPA Region 6 tap water Maximum Contaminant Level (MCL) because a TSWQS was not available for antimony.	

The 2003 Interim ROD stated that groundwater PRGs for surface water protection (distinct from those included in Table 3 above) were developed to ensure that the transport of metals through groundwater seeps into surface water would not result in surface water exceeding applicable surface water quality standards. The 2004 Final ROD does not discuss these PRGs, but because the Final ROD did not replace the Interim ROD, both sets of PRGs are still valid. The 2003 Interim ROD PRGs are included below in Table 4.

Table 4: 2003 Interim ROD Groundwater PRGs for Surface Water Protection

Groundwater COC	2003 Interim ROD PRG (µg/L)	
	North Property Groundwater (for protection of Leon River)	Central Property Groundwater (for protection of Nolan Creek)
Antimony	2,932	1,396
Arsenic [a]	24,441	11,633
Lead	2,444	1,163

Source: 2003 Interim ROD, Table 5 Groundwater PRGs.

a. The arsenic TSWQS/MCL that the PRG for surface water protection was based on has changed from 50 µg/L to 10 µg/L. The PRG was recalculated based on the dilution factors provided in Table 5 of the 2003 Interim ROD. Therefore, the following are estimates of PRGs with the current arsenic MCL incorporated:
Current standard ÷ dilution factor = current PRG
10 µg/L ÷ 0.002046 = 4,888 µg/L for Leon River
10 µg/L ÷ 0.004298 = 2,327 µg/L for Nolan Creek

Status of Implementation

The remedial action started on April 11, 2005, and finished on May 1, 2006. Remediation by area is detailed below:

Geer Property/Cemetery Area
EPA's contractor excavated 218 cubic yards of waste and contaminated soil to a depth of two feet in the Cemetery Shot Pile and placed it in the containment cell. Following excavation, the contractor installed two corrugated metal pipes to route storm water around the Cemetery Shot Pile and prevent storm water contact with residual waste material. Once excavation was completed, the contractor graded the area to drain and covered it with one foot of clay and six inches of topsoil. The contractor also placed concrete rubble on the steeper portions of the outfall slope, keyed it into the Leon River bank, and installed a geotextile fabric around the outlets of the corrugated metal pipes and rip-rap to minimize erosion.

North Property Area
EPA's contractor excavated 7,644 cubic yards of waste and contaminated soil to a depth of two feet from the North Property Area, including the North Shot Pile and evaporation lagoon area, and placed it in the containment cell. Following dewatering and stabilization of evaporation lagoon sludge with rice hulls, the evaporation lagoon's berms were collapsed. Some waste material from the South Shot Pile was used to backfill and re-grade the evaporation lagoon. Excavated areas in the North Property Area were re-graded with slopes along the edges of the North Property Area that were graded to promote storm water drainage toward the Leon River bank. One foot of clay and six inches of topsoil was placed over the excavated evaporation lagoon and North Shot Pile areas to cover waste remaining below the two-foot excavation. The cover was hydro-mulched for long-term erosional control.

EPA's contractor tied a corrugated metal pipe into the manhole on the west side of the evaporation lagoon to divert storm water to the Leon River bank. The concrete culvert outlet pipe, which conducted flow to the evaporation lagoon, was plugged with concrete to reroute flow to the new corrugated metal pipe. A concrete culvert east of the evaporation lagoon was plugged with concrete at the inlet and collapsed in place. The east manhole was filled and capped with a 4-inch concrete cap.

Isolated non-hazardous solid waste consisting of office equipment, paper debris, wood, and other material was removed from on-site buildings and disposed of off-site.

Leon River bank
EPA's contractor used articulated concrete blocks to improve stability of the Leon River bank and prevent erosion of waste material into the river, which differed from the design of using localized bank restoration. The contractor excavated waste material from unstable areas of the Leon River's south bank, re-graded the slope along the northern boundary of the Site, and covered the river bank slope (about 78,116 square feet) with non-woven geotextile fabric, upon which articulated concrete blocks were placed. Rip-rap was placed at the leading and trailing edges of the bank and at the toe of the bank to mitigate erosion from scour under those edges. The contractor backfilled the articulated concrete blocks with select fill, then hydro-mulched and covered with a straw matting to help maintain slope stability and provide an aesthetically pleasing river bank.

OU2 and Central Property Areas
EPA's contractor excavated 71,191 cubic yards of waste material and contaminated soil from the OU2 and Central Property Areas and placed it in the on-site containment cell. Excavated areas included the South Shot Pile, Dangerfield Slag Pile and the OU2 Property area. Additional contamination discovered during the remedial action was covered with one foot of clay and six inches of topsoil; this was documented in the 2005 ESD. The covered areas had COC concentrations above direct contact PRG levels. Excavated areas that were designated clean were backfilled as needed. All areas were graded to promote storm water drainage.

Isolated non-hazardous solid waste was removed from the Maintenance and Warehouse buildings and disposed of off-site. 2,189 gallons of Mulrex™ (resin used in the RWI industrial process) sludge was removed from one of three 6,000-gallon aboveground storage tanks and disposed of off-site at a non-hazardous waste landfill. The other aboveground storage tanks were empty.

Containment Cell

EPA changed the containment cell design from the original multilayer cell to a cell with a MatCon® (Modified Asphalt Technology for Waste Containment) cap, which is an asphaltic cap with proprietary chemical added. The MatCon cap was chosen because it was expected to provide effective waste isolation, be lower maintenance, be lower profile, and be better for future use, such as a parking lot. The contractor constructed the MatCon containment cell in the northwestern portion of the Central Property. The cell's floor and sidewalls were lined with a geotextile fabric. Once the cell reached its waste capacity and was filled with about 78,835 cubic yards of excavated waste material, a 1-foot-thick layer of select fill and a six-inch-thick layer of base course material was placed over the waste. The final cap consisted of four inches of MatCon material; it is graded to direct surface water off the cell. The contractor also built a storm water interceptor ditch around the cell. Storm water runoff from the MatCon cover is conveyed by the ditch to a detention basin southeast of the cell, then to a drainage course under FM 93.

Institutional Control (IC) Summary Table

The 2004 ROD requires institutional controls to prevent use of shallow groundwater, prevent disturbance of the cap and containment cell that would negatively affect its functioning, provide for the continued effectiveness of the interceptor trench and surface flow controls, provide protection of and access to monitoring wells, and protect site workers from contacting waste and soil that does not meet PRGs. All institutional controls are mapped in Figure 2 and detailed below in Table 5.

In September 2005, the City of Belton adopted Ordinance 2005-46, which included the restrictions listed in Table 5 for the approximately 100-acre Site (Figure C-1, Appendix C). In 2013, the City amended Ordinance 2005-46 to exclude the property south of FM 93 (the non-process area), which had no contamination or cleanup and was originally included due to common ownership only. In June 2016, the City amended the 2013 Ordinance to align better with the institutional controls currently in place and to aid in BEDC's effort to market and sell the properties. The 2016 Ordinance states that it applies to the approximately 100-acre Site (excluding the non-process area), but the exact area under the ordinance is unclear based on the document.

In 2013, TCEQ prepared and the City of Belton filed two restrictive covenants on several tracts with Bell County. The restrictive covenants did not supersede the city ordinances, but they did supersede previously filed Notices of Environmental Conditions. The restrictive covenants state that portions of the soil and groundwater on the properties contain COCs that exceed Protective Concentration Levels, causing those portions of the property to be considered "affected property" per the Texas Risk Reduction Program. The affected property and restrictions included under each restrictive covenant are listed in Table 5.

The Cemetery Area also has informational institutional controls in the form of signage; there are "do not excavate" signs to prevent excavation of and contact with contaminated soil.

Table 5: Summary of Planned and/or Implemented Institutional Controls (ICs)

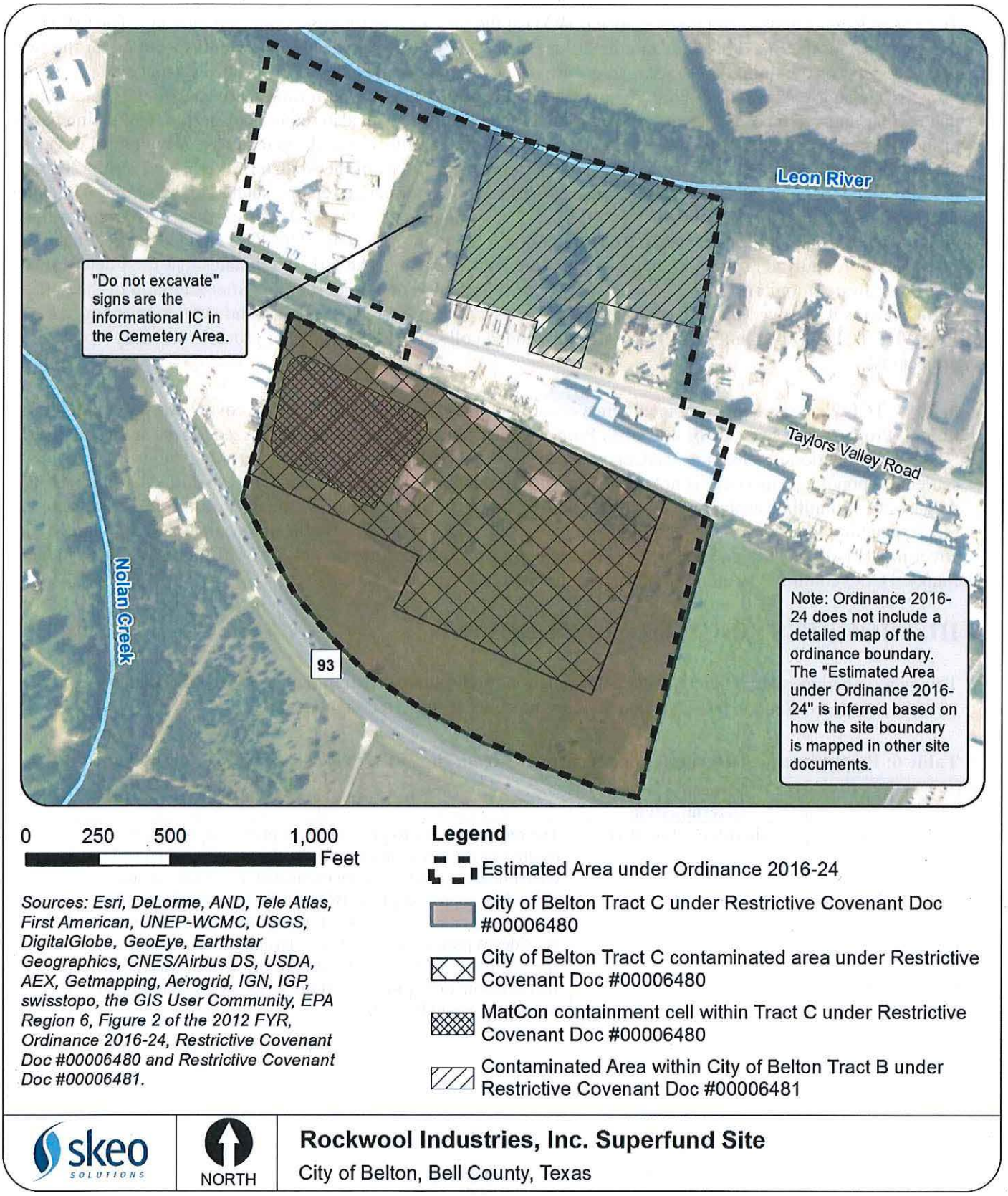
Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater and soil	Yes	Yes	The approximately 100-acre Site (see Figure C-1 in Appendix C)	• Prohibit any action that would disturb any capped areas, integrity of caps or containment cell, or cause exposure to contaminated soils at the Site • Prohibit any action that could cause exposure or access to shallow groundwater at the Site • Prohibit any action that would disturb or damage the integrity of monitoring wells at the Site • Obligates the City of Belton to preserve the integrity of the cap and containment cell • Obligates the City of Belton for implementation, inspection, reporting and enforcement of institutional controls, including notification of EPA and TCEQ upon violations • Requires ICs to remain in place until Site is UU/UE	Ordinance 2005-46
Groundwater and soil	Yes	Yes	The approximately 100-acre Site, excluding the property south of FM 93	• Includes same restrictions as Ordinance 2005-46, but excludes Tract 13, located on the south side of FM 93, because it was originally included due to common ownership only	Ordinance 2013-02

Groundwater and soil	Yes	Yes	The approximately 100-acre Site, excluding the property south of FM 93	• Includes same restrictions as Ordinance 2005-46, with the following changes to facilitate site reuse:
				  ◦ States that the remedy is suitable for "commercial" uses in addition to industrial uses
				  ◦ Allows disturbance of the caps or containment cell only if agreed to by EPA and/or TCEQ
				  ◦ Allows drilling, excavation of soil, and the construction of a well only if agreed to by EPA and/or TCEQ
				  ◦ Allows disturbance of the groundwater monitoring wells only if agreed to by EPA and/or TCEQ
				  ◦ Allows assumption of obligation for site integrity by BEDC or any subsequent owner or lessee, subject to EPA's/TCEQ's review
					Ordinance 2016-24

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
				• Preserves City's obligation to conduct one annual inspection and associated report to TCEQ and EPA each year, regardless of ownership changes, to confirm compliance with the institutional controls by owners/lessees. This does not supersede maintenance, monitoring, and reporting obligations of owners and/or lessees.	
Groundwater and soil	Yes	Yes	36.326-acre City of Belton Tract C, 21.538-acre City of Belton Tract C contaminated area and 3.944-acre MatCon containment cell within City of Belton Tract C	• No use of the property besides commercial/industrial uses • Removal or modification of the restrictive covenants is prohibited without prior TCEQ approval • No removal or modification of the physical control on the affected property without prior approval from TCEQ, and physical control must be maintained and monitored. Specific requirements for maintenance and monitoring are included in Exhibit C, which is included with the full restrictive covenant text in Appendix K. • Removal or modification of the waste control unit on the affected property is prohibited without prior approval from TCEQ, and the waste control unit must be maintained and monitored as described in Exhibit D, which is also included in Appendix K. Use of and exposure to the groundwater underlying the waste control unit for any purpose is prohibited until such time when all COCs no longer exceed their respective protective concentration levels. Removal or modification of this restrictive covenant is prohibited without prior approval of TCEQ.	2013 Restrictive Covenant Doc# 00006480
Groundwater and soil	Yes	Yes	11.016-acre contaminated area within City of Belton Tract B	• No use of the property besides commercial/industrial uses • Removal or modification of the restrictive covenants is prohibited without prior TCEQ approval. • No removal or modification of the physical control on the affected property without prior approval from TCEQ, and physical control must be maintained and monitored. Specific	2013 Restrictive Covenant Doc# 00006481

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
				requirements for maintenance and monitoring are included in Exhibit C, which is included with the full restrictive covenant text in Appendix K.	
Soil	Yes	Yes	Cemetery Area	• Prevent excavation of and contact with contaminated soil	(Signage)

Figure 2: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation & Maintenance

TCEQ conducts operation and maintenance (O&M) at the Site, except for city-conducted mowing. The O&M requirements for the Site are detailed in the 2011 O&M Plan, which specifies semiannual inspections for the first five years up to a maximum of 30 years to ensure the cover and drainage controls installed in the Geer Property/Cemetery Area, North Property and Central Property Areas are performing as designed, and to document that regular maintenance and repairs are performed as needed. The plan also requires inspection and maintenance of the articulated concrete blocks along the Leon River bank, monitoring wells, and site security/control devices, such as fences, locked gates and posted signs. TCEQ took over O&M of the MatCon cover from EPA in 2013; O&M requirements include semi-annual visual inspections and corrective repairs, such as crack sealing, patching, overlays and seal coating, as needed. The 2011 Field Sampling Plan for O&M Activities describes groundwater monitoring, which includes semi-annual sampling of all 23 monitoring wells. The 2004 ROD identified that semiannual groundwater sampling may continue for up to five years. The 2012 FYR states that EPA determined that groundwater monitoring, as stipulated in the O&M Plan, was no longer required after adoption of the 2005 Ordinance (as it removed the groundwater pathway); TCEQ decided to continue groundwater monitoring. The June 2015 TCEQ Field Sampling Plan Addendum added collection and analysis of groundwater seeps to the project tasks.

In 2014, TCEQ's contractor completed fence construction and repairs to the MatCon cover. The north side of the Central Property and east side of the North Property were fenced to prevent unauthorized access and vandalism. Since its installation in 2005, the MatCon cover has experienced surface oxidation, cracking and settlement/ponding. The cover is not subject to traffic or material storage. Repair crews mobilized to the Site in August 2014 to initiate asphalt cover repairs, which included installation of a drainage swale crossing, apron repair, patching, crack sealing and application of the seal coat. Subsequent to the major repairs to the Matcon cover in 2014, TCEQ has documented accelerated cracking and deterioration of the MatCon cover (south facing flank). TCEQ continues to monitor and repair the Matcon cover as necessary.

III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the current status of those recommendations.

Table 6: Protectiveness Determinations/Statements from the 2012 FYR

OU #	Protectiveness Determination	Protectiveness Statement
Site-wide	Short-term Protective	The remedy for the Rockwool site is protective of human health and the environment because the waste material and contaminated soils have been excavated, consolidated and capped, or capped in place. Because the completed remedial actions and monitoring program for the Rockwool site are considered protective for the short term, the remedy for the site is protective of human health and the environment and will continue to be protective if the action items identified in this report are addressed.

Table 7: Status of Recommendations from the 2012 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
Site-wide	1	All unused monitoring wells should be plugged and abandoned.	Completed	TCEQ and contractor plugged and abandoned MW-36-90 and will continue to evaluate which wells should be plugged and abandoned.	3/21/2013 MW-36-90 abandoned.
Site-wide	2	Install warning signs in the areas where they are missing.	Completed	TCEQ and contractor installed additional warning signage.	1/26/2017
Site-wide	3	Remove the trees growing out of the articulated concrete blocks as specified in the O&M Plan.	Completed	TCEQ and contractor removed trees growing out of the articulated concrete blocks.	6/1/2013
Site-wide	4	Monitor the articulated concrete blocks to avoid loss of blocks and erosion of the bank.	Completed	TCEQ and contractor have monitored the articulated concrete blocks, and erosion is not evident.	8/24/2015
Site-wide	5	Clear out all the corrugated metal pipes at the site.	Completed	TCEQ and contractor cleared out corrugated metal pipes at the Site.	8/24/2015
Site-wide	6	Patch the cracks in the outfall for the corrugated metal pipe in the stabilized Leon River bank.	Completed	TCEQ and contractor patched cracks in the outfall for the corrugated metal pipe in the stabilized Leon River bank.	1/26/2017
Site-wide	7	In areas with capped waste and with sparse vegetation the vegetation needs to be re-established to provide erosion protection.	Completed	TCEQ and contractor re-established vegetation.	1/26/2017
Site-wide	8	The erosion near the edge of the capped evaporation lagoon should be repaired and addressed in a manner to reduce or prevent future erosion.	Completed	TCEQ and contractor placed gravel and rip-rap in formerly eroded area.	8/24/2015
Site-wide	9	Site inspections should be conducted as specified in the Operations and Maintenance Plan and as specified in the institutional controls documents.	Completed	Inspections are performed as required.	1/26/2017

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

A public notice was made available by a newspaper posting in the Belton Journal on 10/6/2016, stating that there was a FYR and inviting the public to submit any comments to EPA (Appendix E). The results of the review and the report will be made available at the Site's information repository, located at City of Belton City Hall, 333 East Avenue A, Belton, TX 76513.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that has been implemented to date. The results of these interviews are summarized below, and the full interviews are included in Appendix J.

Marilyn Czimer Long, TCEQ, and Ben Camacho, TCEQ contractor, stated that the Site is acceptable and that all issues and recommendations from the previous FYR were addressed. They conducted major maintenance on the MatCon cover in 2014 due to extensive and accelerated cracking. They stated that crack depths extend through the 4-inch thick MatCon cover to the underlying crushed limestone subgrade over the compacted waste fill. In 2016, the contractor reviewed project documents and took cores of the cover to further investigate the causes of the

extensive cracking. This investigation concluded that the crack development is a function of the asphalt material itself, and that the subgrade is non-saturated and compacted. Ms. Long and Mr. Camacho also stated that they added sampling of groundwater seeps near the Leon River bank to the O&M program and that during the rainy season, the groundwater to surface water pathway is complete. They also noted that several monitoring wells consistently have elevated COC concentrations, which may indicate that the clay caps are not preventing infiltration of rainfall and leaching of contaminants to groundwater.

Cynthia Hernandez, BEDC Executive Director, and Sam Listi, Belton City Manager, were both well informed about former environmental issues and current remedial progress at the Site. Ms. Hernandez noted that in conducting a Phase I Environmental Site Assessment, there was minor debris within the bin on the Central Property and evidence of possible use as a make-shift shelter. Both Ms. Hernandez and Mr. Listi stated that no vandalism had occurred. They shared that the BEDC had begun marketing the Site for sale and that the Central Property was rezoned from heavy industrial to light industrial in the fall of 2016.

Data Review

Groundwater Data

The objective of the groundwater monitoring program is to evaluate groundwater contamination by comparing groundwater samples to site PRGs. Since 2011, TCEQ's contractor has conducted 16 groundwater sampling events. Historical groundwater monitoring data are included in Appendix G, and well locations are depicted in the site map (Figure 3). Groundwater COC plumes and groundwater flow direction are included in Figures C-3 and C-4, respectively. In this FYR, groundwater data are primarily compared to the 2003 Interim ROD groundwater PRGs for surface water protection (Table 4).[4] Institutional Controls for groundwater are in place at the site. In the last five years, no river-specific PRG exceedances were detected for any COC (lead, antimony and arsenic) in any well.[5] Despite the lack of exceedances, several wells show significant concentration increases since 2012. Select wells with notable increases of antimony and arsenic are included below in Table 8.

[4] The arsenic TSWQS/MCL that the PRG for surface water protection was based on has changed from 50 µg/L to 10 µg/L. The PRG was recalculated based on the dilution factors provided in Table 5 of the 2003 Interim ROD. Therefore, the following are estimates of PRGs with the current arsenic MCL incorporated:
Current standard ÷ dilution factor = current PRG
10 µg/L ÷ 0.002046 = 4,888 µg/L for Leon River
10 µg/L ÷ 0.004298 = 2,327 µg/L for Nolan Creek
No exceedances of these more stringent arsenic PRGs were found in the last five years.

[5] There were three antimony exceedances of the Nolan Creek PRG in MW-38-90 in the last five years, but this well is near the Leon River. There were no antimony exceedances in MW-38-90 of the Leon River PRG in this FYR period.

Table 8: Maximum Arsenic and Antimony Exceedances in Select Wells (2012 vs. 2016)

Area	Well	Antimony (North Property/Leon River Interim ROD PRG= 2,932 µg/L; Central Property/Nolan Creek Interim ROD PRG= 1,396 µg/L)		Arsenic (North Property/Leon River Interim ROD PRG= 24,441 µg/L; Central Property/Nolan Creek Interim ROD PRG= 11,633 µg/L)	
		Maximum 2012 concentration (µg/L)	**Maximum 2016 concentration (µg/L)**	**Maximum 2012 concentration (µg/L)**	**Maximum 2016 concentration (µg/L)**
Former South Shot Pile area in the Central Property	MW-24-90	5.66	229	10.4	123
North and downgradient of containment cell	MW-28-90	29.9	101	68.9	270
South of the containment cell on the Central Property border	MW-9	249	386	81	430
East of the evaporation lagoon	MW-38-90	516	1,410	6.81	18.1
South of the containment cell on the Central Property border, downgradient of former South Shot Pile	MW-34-90	323	287	391	966
Source: 2016 Annual O&M Report, Table 1.					

In addition, lead concentrations increased in the most recent sampling events in May and July 2016 in the following areas: southwest of the containment cell, along the north border of the Central Property, on the west border of North Property, south and west of the former evaporation lagoon, in the former South Shot Pile, near the containment cell, and between the former evaporation lagoon and North Shot Pile. TCEQ's contractor noted that Texas was under a drought prior to 2016 and that increased groundwater elevations in 2016 may have caused remobilized COCs, leading to increased exceedances.

Lastly, TCEQ's plume maps (created using the Final ROD PRGs rather than the Interim ROD PRGs) indicate that plumes are not delineated south and west of the Central Property Area and that plumes in the North Property Area extend beyond the site boundary (Figure C-3). There are exceedances of the Final ROD PRGs (Table 3) for all COCs in the farthest downgradient wells before the Leon River and Nolan Creek. While on-site groundwater data were compared to the less stringent Interim ROD PRGs, evaluating groundwater on the edge of the Site with the more conservative Final ROD PRGs is appropriate because there are no off-site groundwater use restrictions and off-site groundwater use is unknown. The lack of plume delineation near the Central Property and the off-site plume near the North Property may warrant monitoring and evaluation to fully delineate the plumes and to ensure that off-site groundwater and surface water impacts are adequately addressed.

Seep Data

In March 2015, TCEQ's contractor observed groundwater seeps from the articulated concrete block area along the south Leon River bank, about 100 feet north of the capped evaporation lagoon area. Seeps were present in an upper area in the form of running water and in a lower area in the form of ponding. In 2015 and 2016, the contractor collected seep samples to determine if COCs were leaching from groundwater to surface water. No upper seeps were observed in July 2016 so only lower samples were collected during that event. When compared to the Final ROD PRGs, exceedances of all COCs were detected in all sampling locations, but not during every sampling event. In several instances, exceedances were substantially higher than the PRG; for example, antimony

was detected at 1,730 µg/L, compared to its PRG of 6 µg/L. When compared to the Leon River Interim ROD PRGs, no exceedances were detected.[6,7] This pathway warrants further monitoring and continued sampling, as these data may indicate a remedy performance issue with the evaporation lagoon's clay cover, which was intended to prevent surface water infiltration and subsequent leaching of contaminants to groundwater. In addition, standing seep water could present a new ecological exposure pathway. Seep sampling data are presented below in Table 9.

Table 9: Seep Sampling Data

Sample ID	Sample Date	Antimony (µg/L)	Arsenic (µg/L)	Lead (µg/L)
Final ROD PRGs		6	10[a]	5
Interim ROD PRGs	**North Property/ Leon River**	2,932	24,441	2,444
	Central Property/ Nolan Creek	1,396	11,633	1,163
SP-1 Upper	6/22/2015	**306**	**26.6**	**18.4**
SP-1 Upper	3/15/2016	***1,730***	**84**	0.72 J
SP-1 Upper	5/24/2016	**1,180**	**104**	**23.3**
SP-2 Upper	6/22/2015	**341**	**41.2**	**31.2**
SP-2 Upper	3/15/2016	***1,760***	**91.8**	**6.43**
SP-2 Upper	5/24/2016	***1,880***	**241**	**7.01**
SP-1 Lower	6/22/2015	2.26 J	2.3 J	<0.300
SP-1 Lower	3/15/2016	**1,290**	**61.8**	0.382 J
SP-1 Lower	5/24/2016	***1,480***	**144**	**6.03**
SP-1 Lower	7/27/2016	**243**	**540**	3.53
SP-2 Lower	6/22/2015	0.993 J	2.28 J	0.305 J
SP-2 Lower	3/15/2016	**1,340**	**59.9**	0.574 J
SP-2 Lower	5/24/2016	***1,460***	**152**	**5.76**
SP-2 Lower	7/27/2016	**428**	**680**	**39.2**

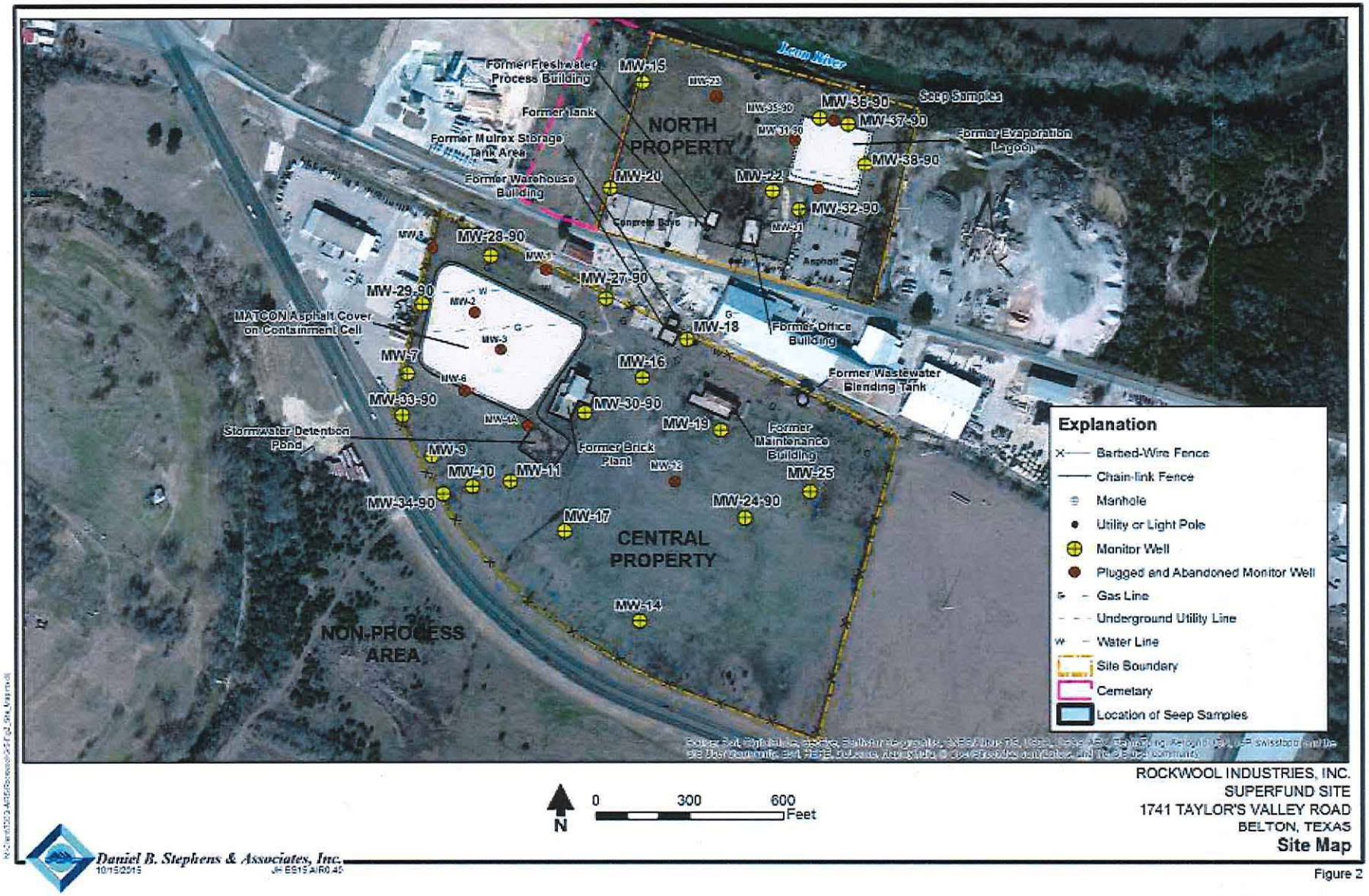
Source: Table 3 of the 2016 Operations and Inspections Letter Report.
[a]The final ROD PRG for arsenic was 50 µg/L. The standard that was the basis for the final ROD PRG for arsenic is now 10 µg/L. TCEQ's groundwater reporting and analysis compares data to the updated standard of 10 µg/L; therefore, this value is used here for consistency with TCEQ.
Bold = exceedance of current Final ROD PRG
Italics = exceedance of Interim ROD PRG for Central Property/Nolan Creek
J = estimated result/analyte detected between sample detection limit and method quantitation limit

[6] The arsenic TSWQS/MCL that the PRG for surface water protection was based on has changed from 50 µg/L to 10 µg/L. The PRG was recalculated based on the dilution factors provided in Table 5 of the 2003 Interim ROD. Therefore, the following are estimates of PRGs with the current arsenic MCL incorporated:
Current standard ÷ dilution factor = current PRG
10 µg/L ÷ 0.002046 = 4,888 µg/L for Leon River
10 µg/L ÷ 0.004298 = 2,327 µg/L for Nolan Creek
No exceedances of these more stringent arsenic PRGs were found for the 2015 and 2016 seep data.
[7] There were five exceedances of the Nolan Creek antimony Interim ROD PRG in 2015 and 2016, but these seeps are adjacent to the Leon River rather than Nolan Creek.

Other Media

Surface water and fish tissue are not sampled. The only risk identified in the ROD from the Leon River was to adult fishers from antimony in fish; however, the 2012 FYR states that previous sampling of fish tissue showed that the non-carcinogenic hazard was below the EPA recommended index of 1 and that there is no published data for acceptable concentrations of antimony in fish according to EPA research. Therefore, additional fish sampling as recommended in the O&M Plan was dismissed.

Figure 3: Detailed Site Map from 2016 Annual O&M Report (Daniel B. Stephens & Associates, Inc.)



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Site Inspection

The site inspection took place on 1/26/2017. In attendance were Robert Sullivan, EPA RPM; Casey Luckett-Snyder, EPA R6 Superfund Redevelopment Coordinator; Marilyn Czimer Long, TCEQ Project Manager; Ben Camacho, Daniel B. Stephens & Associates, Inc., TCEQ contractor; Cynthia Hernandez, BEDC; Byron Sinclair and Jeff Bolton, City of Belton; Mark Katterjohn, RPS, City of Belton contractor; and Eric Marsh and Kelly MacDonald, Skeo, EPA contractor. The purpose of the inspection was to assess the protectiveness of the remedy.

Site inspection participants began by touring the Geer Property/Cemetery Area, which is fenced and includes excavation warning signs. The Cemetery Shot Pile cover was well vegetated with grasses. The corrugated metal pipes used for storm water drainage and rock outfall were clear of vegetation and brush, which had been an issue. TCEQ and its contractor recently installed a new fence between the Cemetery Property and the North Property to prevent trespassing and fishing; the fence was in good condition. The group then toured the North Property, including the perimeter fence, the former North Shot Pile, the former evaporation lagoon and the Leon River bank. The covers on the North Shot Pile and evaporation lagoon were both well vegetated, and there was no evidence of erosion. The Leon River bank was in good condition; woody vegetation was removed from the Leon River bank in the last five years, and only grasses were present during the site inspection. The articulated concrete blocks on the river's edge appear to be slightly extending outward toward the river but still look stable. The corrugated metal pipe and outfall near the Leon River bank were also well maintained. A local business uses the southern portion of the North Property for storage, but the fencing around the property prevents site access.

Next, the inspection team toured the Central Property. There was a small hole in the fence around the property, but those issues are repaired regularly by TCEQ. The group then inspected the MatCon cover located above the main waste consolidation area. The cover was in good condition on the northern half. The southern half has widespread cracking, including the formation of new cracks and expansion of existing cracks. TCEQ and its contractor repair these cracks regularly. The storm water detention basin and the storm water drainage ditch around the MatCon cap were both in good condition. The team noted that the Central Property clay cover was well vegetated with grasses and had "do not excavate" signs around its perimeter. Wells were locked, labeled and visible. The site inspection checklist and site photos are included in Appendices D and F, respectively.

Skeo staff participated in a meeting with EPA, state and local officials at City Hall. The purpose of the meeting was to discuss the FYR process, issues related to ongoing efforts by the City of Belton and the BEDC to facilitate reuse on portions of the Site, and to discuss the Site's information repository. The repository is currently located in City Hall, but is not immediately accessible to the public. After the meeting, Skeo reviewed the repository documents. The repository had the 2004 ROD, several administrative record CDs and additional electronic documents available. The City agreed to move the repository to the library to increase accessibility, and the move was completed on February 1, 2017; the files are now located at the Lena Armstrong Public Library at 301 East 1st Avenue, Belton, Texas. Skeo staff then visited the Belton County Clerk's Office to verify the proprietary controls recorded for the affected properties.

V. TECHNICAL ASSESSMENT

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

Question A Summary:

The remedy is functioning as intended. Removal actions in the 1980s and 1990s abated immediate site threats. The final remedy of excavating and capping or covering contaminated soil and sediment has achieved the RAO of preventing direct human contact with contaminated surface soil/waste. The covers in the evaporation lagoon, Cemetery Area, North Property Area and Central Property Area all appear well vegetated.

The integrity and performance of the containment cell continues to be protective. However, the containment cell's MatCon cover has surficial cracking beyond reasonably expected wear and tear. TCEQ and its contractor repair

the cracks regularly, but formation of new cracks and expansion of existing cracks continues. In 2016, TCEQ reviewed project documents, literature and MatCon cover core sampling. TCEQ determined that the containment cell cover system may not be performing as designed. Crack development is dominant on the south-facing flank (i.e., thermal expansion) and appears to be a function of the asphalt material. Core and subgrade sampling revealed that the subgrade material is non-saturated and compacted. TCEQ should continue to monitor and repair surficial cracking of the MatCon cover to ensure long-term protectiveness. A long-term solution to ensure the containment cell has a functional cap may be warranted.

Surface water drainage issues discussed in the 2012 FYR have been addressed, and drainage features on site are functioning and clear of debris. This has achieved the RAO of preventing the migration of contaminated soil/waste into the Leon River through surface runoff and erosion.

The 2004 ROD's RAOs are to prevent leaching and migration of lead, antimony and arsenic into groundwater and surface water exceeding specified concentrations. Groundwater monitoring data from the TCEQ-led O&M program indicate COC concentrations are all below the river-specific Interim ROD PRGs, though they do not yet achieve the levels specified in the RAOs.[8] Increasing COC concentration trends in groundwater near several caps and covers may indicate a remedy performance issue. The 2016 O&M report suggested a more focused evaluation of hot spots and the adequacy of the soil cover over areas where waste was left in place, because trends suggest that waste may be a continuing source of contamination. The TCEQ groundwater monitoring reports compare groundwater to the more conservative Final ROD PRGs (Table 3) rather than the Interim ROD PRGs (Table 4). Institutional Controls for groundwater are in place at the Site, therefore, the Site continues to be protective until the RAOs are achieved. Regardless, the cause of the increasing COC trends should be further evaluated to ensure capped and covered areas are not further contaminating groundwater and to determine if additional actions are needed to be protective of surface water. In addition, the groundwater seep sampling data from 2015 and 2016 indicate that this pathway warrants continued sampling. These data may indicate a remedy performance issue with the evaporation lagoon's clay cover, which was intended to prevent surface water infiltration and subsequent leaching of contaminants to groundwater.

Groundwater sampling data indicate exceedances of the Final ROD PRGs for all COCs in the farthest downgradient wells before the Leon River and Nolan Creek. Contaminant plumes are not fully delineated in the Central Property Area, and plumes extend off site in the North Property Area. The lack of total plume delineation does not affect the site protectiveness, however, because the yield in the contaminated shallow aquifer is extremely low and unreliable, the groundwater is perched and not hydraulically inter-connected to other water-bearing units, and no drinking water wells are installed in the shallow groundwater. Further downgradient groundwater sampling or surface water sampling, seep sampling, plume delineation, or a groundwater remedial action may be warranted to monitor and mitigate the extent of groundwater contamination and the possibility of surface water impacts. Expansion of institutional controls may also be necessary based on the extent of contamination.

The 2004 ROD identifies that semiannual groundwater sampling may continue for up to five years. In the 2012 FYR, EPA determined that groundwater monitoring was not required because the 2005 Ordinance removed the groundwater exposure pathway. RAOs from the 2004 ROD include preventing leaching and migration of COCs into groundwater and surface water above specified levels; therefore, either surface water monitoring or groundwater monitoring for the protection of surface water appear necessary in order to determine achievement of the RAOs despite the implementation of the Ordinance.

Institutional controls are in place on most of the Site. The required Texas Risk Reduction Program Restrictive Covenants for Tracts 8, 9 and 10 through 13 were recorded on February 19, 2013, in order to establish property use restrictions to support the remedy. The North Property Area restrictive covenant limits site use to commercial/industrial, prohibits removal or modification of physical controls on the property, and includes

[8] There were three antimony exceedances of the Nolan Creek PRG in MW-38-90 in the last five years, but this well is near the Leon River. There were no antimony exceedances in MW-38-90 of the Leon River PRG in this FYR period.

maintenance and monitoring requirements. The restrictive covenant in the Central Property Area includes the same North Property restrictions, with additional restrictions for the MatCon cap. The Cemetery Area also has informational institutional controls in the form of signage. The 2005 Ordinance and subsequent addendums in 2013 and 2016 prohibit actions that cause exposure to contaminated soil or groundwater and include inspection and maintenance requirements for the Site. The 2016 Ordinance states that it applies to the approximately 100-acre Site (excluding the non-process area), but the exact area under the ordinance is unclear based on the document. The precise jurisdiction of the ordinance should be clarified by including an updated map to ensure compliance with its restrictions.

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 B Summary:

As part of this FYR, Applicable or Relevant and Appropriate Requirements (ARARs) that address the protectiveness of the remedy were reviewed. A full ARAR analysis is included in Appendix H. The 2004 ROD selected the Texas Surface Water Quality Standards (TSWQSs) (30 Texas Administrative Code [TAC] 307) and the Federal Water Quality Criteria (FWQC) (40 CFR Part 131) as surface water ARARs for the Site (Table H-2). The ROD did not select cleanup goals for surface water, since no impacts to surface water were identified; however, surface water cleanup goals may be warranted to comply with ARARs.

The 2004 ROD did not identify groundwater-specific ARARs, but Final ROD groundwater PRGs were based on the TSWQSs for arsenic and lead and the MCL for antimony. Therefore, to assess the protectiveness of groundwater cleanup goals, this FYR compared ROD cleanup goals to the standard upon which they were based. Table H-3 compares current standards to the ROD's cleanup goals; both the arsenic and lead TSWQSs are more stringent than the Final ROD PRGs. TCEQ and its contractor compare groundwater data to the current arsenic TSWQS, but they do not use the current lead TSWQS. EPA and TCEQ will evaluate the appropriate standards to ensure they remain protective and document any standard or remedy changes accordingly.

The 2004 ROD established the Texas Risk Reduction Standards (RRS) (30 TAC 335 Subchapter S) as the chemical-specific ARAR for surface soil COCs and states that the RRS were the basis for the soil cleanup goals. This appears to be accurate for arsenic, and the arsenic standard has not changed since the 2004 ROD. However, the 2003 RI/FS states that the cleanup goals for antimony and lead were determined using the methods described in EPA guidance documents from 1991 and 1996. To evaluate the protectiveness of soil cleanup goals, this FYR includes a screening-level risk evaluation, which evaluated the risk associated with soil cleanup goals for a composite worker. The screening-level risk evaluation compared these cleanup goals to EPA's Regional Screening Levels (RSLs) based on a fixed level of cancer risk (1×10^{-6}) and a non-cancer hazard quotient (HQ) of 1, which results in a qualitative estimate of carcinogenic risk and non-cancer HQs for each cleanup goal. Estimates for arsenic and antimony were within EPA's protective risk range or below an HQ of 1. The lead cleanup goal of 1,754 mg/kg, however, exceeds the industrial composite worker RSL of 800 mg/kg. However, the 2003 EPA Adult Lead Model (ALM) was used to determine the lead PRG, and as part of this FYR, the ALM was rerun with current default parameters. The current model yielded a PRG higher than the ROD's selected lead cleanup goal, indicating this cleanup goal remains valid. The full screening-level risk evaluation and ALM are included in Appendix I.

In addition to presenting a groundwater to surface water pathway and indicating possible remedy performance issues, standing seep water is a new potential ecological exposure pathway. The lower seeps in 2015 and 2016 were present in the form of ponding, and exceedances of Final ROD PRGs were detected for all COCs. This should continue to be monitored, further investigated and addressed, as needed, to minimize unacceptable risks.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the

remedy?

No other information has come to light that could call into question the protectiveness of the remedy.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
OU2

Issues and Recommendations Identified in the FYR:

OU(s): 1	Issue Category: Monitoring			
	Issue: Standing seep water exceeds the Final ROD GW PRGs (TSWQSs or MCLs) for protection of GW. The 2003 Interim ROD developed GW PRGs for the groundwater to surface water pathway. Standing seep water does not exceed the Leon River Interim ROD GW PRGs for protection of SW.			
	Recommendation: Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	Issue Category: Operations and Maintenance			
	Issue: The MatCon containment cell asphalt cover has cracking beyond that reasonably anticipated. The MatCon cover is currently functional, but long term performance may be an issue.			
	Recommendation: Evaluate the MatCon containment cell asphalt cover and Site soil covers and consider whether there is a long term solution to the issues of asphalt cracking regarding long term performance.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	Issue Category: Monitoring
	Issue: Final ROD groundwater PRGs were based on the TSWQSs for arsenic and lead, and these standards have changed since the 2004 ROD. TCEQ currently compares groundwater data to the current arsenic TSWQS, but does not use the current lead TSWQS.

	Recommendation: EPA and TCEQ will evaluate the appropriate standards to ensure that GW remediation goals remain protective and document any standard or remedy changes accordingly.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	**Issue Category: Monitoring**			
	Issue: Groundwater COC concentrations indicate upward trends in the Central Property and Evaporation Lagoon Remediation Area.			
	Recommendation: Continue to monitor GW to evaluate any source of upward COC GW trends, and determine if additional actions are needed to be protective of SW.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

OU(s): 1	**Issue Category: Monitoring**			
	Issue: GW contaminant plume is currently stable but is not fully delineated in the Central Property Area, and the plume extends off-site to the Leon River in the North Property Area.			
	Recommendation: Continue to monitor GW to ensure the COC contaminant plume is stable and the institutional controls are protective. Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party/ Support Agency**	**Milestone Date**
No	Yes	TCEQ	EPA	9/21/2020

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement	
Operable Unit: 1	*Protectiveness Determination:* Short-term Protective

Protectiveness Statement: The remedy at OU1 currently protects human health and the environment because contaminated soil and sediment were excavated and capped or covered, the Leon River bank was stabilized and backfilled, and several institutional controls are in place to prevent unacceptable exposures to soil and groundwater contamination. However, in order for the remedy to be protective in the long term, the following actions need to be taken to ensure protectiveness:

- Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.
- Evaluate the MatCon containment cell asphalt cover and Site soil covers and consider whether there is a long term solution to the issues of asphalt cracking regarding long term performance.
- EPA and TCEQ will evaluate the appropriate standards to ensure that GW remediation goals remain protective and document any standard or remedy changes accordingly.
- Continue to monitor GW to evaluate any source of upward COC GW trends, and determine if additional actions are needed to be protective of SW.
- Continue to monitor GW to ensure the COC contaminant plume is stable and the institutional controls are protective. Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.

Site-wide Protectiveness Statement	
Site-wide	*Protectiveness Determination:* Short-term Protective

Protectiveness Statement: The remedy at the Site currently protects human health and the environment because contaminated soil and sediment were excavated and capped or covered, the Leon River bank was stabilized and backfilled, and several institutional controls are in place to prevent unacceptable exposures to soil and groundwater contamination. However, in order for the remedy to be protective in the long term, the following actions need to be taken to ensure protectiveness:

- Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.
- Evaluate the MatCon containment cell asphalt cover and Site soil covers and consider whether there is a long term solution to the issues of asphalt cracking regarding long term performance.
- EPA and TCEQ will evaluate the appropriate standards to ensure that GW remediation goals remain protective and document any standard or remedy changes accordingly.
- Continue to monitor GW to evaluate any source of upward COC GW trends, and determine if additional actions are needed to be protective of SW.
- Continue to monitor GW to ensure the COC contaminant plume is stable and the institutional controls are protective. Continue to monitor seep water to the Leon River to ensure long term protectiveness of SW.

VIII. NEXT REVIEW

The next FYR Report for the Rockwool Industries Inc. Superfund site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

Addendum No. 1 to the Field Sampling Plan for O&M, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. June 2012.

Addendum No. 2 to the Field Sampling Plan for O&M, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. January 2015.

Addendum No. 3 to the Field Sampling Plan for O&M, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. June 2015.

Annual O&M Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. July 2013.

Annual O&M Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. August 2014.

Annual O&M Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. October 2015.

Annual O&M Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. October 2016.

Drainage Maintenance Activity Letter Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. September 2012.

Explanation of Significant Differences, Rockwool Industries, Inc. Superfund Site, Belton, Texas. EPA Region 6. August 2005.

Fence Construction & Hot Mixed Asphaltic Concrete Cover Repair Letter Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. August 2013.

Field Sampling Plan for O&M, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. April 2011.

Field Summary Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. July 2013.

Final Record of Decision, Rockwool Industries, Inc. Superfund Site, Belton, Texas. EPA Region 6. September 2004.

Five-Year Review, Rockwool Industries, Inc. Superfund Site, Belton, Texas. EPA Region 6. September 2012.

Interim Record of Decision, Rockwool Industries, Inc. Superfund Site, Belton, Texas. EPA Region 6. August 2003.

O&M Inspections Letter Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. August 2015.

O&M Inspections Letter Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. August 2016.

O&M Plan, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. February 2011.

O&M Plan for MatCon Hot Mixed Asphaltic Cover, Addendum to the Site O&M Plan, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. August 2013.

Ordinance No. 2005-46, City of Belton, Texas. September 2005.

Ordinance No. 2013-02, City of Belton, Texas. January 2013.

Ordinance No. 2016-24, City of Belton, Texas. June 2016.

Preliminary Close Out Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. EPA Region 6. September 2005.

Project Document Review & Containment Cell Cover Evaluation Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. October 2016.

Remedial Action Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. EPA Region 6. February 2006.

Remedial Investigation/Feasibility Study, Rockwool Industries, Inc. Superfund Site, Belton, Texas. EPA Region 6. April 2003.

Semi-Annual O&M Report, Rockwool Industries, Inc. Superfund Site, Belton, Texas. TCEQ. October 2012.

Texas Risk Reduction Program, Restrictive Covenant Doc# 00006480, State of Texas, County of Bell. January 2013.

Texas Risk Reduction Program, Restrictive Covenant Doc# 00006481, State of Texas, County of Bell. January 2013.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
RWI begins mineral wool manufacturing operation	1955
RWI facility stops production	February 1987
Initial discovery of contamination of waste materials, surface water, sediment and groundwater with antimony, arsenic and lead	December 8, 1995
EPA completed the Preliminary Assessment of the Site	December 1995
EPA completed the Site Screen Investigation	October 1996
EPA proposed the Site to the NPL	March 6, 1998
EPA listed the Site on the NPL	September 29, 1998
EPA initiated remedial investigation/feasibility study	September 30, 1998
EPA completed remedial investigation/feasibility study	April 20, 2003
EPA issued Interim ROD	August 29, 2003
EPA initiated remedial design	October 16, 2003
EPA signed Final ROD	September 20, 2004
EPA completed remedial design	February 7, 2005
EPA initiated the remedial action	April 11, 2005
EPA issued an ESD	August 19, 2005
City of Belton adopted Ordinance 2005-46	September 27, 2005
EPA signed the Preliminary Closeout Report and declared the Site construction complete	September 29, 2005
EPA completed the remedial action	May 1, 2006
First FYR inspection conducted	March 17-18, 2011
Draft Final FYR received by TCEQ	July 5, 2011
TCEQ letter/comments to EPA (Draft final FYR)	August 1, 2011
EPA signed the first FYR	September 21, 2012
City of Belton issued amended Ordinance 2013-02, and TCEQ filed restrictive covenant documents #00006480 and #00006481	January 8, 2013
City of Belton issued amended Ordinance 2016-24	June 28, 2016

APPENDIX C – SITE MAPS

Figure C-1: Aerial View of the Rockwool Site, Figure 2, 2012 FYR

Figure 2. Aerial View of the Rockwool Site

Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Figure C-2: Source Areas & Remediation Areas, Figure 3, 2012 FYR (CH2M HILL)

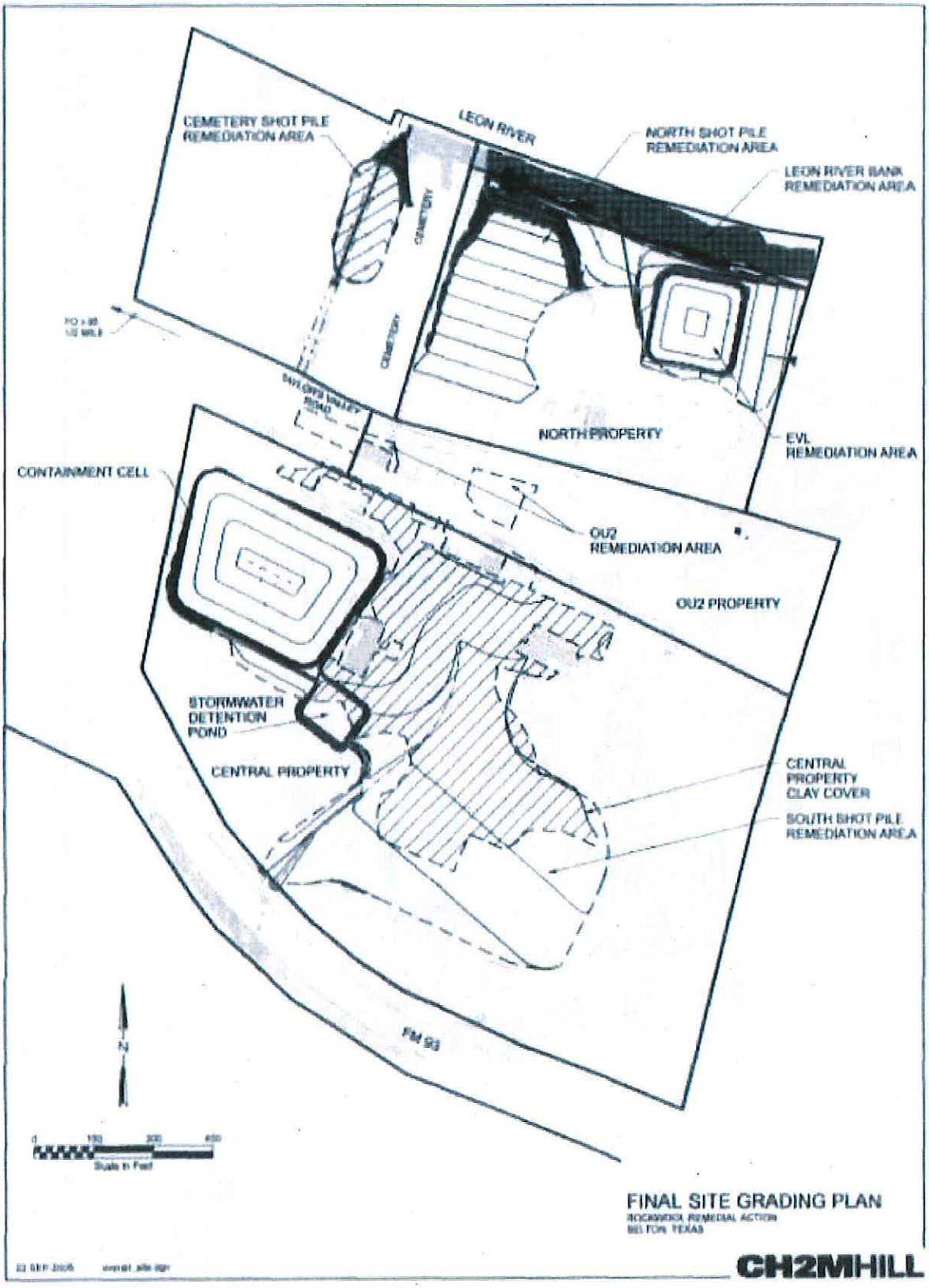
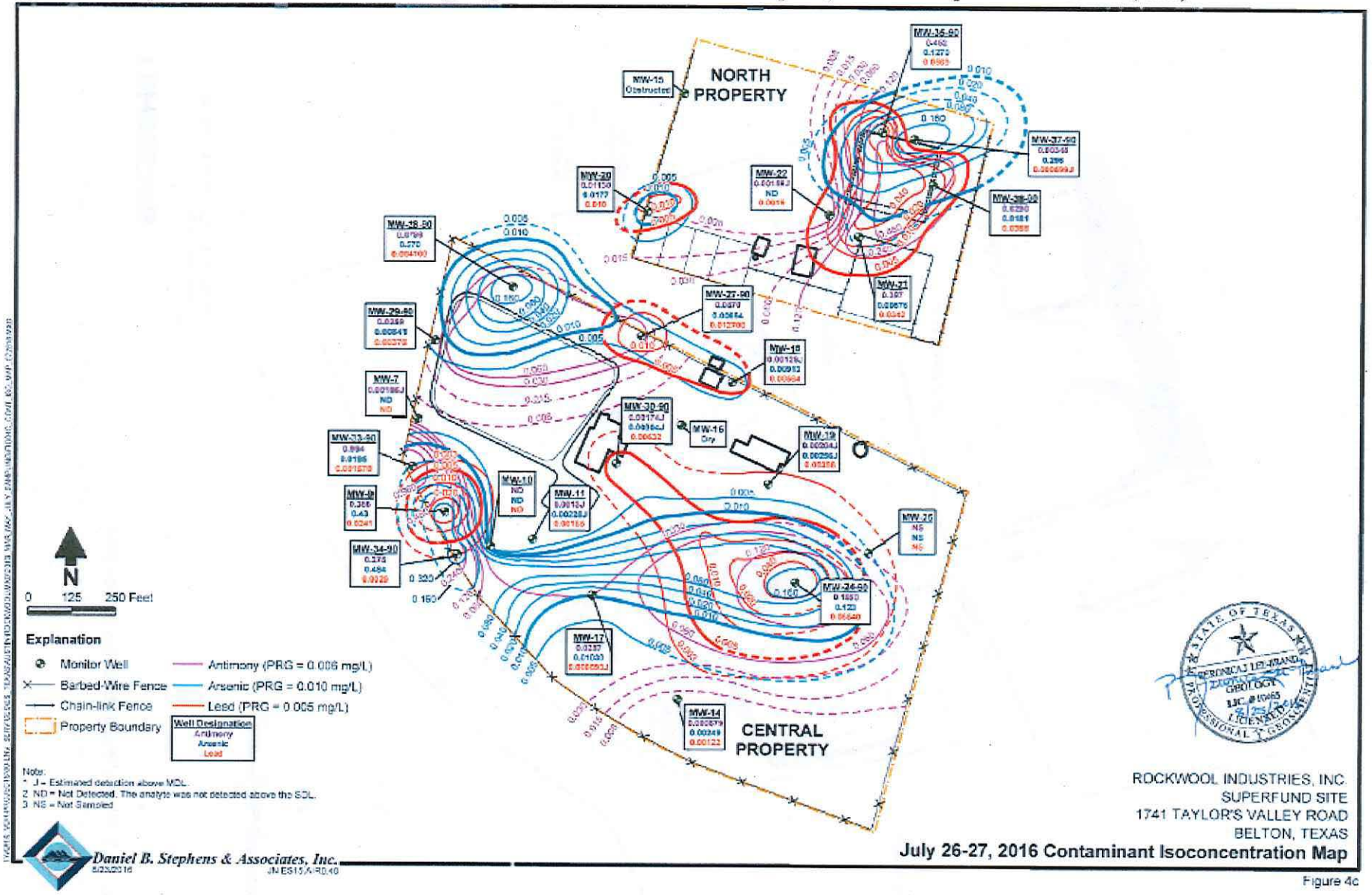


Figure 3. Plan View of the Rockwool Site

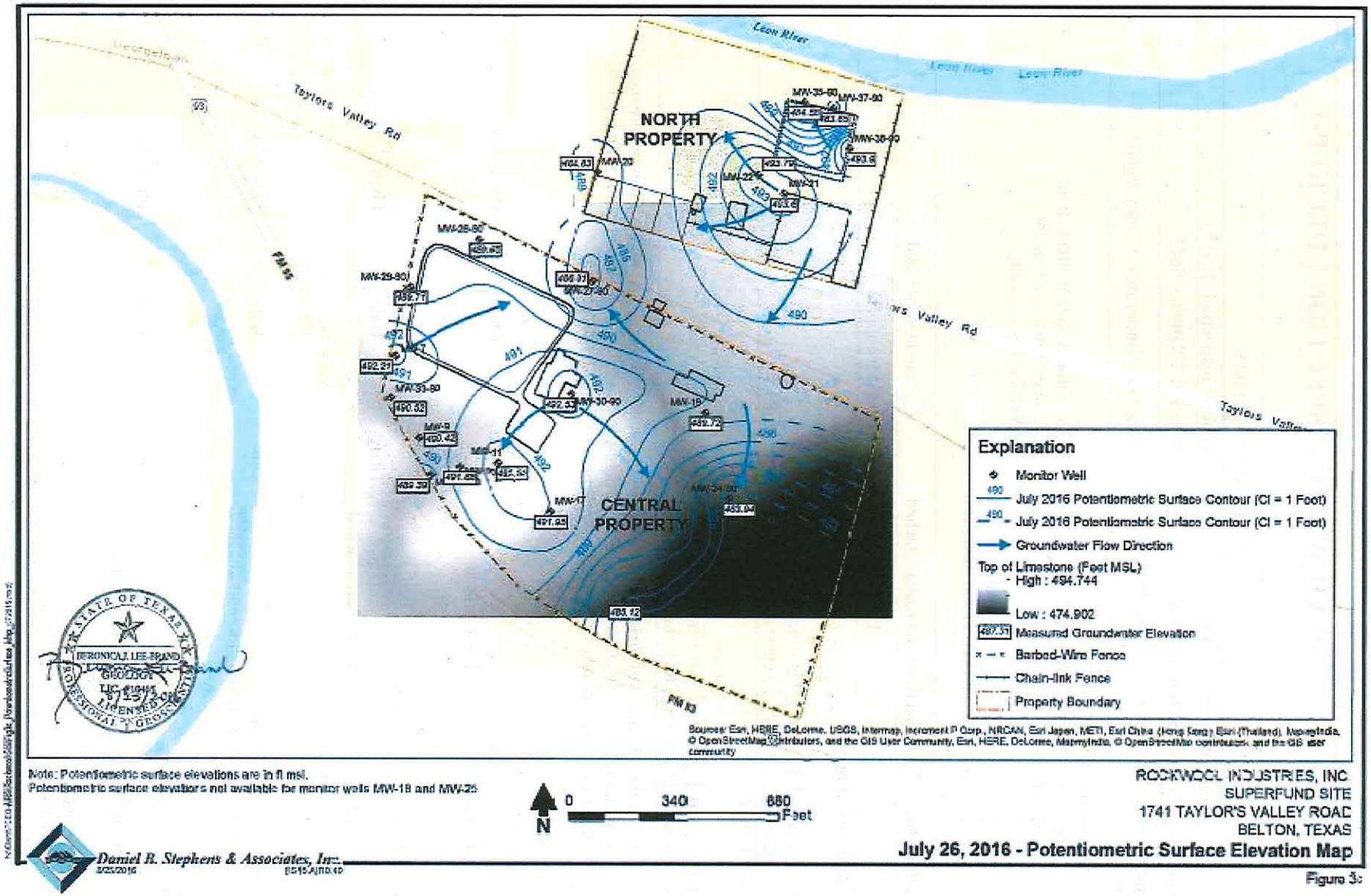
Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Figure C-3: July 2016 Contaminant Plume Map, Figure 4c, 2016 Annual O&M Report (Daniel B. Stephens & Associates, Inc.)



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Figure C-4: July 2016 Potentiometric Surface Elevation Map, Figure 3c, 2016 Annual O&M Report (Daniel B. Stephens & Associates, Inc.)



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

APPENDIX D – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Rockwool Industries Inc.	**Date of Inspection:** 1/26/17
Location and Region: Belton, Texas 6	**EPA ID: TXD066379645**
Agency, Office or Company Leading the Five-Year Review: EPA	**Weather/Temperature:** sunny and 60s

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☐ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: _____
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (check all that apply)

1. **O&M Site Manager** _____ Name _____ Title _____ Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems, suggestions ☐ Report attached: _____

2. **O&M Staff** _____ Name _____ Title _____ Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems/suggestions ☐ Report attached: _____

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). Fill in all that apply.

   Agency _____
   Contact _____ Name _____ Title _____ Date _____ Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency _____
   Contact _____Name _____ Title _____ Date _____ Phone No.
   Problems/suggestions ☐ Report attached:_____

   Agency _____
   Contact _____ Name _____ Title _____ Date _____ Phone No.
   Problems/suggestions ☐ Report attached:_____

   Agency _____
   Contact _____ Name _____ Title _____ Date _____ Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency _____
   Contact _____ Name _____ Title _____ Date _____ Phone No.

Problems/suggestions ☐ Report attached:_____

4. **Other Interviews** (optional) ☐ Report attached: _____

III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)

1. **O&M Documents**

☐ O&M manual	☐ Readily available	☐ Up to date	☒ N/A
☐ As-built drawings	☐ Readily available	☐ Up to date	☒ N/A
☐ Maintenance logs	☐ Readily available	☐ Up to date	☒ N/A

Remarks: _____

2. **Site-Specific Health and Safety Plan** ☐ Readily available ☐ Up to date ☒ N/A

☐ Contingency plan/emergency response plan ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

3. **O&M and OSHA Training Records** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

4. **Permits and Service Agreements**

☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A
☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A

Remarks: _____

5. **Gas Generation Records** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

6. **Settlement Monument Records** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

7. **Groundwater Monitoring Records** ☒ Readily available ☒ Up to date ☐ N/A

Remarks: Available with TCEQ.

8. **Leachate Extraction Records** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

9. **Discharge Compliance Records**

☐ Air	☐ Readily available	☐ Up to date	☒ N/A
☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A

Remarks: _____

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

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

☐ _____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☒ Funding mechanism/agreement in place ☐ Unavailable

Original O&M cost estimate: 2004 ROD estimated $174,000 (Net Present Value of annual costs for next 30 years) ☐ Breakdown attached

Total TCEQ cost by fiscal year for review period if available

From: 9/1/2012 Date	To: 8/31/2013 Date	85,900.60 Total cost	☐ Breakdown attached
From: 12/18/2013 Date	To: 8/31/2014 Date	339,247.70 Total cost	☐ Breakdown attached
From: 9/1/2014 Date	To: 8/31/2015 Date	218,336.57 Total cost	☐ Breakdown attached
From: 9/1/2015 Date	To: 8/31/2016 Date	68,287.13 Total cost	☐ Breakdown attached
From: 9/1/2016 Date	To: 8/31/2017 Date	68,964.72 Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs during Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing Damaged** ☐ Location shown on site map ☐ Gates secured ☒ N/A

Remarks: fencing on site but not part of remedy

B. Other Access Restrictions

1. **Signs and Other Security Measures** ☐ Location shown on site map ☒ N/A

Remarks: signs posted throughout site but not part of remedy

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): site inspections

Frequency: periodic

Responsible party/agency: TCEQ, contractor and the City of Belton

Contact	Marilyn Long	TCEQ Project Manager	1/26/17	512-239-0761
	Name	Title	Date	Phone no.

Reporting is up to date ☒ Yes ☐ No ☐ N/A

Reports are verified by the lead agency ☒ Yes ☐ No ☐ N/A

Specific requirements in deed or decision documents have been met ☒ Yes ☐ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☒ ICs are adequate ☐ ICs are inadequate ☐ N/A

Remarks: _____

D. General

1. **Vandalism/Trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land Use Changes On Site** ☒ N/A

Remarks: _____

3. **Land Use Changes Off Site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☐ Applicable ☒ N/A

1. **Roads Damaged** ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: _____

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (low spots) ☐ Location shown on site map ☒ Settlement not evident

Aerial extent: _____ Depth: _____

Remarks: _____

2. **Cracks** ☐ Location shown on site map ☐ Cracking not evident

Lengths: _____ Widths: _____ Depths: _____

Remarks: cracking evident on MatCon, particularly on south side; TCEQ actively repairs cracks

3.	**Erosion**	☐ Location shown on site map	☒ Erosion not evident
	Aerial extent: _____		Depth: _____
	Remarks: _____		
4.	**Holes**	☐ Location shown on site map	☒ Holes not evident
	Aerial extent: _____		Depth: _____
	Remarks: _____		
5.	**Vegetative Cover**	☒ Grass	☒ Cover properly established
	☐ No signs of stress	☐ Trees/shrubs (indicate size and locations on a diagram)	
	Remarks: vegetative cover properly established with grass on Cemetery Shot Pile, North Shot Pile, evaporation lagoon and South Shot Pile		
6.	**Alternative Cover** (e.g., armored rock, concrete)		☐ N/A
	Remarks: MatCon cover on containment cell; generally in good condition; has cracks mentioned above		
7.	**Bulges**	☐ Location shown on site map	☒ Bulges not evident
	Area extent: _____		Height: _____
	Remarks: _____		
8.	**Wet Areas/Water Damage**	☒ Wet areas/water damage not evident	
	☐ Wet areas	☐ Location shown on site map	Area extent: _____
	☐ Ponding	☐ Location shown on site map	Area extent: _____
	☐ Seeps	☐ Location shown on site map	Area extent: _____
	☐ Soft subgrade	☐ Location shown on site map	Area extent: _____
	Remarks: _____		
9.	**Slope Instability**	☐ Slides	☐ Location shown on site map
	☒ No evidence of slope instability		
	Aerial extent: _____		
	Remarks: Leon River bank and articulated concrete blocks appear stable		
B. Benches		☐ Applicable	☒ N/A
	(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.)		
1.	**Flows Bypass Bench**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
2.	**Bench Breached**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
3.	**Bench Overtopped**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
C. Letdown Channels		☒ Applicable	☐ N/A
	(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.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☒ No evidence of settlement
   Aerial extent: _____ Depth: _____
   Remarks: _____

2. **Material Degradation** ☐ Location shown on site map ☒ No evidence of degradation
   Material type:_____ Aerial extent: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☒ No evidence of erosion
   Aerial extent: _____ Depth: _____
   Remarks: _____

4. **Undercutting** ☐ Location shown on site map ☒ No evidence of undercutting
   Aerial extent: _____ Depth: _____
   Remarks: cracks on the drainage pipe outfall were repaired in last five years

5. **Obstructions** Type: _____ ☒ No obstructions
   ☐ Location shown on site map Aerial 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 Aerial extent: _____
   Remarks: _____

D. Cover Penetrations ☐ Applicable ☒ N/A

1. **Gas Vents** ☐ Active ☐ Passive
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Gas Monitoring Probes**
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ 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. **Extraction Wells Leachate**
   ☐ 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: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☒ Applicable ☐ N/A

1. **Siltation** Area extent: _____ Depth: _____ ☐ N/A

☒ Siltation not evident

Remarks: _____

2. **Erosion** Area extent: _____ Depth: _____

☒ Erosion not evident

Remarks: _____

3. **Outlet Works** ☒ Functioning ☐ N/A

Remarks: _____

4. **Dam** ☐ Functioning ☒ N/A

Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident

Horizontal displacement: _____ Vertical displacement: _____

Rotational displacement: _____

Remarks: _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident

Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☒ Applicable ☐ N/A

1. **Siltation** ☐ Location shown on site map ☒ Siltation not evident
   Area extent: _____ Depth: _____
   Remarks: _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A
   ☒ Vegetation does not impede flow
   Area extent: _____ Type: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☒ Erosion not evident
   Area extent: _____ Depth: _____
   Remarks: _____

4. **Discharge Structure** ☐ Functioning ☒ N/A
   Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident
   Area extent: _____ Depth: _____
   Remarks: _____

2. **Performance Monitoring** Type of monitoring: _____
   ☐ Performance not monitored
   Frequency: _____ ☐ Evidence of breaching
   Head differential: _____
   Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing and Electrical**
   ☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances**
   ☐ Good condition ☐ Needs maintenance
   Remarks: _____

3. **Spare Parts and Equipment**
   ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided
   Remarks: _____

B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Collection Structures, Pumps and Electrical**

☐ Good condition ☐ Needs maintenance

Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. **Treatment Train** (check components that apply)

☐ Metals removal ☐ Oil/water separation ☐ Bioremediation

☐ Air stripping ☐ Carbon adsorbers

☐ Filters: _____

☐ Additive (e.g., chelation agent, flocculent): _____

☐ Others: _____

☐ Good condition ☐ Needs maintenance

☐ Sampling ports properly marked and functional

☐ Sampling/maintenance log displayed and up to date

☐ Equipment properly identified

☐ Quantity of groundwater treated annually: _____

☐ Quantity of surface water treated annually: _____

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

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☒ N/A

Remarks:

X. OTHER REMEDIES

If there are remedies applied at the site and 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 designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions).

The remedy was designed to prevent exposure to contaminated soil and to minimize impacts to groundwater and surface water. Observations during the site inspection indicate that the remedy is functioning as designed. However, monitoring data from TCEQ indicates exceedances for COCs in groundwater and seeps. In addition, cracking in the MatCon cap may require further evaluation to ensure its continued effectiveness.

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.

O&M procedures conducted on site appear to be generally effective. The covers, caps, wells, fences, signs, drainage corrugated metal pipes and articulated concrete blocks are all well-maintained. Widespread cracking on the MatCon cap is monitored and patched regularly.

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.

Widespread cracking on the south-half of the MatCon cap, relative to the north-half of the cap, suggests the remedy is not performing as designed.

D. Opportunities for Optimization

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

N/A

Site Inspection Roster
Robert Sullivan, EPA
Casey Luckett-Snyder, EPA
Marilyn Czimer Long, TCEQ
Ben Camacho, Daniel B. Stephens & Associates, Inc.
Cynthia Hernandez, City of Belton
Byron Sinclair, City of Belton Public Works
Jeff Bolton, City of Belton Public Works
Mark Katterjohn, RPS
Eric Marsh, Skeo
Kelly MacDonald, Skeo

APPENDIX E – PRESS NOTICE

Rockwool Industries Inc. Superfund Site
Public Notice
U. S. Environmental Protection Agency, Region 6

October 2016

The U.S. Environmental Protection Agency Region 6 (EPA) will be conducting the second five-year review of remedy implementation and performance at the Rockwool Industries Inc. Superfund site (Site) in Belton, Texas. The Site covers about 100 acres and is divided by Farm to Market (FM) Road 93. Nearby land uses are primarily industrial but also include commercial, agricultural and residential areas. Some businesses currently operate on site; the remainder of the area is unused. Plans are in place for further development at the Site.

From the mid-1950s until 1987, Rockwool Industries, Inc. manufactured mineral wool insulation on site. The Site's remedy includes excavation and on-site consolidation of some wastes, capping of other wastes in place, revegetation, groundwater monitoring and institutional controls. Remedy construction finished in 2005; operation and maintenance activities are ongoing.

The five-year review will determine if the remedy is still protective of human health and the environment. The five-year review is scheduled for completion in September 2017.

The report will be made available to the public at the following local information repository:

City of Belton City Hall
333 East Avenue A
Belton, Texas 76513
(254) 933-5816

Site status updates are available on the Internet at
https://www.epa.gov/superfund/rockwool

All media inquiries should be directed
to the EPA Press Office at (214) 665-2200

For more information about the Site, contact:

Bob Sullivan / Remedial Project Manager
(214) 665-2223 or 1-800-533-3508 (toll-free)
or by email at sullivan.robert@epa.gov

Joan Drammeh / Community Involvement Coordinator
(214) 665-2151 or 1-800-533-3508 (toll-free)
or by email at drammeh.joan@epa.gov

APPENDIX F – REMEDIAL ACTION AND SITE INSPECTION PHOTOS

BEFORE – Pre-Remediation/Remedial Actions Photos from 2005 (Source: 2006 Remedial Action Report)

North Shot Pile.

Evaporation lagoon.

Dangerfield Slag Pile.

Waste being placed in containment cell.

Removal of piping in evaporation lagoon.

AFTER – Site Inspection Photos: January 2017

"Do not excavate" sign on the Cemetery Property.

Former Cemetery Shot Pile Area.

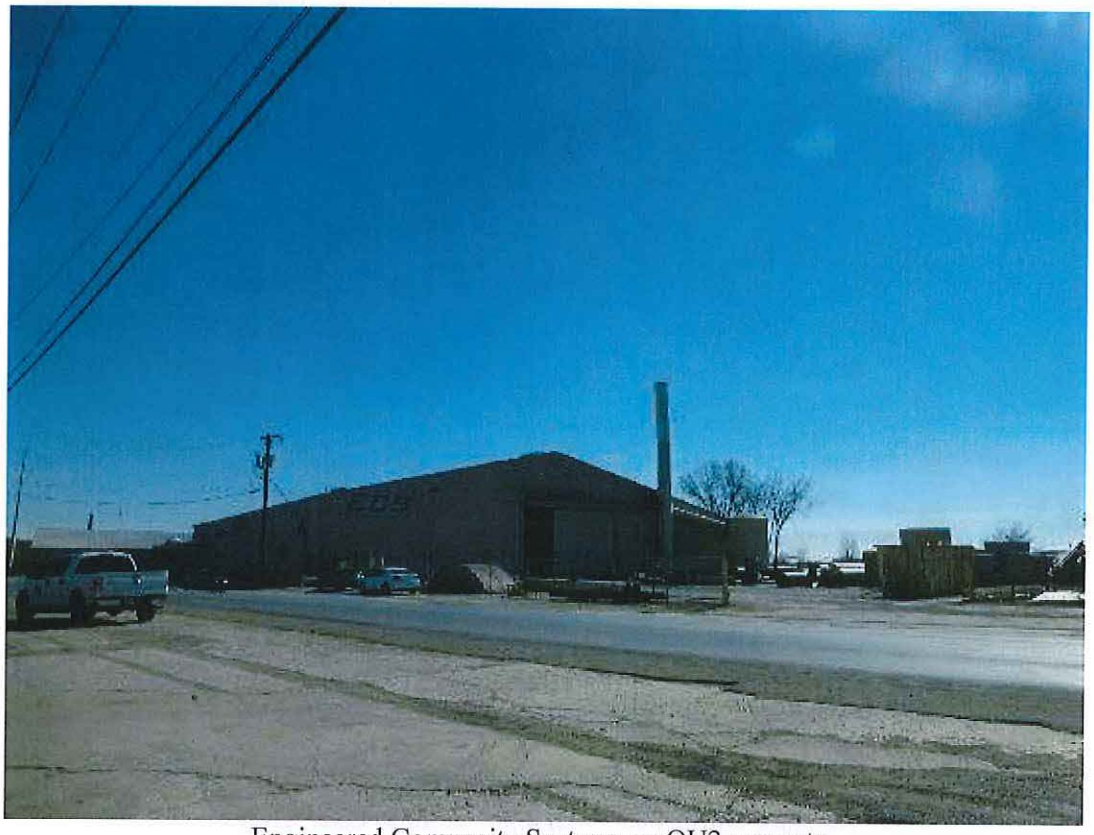
Cemetery Property facing north.

Cemetery Property facing south.

Drainage corrugated metal pipe west of Cemetery Property.

Drainage corrugated metal pipe outfall to Leon River.

Fence between Cemetery Property and North Property.



Engineered Composite Systems on OU2 property.

Former North Shot Pile area, looking north.

Former Evaporation Lagoon Area.

Leon River bank with articulated concrete blocks.

Drainage corrugated metal pipe outfall from North Property to Leon River.

Central Property facing south.

MW-27-90.

MatCon cover, facing southwest.

Cracking and repairs on southern side of MatCon cover.

Surface water drainage south of MatCon cover.

Stormwater detention pond southeast of MatCon cell.

Central Property, facing east.

Central Property clay cover, facing north.

"Do not excavate" sign on Central Property.

APPENDIX G – HISTORICAL GROUNDWATER DATA

Historical Groundwater Sampling Data, Table 1, 2016 Annual O&M Report (Daniel B. Stephens & Associates, Inc.)

Daniel B. Stephens & Associates, Inc.

Table 1. Summary of Groundwater Analytical Results
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)		SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)		SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006				0.010			0.005			
MW-7	1105024-09	5/4/2011	0.00208	J	0.000900	0.00250	<0.00250	0.00200	0.00500	0.000972	J	0.000300	0.00150
	1207068-01	7/10/2012	0.00163	J	0.000900	0.00250	<0.00250	0.00200	0.00500	0.00069	J	0.000300	0.00150
	1212276-01	12/27/2012	0.00142	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1303040-01	3/5/2013	0.00120	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1306108-01	6/11/2013	0.00143	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1401180-12	1/22/2014	0.00116	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1403158-04	3/19/2014	0.00152	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1405261-18	5/21/2014	0.00133	J-RB	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1407278-18	7/22/2014	0.00218	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1501295-17	1/28/2015	0.00194	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1503237-17	3/19/2015	0.00198	J	0.000900	0.00250	<0.00250	0.00200	0.00500	0.000884	J	0.000300	0.00150
	1506261-10	6/22/2015	0.00215	J	0.000900	0.00250	<0.00250	0.00200	0.00500	0.00187		0.000300	0.00150
	1508165-09	8/17/2015	0.00174	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
	1603295-17	3/24/2016	0.00207		0.000900	0.00250	<0.00250	0.00200	0.00500	0.0105		0.000300	0.00150
	1605244-15	5/24/2016	0.00216	J	0.000900	0.00250	<0.00250	0.00200	0.00500	0.00225		0.000300	0.00150
	1607338-20	7/27/2016	0.00188	J	0.000900	0.00250	<0.00250	0.00200	0.00500	<0.000600		0.000300	0.00150
MW-9	1105024-10	5/4/2011	0.266		0.000900	0.00250	0.0911	0.00200	0.00500	0.000715	J	0.000300	0.00150
	1207068-02	7/10/2012	0.249		0.000900	0.00250	0.081	0.00200	0.00500	<0.000600		0.000300	0.00150
	1212278-02	12/26/2012	0.236		0.000900	0.00250	0.0807	0.00200	0.00500	<0.000600		0.000300	0.00150
	1303040-02	3/5/2013	0.212		0.000900	0.00250	0.0731	0.00200	0.00500	<0.000600		0.000300	0.00150
	1306108-02	6/11/2013	0.256		0.000900	0.00250	0.0982	0.00200	0.00500	<0.000600		0.000300	0.00150
	1401180-24	1/23/2014	0.250		0.000900	0.00250	0.122	0.00200	0.00500	<0.000600		0.000300	0.00150
	1403158-10	3/19/2014	0.245		0.000900	0.00250	0.0999	0.00200	0.00500	<0.000600		0.000300	0.00150
	1405261-24	5/21/2014	0.237		0.000900	0.00250	0.0951	0.00200	0.00500	<0.000600		0.000300	0.00150
	1407278-24	7/22/2014	0.240		0.000900	0.00250	0.0997	0.00200	0.00500	<0.000600		0.000300	0.00150
	1501295-29	1/28/2015	0.234		0.000900	0.00250	0.0958	0.00200	0.00500	<0.000600		0.000300	0.00150
	1503237-29	3/19/2015	0.232		0.000900	0.00250	0.0995	0.00200	0.00500	0.000637	J	0.000300	0.00150
	1506261-21	6/22/2015	0.239		0.000900	0.00250	0.105	0.00200	0.00500	0.00102		0.000300	0.00150
	1508165-09	8/17/2015	0.229		0.000900	0.00250	0.106	0.00200	0.00500	0.000458	J	0.000300	0.00150
	1603295-29	3/24/2016	0.228		0.000900	0.00250	0.104	0.00200	0.00500	<0.000600		0.000300	0.00150

Table 1. Summary of Groundwater Analytical Results
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	16045244-26	5/24/2016	**0.372**	0.000800	0.00250	**0.356**	0.00200	0.00500	**0.0196**	0.000300	0.00100
	1607338-26	7/27/2016	**0.386**	0.000800	0.00250	**0.43**	0.00200	0.00500	**0.0241**	0.000300	0.00100
MW-10	1105024-11	5/4/2011	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000351 J	0.000300	0.00100
	1207088-03	7/10/2012	<0.000800	0.000800	0.00250	0.00302 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-03	12/26/2012	<0.000800	0.000800	0.00250	0.00244 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-03	3/5/2013	<0.000800	0.000800	0.00250	0.00296 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-03	6/10/2013	<0.000800	0.000800	0.00250	0.00363 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-11	1/22/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-16	3/19/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-05	5/21/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-06	7/22/2014	0.000624 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-01	1/28/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-07	3/19/2015	0.000935 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506261-09	6/22/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-11	8/17/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-01	3/23/2016	0.00169 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000669 J	0.000300	0.00100
	1605244-06	5/23/2016	0.00196 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1607338-01	7/26/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
MW-11	1105024-12	5/3/2011	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00384	0.000300	0.00100
	1207088-04	7/10/2012	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-04	12/26/2012	<0.000800	0.000800	0.00250	0.00311 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-04	3/5/2013	<0.000800	0.000800	0.00250	0.00353 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-04	6/10/2013	<0.000800	0.000800	0.00250	0.0026 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-09	1/22/2014	<0.000800	0.000800	0.00250	0.00226 J	0.00200	0.00500	0.00362	0.000300	0.00100
	1403158-02	3/19/2014	<0.000800	0.000800	0.00200	<0.00200	0.00200	0.00500	0.000372 J	0.000300	0.00100
	1405261-16	5/21/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100

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PRGs (mg/L)			0.006			0.010			0.005		
	1407278-16	7/22/2014	0.00168 J	0.000800	0.00250	0.00581	0.00200	0.00500	**0.009**	0.000300	0.00100
	1501295-15	1/28/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000426 J	0.000300	0.00100
	1503237-15	3/19/2015	0.000871 J	0.000800	0.00250	0.0038 J	0.00200	0.00500	**0.00525**	0.000300	0.00100
	1506261-07	6/22/2015	0.0036	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000696 J	0.000300	0.00100
	1506165-01	8/17/2015	0.00131 J	0.000800	0.00250	0.00242 J	0.00200	0.00500	**0.00508**	0.000300	0.00100
	1603295-15	3/24/2016	0.00098 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000384 J	0.000300	0.00100
	1605244-17	5/24/2016	0.00158 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00194	0.000300	0.00100
	1607336-15	7/27/2016	0.0013 J	0.000800	0.00250	0.00228 J	0.00200	0.00500	0.00165	0.000300	0.00100
MW-14	1212276-05	12/26/2012	<0.000800	0.000800	0.00250	0.00209 J	0.00200	0.00500	0.000376 J	0.000300	0.00100
	1303040-05	3/5/2013	<0.000800	0.000800	0.00250	0.00214 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-05	6/10/2013	<0.000800	0.000800	0.00250	0.00216 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-13	1/22/2014	<0.000800	0.000800	0.00250	0.00224 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-03	3/19/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-17	5/21/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-17	7/22/2014	0.00357	0.000800	0.00250	0.00230 J	0.00200	0.00500	0.000356 J	0.000300	0.00100
	1501295-16	1/28/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-16	3/19/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000568 J	0.000300	0.00100
	1506261-08	6/22/2015	0.00122 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506165-02	8/17/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-16	3/24/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-15	5/24/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1607336-13	7/27/2016	0.000879	0.000800	0.00250	0.00249	0.00200	0.00500	0.00122	0.000300	0.00100
MW-17	1106324-13	6/3/2011	**0.0353**	0.000800	0.00250	0.00525	0.00200	0.00500	0.000556 J	0.000300	0.00100
	1207088-05	7/10/2012	**0.00828**	0.000800	0.00250	0.00585	0.00200	0.00500	0.000706 J	0.000300	0.00100
	1212276-06	12/26/2012	**0.0454**	0.000800	0.00250	0.00730	0.00200	0.00500	<0.000900	0.000300	0.00100
	1303040-06	3/5/2013	**0.0314**	0.000800	0.00250	0.00537	0.00200	0.00500	0.000365 J	0.000300	0.00100
	1306108-06	6/11/2013	**0.0436**	0.000800	0.00250	**0.0115**	0.00200	0.00500	<0.000300	0.000300	0.00100

Table 1. Summary of Groundwater Analytical Results
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1401180-20	1/23/2014	**0.0256**	0.000800	0.00250	0.00472	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-20	3/19/2014	**0.0490**	0.000800	0.00250	**0.0149**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-09	5/21/2014	**0.0427**	0.000800	0.00250	0.00689	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-09	7/22/2014	**0.0354**	0.000800	0.00250	**0.0137**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-04	1/28/2015	**0.0369**	0.000800	0.00250	0.00988	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-04	3/19/2015	**0.0269**	0.000800	0.00250	0.00923	0.00200	0.00500	0.000506 J	0.000300	0.00100
	1506261-17	6/22/2015	**0.0255**	0.000800	0.00250	0.00714	0.00200	0.00500	**0.00581**	0.000300	0.00100
	1508165-14	8/17/2015	**0.0208**	0.000800	0.00250	0.00344 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-04	3/23/2016	**0.0284**	0.000800	0.00250	0.00586	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-09	5/23/2016	**0.0285**	0.000800	0.00250	0.00752	0.00200	0.00500	0.000798 J	0.000300	0.00100
	1607338-04	7/26/2016	**0.0287**	0.000800	0.00250	**0.01030**	0.00200	0.00500	0.000693 J	0.000300	0.00100
MW-18	1306040-25	3/6/2013	0.00118 J	0.000800	0.00250	0.00785	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-07	6/10/2013	<0.000800	0.000800	0.00250	0.00699	0.00200	0.00500	**0.00601**	0.000300	0.00100
MW-18 Cont.	1401180-16	1/22/2014	0.000809 J	0.000800	0.00250	0.00265 J	0.00200	0.00500	0.000877 J	0.000300	0.00100
	1403158-07	3/19/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00115	0.000300	0.00100
	1405261-21	5/21/2014	0.00117 U-RB	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000982 J	0.000300	0.00100
	1407278-21	7/22/2014	0.00127 J	0.000800	0.00250	0.00234 J	0.00200	0.00500	0.000433 J	0.000300	0.00100
	1501295-19	1/28/2015	<0.000800	0.000800	0.00250	0.00232 J	0.00200	0.00500	0.00173	0.000300	0.00100
	1503237-20	3/19/2015	0.00162 J	0.000800	0.00250	0.00221 J	0.00200	0.00500	0.000836 J	0.000300	0.00100
	1506261-14	6/22/2015	0.00232 J	0.000800	0.00250	0.00838	0.00200	0.00500	**0.0101**	0.000300	0.00100
	1508165-06	8/17/2015	0.000901 J	0.000800	0.00250	0.00362 J	0.00200	0.00500	0.00385	0.000300	0.00100
	1603295-20	3/24/2016	<0.000800	0.000800	0.00250	0.00288 J	0.00200	0.00500	0.000394 J	0.000300	0.00100
	1605244-22	5/24/2016	0.00239 J	0.000800	0.00250	**0.0192**	0.00200	0.00500	**0.0161**	0.000300	0.00100
	1607338-23	7/27/2016	0.00129 J	0.000800	0.00250	0.00913	0.00200	0.00500	**0.00564**	0.000300	0.00100
MW-19	1207088-06	7/11/2012	0.00140 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-07	12/27/2012	0.00127 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-07	3/5/2013	0.00126 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-08	6/10/2013	0.00148 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100

Table 1. Summary of Groundwater Analytical Results
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1401180-13	1/22/2014	0.00141 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-05	3/19/2014	0.00122 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-19	5/21/2014	0.00121 U-RB	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-19	7/22/2014	0.00151 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00110	0.000300	0.00100
	1501295-18	1/28/2015	0.00120 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-18	3/19/2015	0.000974 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000871 J	0.000300	0.00100
	1506261-11	6/22/2015	0.00169 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-04	8/17/2015	0.00148 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000644 J	0.000300	0.00100
	1603295-18	3/24/2016	0.00163 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-20	5/24/2016	0.00168 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1607338-21	7/27/2016	0.00204 J	0.000800	0.00250	0.00256 J	0.00200	0.00500	0.00398	0.000300	0.00100
MW-20	1105024-01	5/3/2011	0.0028	0.000800	0.00250	0.00262 J	0.00200	0.00500	0.000845 J	0.000300	0.00100
	1207088-16	7/11/2012	0.00236 J	0.000800	0.00250	0.00267 J	0.00200	0.00500	0.000420 J	0.000300	0.00100
	1212276-19	12/27/2012	0.00180 J	0.000800	0.00250	0.00324 J	0.00200	0.00500	0.000316 J	0.000300	0.00100
	1303040-18	3/6/2013	0.00211 J	0.000800	0.00250	0.00316 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-18	6/11/2013	0.00198 J	0.000800	0.00250	0.00322 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-02	1/21/2014	0.000879 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000554 J	0.000300	0.00100
MW-20 Dup.	1403158-01	3/19/2014	0.00152 J	0.000800	0.00250	0.00205 J	0.00200	0.00500	0.000689 J	0.000300	0.00100
	1405261-15	5/21/2014	0.00193 U-RB	0.000800	0.00250	0.00263 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-15	7/22/2014	<0.000800	0.000800	0.00250	0.00254 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-24	1/28/2015	**0.02020**	0.000800	0.00250	0.00996 J	0.00200	0.00500	0.00042 J	0.000300	0.00100
	1503237-24	3/19/2015	0.00165 J	0.000800	0.00250	0.0021 J	0.00200	0.00500	0.00062 J	0.000300	0.00100
	1506261-02	6/22/2015	**0.00773**	0.000800	0.00250	0.00389 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-10	8/17/2015	**0.00876**	0.000800	0.00250	0.00668	0.00200	0.00500	0.000936 J	0.000300	0.00100
	1603295-24	3/24/2016	0.00557	0.000800	0.00250	0.00702	0.00200	0.00500	0.00352	0.000300	0.00100
	1605244-16	5/24/2016	**0.00685**	0.000800	0.00250	0.00857	0.00200	0.00500	0.00283	0.000300	0.00100
	1607338-17	7/27/2016	**0.01130**	0.000800	0.00250	**0.0177**	0.00200	0.00500	**0.010**	0.000300	0.00100
MW-21	1105024-02	5/2/2011	**0.105**	0.000800	0.00250	**0.016**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1207088-17	7/11/2012	**0.303** JI-FD	0.000800	0.00250	0.00921	0.00200	0.00500	0.00267 JI-FD	0.000300	0.00100

Table 1. Summary of Groundwater Analytical Results
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Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1212276-20	12/27/2012	**0.371**	0.000800	0.00250	0.00327 J	0.00200	0.00500	0.000354 J	0.000300	0.00100
	1303040-19	3/6/2013	**0.325**	0.000800	0.00250	0.00276 J	0.00200	0.00500	**0.00566** JI-FD	0.000300	0.00100
	1306108-19	6/11/2013	**0.361**	0.000800	0.00250	0.00295 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401150-04	1/21/2014	**0.336**	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000335 J	0.000300	0.00100
	1403156-17	3/19/2014	**0.211**	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000322 J	0.000300	0.00100
	1405261-03	5/21/2014	**0.309**	0.000800	0.00250	0.00596	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407275-03	7/22/2014	**0.218**	0.000800	0.00250	0.00778	0.00200	0.00500	0.00161 JI-DL	0.000300	0.00100
	1501295-09	1/26/2015	**0.523**	0.004000	0.01250	0.00312 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-10	3/19/2015	**0.443**	0.000800	0.00250	0.00227 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506261-04	6/22/2015	**0.537**	0.004000	0.01250	0.00595	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-19	8/17/2015	**0.379**	0.000800	0.00250	0.00380 J	0.00200	0.00500	0.00143	0.000300	0.00100
	1603295-09	3/23/2016	**0.431**	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-03	5/23/2016	**0.293**	0.000800	0.00250	0.00632	0.00200	0.00500	0.00348	0.000300	0.00100
	1607335-06	7/26/2016	**0.397**	0.000800	0.00250	0.00576	0.00200	0.00500	**0.0342**	0.000300	0.00100
DUP-1 (MW-21)	1105024-06	5/2/2011	**0.120**	0.000800	0.00250	**0.014**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1207088-22	7/11/2012	**0.428** JI-FD	0.000800	0.00250	0.00545	0.00200	0.00500	0.00100 JI-FD	0.000300	0.00100
	1212276-15	12/27/2012	**0.304**	0.000800	0.00250	0.00293	0.00200	0.00500	0.000523 J	0.000300	0.00100
	1303040-17	3/6/2013	**0.335**	0.000800	0.00250	0.00339 J	0.00200	0.00500	**0.0112** JI-FD	0.000300	0.00100
	1306108-24	6/11/2013	**0.349**	0.000800	0.00250	0.00269 J	0.00200	0.00500	<0.000300	0.000300	0.00100
MW-22	1105024-08	5/3/2011	0.00199 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1207088-18	7/11/2012	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00368	0.000300	0.00100
	1212276-21	12/27/2012	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000629 J	0.000300	0.00100
	1303040-20	3/6/2013	0.00146 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000856 J	0.000300	0.00100
	1306105-20	6/11/2013	0.00103 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000461 J	0.000300	0.00100
	1401150-01	1/21/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403156-12	3/19/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000474 J	0.000300	0.00100

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Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1405261-01	5/21/2014	0.00218 U-RB	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000312 J	0.000300	0.00100
	1407278-01	7/22/2014	0.00188 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000573 J-DL	0.000300	0.00100
	1501295-07	1/28/2015	0.00199 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00377	0.000300	0.00100
	1503257-09	3/19/2015	0.00210 J	0.000800	0.00250	0.00222 J	0.00200	0.00500	**0.00606**	0.000300	0.00100
	1506261-01	6/22/2015	0.00327	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000621 J	0.000300	0.00100
	1508165-17	8/17/2015	0.00121 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-07	3/23/2016	0.00467	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-01	5/23/2016	0.00606	0.000800	0.00250	0.011	0.00200	0.00500	**0.0842**	0.000300	0.00100
	1607338-07	7/26/2016	0.00159 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.0019	0.000300	0.00100
MW-24-90	1105024-14	5/3/2011	**0.00717**	0.000800	0.00250	**0.011**	0.00200	0.00500	0.000988 J	0.000300	0.00100
	1207088-07	7/11/2012	0.00352	0.000800	0.00250	0.00215 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-09	12/27/2012	0.00566	0.000800	0.00250	**0.0104**	0.00200	0.00500	0.000684 J	0.000300	0.00100
	1303040-08	3/5/2013	**0.00627**	0.000800	0.00250	0.00821	0.00200	0.00500	0.000551 J	0.000300	0.00100
	1306108-09	6/10/2013	**0.00982**	0.000800	0.00250	0.00458 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-15	1/22/2014	**0.0128**	0.000800	0.00250	**0.0124**	0.00200	0.00500	0.001320	0.000300	0.00100
	1403158-09	3/19/2014	**0.0126**	0.000800	0.00250	**0.0119**	0.00200	0.00500	0.000962 J	0.000300	0.00100
	1405261-20	5/21/2014	**0.0171**	0.000800	0.00250	**0.0122**	0.00200	0.00500	0.000779 J	0.000300	0.00100
	1407278-20	7/22/2014	**0.0673**	0.000800	0.00250	**0.0484**	0.00200	0.00500	0.00479	0.000300	0.00100
	1501295-20	1/28/2015	**0.0866**	0.000800	0.00250	**0.0538**	0.00200	0.00500	0.00477	0.000300	0.00100
	1503257-19	3/19/2015	**0.0750**	0.000800	0.00250	**0.0759**	0.00200	0.00500	**0.0110**	0.000300	0.00100
	1506261-19	6/22/2015	**0.297**	0.000800	0.00250	**0.0148**	0.00200	0.00500	0.00034 J	0.000300	0.00100
	1508165-05	8/17/2015	**0.0204**	0.000800	0.00250	**0.0166**	0.00200	0.00500	**0.00632**	0.000300	0.00100
	1603295-19	3/24/2016	**0.0498**	0.000800	0.00250	**0.0193**	0.00200	0.00500	0.00176	0.000300	0.00100
	1605244-21	5/24/2016	**0.2290**	0.000800	0.00250	**0.0666**	0.00200	0.00500	**0.02230**	0.000300	0.00100
	1607338-22	7/27/2016	**0.1990**	0.000800	0.00250	**0.123**	0.00200	0.00500	**0.06540**	0.000300	0.00100
MW-25	1503257-03	3/19/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
		6/22/2015	*Not gauged or sampled per TCEQ.*								
		8/17/2015	*Not gauged or sampled per TCEQ.*								

Table 1. Summary of Groundwater Analytical Results
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
MW-27-90	1207088-08	7/11/2012	**0.0717**	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000480 J	0.000300	0.00100
	1212276-09	12/28/2012	**0.0639**	0.000800	0.00250	0.00218 J	0.00200	0.00500	0.000508 J	0.000300	0.00100
	1303040-09	3/5/2013	**0.0630**	0.000800	0.00250	0.00221 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-10	6/11/2013	**0.0624**	0.000800	0.00250	0.00211 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-19	1/23/2014	**0.0554**	0.000800	0.00250	0.00219 J	0.00200	0.00500	0.000746 J	0.000300	0.00100
	1403158-08	3/19/2014	**0.0562**	0.000800	0.00250	0.00210 J	0.00200	0.00500	0.00176	0.000300	0.00100
	1405261-22	5/21/2014	**0.0554**	0.000800	0.00250	0.00302 J	0.00200	0.00500	0.00194	0.000300	0.00100
	1407278-22	7/22/2014	**0.0516**	0.000800	0.00250	0.00224 J	0.00200	0.00500	0.00498	0.000300	0.00100
	1501295-21	1/28/2015	**0.0539**	0.000800	0.00250	0.00252 J	0.00200	0.00500	0.00418	0.000300	0.00100
	1503237-21	3/19/2015	**0.0486**	0.000800	0.00250	<0.00200	0.00200	0.00500	**0.000536** J	0.000300	0.00100
	1506261-16	6/22/2015	**0.0575**	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00253	0.000300	0.00100
	1508165-07	8/17/2015	**0.0662**	0.000800	0.00250	0.00262 J	0.00200	0.00500	0.00299	0.000300	0.00100
	1603295-21	3/24/2016	**0.0712**	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-23	5/24/2016	**0.0877**	0.000800	0.00250	0.00769	0.00200	0.00500	**0.007930**	0.000300	0.00100
	1607338-24	7/27/2016	**0.0070**	0.000800	0.00250	0.00664	0.00200	0.00500	**0.012700**	0.000300	0.00100
MW-28-90	1207088-09	7/11/2012	**0.0299**	0.000800	0.00250	**0.0689**	0.00200	0.00500	0.000735 J	0.000300	0.00100
	1212276-10	12/28/2012	**0.0254**	0.000800	0.00250	**0.0496**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-10	3/5/2013	**0.0224**	0.000800	0.00250	**0.0506**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-11	6/10/2013	**0.0254**	0.000800	0.00250	**0.0554**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-21	1/23/2014	**0.0412**	0.000800	0.00250	**0.125**	0.00200	0.00500	0.000501 J	0.000300	0.00100
	1403158-09	3/19/2014	0.00586	0.000800	0.00250	**0.0168**	0.00200	0.00500	0.00112	0.000300	0.00100
	1405261-23	5/21/2014	**0.0399**	0.000800	0.00250	**0.106**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-23	7/22/2014	**0.0405**	0.000800	0.00250	**0.104**	0.00200	0.00500	0.00054	0.000300	0.00100
	1501295-22	1/28/2015	**0.086**	0.000800	0.00250	**0.311**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-22	3/19/2015	**0.0803**	0.000800	0.00250	**0.283**	0.00200	0.00500	0.00035 J	0.000300	0.00100
	1506261-18	6/22/2015	**0.0883**	0.000800	0.00250	**0.230**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-08	8/17/2015	**0.0794**	0.000800	0.00250	**0.219**	0.00200	0.00500	0.000961 J	0.000300	0.00100
	1603295-22	3/24/2016	**0.0638**	0.000800	0.00250	**0.179**	0.00200	0.00500	0.000324 J	0.000300	0.00100
	1605244-24	5/24/2016	**0.101**	0.000800	0.00250	**0.233**	0.00200	0.00500	0.000935 J	0.000300	0.00100
	1607338-25	7/27/2016	**0.0796**	0.000800	0.00250	**0.270**	0.00200	0.00500	0.004100	0.000300	0.00100

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Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
MW-29-SC	1207088-10	7/11/2012	**0.0283**	0.000800	0.00250	0.00503	0.00200	0.00500	0.002310	0.000300	0.00100
	1212276-11	12/27/2012	**0.00629**	0.000800	0.00250	0.00790	0.00200	0.00500	0.000433 J	0.000300	0.00100
	1303040-11	3/5/2013	**0.0306**	0.000800	0.00250	0.00270 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-12	6/11/2013	**0.0221**	0.000800	0.00250	0.00270 J	0.00200	0.00500	0.000602 J	0.000300	0.00100
	1401180-17	1/22/2014	**0.0169**	0.000800	0.00250	0.00441 J	0.00200	0.00500	0.00159	0.000300	0.00100
	1403158-19	3/19/2014	**0.0254**	0.000800	0.00250	0.00514	0.00200	0.00500	0.00359	0.000300	0.00100
	1405261-08	5/21/2014	**0.0217**	0.000800	0.00250	0.00275 J	0.00200	0.00500	0.00123	0.000300	0.00100
	1407278-08	7/22/2014	**0.0274**	0.000800	0.00250	0.00763	0.00200	0.00500	0.00235 JI-DL	0.000300	0.00100
	1501295-03	1/28/2015	**0.0202**	0.000800	0.00250	0.00402 J	0.00200	0.00500	0.00082 J	0.000300	0.00100
	1503237-02	3/19/2015	**0.0206**	0.000800	0.00250	0.00247 J	0.00200	0.00500	0.00129	0.000300	0.00100
	1506261-15	6/22/2015	**0.0155**	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-13	8/17/2015	**0.0192**	0.000800	0.00250	<0.00200	0.00200	0.00500	0.000325 J	0.000300	0.00100
	1603295-03	3/23/2016	**0.0176**	0.000800	0.00250	0.00272 J	0.00200	0.00500	0.00084 J	0.000300	0.00100
	1605244-08	5/23/2016	**0.0257**	0.000800	0.00250	0.00702	0.00200	0.00500	0.00237	0.000300	0.00100
	1607338-03	7/26/2016	**0.0259**	0.000800	0.00250	0.00841	0.00200	0.00500	0.00379	0.000300	0.00100
MW-30-SC	1207088-11	7/11/2012	0.00116 J	0.000800	0.00250	0.00269 J	0.00200	0.00500	**0.0113**	0.000300	0.00100
	1212276-12	12/26/2012	0.00102 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00107	0.000300	0.00100
	1303040-12	3/5/2013	0.000635 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00129	0.000300	0.00100
	1306108-13	6/10/2013	0.00121 J	0.000800	0.00250	0.00205 J	0.00200	0.00500	0.00378	0.000300	0.00100
	1401180-14	1/22/2014	0.00128 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00150	0.000300	0.00100
	1403158-18	3/19/2014	0.00146 J	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00380	0.000300	0.00100
	1405261-07	5/21/2014	0.00151 U-RB	0.000800	0.00250	0.00205 J	0.00200	0.00500	**0.00586**	0.000300	0.00100
	1407278-07	7/22/2014	0.00152 J	0.000800	0.00250	0.00372 J	0.00200	0.00500	**0.0107** JI-DL	0.000300	0.00100
	1501295-02	1/28/2015	0.00155 J	0.000800	0.00250	0.00233 J	0.00200	0.00500	0.00404	0.000300	0.00100
	1503237-01	3/19/2015	0.00144 J	0.000800	0.00250	0.00407 J	0.00200	0.00500	**0.00706**	0.000300	0.00100
	1506261-12	6/22/2015	0.000955 J	0.000800	0.00250	0.00203 J	0.00200	0.00500	0.00319	0.000300	0.00100
	1508165-12	8/17/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	0.00392	0.000300	0.00100
	1603295-02	3/23/2016	0.00147 J	0.000800	0.00250	0.00255 J	0.00200	0.00500	0.00478	0.000300	0.00100
	1605244-07	5/23/2016	0.00194 J	0.000800	0.00250	0.00515	0.00200	0.00500	**0.00838**	0.000300	0.00100
	1607338-02	7/26/2016	0.00174 J	0.000800	0.00250	0.00304 J	0.00200	0.00500	**0.00632**	0.000300	0.00100

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PRGs (mg/L)			0.006			0.010			0.005		
MW-33-90	1105024-15	5/4/2011	**0.174**	0.000800	0.00250	**0.0347**	0.00200	0.00500	0.000732 J	0.000300	0.00100
	1207088-12	7/10/2012	**0.159**	0.000800	0.00250	**0.0312**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-13	12/26/2012	**0.150**	0.000800	0.00250	**0.0283**	0.00200	0.00500	<0.000300	0.000300	0.00100
MW-33-90 Cont	1303040-13	3/5/2013	**0.131**	0.000800	0.00250	**0.0301**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-14	6/11/2013	**0.138**	0.000800	0.00250	**0.0314**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-22	1/23/2014	**0.132**	0.000800	0.00250	**0.0321**	0.00200	0.00500	0.000766 J	0.000300	0.00100
	1403158-21	3/19/2014	**0.131**	0.000800	0.00250	**0.0387**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-10	5/21/2014	**0.126**	0.000800	0.00250	**0.0296**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-10	7/22/2014	**0.140**	0.000800	0.00250	**0.0260**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-05	1/28/2015	**0.119**	0.000800	0.00250	**0.0353**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-05	3/19/2015	**0.119**	0.000800	0.00250	**0.0322**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506261-19	6/22/2015	**0.140**	0.000800	0.00250	**0.0181**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-15	8/17/2015	**0.133**	0.000800	0.00250	**0.0263**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-05	3/23/2016	**0.141**	0.000800	0.00250	**0.0186**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-10	5/23/2016	**0.123**	0.000800	0.00250	**0.0143**	0.00200	0.00500	0.001030	0.000300	0.00100
	1607338-05	7/26/2016	**0.994**	0.000800	0.00250	**0.0195**	0.00200	0.00500	0.001570	0.000300	0.00100
MW-34-90	1105024-16	5/4/2011	**0.315**	0.000800	0.00250	**0.358**	0.00200	0.00500	0.000650 J	0.000300	0.00100
	1207088-13	7/10/2012	**0.323**	0.000800	0.00250	**0.391**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-14	12/26/2012	**0.310**	0.000800	0.00250	**0.352**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-14	3/5/2013	**0.306**	0.000800	0.00250	**0.346**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-15	6/11/2013	**0.327**	0.000800	0.00250	**0.368**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-23	1/23/2014	**0.306**	0.000800	0.00250	**0.415**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-22	3/19/2014	**0.305**	0.000800	0.00250	**0.447**	0.00200	0.00500	0.000894 J	0.000300	0.00100
	1405261-11	5/21/2014	**0.324**	0.000800	0.00250	**0.383**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-11	7/22/2014	**0.314**	0.000800	0.00250	**0.433**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-06	1/28/2015	**0.306**	0.000800	0.00250	**0.373**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-06	3/19/2015	**0.297**	0.000800	0.00250	**0.393**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506261-20	6/22/2015	**0.300**	0.000800	0.00250	**0.371**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-16	8/17/2015	**0.292**	0.000800	0.00250	**0.393**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-08	3/23/2016	**0.267**	0.000800	0.00250	**0.370**	0.00200	0.00500	<0.000300 J	0.000300	0.00100

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Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1605244-11	5/23/2016	**0.286**	0.000800	0.00250	**0.966**	0.00200	0.00500	**0.0248**	0.000300	0.00100
	1607338-06	7/26/2016	**0.275**	0.000800	0.00250	**0.484**	0.00200	0.00500	0.0029	0.000300	0.00100
DUP-2 (MW-34-90)	1105024-17	5/4/2011	**0.320**	0.000800	0.00250	**0.408**	0.00200	0.00500	0.00201 J	0.000300	0.00100
	1207088-14	7/10/2012	**0.318**	0.000800	0.00250	**0.378**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-16	12/26/2012	**0.304**	0.000800	0.00250	**0.340**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-15	3/5/2013	**0.302**	0.000800	0.00250	**0.345**	0.00200	0.00500	<0.000300	0.000300	0.00100
DUP-2 (MW-34-90)	1306108-16	6/11/2013	**0.337**	0.000800	0.00250	**0.413**	0.00200	0.00500	<0.000300	0.000300	0.00100
Cont	1401180-26	1/23/2014	**0.300**	0.000800	0.00250	**0.410**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-24	3/19/2014	**0.316**	0.000800	0.00250	**0.463**	0.00200	0.00500	0.00114	0.000300	0.00100
	1405261-13	5/21/2014	**0.329**	0.000800	0.00250	**0.377**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-13	7/22/2014	**0.318**	0.000800	0.00250	**0.424**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-13	1/28/2015	**0.314**	0.000800	0.00250	**0.397**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503257-14	3/19/2015	**0.292**	0.000800	0.00250	**0.387**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506261-23	6/22/2015	**0.298**	0.000800	0.00250	**0.367**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-23	8/17/2015	**0.302**	0.000800	0.00250	**0.419**	0.00200	0.00500	0.000635 J	0.000300	0.00100
	1603295-13	3/23/2016	**0.294**	0.000800	0.00250	**0.378**	0.00200	0.00500	0.000505 J	0.000300	0.00100
	1605244-13	5/23/2016	**0.268**	0.000800	0.00250	**0.745**	0.00200	0.00500	**0.0193**	0.000300	0.00100
	1607338-13	7/26/2016	**0.266**	0.000800	0.00250	**0.509**	0.00200	0.00500	0.0041B	0.000300	0.00100
MW-35-90	1105024-03	5/3/2011	**1.01**	0.080000	0.00250	**0.076**	0.00200	0.00500	0.00166	0.000300	0.00100
	1207088-19	7/11/2012	**0.526**	0.004000	0.01250	**0.0904**	0.00200	0.00500	**0.0113**	0.000300	0.00100
	1212276-22	12/25/2012	**0.464**	0.000800	0.00250	**0.0867**	0.00200	0.00500	**0.0366**	0.000300	0.00100
	1303040-21	3/6/2013	**1.31**	0.008000	0.02500	**0.0957**	0.00200	0.00500	0.000598 J	0.000300	0.00100
	1306108-21	6/11/2013	**0.85**	0.004000	0.01250	**0.0955**	0.00200	0.00500	0.000834 J	0.000300	0.00100
	1401180-06	1/21/2014	**0.604**	0.004000	0.01250	**0.0803**	0.00200	0.00500	0.000511 J	0.000300	0.00100
	1403158-15	3/19/2014	**0.166**	0.000800	0.00250	**0.0556**	0.00200	0.00500	**0.0479** JI-FD	0.000300	0.00100
	1405261-05	5/21/2014	**0.985**	0.008000	0.02500	**0.0943**	0.00200	0.00500	0.000506 J	0.000300	0.00100
	1407278-05	7/22/2014	**0.524**	0.008000	0.02500	**0.0826**	0.00200	0.00500	0.00157 JI-DL	0.000300	0.00100
	1501295-11	1/28/2015	**0.763**	0.004000	0.01250	**0.0886**	0.00200	0.00500	0.000706 J	0.000300	0.00100
	1503257-12	3/19/2015	**0.481**	0.008000	0.02500	**0.071**	0.00200	0.00500	0.000416 J	0.000300	0.00100
	1506261-06	6/22/2015	**0.734**	0.00400	0.0125	**0.113**	0.00200	0.00500	0.000923 J	0.000300	0.00100
	1508165-21	8/17/2015	**0.251**	0.008000	0.02500	**0.0595**	0.00200	0.00500	**0.0320**	0.000300	0.00100

Table 1. Summary of Groundwater Analytical Results
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1603295-11	3/23/2016	**0.540**	0.00400	0.0125	**0.0631**	0.00200	0.00500	0.000406 J	0.000300	0.00100
	1605244-05	5/23/2016	**0.540**	0.00400	0.0125	**0.1050**	0.00200	0.00500	**0.0171**	0.000300	0.00100
	1607338-11	7/26/2016	**0.452**	0.00400	0.0125	**0.1270**	0.00200	0.00500	**0.0569**	0.000300	0.00100
DUP-1 (MW-35-90)	1401180-07	1/21/2014	**0.594**	0.004000	0.01250	**0.0809**	0.00200	0.00500	0.000764 J	0.000300	0.00100
	1403158-23	3/19/2014	**0.149**	0.000800	0.00250	**0.0446**	0.00200	0.00500	**0.0268** JI-FD	0.000300	0.00100
	1405261-12	5/21/2014	**0.985**	0.000800	0.02500	**0.0922**	0.00200	0.00500	0.000525 J	0.000300	0.00100
	1407278-12	7/22/2014	**0.516**	0.008000	0.02500	**0.0835**	0.00200	0.00500	0.001690 JI-DL	0.000300	0.00100
	1501295-12	1/28/2015	**0.704**	0.004000	0.01250	**0.0883**	0.00200	0.00500	0.000746 J	0.000300	0.00100
DUP-1 (MW-35-90)	1503237-13	3/19/2015	**0.496**	0.000800	0.00250	**0.0716**	0.00200	0.00500	0.000449 J	0.000300	0.00100
Cont.	1506261-22	6/22/2015	**0.737**	0.00400	0.0125	**0.110**	0.00200	0.00500	0.000922 J	0.000300	0.00100
	1508165-22	8/17/2015	**0.217**	0.000800	0.00250	**0.0577**	0.00200	0.00500	**0.0394**	0.000300	0.00100
	1603295-12	3/23/2016	**0.536**	0.00400	0.0125	**0.0632**	0.00200	0.00500	0.000392 J	0.000300	0.00100
	1605244-12	5/23/2016	**0.541**	0.00400	0.0125	**0.1050**	0.00200	0.00500	**0.0157**	0.000300	0.00100
	1607338-12	7/26/2016	**0.439**	0.00400	0.0125	**0.1290**	0.00200	0.00500	**0.0654**	0.000300	0.00100
MW-37-90	1105024-04	5/3/2011	0.000933 J	0.000800	0.00250	**0.0145**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1207088-20	7/11/2012	0.00105 J	0.000800	0.00250	**0.0325**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-23	12/27/2012	0.00098 J	0.000800	0.00250	**0.0602**	0.00200	0.00500	0.00046 J	0.000300	0.00100
	1303040-22	3/6/2013	0.00144 J	0.000800	0.00250	**0.0451**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-22	6/11/2013	0.00169 J	0.000800	0.00250	**0.036**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-03	1/21/2014	0.00121 J	0.000800	0.00250	**0.0437**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-13	3/19/2014	0.000951 J	0.000800	0.00250	**0.0213**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-02	5/21/2014	0.000875 U-PB	0.000800	0.00250	0.00901	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-02	7/22/2014	0.00116 J	0.000800	0.00250	**0.0118**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-08	1/28/2015	0.000995 J	0.000800	0.00250	**0.0311**	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-09	3/19/2015	0.000873 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506261-03	6/22/2015	0.00115 J	0.000800	0.00250	0.00214 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-18	8/17/2015	0.000982 J	0.000800	0.00250	0.00948	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-08	3/23/2016	0.0012 J	0.000800	0.00250	0.00948	0.00200	0.00500	<0.000300	0.000300	0.00100

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Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1505244-02	5/23/2016	0.00213 J	0.000800	0.00250	**0.0233**	0.00200	0.00500	0.00114	0.000300	0.00100
	1507336-10	7/26/2016	0.00348	0.000800	0.00250	**0.296**	0.00200	0.00500	0.000599 J	0.000300	0.00100
MW-38-90	1105024-05	5/3/2011	**0.0286**	0.000800	0.00250	**0.0121**	0.00200	0.00500	0.000634 J	0.000300	0.00100
	1207088-21	7/11/2012	**0.131**	0.000800	0.00250	0.00681	0.00200	0.00500	0.00354	0.000300	0.00100
	1212276-24	12/27/2012	**0.516**	0.000800	0.00250	0.00844 J	0.00200	0.00500	0.00247	0.000300	0.00100
	1303040-23	3/6/2013	**0.911**	0.008000	0.02500	0.00418 J	0.00200	0.00500	0.000396 J	0.000300	0.00100
	1306108-23	6/11/2013	**0.976**	0.004000	0.01250	0.00496 J	0.00200	0.00500	0.000579 J	0.000300	0.00100
	1401180-05	1/21/2014	**0.802**	0.004000	0.01250	0.00412 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-14	3/19/2014	**0.550**	0.004000	0.01250	0.00258 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-04	5/21/2014	**2.21**	0.008000	0.02500	0.00599	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-04	7/22/2014	**0.303**	0.000800	0.00250	0.00737	0.00200	0.00500	0.000709 JI-DL	0.000300	0.00100
	1501295-10	1/28/2015	**1.410**	0.004000	0.01250	0.00414 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-11	3/19/2015	**1.100**	0.000800	0.00250	0.00322 J	0.00200	0.00500	<0.000300	0.000300	0.00100
MW-38-90 Cant	1506261-05	6/22/2015	**1.09**	0.008000	0.02500	0.00832	0.00200	0.00500	<0.000300	0.000300	0.00100
	1508165-20	9/17/2015	**0.6470**	0.008000	0.02500	0.00548	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-10	3/23/2016	**1.4100**	0.008000	0.02500	0.00432 J	0.00200	0.00500	0.000454 J	0.000300	0.00100
	1605244-04	5/23/2016	**0.6260**	0.008000	0.02500	0.00676	0.00200	0.00500	0.00418	0.000300	0.00100
	1607336-09	7/26/2016	**0.6290**	0.008000	0.02500	**0.0181**	0.00200	0.00500	**0.0366**	0.000300	0.00100
ER-1	1105024-07	5/3/2011	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1207088-15	7/10/2012	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-17	12/26/2011	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-16	3/5/2013	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-17	6/10/2013	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-06	1/21/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1403158-11	3/19/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1405261-14	5/21/2014	0.000875 J	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1407278-14	7/22/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1501295-14	1/28/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1503237-25	3/19/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1506261-28	6/22/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100

Table 1. Summary of Groundwater Analytical Results
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1741 Taylors Valley Road, Belton, Bell County, Texas

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
	1508165-24	8/17/2015	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-14	3/23/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-14	5/23/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1607338-14	7/26/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
ER-2	1105024-18	5/4/2011	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1207086-23	7/11/2012	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1212276-18	12/27/2012	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1303040-24	3/6/2013	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1306108-25	6/11/2013	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1401180-18	1/22/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603295-25	3/24/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1605244-15	5/23/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
	1607338-27	7/27/2016	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
ER-3	1401180-26	1/23/2014	<0.000800	0.000800	0.00250	<0.00200	0.00200	0.00500	<0.000300	0.000300	0.00100
SP-1 Upper	1506261-24	6/22/2015	**0.306**	0.000800	0.00250	**0.0266**	0.00200	0.00500	**0.0184**	0.000300	0.00100
	1603157-01	3/15/2016	**1.73**	0.000800	0.00250	**0.084**	0.00200	0.00500	0.000792 J	0.000300	0.00100
	1605244-26	5/24/2016	**1.18**	0.000800	0.00250	**0.104**	0.00200	0.00500	**0.0233**	0.000300	0.00100
SP-2 Upper	1506261-25	6/22/2015	**0.341**	0.000800	0.00250	**0.0412**	0.00200	0.00500	**0.0312**	0.000300	0.00100
	1603157-02	3/15/2016	**1.76**	0.000800	0.00250	**0.0918**	0.00200	0.00500	**0.00643**	0.000300	0.00100
	1605244-27	5/24/2016	**1.88**	0.000800	0.00250	**0.241**	0.00200	0.00500	**0.00701**	0.000300	0.00100
SP-1 Lower	1506261-26	6/22/2015	0.00226 J	0.000800	0.00250	0.00230 J	0.00200	0.00500	<0.000300	0.000300	0.00100
	1603157-03	3/15/2016	**1.29**	0.000800	0.00250	**0.06180**	0.00200	0.00500	0.000382 J	0.000300	0.00100
	1605244-28	5/24/2016	**1.48**	0.000800	0.00250	**0.144**	0.00200	0.00500	**0.00603**	0.000300	0.00100
	1607338-15	7/27/2016	**0.243**	0.000800	0.00250	**0.54**	0.00200	0.00500	0.00352	0.000300	0.00100

Table 1. Summary of Groundwater Analytical Results
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Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
SP-2 Lower	1506261-27	6/22/2015	0.000593 J	0.000800	0.00250	0.00226 J	0.00200	0.00500	0.000305 J	0.000300	0.00100
	1603157-04	3/15/2016	**1.34**	0.000800	0.00250	**0.05990**	0.00200	0.00500	0.000382 J	0.000300	0.00100
	1605244-25	5/24/2016	**1.46**	0.000800	0.00250	**0.152**	0.00200	0.00500	**0.00576**	0.000300	0.00100
	1607368-18	7/27/2016	**0.428**	0.000800	0.00250	**0.68**	0.00200	0.00500	**0.0392**	0.000300	0.00100

Notes:
Values in bold indicate results above PRGs.
PRGs = Preliminary Remediation Goals.
SDL = Sample Detection Limit.
MQL = Method Quantitation Limit, adusted for moisture and sample size.
J = Estimated result/analyte detected between SDL and MQL.
I = Bias in sample result is indeterminate.
FD = Field duplicate evaluation criteria not met
U-RB = Not detected due to equipment blank contamination.
JI-FD = Estimated result with indeterminant bias due to field duplicate imprecision.

APPENDIX H – DETAILED ARARs REVIEW TABLES

ARARs Review

CERCLA Section 121(d)(1) requires that Superfund remedial actions attain "a degree of cleanup of hazardous substances, pollutants, and contaminants released into the environment and of control of further release at a minimum which assures protection of human health and the environment." The remedial action must achieve a level of cleanup that at least attains those requirements that are legally applicable or relevant and appropriate. In performing the FYR for compliance with ARARs, only those ARARs that address the protectiveness of the remedy are reviewed.

Surface Soil ARARs

The 2004 Final ROD established the Texas RRS (30 TAC 335 Subchapter S) as the chemical-specific ARAR for surface soil COCs. The ROD states that RRS were the basis for the soil cleanup goals, which evaluated the extent of soil remediation necessary and established the residual contaminant levels allowable after treatment. The 2003 RI/FS states that the arsenic cleanup goal was selected from the 1×10^{-4} risk level from the Industrial Outdoor Worker scenario from the EPA Region 6 Medium-Specific Screening Levels (the upper risk level of 1×10^{-4} was selected because arsenic is the only carcinogen on site). However, the 2003 RI/FS also states that the cleanup goals for antimony and lead were determined using the methods described in EPA guidance documents from 1991 and 1996. The antimony cleanup goal was calculated using the non-carcinogenic HQ f 1, the published antimony toxicity factors and other parameters provided in 30 TAC §350.74(a). The lead cleanup goal was determined based on the EPA Adult Lead Model. Although only the arsenic cleanup goal was based on RRS, this FYR includes a comparison of all soil cleanup goals to ARARs to be conservative. As seen below in Table H-1, there was no change in the standard for arsenic. The ARAR for antimony is currently less stringent than detailed in the ROD, while the ARAR for lead is more stringent.

Table H-1: Surface Soil ARARs

Surface Soil COC	ROD Cleanup Goal (mg/kg)	Texas RRS Soil MSCs for Industrial Use Based on Inhalation, Ingestion, and Dermal Contact[a] (mg/kg)	ARAR Change
Arsenic	200	200	No change
Antimony	310	490	Less stringent
Lead	1,754	1,000	More stringent

[a] Accessed 11/7/16 at https://www.tceq.texas.gov/assets/public/remediation/rrr/msc-rbscn_2006.xls.

Surface Water ARARs

The 2004 ROD selected the Texas Surface Water Quality Standards (TSWQSs) (30 TAC 307) and the FWQC (40 CFR Part 131) as surface water ARARs for the Site; current values are presented in Table H-2. The TSWQSs established limits for constituents for the protection of surface water quality in Texas, and the FWQC applied to water classified as a fisheries resource. However, the ROD did not specify any cleanup goals or COCs for surface water. This may warrant further monitoring and investigation of surface water, as needed, to minimize unacceptable risk.

Table H-2: Surface Water ARARs

COC	National Recommended Water Quality Criteria - Human Health for the Consumption of Water and Organism[a] (µg/L)	TSWQSs Human health protection (water and fish)[b] (µg/L)
Arsenic	0.018	10[cd]
Antimony	5.6	6[c]
Lead	-	1.15[d]

- = criterion not established.
[a] Accessed 11/7/16 at https://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table.
[b] Accessed 11/7/16 at https://www.epa.gov/sites/production/files/2015-01/documents/txwqs-2014.pdf.
[c] Based on Maximum Contaminant Levels (MCLs) specified in 30 TAC §290 (relating to Public Drinking Water).
[d] Criteria for the dissolved fraction in water.

Groundwater ARARs

The 2004 ROD did not identify groundwater-specific ARARs. However, the 2004 Final ROD groundwater cleanup goals were based on the TSWQSs for arsenic and lead and the MCL for antimony, per Table 5 of the 2003 Interim ROD. Therefore, to assess the protectiveness of groundwater cleanup goals, this FYR compared ROD cleanup goals to the standard upon which they were based. Current standards are compared to the cleanup goals in the table below.

Table H-3: Groundwater ARARs

COC	ROD Cleanup Goal (µg/L)	TSWQSs Human health protection (water and fish)[a] (µg/L)	Current MCL[d] (µg/L)
Arsenic	50	10[bc]	10
Antimony	6	6[b]	6
Lead	5	1.15[c]	15[e]

[a] Accessed 11/7/16 at https://www.epa.gov/sites/production/files/2015-01/documents/txwqs-2014.pdf.
[b] Based on MCLs specified in 30 TAC §290 (relating to Public Drinking Water).
[c] Criteria for the dissolved fraction in water.
[d] Accessed 11/21/16 at https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations.
[e] Lead is regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10 percent of tap water samples exceed the action level, water systems must take additional steps.

APPENDIX I – DETAILED TOXICITY REVIEW

Table I-1: Surface Soil Cleanup Goal Screening-Level Risk Evaluation

Surface Soil COC	ROD Cleanup Goal (mg/kg)	Composite Worker RSL[a] (mg/kg)		Composite Worker Screening-Level Risk Evaluation[b]	
		Risk-based (1×10^{-6})	Noncancer (HQ=1)	Carcinogenic risk	Noncancer HQ
Arsenic	200	3	480	6.67×10^{-5}	0.42
Antimony[c]	310	-	470	-	0.66
Lead[d]	1,754	800[e]		-	-

Notes:
[a] Values are EPA's RSLs for carcinogenic and noncancer effects, available at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016. Accessed 11/17/2016.
[b] Screening-level risk evaluation:
Risk = (cleanup criterion / RSL) (1×10^{-6})
HQ = (cleanup criterion / RSL)
[c] Antimony (metallic) RSL used.
[d] Lead and compounds RSL used.
[e] EPA has not developed cancer or noncancer-based toxicity values for lead and evaluates lead exposure using blood-lead modeling. The RSL is compared to the average concentration.
- = criterion not available or unable to calculate risk
Bold = exceedance of the upper bound of EPA's acceptable risk range of 1×10^{-6} to 1×10^{-4} or a noncancer HQ of 1
mg/kg = milligrams per kilogram

ALM Evaluation of Lead Surface Soil PRG

The 2003 EPA ALM was used to determine the lead surface soil PRG, which is included in both the 2003 Interim ROD and 2004 Final ROD. Since then, EPA has updated the ALM several times. In August 2016, EPA updated the geometric standard deviation (GSD) to 1.7 and the background blood lead concentration (PbB) to 0.7 micrograms per deciliter (µg/dL) based on 2007-2012 survey data from the National Health and Nutrition Examination Survey (NHANES). The RI and Human Health Risk Assessment documents do not indicate what values were used for these two variables to calculate the lead PRG. Using the 2016 PbB and GSD values in the 2009 ALM results in a lead PRG of 2,398 mg/kg (Table I-2). Therefore, the more conservative 2003 Interim ROD and 2004 Final ROD lead PRG of 1,754 mg/kg remains valid.

Table I-2: 2009 Adult Lead Model using 2016 PbB and GSD Values

Variable	Description of Variable	Units	GSD_i and PbB_0 from Analysis of NHANES 2007-2012[a]
$PbB_{fetal,\ 0.95}$	95th percentile PbB in fetus	µg/dL	10
$R_{fetal/maternal}$	Fetal/maternal PbB ratio	--	0.9
BKSF	Biokinetic Slope Factor	µg/dL per µg/day	0.4
GSD_i	Geometric standard deviation PbB	--	**1.7**[a]
PbB_0	Baseline PbB	µg/dL	**0.7**[a]
IR_S	Soil ingestion rate (including soil-derived indoor dust)	grams/day	0.050
$AF_{S,\ D}$	Absorption fraction (same for soil and dust)	--	0.12
$EF_{S,\ D}$	Exposure frequency (same for soil and dust)	days/year	250
$AT_{S,\ D}$	Averaging time (same for soil and dust)	days/year	365
PRG		Parts per million	2,398

[a] The GSD and PbB values were formerly 1.8 and 1.0 µg/dL, respectively.
Bold = updated model input in 2016

APPENDIX J – INTERVIEW FORMS

Rockwool Industries Inc. Superfund Site — Five-Year Review Interview Form

Site Name: Rockwool Industries Inc. **EPA ID No.:** TXD066379645

Interviewer Name: Eric Marsh **Affiliation:** Skeo
Subject Name: Cynthia Hernandez **Affiliation:** Executive Director, Belton Economic Development Corporation

Subject Contact Information: chernandez@beltonedc.org
Time: **Date:** 02/03/2017
Interview Location: N/A

Interview Format (circle one): In Person Phone Mail Other (Email)

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Site and the cleanup activities that have taken place to date?

   Yes.

2. Do you feel well-informed regarding the Site's activities and remedial progress? If not, how might EPA convey site-related information in the future?

   Yes.

3. Have there been any problems with unusual or unexpected activities at the Site in the past five years, such as emergency response, vandalism or trespassing?

   In conducting a Phase I ESA there was minor debris within the bin on the Central Tract, evidence of possible use as a make-shift shelter. No vandalism.

4. Are you aware of any changes to state laws or local regulations in the past five years that might affect the protectiveness of the Site's remedy?

   No.

5. Are you aware of any changes in projected land use(s) at the Site, or are there any updates on site redevelopment?

   Rezoning of the Central Tract from Heavy Industrial to Light Industrial occurred in the fall of 2016.

6. Has EPA kept involved parties and surrounding neighbors informed of activities at the Site? How can EPA best provide site-related information in the future?

   Yes. Via email.

7. Do you have any comments, suggestions or recommendations regarding the project?

No.

8. Do you give permission for the following to be included in the Five Year Review Report and appendices, which becomes a public document? Please initial below.
    1) Your name? Yes _X___ No _____
    2) Your affiliation? Yes _X___ No _____
    3) Your responses? Yes _X___ No _____

Rockwool Industries Inc. Superfund Site **Five-Year Review Interview Form**

Site Name: Rockwool Industries Inc. **EPA ID No.:** TXD066379645

Interviewer Name: Eric Marsh **Affiliation:** Skeo
Subject Name: Sam Listi **Affiliation:** City Manager, City of Belton
Subject Contact Information: slisti@beltontexas.gov
Time: **Date:** 02/01/2017
Interview Location: N/A

Interview Format (circle one): In Person Phone Mail Other (Email)

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Site and the cleanup activities that have taken place to date?

   Yes.

2. Do you feel well-informed regarding the Site's activities and remedial progress? If not, how might EPA convey site-related information in the future?

   Yes. N/A.

3. Have there been any problems with unusual or unexpected activities at the Site in the past five years, such as emergency response, vandalism or trespassing?

   No.

4. Are you aware of any changes to state laws or local regulations in the past five years that might affect the protectiveness of the Site's remedy?

   No.

5. Are you aware of any changes in projected land use(s) at the Site, or are there any updates on site redevelopment?

   No, just beginning marketing the Site by BEDC.

6. Has EPA kept involved parties and surrounding neighbors informed of activities at the Site? How can EPA best provide site-related information in the future?

   Yes. Directly to City/BEDC.

7. Do you have any comments, suggestions or recommendations regarding the project?

   No.

8. Do you give permission for the following to be included in the Five Year Review Report and appendices, which becomes a public document? Please initial below.
   1) Your name? Yes _X___ No _____
   2) Your affiliation? Yes _X___ No _____

3) Your responses? Yes _X___ No _____

Rockwool Industries Inc. Superfund Site **Five-Year Review Interview Form**

Site Name: Rockwool Industries Inc. **EPA ID No.:** TXD066379645

Interviewer Name: Kelly MacDonald **Affiliation:** Skeo
Subject Name: Marilyn Czimer Long **Affiliation:** TCEQ

Date: 02/08/2017

Interview Format (circle one): In Person Phone Mail Other: Email

Interview Category: State Agency

NOTE: Comments/observations from Mr. Ben Camacho, DBS&A (TCEQ Contractor), have been included by the TCEQ in order to provide comprehensive responses. M.C. Long (TCEQ).

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

TCEQ: *The site is acceptable. Communication and coordination is ongoing between the City of Belton, Belton Economic Development Corporation (BEDC), U.S. Environmental Protection Agency (EPA), and the Texas Commission on Environmental Quality (TCEQ) regarding future redevelopment/reuse options.*

Reference notation: I assumed the Project Manager assignment/responsibilities for this site following the First Five-Year Review (FYR) site inspection, which was conducted on March 17-18, 2011. The TCEQ received the draft FYR report on July 5, 2011, and provided review comments to the EPA (TCEQ letter dated August 1, 2011). The Final First FYR document was signed by EPA on September 21, 2012.

DBS&A: *The site is in manageable condition. Since the First Five Year Review, all EPA recommended actions have been addressed.*

2. What is your assessment of the current performance of the remedy in place at the Site?

TCEQ: *Although the remedy components are protective of human health and the environment, the TCEQ conducted supplementary O&M evaluations (as needed) to verify remedy performance/protectiveness. Refer to Comments #4 and #8 (below).*

DBS&A: *Refer to Comments #4 and #8 (below).*

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities in the past five years?

TCEQ: *To my knowledge, the TCEQ has not received any complaints regarding site-related environmental issues. However, since the First FYR was conducted, I have received an*

occasional inquiry regarding the site status or access to TCEQ Operation & Maintenance reports.

DBS&A: *No comment.*

4. Has your office conducted any site-related activities or communications in the past five years apart from routine activities? If so, please describe the purpose and results of these activities.

TCEQ: *Although the remedy components are protective of human health and the environment, the TCEQ conducted supplementary O&M evaluations (as needed) to verify remedy performance/protectiveness.*

During 2014, the TCEQ/TCEQ contractor conducted major maintenance of the MatCon cover of the containment cell due to extensive cracking. The MatCon cover had cracking across the cover; however, major cracking was observed on the southern flank relative to the northern flank of the cover. The cell cover material, which extends outward toward the perimeter drainage channels (referred to as an "apron"), was cracked/compromised due to undercutting erosion along the adjacent surface water drainage channels. The cell cover material was repaired and additional rip-rap was installed to reinforce the drainage channel margins to mitigate erosion. Major cell repairs and surface coating were completed in the fall of 2014. (Refer to Fence Construction and Hot Mixed Asphaltic Concrete Cover Repair Letter Report, dated February 3, 2015). In addition to the cell repairs, the sampling of groundwater seeps occurring along the Leon River bank, near the former Evaporation Lagoon (EVL), were included in the O&M sampling program (refer to DBS&A comments, below).

DBS&A: *During 2015, it was observed that cracks on the southern flank of the MatCon cover were appearing and expanding, subsequent to the major cap maintenance/repairs conducted in 2014. In Fiscal Year 2016, a review of project documents, project history, and relevant literature were conducted in order to identify the potential cause(s) for the reoccurring cracking of the MatCon cover. In addition to the records reviews, coring of the cover was conducted to determine if there was potential settling of the underlying crushed limestone layer and waste beneath the MatCon cover, and to evaluate the condition of the underlying crushed limestone layer and waste material (i.e., dry or moist). Based on the findings from the coring program, the underlying crushed limestone layer and the waste material was relatively dry (Refer to Fiscal Year 2016 Operations and Maintenance Inspections Letter Report, dated August 15, 2016). Current field observations note that crack development appears to be accelerating despite repeated patching and sealing efforts.*

During the March 2015 O&M inspections, groundwater seeps were observed originating from the Articulating Concrete Blocks (ACB) area, approximately 100 feet north of the capped EVL area. The seeps were identified as an upper area where the sounds of "running water" were audibly noted and a lower area where the pooled water was visually observed. The sampling of the upper and lower seeps have been added to the groundwater sampling program. The seeps represent a groundwater to surface water pathway. Seep analytical data varies, but generally exceeds the Preliminary Remediation Goals (PRGs) for antimony and arsenic. (Refer to Annual O&M Report, dated October 17, 2016, Table 4.4).

5. Are you aware of any changes to state laws in the past five years that might affect the protectiveness of the Site's remedy? If so, please explain.

TCEQ: *To my knowledge there have not been changes to state law(s) that might affect the protectiveness of the Site's remedies.*

DBS&A: *Not to my knowledge.*

6. Are you comfortable with the status of the institutional controls at the Site? If not, what are the associated outstanding issues?

TCEQ: *The required Texas Risk Reduction Program Restrictive Covenants for Tracts 8, 9, and 10 through 13 were recorded on February 19, 2013 in order to establish property use restrictions to support the remedy. The City of Belton 2016 Annual Report (dated January 23, 2017) and received by the TCEQ on January 30, 2017, provided a copy of City of Belton Ordinances No. 2016-23, No. 2016-24, and a copy of BEDC letter to the TCEQ (dated September 30, 2016).*

1. Ordinance No. 2016-23: rezoning of Tract 10 from heavy industrial to light industrial;
2. Ordinance No. 2016-24: amendment to City of Belton institutional control measures and standards enacted via prior City of Belton Ordinance;
3. BEDC letter to TCEQ: conveyance of former Rockwool Superfund Site from the City of Belton to the BEDC.

DBS&A: *No comment.*

7. Are you aware of any changes in projected land use(s) at the Site?

TCEQ: *The BEDC is in communication with the EPA Region 6 Superfund Redevelopment Coordinator, and the TCEQ.*

DBS&A: *No comment.*

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

TCEQ: *Although the remedy components are protective of human health and the environment, the TCEQ conducted supplementary O&M evaluations (as needed) to verify remedy performance/protectiveness. The following observations are integral in the planning and successful implementation of future redevelopment and reuse of the site.*

TCEQ & DBS&A *comments/observations include:*

Containment Cell/MatCon cover: As stated in Comment #4 (above), during 2014, the TCEQ/TCEQ contractor conducted major maintenance of the MatCon cover of the containment cell due to extensive cracking. The MatCon cover is approximately 4 inches thick, and it was documented that crack depths extended through the asphaltic cover to the underlying crushed limestone sub-grade. The 6-inch thick limestone sub-grade was installed over the compacted waste fill to meet the support requirements for the MatCon cap (Amendment #2, Superfund State

Contract, signed by EPA on 9/26/2005, and by the TCEQ on 9/30/2005). During 2015, it was observed that cracks on the southern flank of the MatCon cover were appearing and expanding. Current field observations note that crack development appears to be accelerating despite repeated patching and sealing efforts. Based on field observations, potential future use(s) of the containment cell should be fully evaluated. Please refer to Project Document Review & Contaminant Cell Cover Evaluation Report, dated October 17, 2016.

Groundwater/Seeps: The presence of groundwater seeps occurring along the Leon River bank, near the former Evaporation Lagoon (EVL), were identified in the Record of Decision (ROD). The Remedial Action (RA) Report (dated February 3, 2006) identified a grid layout in the vicinity of the EVL (Figure 4), and 8 grids were identified with waste remaining in place (Table 6). As indicated in the ROD, the clay cover was installed over the waste in-place to "prevent" rainfall infiltration and leaching of contaminants into groundwater. It should be noted that shallow groundwater was present and the sampling events were conducted consistently during the extended drought. Only 2 wells of a 23-well network were reported "dry", and the seeps were "dry" during the drought period. However, during the last two years, central Texas has had record rainfall events, and water samples have been collected from the seeps, which are located on the Leon River bank, north of the EVL. The seep samples indicated elevated antimony and arsenic concentrations (Annual O&M Report, dated October 17, 2016). During the rainy season(s) a groundwater to surface water pathway, via the seeps, is complete.

Groundwater Monitor Wells/Groundwater Data: The extent of the waste left in-place which exceeded PRGs, as defined in the ROD, was identified in the RA Report (dated February 3, 2006), Figure 4 (North Property) and Figure 6 (Central Property). The following groundwater monitor wells are located in areas designated as waste in-place, and exhibit elevated concentrations of antimony, arsenic and lead (Annual O&M Report, dated 10/17/2016, Table 1): MW-17, MW-18, MW-24-90, MW-27-90, MW-28-90, MW-30-90, MW-35-90, MW-37-90, and MW38-90. Based on the observed consistency of these data over time, a clay cap may not "prevent" infiltration of rainfall to the uppermost saturated zone and/or the leaching of contaminants to groundwater. In general, the groundwater contaminant concentrations, in monitor wells located in the Central Property area, appear to be relatively stable since 2011. However, contaminant concentrations in groundwater increased during 2016. This occurrence may be correlative to the rise of groundwater elevations in response to the increased precipitation in central Texas. The subsequent leaching of contaminants to groundwater may be attributed to a fluctuating water table (i.e., drought/wet weather cycles).

9. Do you give permission for the following to be included in the Five Year Review Report and appendices, which becomes a public document? Please initial below.
    a. Your name? Yes No _____
    b. Your affiliation? Yes No _____
    c. Your responses? Yes No _____

APPENDIX K – INSTITUTIONAL CONTROLS

Doc# 00006481

Texas Risk Reduction Program

Restrictive Covenant

STATE OF TEXAS	§	**COPY**
	§	
COUNTY OF BELL	§	

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described as follows:

Lots 4 and 5, Block 231, outblock to the City of Belton, being 74.00 Acres out of Abstract 20 of the O. T. Tyler Survey, Belton, Bell County, Texas being that property more particularly described in Volume 2769, Page 373, Volume 923, Page 658 and Volume 956, Page 416 of the Deed Records, Bell County, Texas.

The Property includes the following tracts, further described in the Field Notes Prepared by All County Surveying, Inc., which comprise Exhibit A, attached hereto and incorporated herein by reference:

Tract No. 8, a 13.76 acre tract – City of Belton Tract B
Tract No. 9, an 11.016 acre tract – City of Belton Tract B contaminated area

Tract No. 9 is contained within Tract No. 8

Portions of the soils and groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP. The portion considered to be Affected Property includes the following tract, depicted on the map adapted from the Boundary Survey, March 2012, and and further described in the Field Notes Prepared by All County Surveying, Inc. Together the map and the field notes comprise Exhibit B, attached hereto and incorporated herein by reference:

Tract No. 9, an 11.016 tract – City of Belton Tract B contaminated area

The chemicals of concern that exceed critical Protective Concentration Levels are:

Soil	*Groundwater*
Arsenic	Arsenic
Antimony	Antimony
Lead	Lead

A Notice of Environmental Conditions previously was filed for the Property, Instrument No. 2009-00002902 filed for record on January 22, 2009. The conditions that triggered the Notice of Environmental Conditions were commercial/industrial land use and use of physical control on soil. These conditions remain unchanged. The Notice of Environmental Conditions included a provision stating that a more detailed description of the cap would be filed at a later date. Accordingly, this Restrictive Covenant includes a more detailed description of the cap. This Restrictive Covenant supersedes the Notice of Environmental Conditions. The TRRP rule requires the TCEQ to consent to the filing of a superseding restrictive covenant.

COPY

On September 27, 2005, in recognition of the United States Environmental Protection Agency's selected remedy for the Rockwool Superfund Site the City of Belton passed Ordinance No. 2005-46. This Restrictive Covenant has no effect on and does not supersede Ordinance No. 2005-46.

This Restrictive Covenant is required for the following reasons:

1. The Affected Property currently meets TRRP standards for commercial/industrial use. Based on the reports, the chemicals of concern pose no significant present or future risk to humans or the environment based on commercial/industrial land use. No further remediation of the Affected Property is required by the TCEQ as long as the Affected Property is not to be used for residential purposes. If any person desires in the future to use the Affected Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the property may be used for residential purposes. Persons contemplating a change in land use for the Affected Property are encouraged to review the definitions for commercial/industrial and residential land use contained in TRRP as the definition of residential land use is broad.
2. The Affected Property is subject to the TRRP requirements for properties containing concentrations of chemicals of concern in soil and is subject to the requirements in 30 TAC § 350.33(e)(2) to prevent exposure to soils that contain a chemical of concern in excess of the protective concentration level. The attached Exhibit C describes and provides the location of the physical control and extent of the soil that exceeds the TCEQ-approved protective concentration levels for certain chemicals of concern. The attached Exhibit C also provides the reason the physical control must remain in place and describes the maintenance and monitoring required for the physical control. This program must be implemented unless and until TCEQ approves any modification.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is City of Belton Trustee (Owner) with an address of P.O. Box 120, Belton, Texas 76513-0120.

In consideration of response action oversight by the TCEQ and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to wit:

1. The Property shall not be used for any purposes other than commercial/industrial uses, as defined in 30 TAC § 350.4(a)(13).
2. The removal or modification of the physical control on the Affected Property is prohibited without prior approval from the TCEQ and the physical control must be maintained and monitored as described in Exhibit C. Removal or modification of this restrictive covenant is prohibited without prior approval of the TCEQ.
3. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ Central Records Building E 12100 Park 35 Circle Austin, Texas 78753	Mail: TCEQ MC-199 P O Box 13087 Austin, TX 78711-3087

TCEQ Program and Identifier No.: Superfund; EPA ID TXD066379645, TCEQ ID SUP033

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 8th day of January, 2013.

COPY

City of Belton, Trustee
By: [signature]
Name: Jim Covington
Title: Mayor, City of Belton

Accepted as Third Party Beneficiary this 6th day of February, 2013.

Texas Commission on
Environmental Quality
By: Beth Seaton
Name: Beth Seaton
Title: Division Director, Remediation Division

STATE OF TEXAS
Bell COUNTY

BEFORE ME, on this the 8th day of January 2013, personally appeared Jim Covington, Mayor, City of Belton, for City of Belton, Trustee, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 8th day of January 2013.

CONNIE S. TORRES
Notary Public, State of Texas
My Commission Expires
November 21, 2014

Notary Public in and for the State of Texas,
County of Bell
My Commission Expires: 11/21/14

THIS AREA INTENTIONALLY LEFT BLANK.

COPY

STATE OF TEXAS

TRAVIS COUNTY

BEFORE ME, on this the 6th day of FEBRUARY, personally appeared Beth Seaton, Division Director, Remediation Division, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and she acknowledged to me that she executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 6th day of FEBRUARY, 2013.

JAMES D. McGHEE
Notary Public, State of Texas
My Commission Expires
JULY 7, 2014

Notary without Bond

Notary Public in and for the State of Texas

County of TRAVIS

My Commission Expires: 7/7/14

James D. McGhee

Exhibit A – Property Description

Field Notes

COPY

Exhibit A

COPY

Property Description

Field Notes

City of Belton Tract B, Field Notes Prepared by All County Surveying, Inc., March 26, 2012, designated as Tract No. 8, 13.76 acre tract – City of Belton Tract B on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

City of Belton Tract B contaminated area, Field Notes Prepared by All County Surveying, Inc., March 22, 2012, designated as Tract No. 9, 11.016 acre tract – City of Belton Tract B contaminated area on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

March 26, 2012

COPY

Surveyor's Field Notes for CITY OF BELTON, for:

13.76 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 20,** in Bell County, Texas and embracing that certain called 14 acre tract described in a deed to THE CITY OF BELTON, TEXAS, of record in Volume 5330, Page 658 of the Official Public Records of Real Property of Bell County, Texas, said 13.76 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a 5/8" iron rod found in the north right-of-way line of a public maintained roadway known as TAYLOR'S VALLEY ROAD, being the southeast corner of said 14 acre tract, same being the southwest corner of that certain called 17.737 acre tract described in a deed to APAC-TEXAS, INC., of record in Doc. No. 2009-00047510 of the Official Public Records of Real Property of Bell County, Texas and being the southeast corner of this tract.

THENCE in a westerly direction, with the north right-of-way line of said TAYLOR'S VALLEY ROAD, same being the south line of said 14 acre tract *(record call of N 71 deg W, 894 feet)* for the following TWO (2), courses and distances:

1). **NORTH 74 deg 18 min 48 sec WEST, a distance of 381.11 feet** to a 1/2" iron rod found; and

2). **NORTH 75 deg 11 min 20 sec WEST, a distance of 519.13 feet** to a 3/8" iron rod found, being the southwest corner of said 14 acre tract, same being the southeast corner of that certain tract described in a deed to S. H. SMITH, ET AL, of record in Volume 87, Page 491 and Volume 90, page 125 of the Deed Records of Bell County, Texas locally known as East Belton Cemetery and being the southwest corner of this tract.

THENCE in a northerly direction, with the east line of said cemetery tract, same being the west line of said 14 acre tract *(record call of N 19 deg E, 750 feet)* for the following TWO (2), courses and distances:

1). **NORTH 17 deg 23 min 40 sec EAST, a distance of 113.43 feet** to a 5/8" iron rod found; and

2). **NORTH 16 deg 35 min 00 sec EAST, a distance of 576.99 feet** to a calculated point in the LEON RIVER, being the northeast corner of said cemetery tract, same being the northwest corner of said 14 acre tract and being the northwest corner of this tract.

Surveyor's Field Notes for CITY OF BELTON, continued:

THENCE in an easterly direction, with the said LEON RIVER, same being the north line of said 14 acre tract *(record call of "Up the Leon River with it's meanders")* for the following THREE (3), courses and distances:

1). **SOUTH 71 deg 52 min 50 sec EAST, a distance of 423.49 feet** to a calculated point;

2). **SOUTH 75 deg 20 min 25 sec EAST, a distance of 322.86 feet** to a 5/8" iron rod found; and

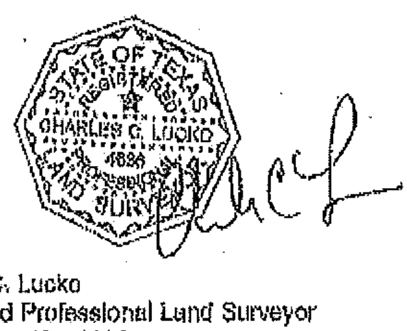
3). **SOUTH 63 deg 00 min 24 sec EAST, a distance of 145.76 feet** to a 3/4" metal pipe found, being the northeast corner of said 14 acre tract, same being the northwest corner of said 17.737 acre tract and being the northeast corner of this tract.

THENCE in a southerly direction, with the west line of said 17.737 acre tract, same being the east line of said 14 acre tract *(record call of S 20 deg 30 min W, 678 feet)* **SOUTH 15 deg 46 min 58 sec WEST, a distance of 641.60 feet** to the Point of Beginning, Containing **13.76 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999857. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the southwest corner of this 13.76 acre tract is N 02°23'54" E, 22.03 feet. Published City coordinates for project reference point 133 are N. = 10,358,458.27 E. = 3,202,085.92. This description is to accompany a Surveyor's Sketch showing the herein described 13.76 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

ALL COUNTY SURVEYING, INC.
1-800-749-PLAT
S:\...\12B.doc



Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4636

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

COPY

March 22, 2012

Surveyor's Field Notes for CITY OF BELTON, of:

11.016 ACRES, and being a portion of that certain called 14 acre tract described in a deed to THE CITY OF BELTON, TEXAS, of record in Volume 5330, Page 658 of the Official Public Records of Real Property of Bell County, Texas, said 11.016 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows;

BEGINNING at a 1/2" iron rod found in the north right-of-way line of a public maintained roadway known as TAYLOR'S VALLEY ROAD, said right-of-way being in a deed to STATE OF TEXAS, recorded in Volume 688, Page 427 of the Deed Records of Bell County, Texas, same being the south line of said 14 acre tract and being the southeast corner of this tract, from which a 5/8" iron found, being the southeast corner of said 14 acre tract, bears: SOUTH 74 deg 18 min 48 sec EAST, a distance of 381.11 feet.

THENCE in a westerly direction, with the north right-of-way line of said TAYLOR'S VALLEY ROAD, same being the south line of said 14 acre tract *(record call of N 71 deg W, 884 feet)* **NORTH 76 deg 11 min 20 sec WEST, a distance of 164.85 feet** to a 5/8" iron rod with plastic cap marked "All County" set being the southwest corner of this tract,

THENCE in a northerly direction, crossing said 14 acre tract **NORTH 14 deg 00 min 26 sec EAST, a distance of 103.28 feet** to a 5/8" iron rod with plastic cap marked "All County" set, being a corner of this tract.

THENCE in a westerly direction, continuing across said 14 acre tract **NORTH 73 deg 26 min 00 sec WEST, a distance of 328.07 feet** to a 5/8" iron rod found in the west line of said 14 acre tract, same being the west line of that certain tract described in a deed to S. H. SMITH, ET AL, of record in Volume 87, Page 491 and Volume 90, page 125 of the Deed Records of Bell County, Texas locally known as East Belton Cemetery and being a corner of this tract.

THENCE in a northerly direction, with the east line of said cemetery tract, same being the west line of said 14 acre tract *(record call of N 19 deg E, 750 feet)* **NORTH 16 deg 35 min 00 sec EAST, a distance of 576.39 feet** to a calculated point in the LEON RIVER, being the northwest corner of said cemetery tract, same being the northwest corner of said 14 acre tract and being the northwest corner of this tract.

THENCE in an easterly direction, with the said LEON RIVER, same being the north line of said 14 acre tract *(record call of "Up the Leon River with it's meanders")* for the following THREE (3), courses and distances:

1). **SOUTH 71 deg 52 min 50 sec EAST, a distance of 423.48 feet** to a calculated point;

COPY

Surveyor's Field Notes for CITY OF BELTON, continued:

2). **SOUTH 75 deg 20 min 26 sec EAST, a distance of 322.86 feet** to a 5/8" iron rod found; and

3). **SOUTH 63 deg 00 min 24 sec EAST, a distance of 146.75 feet** to a 3/4" metal pipe found, being the northeast corner of said 14 acre tract, same being the northwest corner of said 17.737 acre tract and being the northeast corner of this tract.

THENCE in a southerly direction, with the west line of said 17.737 acre tract, same being the east line of said 14 acre tract *(record call of S 20 deg 30 min W, 678 feet)* **SOUTH 16 deg 46 min 56 sec WEST, a distance of 417.48 feet** to a 5/8" iron rod with plastic cap marked "All County" set, being a corner of this tract.

THENCE in a westerly direction, crossing said 14 acre tract **NORTH 78 deg 16 min 35 sec WEST, a distance of 377.20 feet** to a 5/8" iron rod found, being a corner of this tract.

THENCE in a southerly direction, continuing across said 14 acre tract **SOUTH 16 deg 49 min 34 sec WEST, a distance of 217.94 feet** to the Point of Beginning, Containing **11.016 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 138. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999857. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 138 to the southwest corner of this 11.016 acre tract is S 78°51'36" E, 326.83 feet. Published City coordinates for project reference point 133 are N. = 10,366,456.27 E. = 3,202,086.92. This description is to accompany a Surveyor's Sketch showing the herein described 11.016 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

ALL COUNTY SURVEYING, INC.
1-800-749-PLAT
Server/projects/pb120000/120000/120100/120112/120112A.doc

STATE OF TEXAS
REGISTERED
CHARLES C. LUCKO
4636
LAND SURVEYOR

Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4636

Exhibit B – Affected Property Description

COPY

Field Notes

Map

Exhibit B

Affected Property Description COPY

Field Notes

City of Belton Tract B contaminated area, Field Notes Prepared by All County Surveying, Inc., March 22, 2012, designated as Tract No. 9, 11.016 acre tract – City of Belton Tract B contaminated area on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

March 22, 2012

COPY

Surveyor's Field Notes for CITY OF BELTON, of:

11.016 ACRES, and being a portion of that certain called 14 acre tract described in a deed to THE CITY OF BELTON, TEXAS, of record in Volume 5330, Page 858 of the Official Public Records of Real Property of Bell County, Texas, said 11.016 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a 1/2" iron rod found in the north right-of-way line of a public maintained roadway known as TAYLOR'S VALLEY ROAD, said right-of-way being in a deed to STATE OF TEXAS, recorded in Volume 683, Page 427 of the Deed Records of Bell County, Texas, same being the south line of said 14 acre tract and being the southeast corner of this tract, from which a 5/8" iron found, being the southeast corner of said 14 acre tract, bears: SOUTH 74 deg 18 min 48 sec EAST, a distance of 381.11 feet.

THENCE in a westerly direction, with the north right-of-way line of said TAYLOR'S VALLEY ROAD, same being the south line of said 14 acre tract *(record call of N 71 deg W, 894 feet)* **NORTH 75 deg 11 min 20 sec WEST, a distance of 184.86 feet** to a 5/8" iron rod with plastic cap marked "All County" set being the southwest corner of this tract.

THENCE in a northerly direction, crossing said 14 acre tract **NORTH 14 deg 00 min 25 sec EAST, a distance of 103.28 feet** to a 5/8" iron rod with plastic cap marked "All County" set, being a corner of this tract.

THENCE in a westerly direction, continuing across said 14 acre tract **NORTH 73 deg 26 min 00 sec WEST, a distance of 328.07 feet** to a 5/8" iron rod found in the west line of said 14 acre tract, same being the west line of that certain tract described in a deed to S. H. SMITH, ET AL., of record in Volume 87, Page 491 and Volume 90, page 125 of the Deed Records of Bell County, Texas locally known as East Belton Cemetery and being a corner of this tract.

THENCE in a northerly direction, with the east line of said cemetery tract, same being the west line of said 14 acre tract *(record call of N 19 deg E, 750 feet)* **NORTH 16 deg 35 min 00 sec EAST, a distance of 576.99 feet** to a calculated point in the LEON RIVER, being the northwest corner of said cemetery tract, same being the northwest corner of said 14 acre tract and being the northwest corner of this tract.

THENCE in an easterly direction, with the said LEON RIVER, same being the north line of said 14 acre tract *(record call of "Up the Leon River with it's meanders")* for the following THREE (3), courses and distances:

1). **SOUTH 71 deg 52 min 50 sec EAST, a distance of 423.49 feet** to a calculated point;

COPY

Surveyor's Field Notes for CITY OF BELTON, continued:

2). **SOUTH 76 deg 20 min 26 sec EAST, a distance of 322.86 feet** to a 5/8" iron rod found; and

3). **SOUTH 63 deg 00 min 24 sec EAST, a distance of 146.76 feet** to a 3/4" metal pipe found, being the northeast corner of said 14 acre tract, same being the northwest corner of said 17.737 acre tract and being the northeast corner of this tract.

THENCE In a southerly direction, with the west line of said 17.737 acre tract, same being the east line of said 14 acre tract *(record call of S 20 deg 30 min W, 678 feet)* **SOUTH 16 deg 46 min 56 sec WEST, a distance of 417.48 feet** to a 5/8" iron rod with plastic cap marked "All County" set, being a corner of this tract.

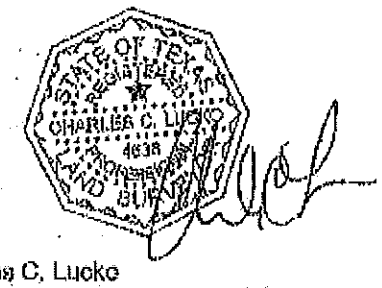
THENCE In a westerly direction, crossing said 14 acre tract **NORTH 76 deg 16 min 35 sec WEST, a distance of 377.20 feet** to a 5/8" iron rod found, being a corner of this tract.

THENCE In a southerly direction, continuing across said 14 acre tract **SOUTH 16 deg 49 min 34 sec WEST, a distance of 217.94 feet** to the Point of Beginning, Containing **11.016 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°26'23". The combined correction factor (CCF) is 0.999957, Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the southwest corner of this 11.016 acre tract is S 78°51'36" E, 328.63 feet. Published City coordinates for project reference point 133 are N. = 10,358,459.27 E. = 3,202,086.92. This description is to accompany a Surveyor's Sketch showing the herein described 11.016 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

ALL COUNTY SURVEYING, INC.
1-800-749-PLAT
server/projects/pro120000/120000/120100/120112/120112A.doc



Charles C. Lucke
Registered Professional Land Surveyor
Registration No. 4636

Exhibit B

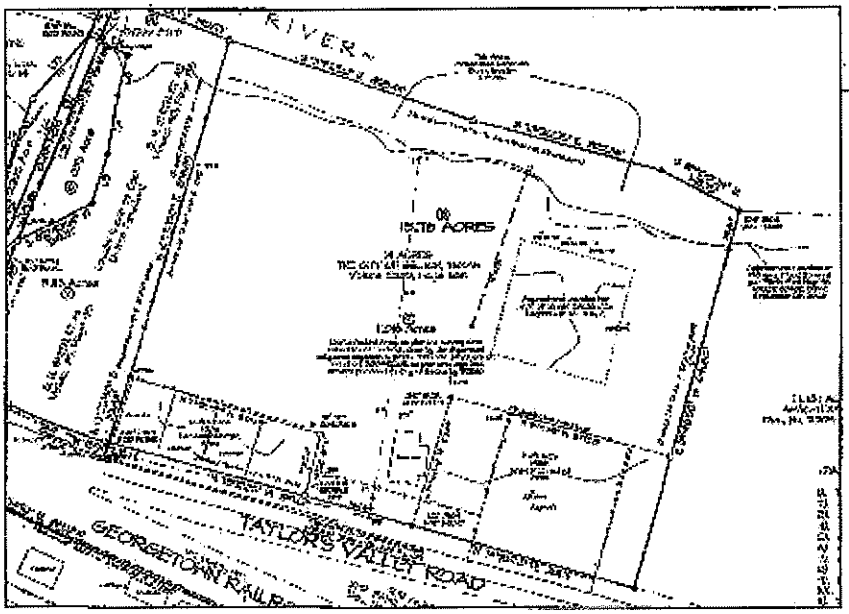
Affected Property Description

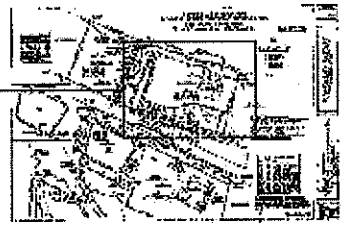
Map

COPY

Exhibit B – Map, Tracts 8 (13.76 ac.) and 9 (11.016 ac.)

Exhibit B - Map
Tracts 8 (13.76 ac.) and 9 (11.016 ac.)





COPY

This map has been adapted by the Remediation Division of the Texas Commission on Environmental Quality. This map is for informational purposes and was not prepared for and may not be suitable for legal, engineering, or surveying purposes. This map is based on a drawing prepared by [illegible] Surveying, Inc. in March 2002. To obtain a copy of the original drawing, contact the Remediation Division at [illegible].

Exhibit C – Physical Control on Soil

Map

COPY

Maintenance and Monitoring

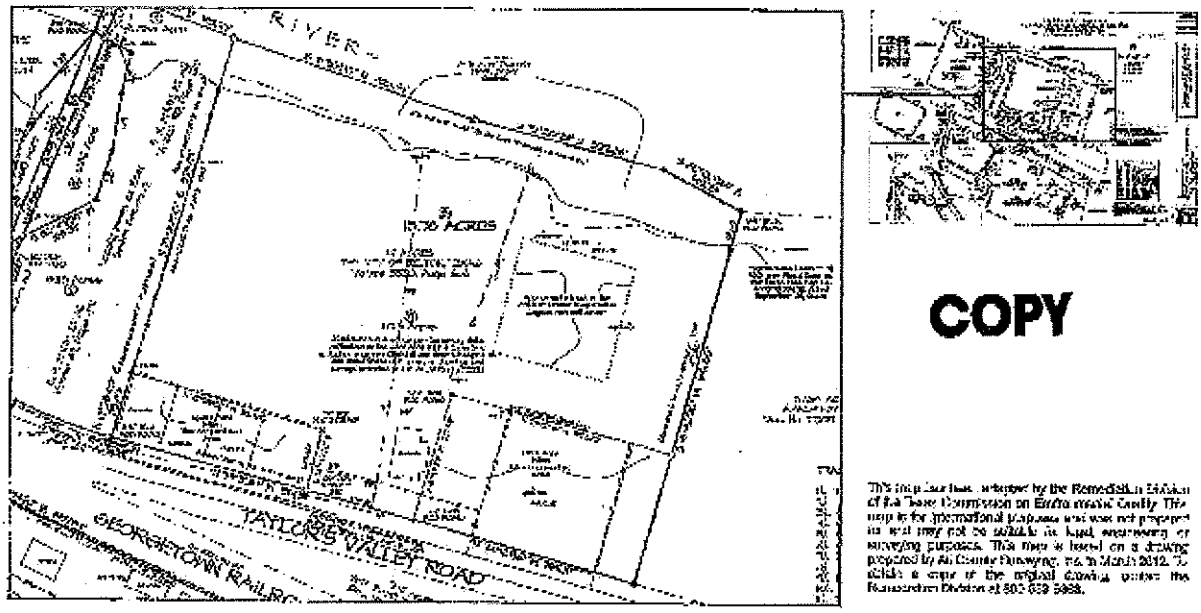
Exhibit C

Physical Control on Soil

Map

Exhibit C – Map, Tracts 8 (13.76 ac.) and 9 (11.016 ac.)

Exhibit C - Map
Tracts 8 (13.76 ac.) and 9 (11.016 ac.)



COPY

Exhibit C

COPY

Physical Control on Soil

Maintenance and Monitoring

The physical control on soil consists of a soil cover that is one (1) foot of clay and one-half (0.5) foot of topsoil, which covers the Affected Property. In addition, the physical control on soil also includes articulating concrete blocks, soil infill, and vegetation that cover the banks of the Leon River. The physical control on soil must remain in place in order to ensure that the remedy remains protective of human health and the environment. Future use of shallow groundwater is prohibited. The clay cap and vegetative cover may not be disturbed. Continued effectiveness of interceptor trench and surface flow controls must be maintained. These restrictions are necessary to protect the industrial worker and to prohibit access to groundwater.

The maintenance and monitoring required for the physical control include:

1. Inspect fence, including gates, and signage semiannually. If damaged and/or missing, repair or install new fencing, gates and signs.
2. Inspect site vegetation semiannually in order to protect the soil cover and to easily see and access monitor wells. If there are holes from burrowing animals, fill holes with clean soil material and compact. If there is settlement, fill settled area with clean soil material and reseed surface. If there are wet areas or water damage, repair so that the surface contains properly graded and drained. If there is erosion, fill eroded area with clean soil material. If there are cracks, fill cracked area with clean soil material and reseed surface. If there are areas with no vegetation, reseed.
3. At least three times a year, mow the Property. Remove vegetation surrounding monitor wells. Do not use a chemical method to control vegetation, as that might affect groundwater sampling data.
4. Inspect the drainage controls semiannually. If there is debris present, remove debris. If there is restricted flow because of sediment or vegetation, remove vegetation and sediment.
5. Inspect the culverts semiannually. If culverts, culvert inlets, manholes, and/or outfall boxes are blocked or damaged, remove blockage and repair or replace if needed.
6. Visually inspect the articulating concrete blocks semiannually and report any vegetation growth among the articulating concrete blocks to the Texas Commission on Environmental Quality. No other maintenance activities are required with regard to the articulating concrete blocks themselves; however, maintain soil infill and vegetation in areas adjacent to the articulating concrete blocks, along the river bank, in accordance with No. 2 above.
7. Using Exhibit C, Physical Control on Soil, as a reference and guide, draft and submit an annual report to the Texas Commission on Environmental Quality. Include documentation of onsite and adjacent offsite land uses. Provide a summary of maintenance and monitoring activities performed, including general observations and findings pertaining to each enumerated maintenance and monitoring requirement, a general description of inspection and maintenance tasks enumerated in Exhibit C, and the date(s) on which the tasks were performed. No specific format is prescribed. For example, a checklist may be developed and

utilized. Photographic documentation may be helpful but is optional. By March 31, submit the annual report for the previous year to:

Texas Commission on Environmental Quality
Remediation Division
Superfund Section
Attention: Project Manager
Rockwool Industries Inc. Federal Superfund Site
MC-136
P.O. Box 13087
Austin, TX 78711-3087

COPY

Bell County
Shelley Coston
County Clerk
Belton, Texas 76513

Instrument Number: 2013-00006481
As
Recordings

Recorded On: February 19, 2013

Parties: CITY OF BELTON TRUSTEE

To EX PARTE

COPY

Billable Pages: 21

Number of Pages: 22

Comment:

(Parties listed above are for Clerks reference only)

** Examined and Charged as Follows: **

Recordings	91.00
Total Recording:	91.00

********** DO NOT REMOVE, THIS PAGE IS PART OF THE INSTRUMENT **********

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law

File Information:

Document Number: 2013-00006481

Receipt Number: 151926

Recorded Date/Time: February 19, 2013 10:37:05A

User / Station: G Gomez - Cash Station 1

Record and Return To:

CITY OF BELTON
PO BOX 120
BELTON TX 76513

I hereby certify that this instrument was filed on the date and time stamped hereon and was duly recorded in the Real Property Records of Bell County, Texas

Shelley Coston
Bell County Clerk

Doc# 00006480

Texas Risk Reduction Program

Restrictive Covenant

COPY

STATE OF TEXAS §
§
COUNTY OF BELL §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described as follows:

80.804 Acres, more or less, out of Abstract Number 20, O.T. Tyler Survey, being Lot 2B, Block 230 of the Hubbard-Tyler Industrial Park Addition to the City of Belton, Bell County, Texas being that property more particularly described in Volume 5600, Page 897 of the Deed Records, Bell County, Texas.

The Property includes the following designated tracts, further described in the Field Notes Prepared by All County Surveying, Inc., which comprise Exhibit A, attached hereto and incorporated herein by reference:

Tract No. 10, a 36.326 acre tract – City of Belton Tract C
Tract No. 11, a 21.538 acre tract – City of Belton Tract C contaminated area
Tract No. 12, a 3.944 acre tract – MATCON containment cell
Tract No. 13, a 41.087 acre tract – City of Belton south tract

Tract Nos. 11 and 12 are contained within Tract No. 10.

Portions of the soils and groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP. The portion considered to be Affected Property includes the following designated tracts, depicted on the map adapted from the Boundary Survey, March 2012, and further described in the Field Notes Prepared by All County Surveying, Inc. Together the map and the field notes comprise Exhibit B, attached hereto and incorporated herein by reference:

Tract No. 10, a 36.326 acre tract – City of Belton Tract C
Tract No. 11, a 21.538 acre tract – City of Belton Tract C contaminated area
Tract No. 12, a 3.944 acre tract – MATCON containment cell

The Affected Property does not include Tract No. 13.

The chemicals of concern that exceed critical Protective Concentration Levels are:

Soil	*Groundwater*
Arsenic	Arsenic
Antimony	Antimony
Lead	Lead

After recording return to:
City of Belton
Attn: City Clerk
P.O. Box 120
Belton, TX 76513

COPY

A Notice of Environmental Conditions previously was filed for the Property, Instrument No. 2009-00002504 filed for record on January 22, 2009. The conditions that necessitated the filing of the Notice of Environmental Conditions were commercial/industrial land use, use of physical control on soil, and use of waste control unit. These conditions remain unchanged. The Notice of Environmental Conditions included a provision stating that a more detailed description of the cap and waste control unit would be filed at a later date. Accordingly, this Restrictive Covenant includes more detailed descriptions of the cap and waste control unit. This Restrictive Covenant supersedes the Notice of Environmental Conditions. The TRRP rule requires the TCEQ to consent to the filing of a superseding restrictive covenant.

On September 27, 2005, in recognition of the United States Environmental Protection Agency's (EPA) selected remedy for the Rockwool Superfund Site, the City of Belton passed Ordinance No. 2005-46. This Restrictive Covenant has no effect on and does not supersede Ordinance No. 2005-46.

This Restrictive Covenant is required for the following reasons:

1. The Affected Property currently meets TRRP standards for commercial/industrial use. Based on the reports, the chemicals of concern pose no significant present or future risk to humans or the environment based on commercial/industrial land use. No further remediation of the Affected Property is required by the TCEQ as long as the Affected Property is not to be used for residential purposes. If any person desires in the future to use the Affected Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the property may be used for residential purposes. Persons contemplating a change in land use for the Affected Property are encouraged to review the definitions for commercial/industrial and residential land use contained in TRRP as the definition of residential land use is broad.

2. The Affected Property is subject to the TRRP requirements for properties containing concentrations of chemicals of concern in soil and is subject to the requirements in 30 TAC § 350.33(e)(2) to prevent exposure to soils that contain a chemical of concern in excess of the protective concentration level. The attached Exhibit C describes and provides the location of the physical control and extent of the soil that exceeds the TCEQ-approved protective concentration levels for certain chemicals of concern. The attached Exhibit C also provides the reason the physical control must remain in place and describes the maintenance and monitoring required for the physical control. This program must be implemented unless and until TCEQ approves any modification.

3. The Affected Property is subject to the TRRP requirements for properties containing concentrations of chemicals of concern in groundwater underlying a waste control unit and is subject to the requirements in 30 TAC § 350.33(f)(2) to prevent exposure to underlying groundwater that contains a chemical of concern in excess of the protective concentration level. A waste control unit includes municipal or industrial solid waste landfills, including Resource Conservation and Recovery Act-regulated units closed as landfills, with a liner system and engineered cap. The attached Exhibit D provides the location of the waste control unit and extent of the groundwater underlying the waste control unit that exceeds the TCEQ-approved protective concentration levels for certain chemicals of concern. The attached Exhibit D also describes the maintenance and monitoring required for the waste control unit. This program must be implemented unless and until TCEQ approves any modification.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is City of Belton Trustee (Owner) with an address of P.O. Box 120, Belton, Texas 76513-0120.

In consideration of response action oversight by the TCEQ and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to wit:

1. The Property shall not be used for any purposes other than commercial/industrial uses, as defined in 30 TAC § 350.4(a)(13).
2. The removal or modification of the physical control on the Affected Property is prohibited without prior approval from the TCEQ and the physical control must be maintained and monitored as described in Exhibit C. Removal or modification of this restrictive covenant is prohibited without prior approval of the TCEQ.
3. The removal or modification of the waste control unit on the Affected Property is prohibited without prior approval from the TCEQ and the waste control unit must be maintained and monitored as described in Exhibit D. Use of and exposure to the groundwater underlying the waste control unit for any purpose is prohibited until such time when all the chemicals of concern no longer exceed their respective protective concentration levels. Removal or modification of this restrictive covenant is prohibited without prior approval of the TCEQ.
4. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
Building E
12100 Park 35 Circle
Austin, Texas 78753

Mail:
TCEQ
MC-199
P O Box 13087
Austin, TX 78711-3087

COPY

TCEQ Program and Identifier No.: Superfund; EPA ID TXD066379645, TCEQ ID SUP033

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

THIS AREA INTENTIONALLY LEFT BLANK.

COPY

Executed this 8th day of January, 2013.

City of Belton, Trustee

By: _____

Name: Jim Covington

Title: Mayor, City of Belton

Accepted as Third Party Beneficiary this 10th day of February, 2013.

Texas Commission on Environmental Quality

By: Beth Seaton

Name: Beth Seaton

Title: Division Director, Remediation Division

STATE OF TEXAS

Bell COUNTY

BEFORE ME, on this the 8th day of January 2013, personally appeared Jim Covington, Mayor, City of Belton for City of Belton, Trustee, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 8th day of January, 2013.

CONNIE S. TORRES
Notary Public, State of Texas
My Commission Expires
November 21, 2014

Notary Public in and for the State of Texas,

County of Bell

My Commission Expires: 11/21/14

STATE OF TEXAS

TRAVIS COUNTY

BEFORE ME, on this the 6th day of FEBRUARY, personally appeared Beth Seaton, Division Director, Remediation Division, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and she acknowledged to me that she executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 6th day of FEBRUARY, 2013.

JAMES D. McGHEE
Notary Public, State of Texas
My Commission Expires
JULY 7, 2014

Notary without Bond

Notary Public in and for the State of Texas

County of Travis

My Commission Expires: 7/7/14

Exhibit A – Property Description

Field Notes

COPY

Exhibit A

COPY

Property Description

Field Notes

City of Belton Tract C, Field Notes Prepared by All County Surveying, Inc., March 28, 2012, designated as Tract No. 10, 36.326 acre tract – City of Belton Tract C on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

City of Belton Tract C contaminated area, Field Notes Prepared by All County Surveying, Inc., March 28, 2012, designated as Tract No. 11, 21.538 acre tract – City of Belton Tract C contaminated area on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

MATCON Containment Cell, Field Notes Prepared by All County Surveying, Inc., April 17, 2012, designated as Tract No. 12, 3.944 acre tract – MATCON containment cell on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

City of Belton south tract, Field Notes Prepared by All County Surveying, Inc., March 28, 2012, designated as Tract No. 13, 41.087 acre tract – City of Belton south tract on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

March 28, 2012

Surveyor's Field Notes for the CITY OF BELTON, for;

36.326 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 29,** in Bell County, Texas and being a portion of that certain called 100.02 acre tract described in a deed to THE CITY OF BELTON, of record in Doc. No. 2009-00008069 of the Official Public Records of Real Property of Bell County, Texas, said 36.326 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a 5/8" iron rod found in the south right-of-way line of the GEORGETOWN RAILROAD, and being in the east line of said 100.02 acre tract, being the northwest corner of that certain called 18.952 acre tract described in a deed to BMA FAMILY, LTD., of record in Volume 6316, Page 596 of the Official Public Records of Real Property of Bell County, Texas and being the northeast of this tract.

THENCE in a southerly direction, with the west line of said 18.952 acre tract, same being the east line of said 100.02 acre tract *(record call of S 17 deg 30 min 00 sec W, 1888.91 feet)* **SOUTH 14 deg 09 min 11 sec WEST, a distance of 1024.20 feet** to a 5/8" iron rod found in the north right-of-way line of a public roadway known as F. M. ROAD NO. 93, said right-of-way is of record in a deed to the STATE OF TEXAS, in Volume 2590, Page 336 of the Official Public Records of Real Property of Bell County, Texas, being the southwest corner of said 18.952 acre tract and being the southeast corner of this tract.

THENCE in a generally northwesterly direction, with the north right-of-way line of said F. M. ROAD NO. 93 and crossing said 100.02 acre tract, for the following THREE (3), courses and distances:

1). **NORTH 66 deg 50 min 40 sec WEST, a distance of 566.38 feet** to a 5/8" iron rod with plastic cap marked "All County" set;

2). With a curve to the right, having a radius of **1347.39 feet,** an arc length of **964.55 feet,** a central angle of **41 deg 00 min 59 sec** and a chord that bears **NORTH 48 deg 19 min 32 sec WEST, a distance of 944.09 feet** to a concrete right-of-way marker found; and

3). **NORTH 27 deg 50 min 13 sec WEST, a distance of 249.64 feet** to a brass right-of-way marker found, being the southeast corner of that certain called 11-acre tract described as TRACT 2, in a deed to WILLIAM LEE McGUIRE INVESTMENTS, LLC, of record in Volume 6033, Page 603 of the Official Public Records of Real Property of Bell County, Texas and being the southwest corner of this tract.

THENCE in a northerly direction, with the east line of said 11 acre tract and crossing said 100.02 acre tract **NORTH 11 deg 27 min 49 sec EAST, a distance of 676.34 feet** to a 5/8" iron rod found in the south right-of-way line of said GEORGETOWN

Surveyor's Field Notes for the CITY OF BELTON, for:

RAILROAD, same being the north line of said 100.02 acre tract and being the northwest corner of this tract.

THENCE in an easterly direction, with the south right-of-way line of said GEORGETOWN RAILROAD, same being the north line of said 100.02 acre tract, *(record call of S 59 deg 59 min 20 sec E, 2177.84 feet)* for the following FOUR (4), courses and distances:

1). **SOUTH 68 deg 14 min 10 sec EAST, a distance of 855.34 feet** to a 5/8" iron rod with plastic cap marked "All County" set;

2). **SOUTH 63 deg 07 min 43 sec EAST, a distance of 158.74 feet** to a 5/8" iron rod found;

3). **SOUTH 68 deg 18 min 34 sec EAST, a distance of 440.87 feet** to a 5/8" iron rod found; and

4). **SOUTH 62 deg 22 min 32 sec EAST, a distance of 182.68 feet** to the Point of Beginning, Containing **36.326 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999857. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the northwest corner of this 36.326 acre tract is N 82°09'29" W, 516.68 feet. Published City coordinates for project reference point 133 are N. = 10,358,458.27 E. = 3,202,085.92. This description is to accompany a Surveyor's Sketch showing the herein described 36.326 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

ALL COUNTY SURVEYING, INC.
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STATE OF TEXAS
REGISTERED
CHARLES C. LUCKO
4836
SURVEYOR

Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4836

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

March 28, 2012

COPY

Surveyor's Field Notes for the CITY OF BELTON, for:

21.538 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 20,** in Bell County, Texas and being a portion of that certain called 100.02 acre tract described in a deed to THE CITY OF BELTON, of record in Doc. No. 2008-00008069 of the Official Public Records of Real Property of Bell County, Texas, said 21.538 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a 5/8" iron rod found in the south right-of-way line of the GEORGETOWN RAILROAD, and being in the north line of said 100.02 acre tract, being the northeast corner of that certain called 11 acre tract described as TRACT 2, in a deed to WILLIAM LEE McGUIRE INVESTMENTS, LLC., of record in Volume 5033, Page 663 of the Official Public Records of Real Property of Bell County, Texas and being the northwest of this tract.

THENCE in an easterly direction, with the south right-of-way line of said GEORGETOWN RAILROAD, same being the north line of said 100.02 acre tract, *(record call of S 59 deg 59 min 20 sec E, 2177.84 feet)* for the following **THREE** (3), courses and distances:

1). **SOUTH 65 deg 14 min 10 sec EAST, a distance of 655.34 feet** to a 5/8" iron rod with plastic cap marked "All County" set;

2). **SOUTH 63 deg 07 min 43 sec EAST, a distance of 158.74 feet** to a 5/8" iron rod found; and

3). **SOUTH 65 deg 16 min 34 sec EAST, a distance of 440.87 feet** to a 5/8" iron rod found, being the northeast corner of this tract,

THENCE in a southerly direction, crossing said 100.02 acre tract **SOUTH 20 deg 36 min 55 sec WEST, a distance of 733.93 feet** to a 5/8" iron rod found, being the southwest corner of this tract.

THENCE in a westerly direction, continuing across said 100.02 acre tract **NORTH 66 deg 12 min 18 sec WEST, a distance of 740.11 feet** to a 5/8" iron rod found, being a corner of this tract.

THENCE in a northerly direction, continuing across said 100.02 acre tract **NORTH 23 deg 48 min 14 sec EAST, a distance of 200.00 feet** to a 5/8" iron rod found, being a corner of this tract.

Surveyor's Field Notes for the CITY OF BELTON, continued:

THENCE In a westerly direction, continuing across said 100.02 acre tract **NORTH 66 deg 14 min 14 sec WEST, a distance of 622.16 feet** to a concrete marker found in the east line of said 11 acre tract and being the southwest corner of this tract, from which a concrete right-of-way marker found, bears: SOUTH 11 deg 27 min 49 sec WEST, a distance of 71.13 feet.

THENCE In a northerly direction, crossing said 100.02 acre tract, with the east line of said 11 acre tract **NORTH 11 deg 27 min 49 sec EAST, a distance of 604.91 feet** to the Point of Beginning, Containing **21.538 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999857. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the northwest corner of this 21.538 acre tract is N 82°09'23" W, 516.88 feet. Published City coordinates for project reference point 133 are N. = 10,358,458.27 E. = 3,202,086.92. This description is to accompany a Surveyor's Sketch showing the herein described 21.538 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

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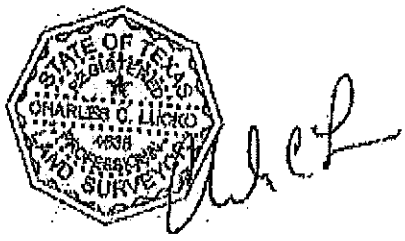

Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4836

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

April 17, 2012

COPY

Surveyor's Field Notes for the CITY OF BELTON, for:

3.944 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 20,** in Bell County, Texas and being a portion of that certain called 100.02 acre tract described in a deed to THE CITY OF BELTON, of record in Doc. No. 2000-00006069 of the Official Public Records of Real Property of Bell County, Texas, said 3.944 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a point being the northwest corner of this tract, from which a 5/8" iron rod found in the west line of said 100.02 acre tract, being a corner of a 38.328 acre tract surveyed by All County Surveying, Inc., bears: NORTH 22 deg 32 min 55 sec WEST, a distance of 192.90 feet.

THENCE in an easterly direction, crossing said 100.02 acre tract **SOUTH 64 deg 35 min 31 sec EAST, a distance of 414.57 feet** to a point, being the northeast corner of this tract.

THENCE in a southerly direction, continuing across said 100.02 acre tract, with a curve to the right, having a **radius of 52.36 feet,** a central angle of **99 deg 13 min 43 sec,** an arc length of **90.68 feet** and a chord that bears **SOUTH 14 deg 58 min 39 sec EAST, a distance of 79.77 feet** to a point, being a corner of this tract.

THENCE in a continuing in a southerly direction and continuing across said 100.02 acre tract **SOUTH 34 deg 38 min 12 sec WEST, a distance of 311.62 feet** to a point, being the southeast corner of this tract.

THENCE in a westerly direction, continuing across said 100.02 acre tract **NORTH 63 deg 11 min 03 sec WEST, a distance of 348.94 feet** to a point, being the southwest corner of this tract.

THENCE in a northerly direction, continuing across said 100.02 acre tract, with a curve to the right having a **radius of 79.76 feet,** a central angle of **78 deg 05 min 20 sec,** an arc length of **105.91 feet** and a chord that bears **NORTH 25 deg 08 min 23 sec WEST, a distance of 98.30 feet** to a point, being a corner of this tract.

THENCE continuing in a northerly direction and continuing across said 100.02 acre tract **NORTH 12 deg 54 min 17 sec EAST, a distance of 230.15 feet** to a point, being a corner of this tract.

Surveyor's Field Notes for the CITY OF BELTON, continued:

THENCE in an easterly direction, continuing across said 100.02 acre tract, with a curve to the right, having a radius of **59.70 feet**, a central angle of **102 deg 30 min 12 sec**, an arc length of **106.80 feet** and a chord that bears **NORTH 64 deg 09 min 23 sec EAST**, a distance of **93.12** feet to the point of Beginning, Containing **3.944 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999857. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the northwest corner of this 3.944 acre tract is N 76°11'54" E, 451.10 feet. Published City coordinates for project reference point 133 are N. = 10,358,468.27 E. = 3,202,085.92. This description is to accompany a Surveyor's Sketch showing the herein described 36.326 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

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STATE OF TEXAS
REGISTERED
CHARLES C. LUCKO
4636
PROFESSIONAL
LAND SURVEYOR

Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4636

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

March 28, 2012

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Surveyor's Field Notes for the CITY OF BELTON, for:

41.087 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 20,** in Bell County, Texas and being a portion of that certain called 100.02 acre tract described in a deed to THE CITY OF BELTON, of record in Doc. No. 2009-00008069 of the Official Public Records of Real Property of Bell County, Texas, said 41.087 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a 5/8" iron rod with plastic cap marked "All County" set in the south right-of-way line of a public maintained roadway known as F. M. ROAD NO. 93, said right-of-way is of record in a deed to the STATE OF TEXAS, in Volume 2590, Page 336 of the Official Public Records of Real Property of Bell County, Texas, same being the east line of said 100.02 acre tract, and being the northwest corner of that certain called 10-64/100 acre tract described in a deed to BRAZOS RIVER AUTHORITY, of record in Volume 3564, Page 97 of the Official Public Records of Real Property of Bell County, Texas and being the northeast corner of this tract.

THENCE in a southerly direction, with the west line of said 10-64/100 acre tract, same being the east line of said 100.02 acre tract *(record call of S 17 deg 30 min 00 sec W, 1888.91 feet)* **SOUTH 14 deg 43 min 47 sec WEST, a distance of 655.04 feet** to a 3/8" iron rod found, being the northeast corner of that certain called 1.403 acre tract described in a deed to BRAZOS RIVER AUTHORITY, of record in Volume 2057, Page 751 of the Deed Records of Bell County, Texas, same being the southwest corner of said 10-64/100 acre tract and being the southeast corner of this tract.

THENCE in a westerly direction, crossing said 100.02 acre tract, with the north line of said 1.403 acre tract **NORTH 71 deg 45 min 15 sec WEST, a distance of 941.83 feet** to a 1" metal pipe found, being the northwest corner of said 1.403 acre tract and being a corner of this tract.

THENCE in a southerly direction, continuing across said 100.02 acre tract, with the west line of said 1.403 acre tract **SOUTH 20 deg 35 min 43 sec WEST, a distance of 92.02 feet** to a 1/2" iron rod found in the north line of a tract of land shown to be in the name of BRAZOS RIVER AUTHORITY, on maps on file with the Bell County Tax Appraisal District, same being the south line of said 100.02 acre tract, being the southwest corner of said 1.403 acre tract and being a corner of this tract.

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Surveyor's Field Notes for the CITY OF BELTON, continued:

THENCE in a westerly direction, with the north line of said BRAZOS RIVER AUTHORITY tract, same being the south line of said 100.02 acre tract *(record call of N 72 deg 30 min 00 sec W, 2193.05 feet)* **NORTH 76 deg 06 min 59 sec WEST, a distance of 1127.73 feet** to a calculated point in NOLAN CREEK, being the southwest corner of said 100.02 acre tract and being the southwest corner of this tract.

THENCE in a generally northerly direction, with the west line of said 100.02 acre tract and with the said NOLAN CREEK, for the following FOUR (4), courses and distances:

1). *(record call of N 39 deg 25 min 40 sec E, 376.65 feet)* **NORTH 34 deg 12 min 32 sec EAST, a distance of 294.24 feet** to a calculated point;

2). *(record call of N 44 deg 50 min 20 sec E, 292.35 feet)* **NORTH 39 deg 37 min 12 sec EAST, a distance of 292.35 feet** to a calculated point;

3). *(record call of N 06 deg 57 min 10 sec E, 450.96 feet)* **NORTH 01 deg 44 min 02 sec EAST, a distance of 450.96 feet** to a calculated point; and

4). *(record call of N 09 deg 12 min 30 sec E, 471.91 feet)* **NORTH 03 deg 59 min 22 sec EAST, a distance of 371.91 feet** to a calculated point, being the southwest corner of that certain called 11 acre tract described as TRACT 2, in a deed to WILLIAM LEE McGUIRE INVESTMENTS, LLC., of record in Volume 5033, Page 663 of the Official Public Records of Real Property of Bell County, Texas and being the northwest corner of this tract.

THENCE in an easterly direction, with the south line of said 11 acre tract, and crossing said 100.02 acre tract **SOUTH 85 deg 12 min 28 sec EAST, a distance of 477.66 feet** to a 5/8" iron rod with plastic cap marked "All County" set in the south right-of-way line of said F. M. ROAD NO. 93, being the southeast corner of said 11 acre tract and being a corner of this tract.

THENCE in a southeasterly direction, with the south right-of-way line of said F. M. ROAD NO. 93, and crossing said 100.02 acre tract, for the following TWO (2), courses and distances:

1). **SOUTH 27 deg 48 min 32 sec EAST, a distance of 41.61 feet** to a concrete right-of-way marker found;

Surveyor's Field Notes for the CITY OF BELTON, continued:

2). With a curve to the left, having a radius of **1517.39 feet**, an arc length of **1086.52 feet**, a central angle of **41 deg 01 min 35 sec** and a chord that bears **SOUTH 48 deg 22 min 35 sec EAST**, a distance of **1063.46 feet** to a concrete right-of-way marker found; and

3). **SOUTH 68 deg 48 min 49 sec EAST, a distance of 583.27 feet** to the Point of Beginning, Containing **41.087 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999867. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the south corner of this 41.087 acre tract is S 19°59'32" E, 1926.15 feet. Published City coordinates for project reference point 133 are N. = 10,358,456.27 E. = 3,202,085.92. This description is to accompany a Surveyor's Sketch showing the herein described 41.087 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

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Surveyed March 2012

ALL COUNTY SURVEYING, INC.
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Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4636

Exhibit B – Affected Property Description

Field Notes

COPY

Map

Exhibit B

Affected Property Description

COPY

Field Notes

City of Belton Tract C, Field Notes Prepared by All-County Surveying, Inc., March 28, 2012, designated as Tract No. 10, 36.326 acre tract – City of Belton Tract C on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

City of Belton Tract C, Field Notes Prepared by All County Surveying, Inc., March 28, 2012, designated as Tract No. 11, 21.538 acre tract – City of Belton Tract C contaminated area on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

MATCON Containment Cell, Field Notes Prepared by All County Surveying, Inc., April 17, 2012, designated as Tract No. 12, 3.944 acre tract – MATCON containment cell on Boundary Survey, Rockwool Industries Federal Superfund Site, in Belton, Bell County, Texas, completed March 2012 by All County Surveying, Inc.

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

March 28, 2012

COPY

Surveyor's Field Notes for the CITY OF BELTON, for:

36.326 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 20,** in Bell County, Texas and being a portion of that certain called 100.02 acre tract described in a deed to THE CITY OF BELTON, of record in Doc. No. 2009-00008069 of the Official Public Records of Real Property of Bell County, Texas, said 36.326 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a 5/8" iron rod found in the south right-of-way line of the GEORGETOWN RAILROAD, and being in the east line of said 100.02 acre tract, being the northwest corner of that certain called 18.952 acre tract described in a deed to SMA FAMILY, LTD., of record in Volume 5319, Page 598 of the Official Public Records of Real Property of Bell County, Texas and being the northeast of this tract.

THENCE in a southerly direction, with the west line of said 18.952 acre tract, same being the east line of said 100.02 acre tract *(record call of S 17 deg 30 min 00 sec W, 1888.91 feet)* **SOUTH 14 deg 09 min 11 sec WEST, a distance of 1024.20 feet** to a 5/8" iron rod found in the north right-of-way line of a public roadway known as F. M. ROAD NO. 93, said right-of-way is of record in a deed to the STATE OF TEXAS, in Volume 2590, Page 336 of the Official Public Records of Real Property of Bell County, Texas, being the southwest corner of said 18.952 acre tract and being the southeast corner of this tract,

THENCE in a generally northwesterly direction, with the north right-of-way line of said F. M. ROAD NO. 93 and crossing said 100.02 acre tract, for the following THREE (3), courses and distances:-

1). **NORTH 68 deg 50 min 40 sec WEST, a distance of 585.38 feet** to a 5/8" iron rod with plastic cap marked "All County" set;

2). With a curve to the right, having a radius of **1347.39 feet,** an arc length of **964.68 feet,** a central angle of **41 deg 00 min 08 sec** and a chord that bears **NORTH 48 deg 19 min 32 sec WEST,** a distance of **944.09 feet** to a concrete right-of-way marker found; and

3). **NORTH 27 deg 50 min 13 sec WEST, a distance of 249.64 feet** to a brass right-of-way marker found, being the southeast corner of that certain called 11 acre tract described as TRACT 2, in a deed to WILLIAM LEE McGUIRE INVESTMENTS, I.LC. of record in Volume 5033, Page 863 of the Official Public Records of Real Property of Bell County, Texas and being the southwest corner of this tract.

THENCE in a northerly direction, with the east line of said 11 acre tract and crossing said 100.02 acre tract **NORTH 11 deg 27 min 49 sec. EAST, a distance of 676.34 feet** to a 5/8" iron rod found in the south right-of-way line of said GEORGETOWN

Surveyor's Field Notes for the CITY OF BELTON, for:

RAILROAD, same being the north line of said 100.02 acre tract and being the northwest corner of this tract.

THENCE in an easterly direction, with the south right-of-way line of said GEORGETOWN RAILROAD, same being the north line of said 100.02 acre tract, *(record call of S 59 deg 59 min 20 sec E, 2177.64 feet)* for the following FOUR (4), courses and distances:

1). **SOUTH 65 deg 14 min 10 sec EAST, a distance of 856.34 feet** to a 5/8" iron rod with plastic cap marked "All County" set;

2). **SOUTH 63 deg 07 min 43 sec EAST, a distance of 158.74 feet** to a 5/8" iron rod found;

3). **SOUTH 65 deg 16 min 34 sec EAST, a distance of 440.87 feet** to a 5/8" iron rod found; and

4). **SOUTH 62 deg 22 min 32 sec EAST, a distance of 182.65 feet** to the Point of Beginning, Containing **36.326 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999867. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the northwest corner of this 36.326 acre tract is N 82°09'23" W, 616.88 feet. Published City coordinates for project reference point 133 are N. = 10,350,458.27 E. = 3,202,085.92. This description is to accompany a Surveyor's Sketch showing the herein described 36.326 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

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STATE OF TEXAS
REGISTERED
CHARLES C. LUCKO
4636
PROFESSIONAL
LAND SURVEYOR

Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4636

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

March 28, 2012

COPY

Surveyor's Field Notes for the CITY OF BELTON, for:

21.638 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 20,** in Bell County, Texas and being a portion of that certain called 100.02 acre tract described in a deed to THE CITY OF BELTON, of record in Doc. No. 2008-00008089 of the Official Public Records of Real Property of Bell County, Texas, said 21.638 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a 5/8" iron rod found in the south right-of-way line of the GEORGETOWN RAILROAD, and being in the north line of said 100.02 acre tract, being the northeast corner of that certain called 11 acre tract described as TRACT 2, in a deed to WILLIAM LEE McGUIRE INVESTMENTS, LLC., of record in Volume 5033, Page 663 of the Official Public Records of Real Property of Bell County, Texas and being the northwest of this tract.

THENCE in an easterly direction, with the south right-of-way line of said GEORGETOWN RAILROAD, same being the north line of said 100.02 acre tract, *(record call of S 59 deg 59 min 20 sec E, 2177.84 feet)* for the following THREE (3), courses and distances:

1). **SOUTH 65 deg 14 min 10 sec EAST, a distance of 866.34 feet** to a 5/8" iron rod with plastic cap marked "All County" set;

2). **SOUTH 53 deg 07 min 43 sec EAST, a distance of 158.74 feet** to a 5/8" iron rod found; and

3). **SOUTH 65 deg 16 min 34 sec EAST, a distance of 440.87 feet** to a 5/8" iron rod found, being the northeast corner of this tract,

THENCE in a southerly direction, crossing said 100.02 acre tract **SOUTH 20 deg 36 min 55 sec WEST, a distance of 739.93 feet** to a 5/8" iron rod found, being the southwest corner of this tract.

THENCE in a westerly direction, continuing across said 100.02 acre tract **NORTH 68 deg 12 min 18 sec WEST, a distance of 740.11 feet** to a 5/8" iron rod found, being a corner of this tract.

THENCE in a northerly direction, continuing across said 100.02 acre tract **NORTH 23 deg 48 min 14 sec EAST, a distance of 200.00 feet** to a 5/8" iron rod found, being a corner of this tract.

Surveyor's Field Notes for the CITY OF BELTON, continued:

THENCE In a westerly direction, continuing across said 100.02 acre tract **NORTH 66 deg 14 min 14 sec WEST, a distance of 622.16 feet** to a concrete marker found in the east line of said 11 acre tract and being the southwest corner of this tract, from which a concrete right-of-way marker found, bears: SOUTH 11 deg 27 min 49 sec WEST, a distance of 71.13 feet.

THENCE in a northerly direction, crossing said 100.02 acre tract, with the east line of said 11 acre tract **NORTH 11 deg 27 min 49 sec EAST, a distance of 604.61 feet** to the Point of Beginning, Containing **21.538 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999857. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the northwest corner of this 21.538 acre tract is N 82°00'23" W, 516.88 feet. Published City coordinates for project reference point 133 are N. = 10,359,456.27 E. = 3,202,065.92. This description is to accompany a Surveyor's Sketch showing the herein described 21.538 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

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STATE OF TEXAS
REGISTERED
CHARLES C. LUCKO
4636
PROFESSIONAL
LAND SURVEYOR

Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4636

FIELD NOTES PREPARED BY ALL COUNTY SURVEYING, INC.

COPY

April 17, 2012

Surveyor's Field Notes for the CITY OF BELTON, for:

3.944 ACRES, being part of the **O. T. TYLER SURVEY, ABSTRACT NO. 20,** in Bell County, Texas and being a portion of that certain called 100.02 acre tract described in a deed to THE CITY OF BELTON, of record in Doc. No. 2008-00008069 of the Official Public Records of Real Property of Bell County, Texas, said 3.944 acre tract was surveyed by All County Surveying, Inc. and is more particularly described by these metes and bounds as follows:

BEGINNING at a point being the northwest corner of this tract, from which a 5/8" iron rod found in the west line of said 100.02 acre tract, being a corner of a 36.326 acre tract surveyed by All County Surveying, Inc., bears: NORTH 22 deg 32 min 55 sec WEST, a distance of 192.80 feet.

THENCE in an easterly direction, crossing said 100.02 acre tract **SOUTH 64 deg 35 min 31 sec EAST, a distance of 414.57 feet** to a point, being the northeast corner of this tract.

THENCE in a southerly direction, continuing across said 100.02 acre tract, with a curve to the right, having a radius of **52.36 feet,** a central angle of **99 deg 13 min 43 sec,** an arc length of **90.68 feet** and a chord that bears **SOUTH 14 deg 58 min 39 sec EAST, a distance of 79.77 feet** to a point, being a corner of this tract.

THENCE in a continuing in a southerly direction and continuing across said 100.02 acre tract **SOUTH 34 deg 38 min 12 sec WEST, a distance of 311.62 feet** to a point, being the southeast corner of this tract.

THENCE in a westerly direction, continuing across said 100.02 acre tract **NORTH 83 deg 11 min 03 sec WEST, a distance of 348.94 feet** to a point, being the southwest corner of this tract.

THENCE in a northerly direction, continuing across said 100.02 acre tract, with a curve to the right having a radius of **79.75 feet,** a central angle of **70 deg 05 min 20 sec,** an arc length of **105.91 feet** and a chord that bears **NORTH 26 deg 08 min 23 sec WEST, a distance of 99.30 feet** to a point, being a corner of this tract.

THENCE continuing in a northerly direction and continuing across said 100.02 acre tract **NORTH 12 deg 54 min 17 sec EAST, a distance of 230.15 feet** to a point, being a corner of this tract.

Surveyor's Field Notes for the CITY OF BELTON, continued:

THENCE In an easterly direction, continuing across said 100.02 acre tract, with a curve to the right, having a radius of **59.70 feet**, a central angle of **102 deg 30 min 12 sec**, an arc length of **106.80 feet** and a chord that bears **NORTH 64 deg 09 min 23 sec EAST, a distance of 93.12 feet** to the point of Beginning, Containing **3.944 ACRES.**

This project is referenced to the City of Temple Coordinate System, an extension of the Texas Coordinate System of 1983, Central Zone. All distances are horizontal surface distances unless noted and all bearings are grid bearings. All coordinates are referenced to City Monument No. 133. The theta angle at City Monument No. 133 is 01°29'23". The combined correction factor (CCF) is 0.999857. Grid distance = Surface distance X CCF. Geodetic north = Grid north + theta angle. Reference tie from City monument No. 133 to the northwest corner of this 3.944 acre tract is N 76°11'54" E, 451.10 feet. Published City coordinates for project reference point 133 are N. = 10,358,458.27 E. = 3,202,085.92. This description is to accompany a Surveyor's Sketch showing the herein described 36.326 acre tract. This document is not valid for any purpose unless signed and sealed by a Registered Professional Land Surveyor.

Surveyed March 2012

COPY

ALL COUNTY SURVEYING, INC.
1-800-749-PLAT
S:\users\projects\pro120000\120000\120100\120112\120112N.doc

STATE OF TEXAS REGISTERED CHARLES C. LUCKO 4636 PROFESSIONAL LAND SURVEYOR

Charles C. Lucko
Registered Professional Land Surveyor
Registration No. 4636

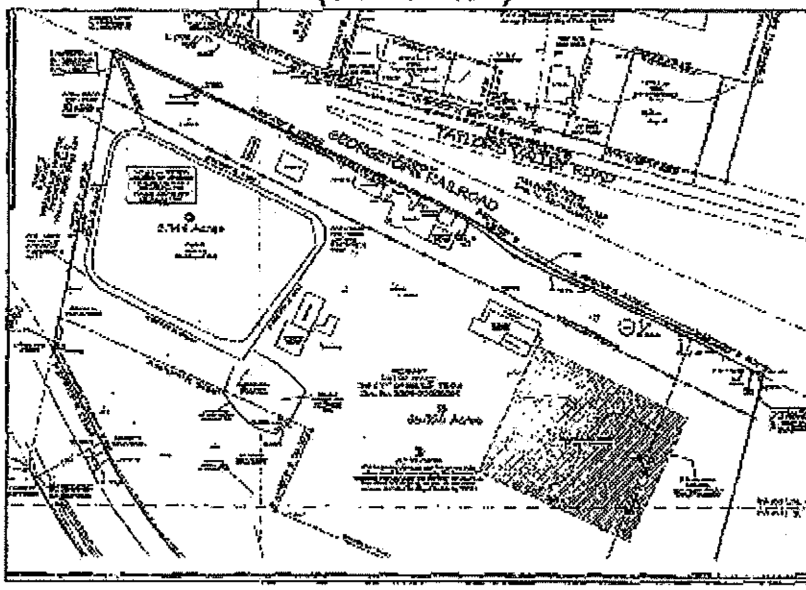
Exhibit B
Affected Property Description

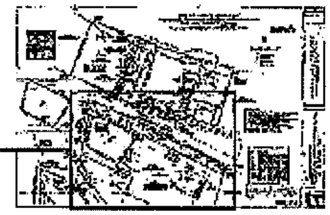
COPY

Map

Exhibit B – Map, Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.), Sheet 1 of 2
Exhibit B – Map, Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.), Sheet 2 of 2

Exhibit B - Map
Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.)
(Sheet 1 of 2)





This map has been adapted by the Remediation Division of the Texas Commission on Environmental Quality. This map is for informational purposes and was not prepared for and may not be suitable for legal, engineering, or surveying purposes. This map is based on a drawing prepared by All County Surveying, Inc. in March 2012. To obtain a copy of the original drawing, contact the Remediation Division at [illegible].

COPY

Exhibit B - Map
Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.)
(Sheet 2 of 2)

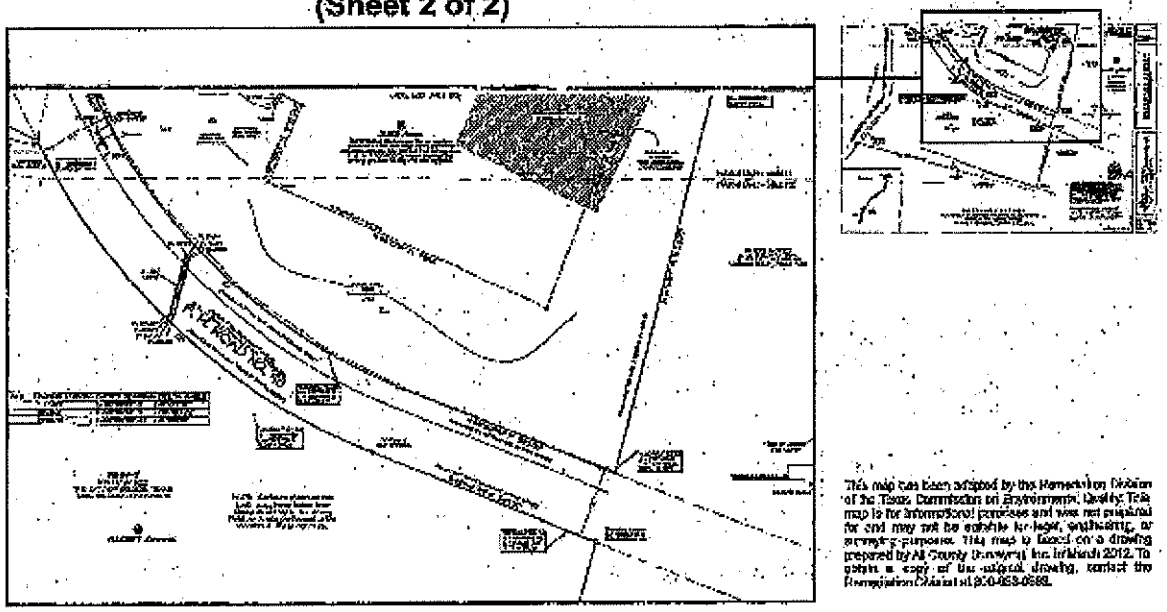


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Exhibit C – Physical Control on Soil

Map COPY

Maintenance and Monitoring

Exhibit C

Physical Control on Soil

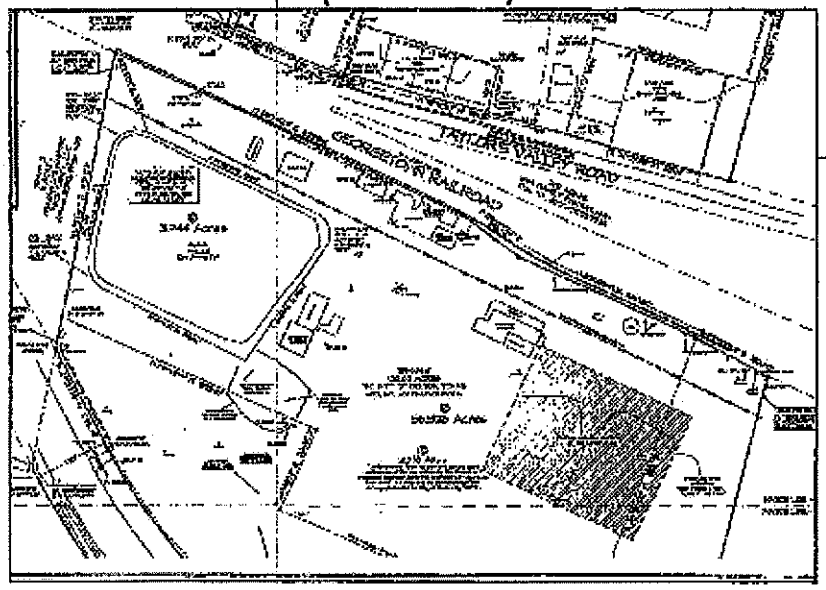
COPY

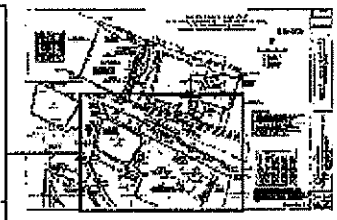
Map

Exhibit C – Map, Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.), Sheet 1 of 2
Exhibit C – Map, Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.), Sheet 2 of 2

COPY

Exhibit C
Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.)
(Sheet 1 of 2)





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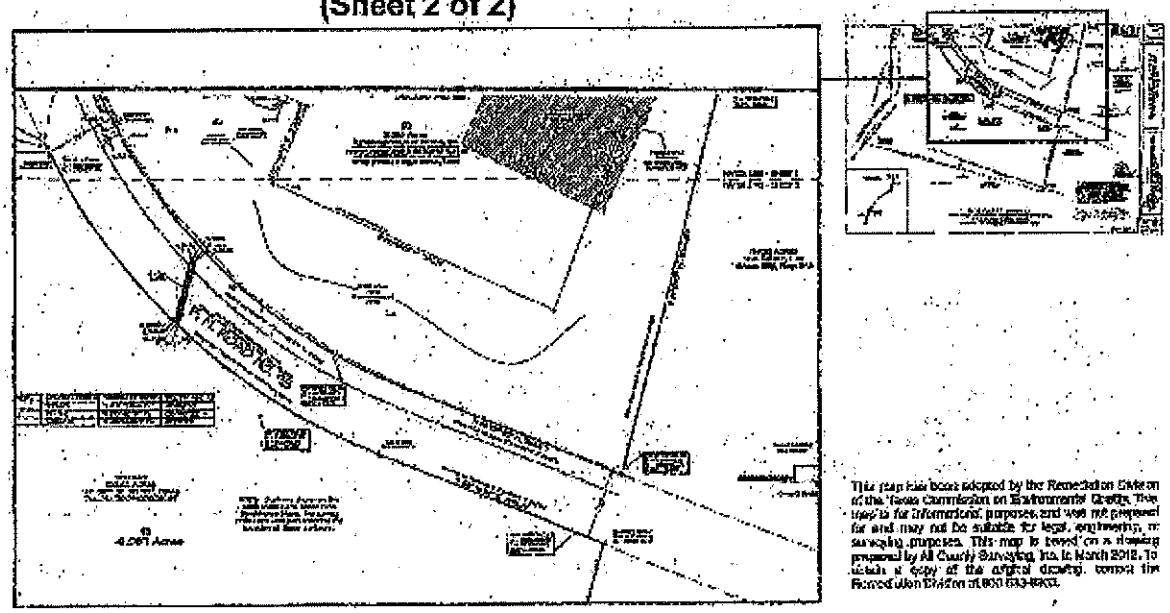
COPY

Exhibit C - Map
Tracts 10 (36.326 ac.), 11 (21.538 ac.), and 12 (3.944 ac.)
(Sheet 2 of 2)



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COPY

Exhibit C

Physical Control on Soil

Maintenance and Monitoring

The physical control on soil consists of a soil cover that is one (1) foot of clay and one-half (0.5) foot of topsoil. In addition, there is an asphaltic cover, which is the MatCon cap, overlying a containment cell. The physical control on soil must remain in place in order to ensure that the remedy remains protective of human health and the environment. Future use of shallow groundwater is prohibited. The clay cap and vegetative cover may not be disturbed. The MatCon cap and underlying containment cell as well as the associated drainage system may not be modified without prior written approval from the Texas Commission on Environmental Quality, and the integrity of the MatCon cap and containment cell must be preserved. The integrity of the monitor wells must be preserved, and access to the monitor wells must be provided. These restrictions are necessary to protect the industrial worker and to prohibit access to groundwater.

The maintenance and monitoring required for the physical control include:

1. Inspect fence, including gates, and signage semiannually. If damaged and/or missing, repair existing or install new fence, gates and signs.
2. Inspect site vegetation semiannually in order to protect the soil cover. If there are holes from burrowing animals, fill holes with clean soil material and compact. If there is settlement, fill settled area with clean soil material and reseed surface. If there are wet areas or water damage, repair so the surface is properly graded and drained. If there is erosion, fill eroded area with clean soil material. If there are cracks, fill cracked area with clean soil material and reseed surface. If there are areas with no vegetation, reseed.
3. At least three times a year, mow the Property. Mow the outer side of the berm surrounding the MatCon capped containment cell (MatCon) up to the top of the berm, but do not mow the inner side of the berm or the MatCon perimeter drainage. Mow vegetation surrounding monitor wells. Do not use a chemical method to control vegetation, as that might affect groundwater sampling data.
4. Inspect the drainage controls semiannually. Drainage controls include the drainage detention pond and drainage outfall from the detention pond south-southwest toward F.M. Road No. 93 but do not include the MatCon perimeter drainage ditch and berm. If berms, except for the berm surrounding the MatCon, are observed to be eroded or unstable, evaluate the damage and repair. If there is debris present, remove debris. If there is restricted flow because of sediment or vegetation, remove vegetation and sediment.
5. Inspect the culverts semiannually. If culverts, culvert inlets, manholes, and/or outfall boxes are blocked or damaged, remove blockage and repair or replace if needed.
6. Visually inspect the surface of the MatCon cap semiannually and report any disturbances or changes to the Texas Commission on Environmental Quality. No other maintenance activities are required with regard to the MatCon cap itself or the underlying containment cell.
7. Using Exhibit C, Physical Control on Soil, as a reference and guide, draft and submit an annual report to the Texas Commission on Environmental Quality. Include documentation of onsite and adjacent offsite land uses. Provide a summary of maintenance and monitoring activities performed, including general observations and findings pertaining to each enumerated maintenance and monitoring requirement, a general description of inspection

and maintenance tasks enumerated in Exhibit C; and the date(s) on which the tasks were performed. No specific format is prescribed. For example, a checklist may be developed and utilized. Photographic documentation may be helpful but is optional. By March 31, submit the annual report for the previous year to:

Texas Commission on Environmental Quality
Remediation Division
Superfund Section
Attention: Project Manager
Rockwool Industries Inc. Federal Superfund Site
MC-136
P.O. Box 13087
Austin, TX 78711-3087

COPY

Exhibit D – Waste Control Unit

Map

COPY

Maintenance and Monitoring

Exhibit D

Waste Control Unit

Map

Exhibit D – Map, Tract 12 (3.944 ac.)

COPY

COPY

Exhibit D - Map
Tract 12 (3.944 ac.)

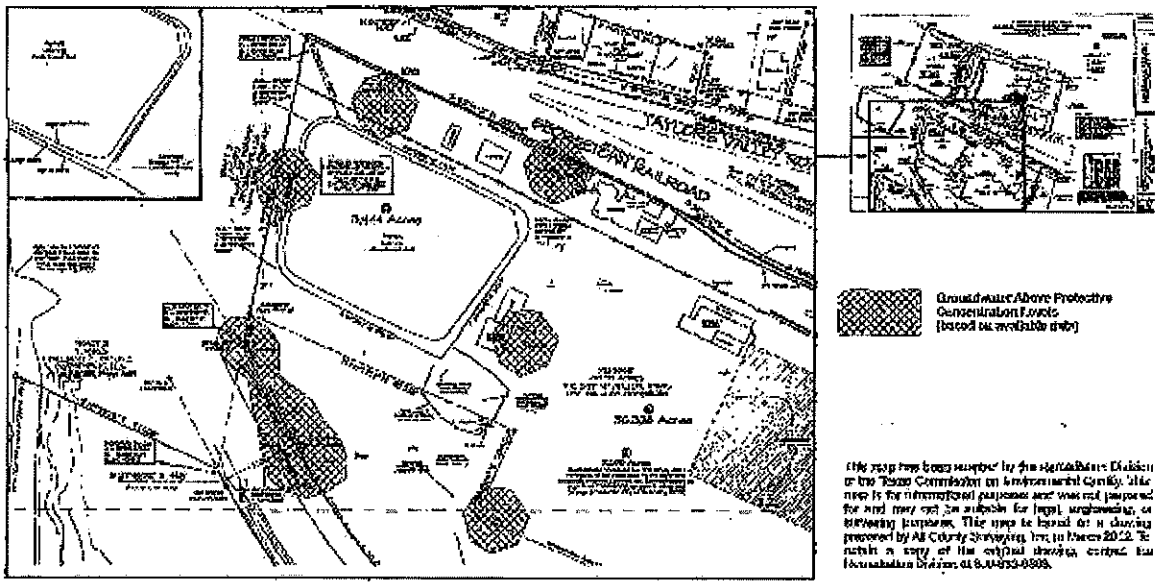

Exhibit D

COPY

Waste Control Unit

Maintenance and Monitoring

The waste control unit is identified as the MatCon-capped containment cell (Tract No. 12).

The waste control unit must remain in place in order to ensure that the remedy remains protective of human health and the environment.

The maintenance and monitoring required for the waste control unit include:

1. Fulfill the maintenance and monitoring requirements listed in Exhibit C in order to protect the integrity of the waste control unit.
2. The asphaltic cover of the MatCon-capped containment cell must not be disturbed. No holes are to be made in or through the asphaltic cover.

Bell County
Shelley Coston
County Clerk
Belton, Texas 76513

Instrument Number: 2013-00006480
As
Recordings

Recorded On: February 19, 2013

Parties: CITY OF BELTON TRUSTEE
To EX PARTE

Billable Pages: 36
Number of Pages: 37

Comment:

(Parties listed above are for Clerks reference only)

**** Examined and Charged as Follows: ****

Recordings	151.00
Total Recording:	151.00

COPY

************ DO NOT REMOVE. THIS PAGE IS PART OF THE INSTRUMENT ************

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

File Information:
Document Number: 2013-00006480
Receipt Number: 161926
Recorded Date/Time: February 19, 2013 10:37:05A
User / Station: G Gomez - Cash Station 1

Record and Return To:
CITY OF BELTON
PO BOX 120
BELTON TX 76513

I hereby certify that this instrument was filed on the date and time stamped hereon and was duly recorded in the Real Property Records of Bell County, Texas

Shelley Coston
Bell County Clerk

ORDINANCE NO. 2016-24

AN ORDINANCE OF THE CITY OF BELTON, TEXAS, AMENDING ORDINANCE NO. 2013-02, ADOPTING INSTITUTIONAL CONTROL MEASURES AND STANDARDS; ESTABLISHING STANDARDS ON CERTAIN LAND, AND SHALLOW GROUND WATER USES; ESTABLISHING CRITERIA FOR THE IMPLEMENTATION, INSPECTION, REPORTING AND ENFORCEMENT OF THE INSTITUTIONAL CONTROL MEASURES; ESTABLISHING PENALTIES FOR THE VIOLATION OF AND PROVISIONS FOR ENFORCEMENT OF THESE STANDARDS; AMENDING THE AFFFECTED BOUNDARY; ADDRESSING CHANGES IN OWNERSHIP; ESTABLISHING NOTICE AND DURATION PROCEDURES; AND ESTABLISHING A SEVERABILITY PROVISION AND EFFECTIVE DATE.

WHEREAS, the City of Belton, Texas, recognizes the Rockwool Superfund Site ("Site") located in the City of Belton, Texas, contains approximately 100 acres of land upon which hazardous substances were disposed of on portions of the 100 acres;

WHEREAS, the City of Belton, Texas, recognizes the United States Environmental Protection Agency ("EPA"), with the concurrence of the Texas, Commission on Environmental Quality ("TCEQ"), selected a remedy to address the hazardous substances at the Site pursuant to Section 121 of the Comprehensive Environmental Responses, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9621;

WHEREAS, the City of Belton, Texas, recognizes the selected remedy was memorialized in a September 30, 2004, Record of Decision ("ROD") and an August 19, 2005, Explanation of Significant Differences ("ESD");

WHEREAS, the City of Belton, Texas, recognizes that although the selected remedy is protective of human health and the environment, and complies with applicable and/or relevant and appropriate Federal and State requirements, the selected remedial action is suitable for future commercial/industrial uses and will result in hazardous substances, pollutants and/or contaminants remaining on portions of the 100 acres;

WHEREAS, the City of Belton, Texas, recognizes that because the selected remedial action will result in hazardous substances, pollutants and/or contaminants remaining on a portion of the 100 acres, institutional controls were included in the selected remedy to prevent any action that would disturb any of the capped areas at the Site, to protect the integrity of the containment cell, to prevent the exposure from contaminated soil and to future use of shallow ground water at the Site, and to provide for the protection and access to ground water monitoring wells located at the Site;

WHEREAS, the City of Belton, Texas, recognizes that with respect to Superfund Sites with selected remedies such as the remedial action selected for the Rockwool Superfund Site, which leave hazardous substances, pollutants, or contaminants in

place, and do not provide unlimited use and unrestricted exposure, the EPA is required to conduct a review of the site to determine the protectiveness of the selected remedy pursuant to Section 121(c), 42 U.S.C. § 9621(c), every five (5) years;

WHEREAS, the City of Belton, Texas, recognizes that Section 121(d)(2)(B)(ii)(III) of CERCLA, 42 U.S.C. § 9621(d)(2)(B)(ii)(III), and 40 C.F.R. § 300.430(a)(1)(iii)(C) and (D), authorizes the use of enforceable measures such as institutional controls at Superfund Sites;

WHEREAS, the City of Belton, Texas, recognizes that with respect to Superfund Sites like the Rockwool Site which are remediated with Superfund funding, 40 C.F.R. § 300.510(c)(1) requires TCEQ to assure implementation of institutional controls, to assure the reliability of the institutional controls, and to assure that the institutional controls remain in place after initiation of operation and maintenance;

WHEREAS, the City of Belton, Texas, recognizes that the institutional controls identified in the ROD and ESD are necessary to protect human health and the environment, and ensure the long-term reliability and protectiveness of the selected remedial action;

WHEREAS, as authorized under law, and in the best interests of the citizens of Belton, Texas, the City Council deems it expedient and necessary to establish certain standards to ensure that the institutional control measures identified in the ROD and ESD are administered in a manner that provides reliable, long-term protection to human health and the environment;

NOW THEREFORE, BE IT ORDAINED BY THE CITY OF BELTON, TEXAS:

SECTION 1. That the City of Belton, Texas, hereby adopts the institutional control measures identified in the Rockwool Superfund Site ROD and ESD, attached hereto as Exhibits A and B respectively, as the official policy of the City for those portions of the 100-acre Site with hazardous substances, pollutants or contaminants remaining in place. A map showing the locations of the capped areas and containment cell is attached hereto as Exhibit C.

SECTION 2. That the City of Belton, Texas, hereby prohibits any action, including but not limited to digging, excavation, or drilling that would disturb any of the capped areas at the Site, the integrity of the caps, the integrity of the containment cell, and causes exposure or access to contaminated soil at the Site. The above prohibition is subject to the following exception: any disturbance, exposure, access to, or construction on the contaminated soils, containment cell, or capped areas at the Site is permissible if it is consistent with the Rockwool Superfund Site ROD and ESD, and includes individuals authorized by the ROD and ESD, or if otherwise agreed by EPA and/or TCEQ.

SECTION 3. That the City of Belton, Texas, hereby prohibits any action including but not limited to the drilling, excavation of soil, and the construction of a well or other apparatus that could cause exposure or access to shallow ground water at the Site. The future use, exposure and access to the shallow ground water at the Site are prohibited. The above prohibitions are subject to the following exception: any use, exposure or access to the shallow ground water at the Site is permissible if it is consistent with the Rockwool Superfund Site ROD and ESD, and includes individuals authorized by the ROD and ESD, or if otherwise agreed by EPA and/or TCEQ.

SECTION 4. The City of Belton, Texas, hereby prohibits any action that would disturb or damage the integrity of the ground water monitoring wells located at the Site. The access to and use of the ground water monitoring network is prohibited. The above prohibition is subject to the following exception: any disturbance, access to, or use of the ground water monitoring wells at the Site is permissible if it is consistent with the Rockwool Superfund Site ROD and ESD, and includes individuals authorized by the ROD and ESD, or if otherwise agreed by EPA and/or TCEQ.

SECTION 5. The City of Belton, Texas, is hereby obligated to preserve the integrity of the cap and the containment cell as indicated herein. Such obligation may be wholly or partially assumed by the Belton Economic Development Corporation, or any other subsequent owner(s) or lessee(s) of the property containing all or a portion of the cap or containment cell, during the period of its (or their) ownership or lease. Nothing contained in this ordinance prohibits the construction of permanent buildings, foundations and piers to support them, and support and accessory structures, parking lots, underground utilities, and other related facilities on or about the ca and the containment cell, including the subsequent use and maintenance thereof, so long as such construction does not cause components of the remedy selected in the Rockwool Superfund Site ROD and ESD to fail, and the EPA and/or TCEQ is afforded the opportunity to review and concur that such construction is protective of human health and the environment.

SECTION 6. The City of Belton, Texas, is responsible for the initial implementation and subsequent inspection, reporting, and enforcement of the institutional control measures and standards included herein. Notwithstanding any change in ownership of the property, the City will conduct at least one inspection of the Site every calendar year in order to determine if the institutional control measures and standards are being complied with by the owner(s) or lessee(s). The inspection will evaluate and address the status of the institutional control measures and standards, whether or not the institutional control measures and standards remain protective to human health and the environment, and whether the Site property has conformed with such institutional control measures and standards. The City will draft a report of its findings at least once every calendar year. A copy of the annual report will be submitted to the TCEQ and EPA by March 31st of each calendar year. Such responsibility of the City has no effect on and does not supersede any maintenance, monitoring or reporting obligations of the owner(s) or lessee(s) of the property under any applicable regulatory agreement or Texas, Risk Reduction Program restrictive covenant at the Site.

SECTION 7. Upon discovery of any violation of the provisions of this ordinance the City of Belton, Texas, is authorized to take any appropriate enforcement action including the issuance of orders necessary to ensure compliance with this ordinance, the imposition of a monetary penalty, or the initiation of administrative or civil proceedings. At a minimum, the City will issue orders as necessary to ensure compliance with the institutional control measures and standards within ten (10) days of discovery of the violation.

SECTION 8. That the City of Belton, Texas, will notify TCEQ and EPA as soon as practicable, but no longer than ten (10) days after discovery of any activity inconsistent with the institutional control measures and standards provided herein, or any other action that may interfere with the effectiveness of the institutional control measures and standards provided herein. The City of Belton, Texas, will notify TCEQ and EPA of the enforcement measures taken within ten (10) days of the discovery notification provided to TCEQ and EPA.

SECTION 9. That the City of Belton, Texas, herby declares the institutional control measures and standards identified herein, and the requirements of this ordinance, shall remain in full force and effect until the hazardous substances, pollutants or contaminants remaining at the Site are at concentration levels sufficient to support unlimited use and unrestricted exposure. The institutional control measures and standards and this ordinance shall cease upon EPA's approval and TCEQ's concurrence on risk assessment data and information specific to the Rockwool Superfund Site, which demonstrates the Site can support unlimited use and unrestricted exposure.

SECTION 10. That the City of Belton, Texas, will notify TCEQ and EPA at least one-hundred and twenty (120) calendar days prior to enacting any ordinance which repeals or nullifies a portion or all of the institutional control measures and standards provided herein. The City of Belton will provide TCEQ and EPA a copy of any final ordinance that modifies, changes, repeals or nullifies a portion or all of the institutional control measures and standards provided herein within ten (10) days after the effective date of the ordinance.

SECTION 11. Notwithstanding any provisions of this ordinance, and following an updated boundary survey in 2012 (Exhibit D), Tract 13, located on the south side of FM 93, is excluded from application of these institutional controls, since it should not be included in the "Affected Property", and was originally included due to common ownership only.

SECTION 12. That all ordinances in conflict with the provisions of this ordinance are hereby repealed, and all other ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

SECTION 13. Should any paragraph, sentence subdivision, clause phrase, or section of this ordinance be adjudged or held to be unconstitutional, illegal, or invalid,

the same shall not affect the validity of this ordinance or any part of provision thereof, other than the part so declared to be invalid, illegal or unconstitutional.

SECTION 14. Any person or persons, firm or corporation which violates any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined not less than one hundred dollars ($100) nor more than one thousand dollars ($1,000) for each offense and each violation hereof shall be deemed a separate and distinct offense for each of said days and shall be punishable as such.

SECTION 15. This ordinance shall take effect immediately from its passage and publication of the caption, as the law in such cases provides.

DULY PASSED BY THE CITY COUNCIL OF THE CITY OF BELTON, TEXAS, on the 28th day of June, 2016.

Marion Grayson, Mayor

ATTEST:

Amy M. Casey, City Clerk

FINAL
RECORD OF DECISION

ROCKWOOL INDUSTRIES, INC.
SUPERFUND SITE

REGION 6

September 2004

Exhibit "A"

176906

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DECLARATION
Rockwool Industries, Inc.

FINAL RECORD OF DECISION

SITE NAME AND LOCATION

Rockwool Industries, Inc. TXD06637964
Belton, Bell County, Texas

STATEMENT OF BASIS AND PURPOSE

This decision document presents the final Record of Decision (Final ROD) for the Rockwool Industries, Inc. (RWI) Site (the Site) in Belton, Bell County, Texas. The final remedy is to address human health and environmental risk and was chosen in accordance with the Comprehensive Environmental, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601 et seq. (CERCLA), and, to the extent practicable, the National Oil and Hazardous Substances Contingency Plan, 40 C.F.R. Part 300 (NCP). This Final ROD is based on the Administrative record file for this Site.

The United States Environmental Protection Agency (EPA) provided the public an opportunity to comment on EPA's Proposed Plan in accordance with the public participation requirements of CERCLA and the NCP. The public comment period began on August 20,2004 and ended on September 20,2004. The EPA held a public meeting at the Belton City Hall on August 31,2004 to provide the community an opportunity to provide verbal and/or written comments on the Proposed Plan. The EPA has reviewed all written and oral comments submitted during the public comment period. Upon review of these comments, the EPA has determined that no changes in the remedy identified in the Proposed Plan are required. The State of Texas concurs with the selected final remedy.

ASSESSMENT OF SITE

Actual or threatened releases of hazardous substances, as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and further defined in Section 302.4 of the NCP, 40 C.F.R. § 302.4, from the RWI Site , if not addressed by implementing the response action selected in the ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

DESCRIPTION OF SELECTED REMEDY

The selected remedy is that the soil in areas where the concentration of Antimony exceeds the calculated Preliminary Remediation Goals (PRGs), including the Cemetery Shot Pile, North Area, Central Property Area and the sediment along the south bank of the Leon River, will be excavated and consolidated in an on-site containment cell. The containment cell will be an industrial landfill with multilayer construction which will prevent materials from leaching into the ground water..
After the Cemetery Shot Pile and North Area have been excavated and contoured, the final remedy provides that a clay cover will be installed over the Cemetery Shot Pile and North Area

to prevent further runoff of the waste material to the Leon River, and to prevent surface water infiltration and subsequent leaching of contaminants to ground water. The ground water enters the Leon River through seeps. A culvert and other drainage control features will be installed near the Cemetery Shot Pile boundary to control surface drainage and to prevent surface water runoff from contacting and transporting any materials remaining on Site that do not exceed Site PRGs's. The final remedy will minimize the erosion of additional contamination and prevent it from contacting the Leon River and contaminating sediment and aquatic life. In the Central Property area contaminants will be excavated and consolidated with other Site waste in the Contaminant Cell.

In order to protect the integrity of the containment cell, clay caps, monitor wells, culverts and interceptor trenches, and to prevent exposure to contaminated ground water in shallow water-bearing zone, Institutional Controls (ICs) will be implemented. Current and future owners of the site must agree to provide deed restrictions to the affected property, as appropriate or as allowed by law, that address soil and ground water.

The final secondary(contingent) remedy is the excavation and recycling of the contaminated soil and Leon River sediments as road base material, if a highway construction project can be located in close vicinity of the Site. At this time the recycling remedy is not cost effective due to long distance the waste, have to be hauled for recycling. Also the long distance transportation increases the short term risk by an accident, spillage or dust blowing off trucks.

STATUTORY DETERMINATIONS

This final remedial action is protective of human health and the environment; complies with those Federal and State requirements that are applicable or relevant and appropriate for this scope action; and is cost effective. Although the final action is not intended to address the statutory mandate for permanence and treatment to the maximum extent practicable, the selected action provides the same level of protection at a lower cost than the recycling remedy which satisfies the preference for treatment.

Because the Selected Remedy provides for cleanup suitable for industrial use but will result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

ROD DATA CERTIFICATION CHECKLIST

Additional information can be found in the Administrative Record file for this site. Information included in the Decision Summary section of this Record of Decision includes: 1) chemicals of concern (COCs) and their respective concentrations, 2) baseline risks represented by the COCs, 3) cleanup levels established for COCs and the basis for the levels, 4) current and future land and ground water use that

will be available at the site as a result of the selected remedy,5) estimated capital, operation and maintenance costs (O&M), as well as total present worth costs; discount rate; and the number of

years over which the remedy costs estimates are projected and 6) decisive factor(s) that led to selecting the remedy.

_____ _____

Samuel Coleman, P.E. Date
Director
Superfund Division

EPA CONCURRENCES

FINAL
RECORD OF DECISION

ROCKWOOL INDUSTRIES, INC. SUPERFUND SITE

BELTON, BELL COUNTY, TEXAS

EPA ID# TXD6637964

Shawa Ghose - Remedial Project Manager	9-29-04 Date
for Gus Chavarria - Project Management Section Chief	9/30/04 Date
John Hepola - AR/TX Branch Chief	Date
Stephanie Malone - Staff Attorney	09/30/04 Date
Mark Peycke - ORC Branch Chief	PM #44 Date
June Buzzell - Writer/Editor	Date
Sam Coleman - Director, Superfund Division	9-30-04 Date

Acronyms and Abbreviation

7Q2	Seven Day Two Year Flow
ACM	Asbestos Containing Material
AOC	Area of Concern
AST	Above Ground Storage Tank
ASWQS	Applicable Surface Water Quality Standards
BP	Brick Plant
CAP	Corrective Action Plan
CEC	Cation exchange Capacity
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
CJI	Cook-Joyce Incorporated
CLP	Contract Laboratory program
COCs	Chemicals of Concern
COPC	Chemical of Potential Concern
CSM	Conceptual Site Model
CSP	Cemetery Shot Pile
CY	Cubic Yards
DHHS	Department of Health and Human Services
DO	Dissolved Oxygen
DQO	Data Quality Objective
DPT	Direct Push Technology
DSP	Dangerfield Slag Pile
ELCR	Excess Lifetime Cancer Risk
EPA	U.S. Environmental Protection Agency
EPC	Exposure Point Concentration
ERA	Ecological Risk Assessment
ESD	Explanation of Significant Differences
FOD	Frequency of Detection
FS	Feasibility Study
FSP	Field Sampling Plan
GEMS	Geologic Exposure Modeling System
HEAST	Health Effects Assessment Summary Tables
HHRA	Human Health Risk Assessment
HQ	Hazard Quotient
IRIS	Integrated Risk Information System
LBP	Lead-Based Paint
MB	Maintenance Building
MCL	Maximum Contaminant Level
MSSL	Median Soil Screening Level
NCEA	National Center for Environmental Assessment
NPDES	National Pollution Discharge Elimination System
NSP	North Shot Pile
OU	Operable Unit
ORP	Oxidation Reduction Potential

PCB	Polychlorinated Biphenyl
PRG	Preliminary Remediation Goal
PR/VSI	Preliminary Review and Visual Site Inspection
QAPP	Quality Assurance Project Plan
RA	Remedial Action
RD	Remedial Design
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RfC	Reference Concentration
RfD	Reference Dose
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RME	Reasonable Mean Exposure
ROD	Record of Decision
RWI	Rockwool Industries Inc.
SEM	Scanning Electron Microscopic
SF	Slope Factor
SPLP	Synthetic Precipitation Leaching Procedure
SSI	Superfund Site Inspection
SSP	South Shot Pile
SVOC	Semi-Volatile Organic Compound
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TAWP	Technical Activities Work Plan
TCLP	Toxicity Characteristic Leach Procedure
TCEQ	Texas Natural Resource Conservation Commission
TOC	Total Organic Carbon
TVR	Taylor's Valley Road
TRW	Technical Review Workgroup
TWC	Texas Water Commission
UCL	Upper Confidence Limit
URF	Unit Risk Factor
UTL	Upper Tolerance Limit
VOC	Volatile Organic Compound
WBA	Warehouse Building Area
XRF	X-Ray Fluorescence

DECISION SUMMARY

Site Name: Rockwool Industries, Inc.
Includes Operable Units (OUs) 1 and 2

Site Location: Approximately 100-acre tract of land and industrial area located one quarter mile east of I-35 in Belton, Texas. (see Figure 1).

Site Description: The 100-acre Site is bounded on the north by the Leon River and to the south and south-west by Nolan Creek. The Site is broadly divided into three areas, i.e., the North property, the Central property, and the non-process areas by Taylors Valley Road and FM-93. Rockwool manufactured household insulation material by melting copper and Antimony slag from metallurgical operations. The "rockwool" insulation was produced by blowing the melted material over rotating drums. Waste by-product called shot material was piled on the north and south sides of the site. The shot material ran into the Leon River from the north shot pile and contaminated the portion of the river adjacent to the site (south bank). The spent shot material is the principal threat waste at RWI Site. The Site was placed on the NPL in September 1998.

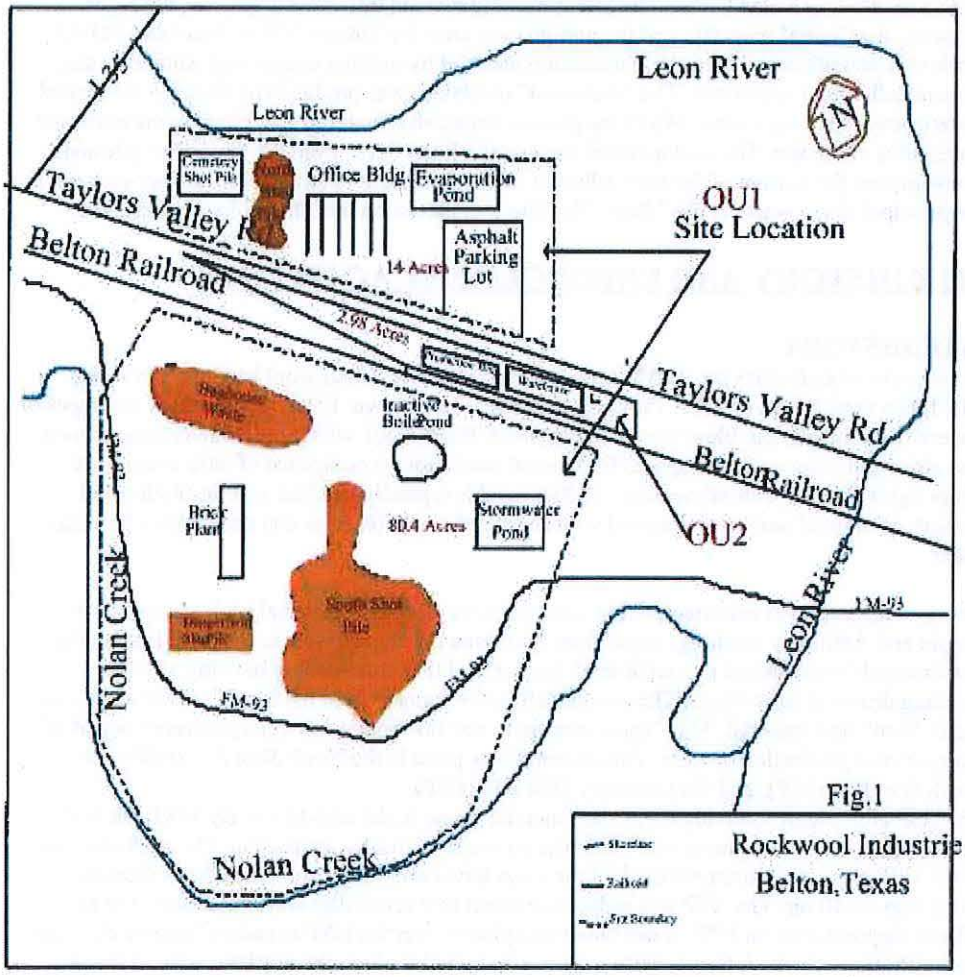
SITE HISTORY AND ENFORCEMENT ACTIVITIES

SITE HISTORY

The Rockwool Industries Inc.(RWI) facility manufactured mineral wool insulation from the mid-1950s until February 1987. Previous land use is not known. RWI manufactured two types of mineral wool insulation: blow wool and batt wool. Blow wool, which is generally spray blown into attics and other enclosed spaces for thermal insulation, is composed of bulk mineral wool fibers lightly coated with lubricating oil. Batt wool is typically used for wall insulation and consists of mineral wool that is bound with an organic resin (such as tar) and sandwiched into paper.

The mineral wool was manufactured in blast furnaces using raw material such as slags from copper and Antimony smelting, waste from limestone mining, as well as coke and basalt. The raw materials were melted in a coke-fired furnace and then extruded by blowing air over spinning drums to form fibers. The residue left in the furnace from the heating of the slags was a metal "shot" type material. This "spent iron shot" was the main waste type generated as part of the rockwool production process. This material was piled in the North Shot Pile (NSP), the South Shot Pile (SSP), and the Cemetery Shot Pile (CSP).
The NSP area began receiving spent shot material waste in the mid-1950s. By 1982, the NSP covered more than three acres and there was no room for further expansion. The northern edge of the NSP was on the southern bank of the Leon River and waste runoff had been detected going into the River. The NSP was reduced to about two acres after waste was hauled to an off-site disposal area. In 1983, a dirt cover was placed over the NSP to reduce fugitive dust and the infiltration of rain. A french drain system was installed along the northern edge of the shot pile to

intercept and collect leachate as it flowed horizontally toward the Leon River. This french drain carried the liquid to a concrete sump and the water that collected in the sump was pumped to the lined Evaporation Lagoon.



It is not clear when the SSP began receiving waste; however, beginning in 1984, some of the spent shot material was removed from the SSP and was recycled as an ingredient in brick making. The shot was mixed with cement and Baghouse Dust; it was shaped into bricks and then used as raw material feed for the furnace. An unknown amount of the shot was recycled in this way. It is not known when the CSP began receiving waste.

During the time the site was an active facility, there were numerous solid waste management units that were used to dispose of process wastes. These included a Boiler Blowdown Pond, Stormwater Runoff Pond, Waste Oil Storage Tanks, On-site Landfill, Container Storage Area, Wastewater Blending Tank, West Warehouse Container Storage Area, and the previously mentioned NSP and SSP. A Raw Water Make-up Pond and an Old Brine Pond also were used to dispose of wastes. During the preliminary assessment of the Site, incomplete remediation was evident: 1) the ground water recovery system was abandoned and 2) the main facility building was abandoned but still contained office equipment and supplies.

At one time both the boiler blowdown and baghouse wastes were classified as hazardous. With the adoption of Resource Conservation and Recovery Act (RCRA) regulations in May 1980, only the baghouse dust waste was documented to exhibit hazardous characteristics. In August 1980, RWI submitted a Part-A RCRA permit as a generator/disposal facility for hazardous wastes with regard to the baghouse dust wastes. The regulatory history for the Rockwool Site is listed in Table 1.

Table 1
Regulatory Action Chronology
Rockwool Industries, Inc., Belton, TX.

Year	Event
1955	RWI begins mineral wool manufacturing operation
1976	Baghouse Waste Pond (SWMU #1) constructed
1980	Baghouse dust determined characteristically hazardous due to EP Toxicity Testing for Arsenic. Baghouse Dust Surface Impoundment registered as hazardous SWMU
1985	RWI facility ceases production of baghouse dust (EPA Hazardous Waste D004)
1987	RWI facility ceases production
1987	RCRA Facility Assessment (PR/VSI)
1988	Sampling Visit Report submitted by A.T. Kearney to EPA
1988	Closure Certification Report for Baghouse Waste Impoundment (SWMU #1) submitted to TWC by Waid & Associates
1988	TWC Closure Letter to RWI for Baghouse Dust Surface Impoundment (SWMU

Year	Event
	#1)
1988	Corrective Action Plan Hazardous Waste Permit Application submitted to TWC by Wald & Associates
1989	Class II Landfill Closure Certification Report submitted to TWC by Cook-Joyce
1990	TWC letter issued to EPA stating RFI unnecessary at SWMUs 7, 9, 10, 11, 12, 13, 16, 17, and 18, and AOCs 1, 8, 9, and 11
1990	EPA letter to TWC agreeing that RFI unnecessary at SWMUs 7, 9, 10, 11, 12, 13, 16, 17, and 18, and AOCs 1, 8, 9, and 11
1990	Nonhazardous SWMUs Closure Plan submitted to TWC
1990	Closure Plan for Nonhazardous SWMUs submitted to TWC
1990	Baghouse Dust Pocket discovered onsite
1991	Baghouse Dust Pocket Closure Certification Report submitted to TWC
1991	TWC Closure Letter issued to RWI for Class II Landfill
1991	Closure Certification Report for Nonhazardous SWMUs submitted to TWC by Cook-Joyce
1991	Closure Certification Report for Class I Nonhazardous Landfill submitted by Cook-Joyce to TWC
1991	TWC letter issued to RWI acknowledging receipt of Nonhazardous SWMUs Closure Certification Report. Letter states "closure activities involving nonhazardous units do not require formal TWC approval".
1991	TWC letter issued to Cook-Joyce concurs that certain soils at site could be classified as Class III waste
1991	Closure Certification Report for Baghouse Dust Pocket submitted to TWC by Cook-Joyce
1991	TWC Closure Letter issued to RWI for Baghouse Dust Pocket
1991	Hazardous Waste Permit No. HW-50197 & Compliance Plan CP-50197 issued to RWI by TWC authorizing closure & post-closure care and requiring groundwater recovery program
1992	RFI Work Plan submitted to TWC
1993	Offsite Groundwater Investigation Report submitted to TWC by Cook-Joyce
1993	TWC letter issued to RWI concurs with conclusions of Offsite Groundwater Investigation Report
1994	Groundwater monitoring & recovery system shut down by RI due to financial difficulties
1995	TNRCC issued notice of violation letter to RWI
1995	Preliminary Assessment Report submitted to EPA by Fluor Daniel

Year	Event
1996	TNRCC conducted a Superfund Site Inspection to identify the types of contaminants present, assess any releases that have occurred, and identify evidence of actual human and ecological exposures to contaminants
1999	Phase II Environmental Site Assessment, 5.87 Mile Georgetown Railroad Tract, Temple to Belton, Texas, by Raba-Kistner
2000	Technical Activities Workplan submitted to EPA by CH2M HILL
2000	Sampling and Analysis Plan submitted to EPA by CH2M HILL
2001	Remedial Investigation Field Phase completed by CH2M HILL

According to a RCRA Part B permit application, the baghouse dust impoundment had been used since 1970. RWI started using low concentration Antimony slag as feed material for the furnaces in 1977, thus allowing the facility to operate as a "non hazardous" waste generator.

Until 1985, Arsenic-contaminated Baghouse Dust was generated during the manufacturing process (even though hazardous Arsenic content was reduced and non-hazardous Antimony content was increased). This dust was disposed of on-site in a surface impoundment and a landfill. The Baghouse Dust Surface Impoundment (also known as Baghouse Dust Landfill or "The Dust Pocket" - Solid Waste Management Unit 1) was closed as a landfill in 1988. This was discovered at the Site in 1990. RWI proposed a closure plan for this onsite surface impoundment in April of 1990; in 1991, the hazardous wastes were removed.

In October 1991, the TNRCC (now TCEQ) issued a compliance plan and a Hazardous Waste Post-Closure Permit to RWI allowing the company to remove and dispose of contaminated soil, remove and stabilize sludge, and install clay covers where necessary. As part of the remediation effort they installed a ground water recovery system to control and treat ground water in the first saturated interval.

Although numerous on-site solid waste management units (SWMUs) from the RCRA Part A permit were closed by RWI, remediation of the Baghouse Dust Surface Impoundment and the on-site general plant refuse landfill was not completed. The ground water recovery system was abandoned and iron shot piles remained on site. RWI shut down the ground water recovery and treatment system in September of 1994 due to financial problems.

The Preliminary Assessment was completed in December 1995 and the Site Investigation was completed in October of 1996. **The RWI Site was proposed to the National Priorities List (NPL) on March 6, 1998.** The basis for proposing the Site to the NPL was surface water as the major pathway of concern. Chemical analysis of sediment samples in the Leon River and in Nolan Creek indicated the presence of inorganics in concentrations above the release criteria. The Leon River was identified as a fishery and was subject to Level II concentrations of Selenium. The RWI Site was placed on the NPL on September 29, 1998. The combined Remedial Investigation and Feasibility Studies commenced on September 30, 1998.

ENFORCEMENT ACTIVITIES

The Site is currently divided into three parcels of land. RWI formerly owned all three parcels. RWI also owned and operated the facility responsible for creating the contamination at the Site. RWI is defunct. Another defunct company, CTMC, Inc. (CMTC), purchased approximately 83 acres of the property in a tax sale in 1997. CMTC submitted documents to the State of Texas seeking reimbursement for various expenditures associated with "post-closure care procedures" and "cleanup of the site." The largest parcel, consisting of just over 80 acres, is currently owned by Nev-Tex Group, Inc. (Nev-Tex), a Nevada corporation. Nev-Tex appears to be a shell created by unidentified persons.

During the RI/FS, EPA obtained access to the southern tract, owned by Nev-Tex, from Mr. Wayne McMiniment, who was president of Nev-Tex at the time. The EPA obtained a court order to collect samples for the RI/FS at the northern 14-acre tract, owned by the defunct RWI. Since there was no bid on the northern tract in the 1997 tax sale, the property reverted back to the defunct RWI, thus necessitating a court order to collect data and samples from the 14-acre tract adjoining the Leon river. In March 2004 the City of Belton assumed ownership of the northern 14 acres in a tax sale. The third parcel, about 2.9 acres in size, is currently owned by Jones-Bell, L.L.C. ("Jones-Bell"), a Texas limited liability corporation. Jones-Bell purchased the property from CTMC in March 2000, after the start of the RI/FS.

The EPA issued Notice Letters to PRPs to conduct the Remedial Investigation and Feasibility Studies (RI/FS). No response was received for identified parties as companies had become defunct or the notices were returned as undeliverable. No PRPs came forward to conduct the RI/FS. Thus EPA started the RI/FS as a Fund lead project. A new PRP search in May 2004 failed to find any additional viable PRPs other than those identified earlier.

COMMUNITY PARTICIPATION

As part of the Community Involvement Plan, EPA community relations staff conducted door-to-door interviews and held meetings with local Belton residents, public officials, community leaders and business people. The community interviews provided interested citizens with opportunities to ask questions about the Site, voice their opinions and concerns about Site activities and issues, and learn more about the Superfund program. These interviews were held in September 1999. The following summarizes the results of these community interviews.

Community Interviews

All interviewees were aware of the existence of the Site and most knew of its location and general background and history. Many, however, were unaware that the Site is a Superfund Site and that it has been placed on the NPL. Interviewees did voice eagerness to see contamination problems at the Site resolved, if EPA determines that Site contaminants pose a risk to public health or the environment.

The Site-related concerns most often expressed by interviewees were:

- The need to restore the Site to tax-generating status. City officials and community members both addressed the need to clean up the Site so that the property may be more beneficial to the community.
- The potential contamination of the fish in the Leon River. The mayor wanted confirmation that the fish in the Leon River were not contaminated as a result of the Site and that the fish caught in these waters are safe and edible.

Many informational meetings were held in Belton during the Site investigations conducted between late 1999 and August 2002. In September 2003, the City of Belton received a $50,000 Superfund Redevelopment study grant.

Public participation activities for the Site have been satisfied, as required in CERCLA Section 113(k), 42 U.S.C. §9613(k), and CERCLA Section 117, 42 U.S.C. § 9617. The Proposed Plan for the Final ROD was released to the public on August 20, 2004. The notice of availability of the Proposed Plan and the Administrative Record file for the remedial action was published in the Belton Journal on August 19, 2004. The public comment period was from August 20, 2004 to September 18, 2004. A public meeting was held at the Belton City Hall on August 31, 2004. A court recorder was present to record oral comments.

The EPA received one written comment during the public comment period, and no adverse comments were made on the selected remedy during the public meeting. The only written comment was from the City of Belton and related to the location of the containment cell relative to FM 93. EPA has addressed the City's concern by finding some alternative locations for the containment cell. Other questions related to what happens to the land after cleanup and whether somebody can start a business before the cleanup is completed. A responsiveness summary of the public meeting is attached.

Documents and information upon which EPA relied in recommending the remedy, is located in the Administrative record. The Administrative Record includes the text and appendices A to R of the RI/FS report, and the Prefinal (90%) Design Report for the Remedial Design for the Interim ROD. The Administrative record contains many other documents supporting the remedy. A major part of the Administrative Record is the RI/FS report which includes the data evaluation report, the human health risk assessment report and the feasibility study of the remedial alternatives and the 90% Remedial Design..

The Administrative Record was made available to the public by placing a copy of all the material at the following repositories:

- Belton City Hall, 333 Water Street, Belton, Texas 76513
- U.S. EPA Region 6, Seventh Floor Reception Area, 1445 Ross Avenue, Ste 12D13, Dallas, Texas 75202-2733
- Texas Commission on Environmental Quality, 12100 Park 35 Circle, Building E, 1st Floor, Austin, Texas 78753.

SCOPE AND ROLE OF OPERABLE UNITS

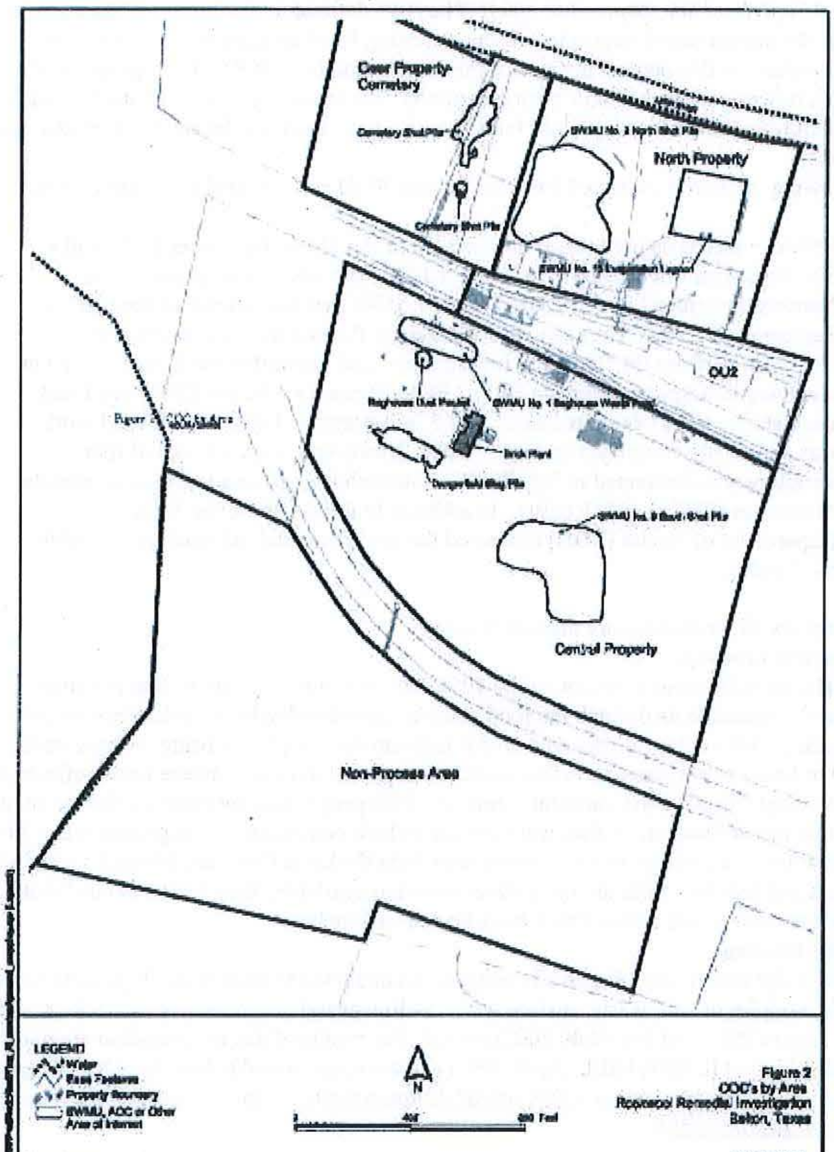
The inactive RWI National Priorities List (NPL) Site (the Site), at 1741 Taylors Valley Road, includes approximately 100 acres (zoned heavy industrial) and lies one mile east of downtown Belton, Bell County, Texas (see Figure 1). The Site consists of three main areas. The first area is the 14-acre area north of the Taylors Valley Road, denoted as the North Property and adjoining Cemetery. The second area is south of Taylors Valley Road and contains the Rockwool production building. This area is designated as the Central Property and extends to FM 93. The third area is south of FM 93 and is designated as the Non-Process area. Figure 2 presents a layout of these areas and the overall Site. The primary waste types at the Site include spent iron shot and baghouse dust. Secondary waste types include boiler blowdown water, stormwater runoff, recovered ground water, and bricks.

Forty-seven (47) acres were used as an industrial facility; 14-acres included an evaporation lagoon; and 40-acres were used as pasture. The Site is bordered to the north by the Leon River and is twice bisected from east to west by Taylors Valley Road and FM 93 (see Figure 2). These roads divide the Site into three distinct areas that include the 14 acres north of Taylors Valley Road including the CSP and the NSP, the Make-up Water Pond, the water treatment building, and the Evaporation Lagoon. The middle portion of the Site, which consists of 47 acres between Taylors Valley Road and FM 93, is where most of the facility operations took place. This area includes the Baghouse Dust Surface Impoundment, the SSP, the Dangerfield Slag Pile (DSP), the Boiler Blowdown Pond, the maintenance building/garage, and the former Kiln and Brick Plant.

The local taxing district put the Rockwool property up for sale in 1997 due to unpaid taxes. The southern 83 acres (Central Property and the Non Process area) was purchased by CTMC, Inc. There was no bid on the North Property, thus it reverted back to the defunct RWI. In March 2000, Jones- Bell, L.L.C. purchased the 2.9-acre triangular lot containing the RWI main production building and warehouses from CTMC. Currently the 80-acre parcel in the Central Property area is owned by Nev-Tex Group, Inc., a Nevada corporation. In March 2004 the City of Belton assumed the title for the northern 14 acres, in a tax sale. Because of this varied ownership, EPA decided to define the triangular 2.9-acre lot as Operating Unit 2 (OU2) (see Figure 1). The rest of the area (the North area, the Geer-Cemetery area and the Central Property and Non-Process area) was defined as Operating Unit 1 (OU1). Operable Unit 2, containing the process building and the warehouse, is likely to require minimal remediation due to contaminated soil. Contaminated soil is the major problem at the site.
Most of the contamination at the Site occurs in the waste material and soil. The remedy addresses essentially the North Property and the Central Property, where Antimony in soil is the primary risk. Results from the Remedial Investigation have shown that the majority of remedial work will consist of excavating soil above PRGs from the Geer-Cemetery property, the North Property and the Central Property. Shot material which has washed into the Leon River from the North Shot Pile will be dredged and consolidated along with other contaminated soil in an on site containment cell located in the Central Property.

The excavation of waste material and soil greater than the PRGs and the dredging of the sediments from the Leon River will mitigate risks to human health. Concurrent with the Remedial Design for the Interim ROD, the ecological risk assessment was completed. The risks were evaluated by taking samples of sediments in the Leon River where previous sampling had indicated high values of COCs in the sediments. A bioassay was conducted with the sediment samples. The bioassay indicated the sediments to be non toxic to biota. Thus no additional remedial measures were necessary to address the ecological risks. Thus the remedy proposed in the Interim ROD would have addressed both human health and ecological risks. While current ecological risks appear minimal, the EPA decided to dredge Leon River sediment adjacent to the Site to check fish tissue values during the First Five -Year Review performed at the Site.

This concurrent sampling of the Leon River sediments along the Site while completing the design for the interim ROD saved time and funding. That is to say, while the remaining ecological risk assessment was being completed (which is a lengthy process), actions to address human health risks were designed. This method was proven to be right, as EPA found no additional remedial measures were needed to address the ecological risks.


Cemetery Shot Pile
Cemetery Shot Pile
North Property
OU2
Brick Plant
Central Property
Non-Process Area
LEGEND
Water
Property Boundary
SWMU, AOC or Other
Area of Interest
N
Feet
Figure 2
COC's by Area
Belton, Texas
CH2M HILL

SITE CHARACTERIZATION

Site characterization was discussed in detail in the Interim ROD *(Interim Record of Decision, Rockwool Superfund Site, September 2003)*. The risks defined in the Interim ROD were based on assessing the human health exposure and the screening-level ecological risks. The risk characterization in this document remains the same as the Interim ROD except the baseline ecological risk evaluation has now been completed. Ecological risks were characterized further by conducting sediment bioassays and sediment chemistry analysis during the Remedial Design (RD) phase.

The following section is extracted from the Interim ROD and repeated for completeness:

> EPA completed its preliminary assessment of the Site in December 1995, and a Site Screening Investigation in October 1996. The site was proposed to the National Priorities List (NPL) on March 6, 1998, and was placed on the List on September 29, 1998. EPA sent notice letters to Potentially Responsible Parties (PRPs) to perform the Remedial Investigation and Feasibility Studies (RI/FS). On receiving no response from the PRPs, EPA proceeded with the RI/FS as a Fund Lead study. EPA began its formal RI/FS in September 1998. The RI field work was essentially completed in August 2001. However a second round of fish sampling was conducted in July 2002 to establish background levels of chemicals of concern (COCs) in fish tissue. In addition to these efforts, the Texas Department of Health (TDH) evaluated the environmental information available for the site.

A brief review of its findings are presented below.

TDH Review Findings

The TDH concluded from a review of the 1996 Site Investigation Report that potential exposure to contaminants through the food chain is considered to be an indeterminate public health hazard. Although available data do not indicate that people are being, or have been, exposed to levels of contamination that would be expected to cause adverse health effects, data are not available for all environmental media to which people may be exposed. Selenium, which is known to bio-accumulate in fish, was detected at high concentrations in ground water from the NSP and at low concentrations in sediment both from the Leon River and Nolan Creek. Surface water data and fish data from the Leon River were not available. They recommended that fish from the Leon River and Nolan Creek be collected and analyzed.

EPA's RI Findings

EPA's RI is the most comprehensive investigation conducted to date. It involved collecting and analyzing samples of soil, waste, surface water, sediment and ground water over a four month (April - August 2001 and June-July 2002) period. The results of this investigation are published in the RI/FS report (CH2M HILL, April 2003) and are summarized below. *EPA's Investigation did not detect selenium at levels which would dictate selenium being a chemical of potential concern for human health*.

Geology and Hydrogeology

The site overlies Quaternary alluvium and terrace deposits associated with the Leon River. The terrace deposits generally lie north of FM 93 and consist of limestone gravels, quartz, quartzite, chert, and jasper with varying amounts of clay and sand. The alluvial deposits, which lie south of FM 93, consist of calcareous silts and clays with high organic content, sand, and gravel. Underlying the Quaternary deposits is the Georgetown Formation. The uppermost water-bearing zone occurs at depths between 20 and 35 feet within the coarse grain deposits of the Quaternary alluvium and terrace deposits, and within the weathered limestone. The saturated thickness of the water bearing zone is typically less than 3 feet, and it is not uncommon for many of the monitor wells to go dry while sampling. Consequently, the water-bearing interval is best described as a perched zone. Ground water north of Taylors Valley Road generally flows north-northeast, discharging through seeps to the Leon River. There is evidence of ground water mounding under the evaporation lagoon suggesting that seepage from the lagoon is recharging the perched zone. On the south side of Taylors Valley Road, it flows to the south and southeast discharging through seeps to Nolan Creek. It flows at an estimated velocity of 0.9 feet per day.

There are 7 domestic, 5 industrial, 3 general use (irrigation), wells within 1 mile of the Site. The nearest well in the perched zone is a domestic well, located approximately 0.5 mile to the west at 104 Elm Street. This well was sampled during past investigative activities and did not reveal any evidence of contamination (TCEQ, 1996b). Several of these wells are screened in the perched zone and several are screened in the deeper zone. Page 4-4 of the Rockwool RI/FS Report presents additional details of these wells. All evidence indicates that the ground-water bearing perched zone located at the site does not appear to be hydraulically connected to any offsite water bearing units. In 1990, Rockwool Industries, Inc., drilled a deep well to the deeper water bearing formation in a shaley limestone which is part of the Georgetown Formation. The water analysis showed no resemblance to the shallow perched ground-water, proving no vertical communication between the two water bearing units. Also the potable aquifer in the area is located in the Travis Peak formation at about 600 feet below the perched aquifer, with positive evidence of no communication. The industrial area around the Site is connected to city water from Lake Belton.

In summary, poor and unreliable yields make the perched water zone an unlikely future drinking, irrigation or industrial water source. Additionally, given the land use designations and availability of water from the City of Belton, future ground-water development in the areas down-gradient of the site is unlikely.

Surface Water Hydrology

The primary surface water features in the vicinity of the site are the Leon River and Nolan Creek. The Leon River discharge volume, downstream in Belton, is recorded continuously by the USGS with mean flows ranging from 20 to 600 cubic feet per second (cfs). Peak flows of 3,000 cfs were observed in late March 2001. The designated water uses of the river are contact recreation, high-quality aquatic habitat, and public water supply. Recreational fishing is known to occur but swimming is unlikely because of unsafe conditions such as high flow rates, unclear water, presence of high brush along the river banks, and steep banks limiting access.

Surface water flow volumes in Nolan Creek are not currently monitored. A harmonic mean discharge of 29 cfs has been reported. The TNRCC (now TCEQ) has designated the creek's uses as non-contact recreation, high-quality aquatic habitat, and public water supply.

Ground water

Antimony, arsenic, and lead in residual waste remaining in the former baghouse dust impoundment represents the primary ground water contaminant source. Analytical results for samples collected in the vicinity of the NSP, SSP and evaporation lagoon areas also indicate waste materials as a probable antimony and arsenic source. This conclusion is also supported by the arsenic results from the Toxicity Characteristic Leaching Procedure (TCLP) and antimony results from the Synthetic Precipitation Leaching Procedure (SPLP) tests. The TCLP results exhibited arsenic leachate concentrations up to 1.02 mg/L from fine waste material in the SSP. The SPLP results revealed antimony leachate concentrations up to 3.1 mg/L from the NSP samples. The absence of TCLP-arsenic in the NSP samples and the relatively low antimony concentration in the SPLP samples from the SSP are most likely the result of waste material variations not captured by the samples.

The ground water seep results show that arsenic and antimony contaminated ground water is currently seeping into the Leon River and Nolan Creek at concentrations greater than surface water quality standards. However, based on the ground water seepage rates and surface water flow volumes observed, antimony and arsenic concentrations attain equilibrium river concentrations within 10 to 100 feet from the point of entry into the Leon River. This has been verified by mass balance calculations.

Surface Water and Sediment

Leon River- Surface water samples collected from 24 locations in the Leon River adjacent to and downstream of the seep sites revealed arsenic and lead concentrations above background levels. Analysis of sediment samples collected from the same 24 locations also revealed elevated levels of antimony, arsenic, and lead. However sediments in Leon River are rare and are limited to the south bank of the river. The majority of the channel bed consists of limestone bedrock. The location of the sediments close to the south bank is most likely the result of NSP waste material either being placed in the river during the facility's operating life or erosion of waste material from the Site itself. The south bank of the river, north of the NSP, is also known to contain significant amounts of waste material presently entering the river.

Nolan Creek- Surface water samples collected from 20 locations in Nolan Creek adjacent to and downstream of the seep sites did not detect many of the metals observed in onsite soil or ground water above the laboratory detection limit or above background levels. It should be noted that sediments are sparsely located in Nolan Creek and the majority of the stream channel flows on the limestone bedrock. Also being farther away from the Central Processing (CP) area, there is very little shot material present in the creek. Analysis of sediment samples collected from these same 20 locations revealed the presence of many of the same metals detected in onsite soil and ground water; however, these same metals (which occur naturally in the environment) were also observed at comparable levels in the upstream sediment samples. Sediment concentration profile graphs developed for antimony, arsenic, and lead show no increase in those areas downstream of

the ground water seep sites.

Waste Material Characteristics and Volumes

The NSP, SSP and DSP represent the three primary non-hazardous SWMUs remaining at the Site. A third shot pile, identified as the CSP straddles the property line between the adjacent cemetery and adjoining private property and within a drainage easement. This pile, and waste material near the evaporation lagoon, were not identified in historical Site documents and may represent overflow from the NSP, or material removed when the NSP was reduced in size in 1987. The estimated waste area and volumes are summarized in Table 2 below.

Analysis of samples collected from the primary waste material piles did not reveal the presence of RCRA hazardous characteristics. The analyses indicate that, in its current condition, Arsenic and lead in the waste (shot, slag, and brick) have very low leachability. However, the leachability will significantly increase if the waste is broken into fine particles and if the pH of the aqueous solutions interacting with the waste is either highly acidic or highly alkaline. Analysis of samples collected from the CSP, NSP, SSP and the DSP reveals that Antimony in the waste materials has higher leachability than Arsenic and lead.

Table 2
Waste Impact Area and Volume Estimates
Rockwool Industries, Inc., Belton, TX.

Waste Unit	Surface Impacted Area (acres)	Estimated Waste Impacted Area (acres)	Max. Waste Thickness Observed (feet)	Estimated Waste Volume (cubic yards)
Cemetery Shot Pile	0.4	5	17.5	30,000
North Shot Pile	2	4	22	25,000
Evap. Lagoon Waste	0	2	10.5	6,000
South Shot Pile	4.6	15	14	25,000
Dangerfield Slag Pile	0.3	0.3	8	2,500
Brick	0.3	0.3	3	150 to 200

Biota

Leon River- Analysis of the 61 fish samples (26 top feeders and 35 bottom feeders) collected from the Leon River at locations adjacent to and down gradient of the Site revealed the presence of many of the same metals detected in on-site soil and ground water (see Figure 3 and Figure 4). Adverse impact associated with the Site can be concluded for fish because Antimony was detected at a high frequency of detection (80.3%) at concentrations significantly higher than background.

Nolan Creek- Analysis of 10 fish samples (5 top feeders and 5 bottom feeders) collected from Nolan Creek at locations adjacent to the Site did not reveal the presence of soil COCs. Adverse impacts associated with the Site are not likely because elevated soil COCs were not identified in the fish samples.

On-site Buildings

The on-site buildings are generally in poor condition. Any building constructed of cinder block/brick is likely a structural liability. The large cracks and differentiated foundations/slabs do not allow for timely/cost effective restoration. Steel beam constructed buildings can be restored and they appear to be structurally sound. This will be addressed when the Site is redeveloped for industrial use.

Figure 3- Distribution of Antimony in Leon River Bottom Feeder Fish

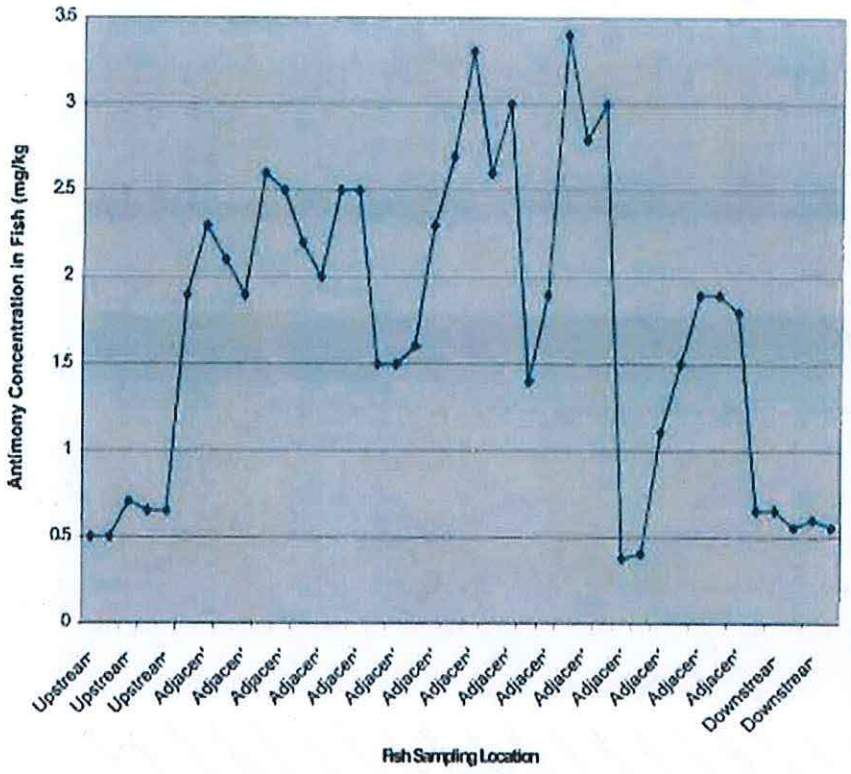
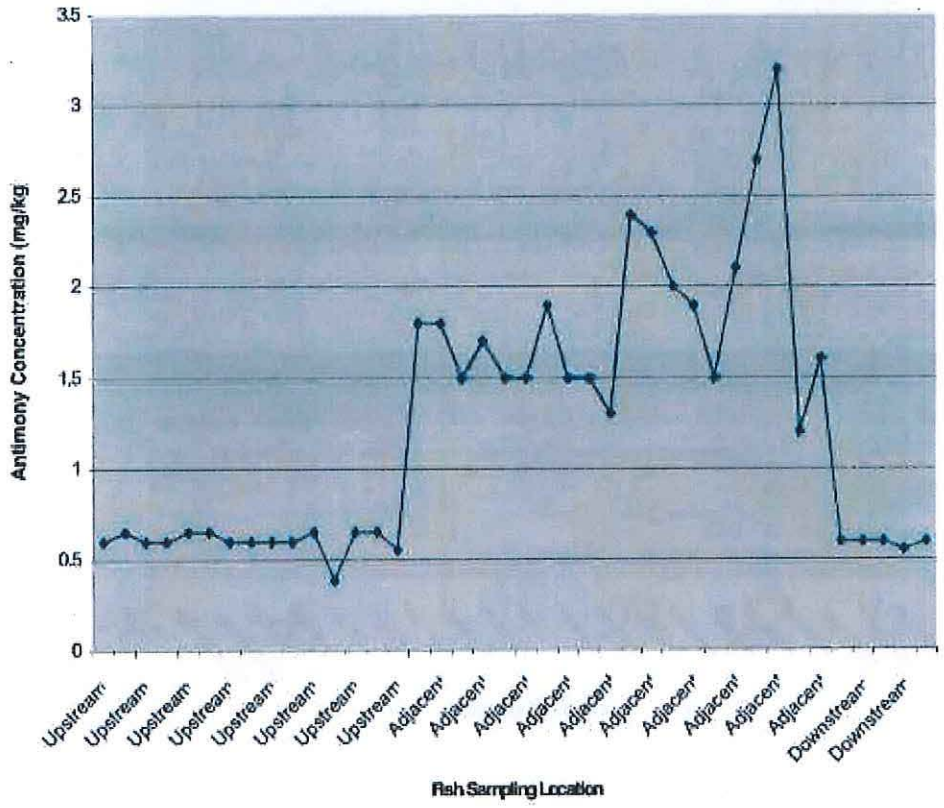


Figure 4- Distribution of Antimony in Leon River Top Feeder Fish

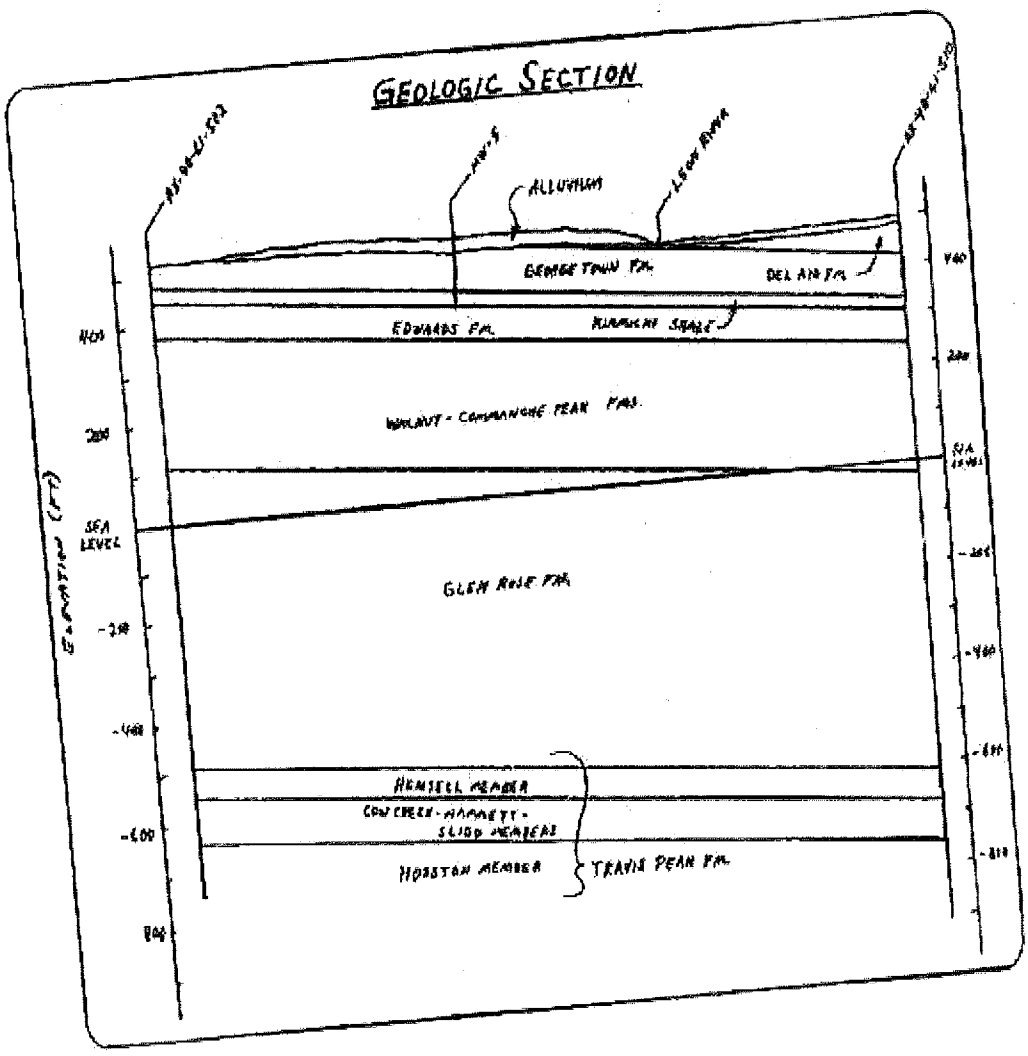


CURRENT AND FUTURE SITE RESOURCE USES

Most of the Site is abandoned. The 3-acre processing building called OU2 is currently occupied and used for light industrial manufacturing. The reasonable future land use is industrial/commercial. The Site is zoned for heavy industrial use. It is located in an area with projected low growth, and is situated between two major roadways. Future residential use of the Site is unlikely, and the City of Belton plans to restore the Site into an industrial area.

The uppermost water bearing zone (see Figure 5) underlying the area occurs at a depth of 20 to 35 feet within the Quaternary alluvium. The water bearing zone occurs in the top 3 feet of the underlying Georgetown formation(fractured limestone at the top). This water bearing zone has very low saturation, and it is not uncommon for monitor wells in this interval to go dry while sampling.
While sampling for the RI/FS in 2001, four out of the nine hydro punch samples failed to extract water from this saturated zone in the alluvium. Because of the low and unreliable yield, this interval in the alluvium can best be described as perched water bearing zone. Thus, it is unlikely that the perched zone will be the source of future drinking, irrigation or industrial use water. Locally, the drinking water aquifer is in the Hosston Member of Travis Peak Formation about 1000 feet below the Site. Thus, it not likely that the contaminated perched aquifer can contaminate the drinking water aquifer. From a review of about 15 shallow wells surrounding the Site, there is no evidence that the perched water bearing zone is connected hydraulically to any off-site water bearing units. The EPA has awarded a Superfund Redevelopment grant to the City of Belton to rehabilitate the area to locate industrial/commercial entities.

Figure 5
Geologic Cross-Section
Rockwool Industries, Inc., Belton, TX.



RISKS ADDRESSED BY FINAL ACTION

This section summarizes the findings from the human health risk assessment (HHRA). The risks are expressed as both excess lifetime cancer risk (for carcinogenic compounds) and as hazard index values for all other non-carcinogenic risks. In other words, arsenic risk values are expressed in relation to the EPA target cancer risk range of $1x10^{-4}$ to $1x10^{-6}$,while the non-cancer risks are expressed in relation to EPA's hazard index (HI) or hazard quotient (HQ) of 1.

The RI/FS Report and the Interim ROD provide a detailed discussion of the human health risk assessment sample collection approach and results. The risk assessment findings are presented in Table 4 below. Human health Preliminary Remediation Goals (PRGs) were developed as concentrations in soil that are protective of human health at the target cancer risk ranges and that result in HIs or HQs below 1.0.

Table 3
Summary of Estimated Health Risks (RME scenario)
Rockwool Industries, Inc.

Exposure Scenario	Cancer Risk		Non-carcinogenic Risk	
	Risk Level	Chemical [1]	Target Organ HI>1	Chemical [2]
Industrial Worker (OU 2)				
Soil	2×10^{-5}	Arsenic	2 (Circulatory)	Antimony
Industrial Worker (Geer Property)				
Soil	3×10^{-5}	Arsenic	--	None
Industrial Worker (North Property)				
Soil	1×10^{-5}	Arsenic	--	None
Industrial Worker (Central Property)				
Soil	5×10^{-5}	Arsenic	5 (Circulatory)	Antimony
Industrial Worker (Non-Process Area)				
Soil	2×10^{-6}	Arsenic	--	None
Adult Fisher (Leon River)				
Surface Water	--	None	--	None
Fish	6×10^{-5}	Arsenic	4 (Circulatory)	Antimony
			2 (Immune)	***Mercury***
			5 (Circulatory)	***Thallium***
Adult Fisher (Nolan Creek)				
Fish	--	None	14 (Kidney)	***Cadmium***
			8 (Circulatory)	***Thallium***
Adult Swimmer (Nolan Creek)	--	None	-----	None

1-Chemical contributes to exposure pathway risk >1x10-6
2-Chemical with Hazard Quotient >1
Bold/Italicized chemicals are within background concentrations

Risks Addressed by the Interim Action (Interim ROD)

The Site contains shot material, waste and contaminated soil resulting from previous industrial

processes. There are several large shot piles, and shot is scattered over the surface soil. In its current condition, Arsenic and lead in the waste (shot, slag, and brick) have very low leachability. However, the leachability will significantly increase if the waste is broken into fine particles and if the pH of aqueous solutions interacting with the waste is either highly acidic or highly alkaline. Analysis of samples collected from the major shot piles (CSP, NSP, SSP and Dangerfield) reveal that Antimony in the waste materials has higher leachability than Arsenic and lead. The EPA's RI has shown that metals from the shot have leached into shallow ground water over the years. Additionally, shot material has visibly entered the Leon River via erosion, and the metals associated with the shot (primarily Antimony) were detected in fish tissue. These detected metals correlate with the boundaries of the Site.

Based on the current and future Site land use, four types of populations were identified and evaluated in the human health risk assessment (HHRA): industrial workers, swimmers and fishers in Nolan Creek, and fishers in the Leon River. No receptor scenarios that were evaluated for the Site exceeded the upper end of the carcinogenic risk range($1x10^{-4}$), so risks due to carcinogenic contaminants do not need to be addressed. However, the industrial worker's non-cancer hazard from direct contact with Antimony in soil/waste from OU2 and the Central Property are 2.1 and 5.1, respectively, which exceed unity. Unity is defined as 1. Also, the adult fisher's non-carcinogenic hazard resulting from ingestion of Antimony in fish tissue from the Leon River is 3.7. These numbers suggest that current fishers in the Leon River and future workers on the Site could have non-carcinogenic health hazards from exposure to Antimony. The interim action, therefore, will address several issues:

* Visible waste material (shot) on the Site will be excavated and removed.
* The impact of shot/waste and contaminated soil on shallow ground water and surface water will be abated.
* The movement of shot into the Leon River through erosion will be halted.
* The effects of leachate and shot on fish in the Leon River will be abated.

As a result, non-carcinogenic health hazards to the current fisher and the future industrial worker from Antimony will be reduced.

Residual Ecological Risks addressed in the Final Action (Final ROD)

During the Interim ROD, EPA completed the first three steps in an eight step process to assess ecological risks. Due to economies in time and to enhance the process, EPA decided to wait to complete the balance of the ecological risk assessment in the remedial design phase of the project. The rationale behind this work phasing was that most of the identified terrestrial risks coincide with human health risk, which will be resolved by the remedial actions recommended in the Interim ROD. The remaining residual ecological risks are addressed in this Final ROD. Therefore, phasing the work allowed the ecological risk assessment to be completed after the human health risks were identified and resolved with the ecological risks being assessed on the residual waste.

The screening level risk assessment (Step1 and Step 2 of process) identified complete pathways and potential adverse effects from Site related source materials to potential ecological receptors. Based on the identified path forward, an interim ecological risk report was generated which

contained the major elements of the baseline problem formulation (BPF).

The results of the BPF were as follows:

- There is no risk to upper trophic level wildlife (i.e., carnivorous and piscivorous wildlife higher on the food chain) from Site related chemicals based on food chain (desk-top) modeling.
- Risk to lower trophic level organisms in soil does exist for several metals (Hazard Quotients [HQs] between 1 and 5) based on comparing measured soil concentrations to screening benchmarks. These risks need to be addressed through further investigation or by eliminating the pathway of exposure to these organisms (i.e. remove or cover the waste).
- There is risk from metals to aquatic and benthic organisms in Leon River and Nolan Creek at some locations, based on a comparison of measured concentrations to screening benchmark values. Further investigation was recommended to substantiate or refute these risks.

The proposed remedial measures for human health (i.e., excavation of soil with concentrations above PRGs and covering the excavated parts with 12 inches of clay) will also address the risks to terrestrial organisms identified by the first two items above. The area of the site with terrestrial ecological risk would be similar in location and size to that being remediated for human health risks. Thus, the proposed remedy would eliminate the complete exposure pathway of ecological organisms to Site related wastes.

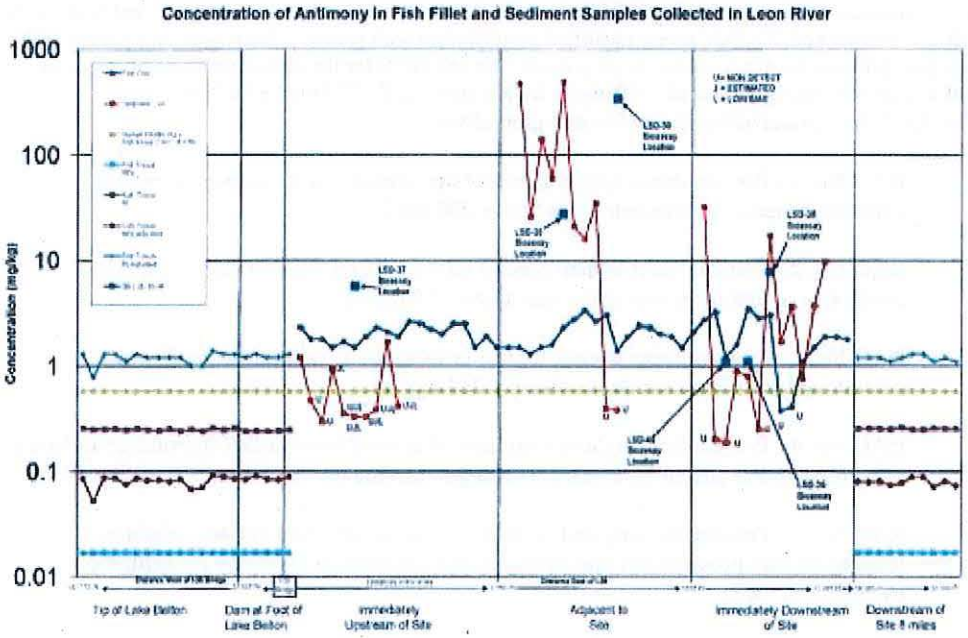
<u>Leon River Investigation</u>
Sediment samples were collected at six locations in the Leon River on December 11, 2003. One sample was collected upstream of the site, two adjacent to the site, and three downstream of the site. All samples were collected from areas previously sampled during the RI, in locations where the concentration of at least one waste related compound exceeds ecological screening values. The sediment samples from this sampling event were analyzed for the concentration of six metals identified as exceeding ecological screening values. A dilution series *Hyalella azteca* bioassay was also conducted on the sediment from all six locations using standard EPA protocols. The dilution series consisted of introducing a known number of organisms into sediment that ranged from 100 percent Leon River sediment to as low as 6.25 percent Leon River sediment. The results of these bioassay tests indicate that there is no toxicity, even in the 100 percent sediment test. There was no significant difference between the survival and growth of organisms exposed to sediment collected adjacent to and downstream of the Site from the results for those organisms exposed to laboratory controls or those exposed to a samples collected upstream of the Site.

These results mean that the sediment in the Leon River is not toxic to sensitive ecological species. Therefore, development of removal standards (PRGs) for protection of ecological organisms is not needed because any resulting PRG would be equal to the highest measured metals concentration from the data set and there are no known areas that exceed those values. While the sediments are not toxic to ecological receptors, the bioassay results and field observations suggest that benthic

organisms are alive and acting as a food source to larger carnivorous fish potentially consumed by human anglers. Thus, benthic organisms could be accumulating wastes from the Site and transferring them to larger fish. The human health risk to adult anglers from antimony (in sediment) which accumulates in fish tissue is the only remaining risk within the sediment exposure pathway. Data for the accumulation of antimony in benthic organisms in the open literature is sparse, but suggests low accumulation for fish. However, the accumulation in fish in Leon River is apparent from the fish tissue residue data collected. The study of the biotransfer pathways leading to this antimony bioaccumulation is extremely difficult due to the transient nature of fish and sediments. Thus, EPA would proceed with the remedial activities stated in the Interim ROD. The Interim ROD states generally that EPA would remove sediment waste in the river immediately along the south bank, adjacent to the site. The wastes will be identified by visual inspection. The risk to the adult angler (through fish consumption) could then be reassessed during future five-year reviews using fish tissue concentration comparisons (to the RI concentration levels) as the decisive information.

Figure 6

Rockwool Industries, Inc.
Leon River Fish and Sediment Concentrations



REMEDIAL ACTION OBJECTIVES

The Feasibility Study (FS) was prepared in accordance with EPA's guidance document entitled Presumptive Remedies for Metals-in-Soil Sites (EPA, 1999). Based on the operation of the Site and the nature and extent of contamination identified, EPA has deemed the presumptive remedy approach appropriate.

Remedial Action Objectives (RAOs) specify the chemicals of concern (COCs), exposure routes, receptors, and Preliminary Remediation Goals (PRGs) for each affected medium. Arsenic, antimony, and lead are the COCs in surface soil. No COCs were identified in subsurface soils (below 2 feet), because a human health exposure pathway for direct contact is not present. The soil PRGs for the direct human health exposure pathway are 200 mg/kg for arsenic, 310 mg/kg for antimony, and 1,754 mg/kg for lead.
The RAOs for surface/subsurface soils and ground water are:

1. RAO No. 1 - Prevent direct human contact (site workers) with surface soil/waste containing arsenic at concentrations above 200 mg/kg.

2. RAO No. 2 - Prevent direct human contact (site workers) with surface soil/waste containing antimony at concentrations above 310 mg/kg.

3. RAO No. 3 - Prevent direct human contact (site workers) with surface soil/waste containing lead at concentrations above 1,754 mg/kg.

4. RAO No. 4 - Prevent leaching and migration of arsenic from surface/subsurface soils/waste into groundwater and surface water resulting in arsenic concentrations exceeding 50 • g/L.

5. RAO No. 5 - Prevent leaching and migration of antimony from surface/subsurface soils/waste into groundwater and surface water resulting in antimony concentrations exceeding 6 • g/L.

6. RAO No. 6 - Prevent leaching and migration of lead from surface/subsurface soils/waste into groundwater and surface water resulting in lead concentrations exceeding 5 • g/L

7. RAO No. 7 - Prevent the migration of contaminated soil/waste into the Leon River through surface runoff and erosion.

No COCs were identified for surface water because the contaminants detected were within the EPA range of acceptable human risks. Therefore, RAOs and PRGs have not been developed.

Sediment and Biota RAOs and PRGs
No COCs were identified for sediment because a direct pathway for human health exposure is not present. However, risk estimates indicate a potential human health risk through consumption of fish from the Leon River. Potential risks through ingesting fish from Nolan Creek are associated with the background concentrations, not site related impacts. Evaluation of the Leon River surface

water and sediment data indicate that elevated antimony in the fish can be attributed to elevated antimony concentrations in sediments along the Leon River bank adjacent to the Site, and due to the ground water seeps.

Therefore, the following RAO was developed to address human health risks posed by sediment through ingestion of fish:

8. RAO No. 8 – Remove sediment containing COCs at concentrations exceeding the sediment PRGs and prevent the transport of waste and contaminated material into the Leon River to an extent that the ASWQS are not exceeded. Sediment PRGs were to be developed during the Remedial Design(RD) phase. However bioassay during the RD showed that the sediments (site wastes washed into the Leon River) are not toxic to biota thus no PRGs are needed. To be protective EPA will however remove all visible sediments in the Leon river adjacent to the Site.

SUMMARY OF REMEDIAL ALTERNATIVES

Remedial alternatives were developed separately for the Geer/Cemetery Property, North Property, and Central/OU 2 Area, to allow for a wider range of alternatives and greater flexibility when selecting the Selected alternatives.

Provisions of the NCP require that each alternative developed be evaluated against the nine criteria listed in 40 CFR 300.430(e)(9). These criteria were published to provide grounds for comparison of the relative performance of the alternatives and to identify their advantages and disadvantages. The criteria include: 1) overall protection of human health and the environment; 2) compliance with applicable, relevant and appropriate requirements; 3) long-term effectiveness and permanence; 4) reduction of toxicity, mobility, and volume (TMV) through treatment; 5) short-term effectiveness; 6) implementability; 7) cost; 8) community acceptance; and 9) state agency acceptance. The first two criteria are minimum, or "threshold" criteria that must be met by all alternatives. The next five are considered "balancing" criteria and are the primary criteria upon which the detailed analysis is based. The last two are considered "modifying" criteria and are deferred until the public comment process is complete. The detailed evaluation of alternatives for the three main areas stated above were evaluated against the nine criteria in the Interim ROD (*Interim Record of Decisions, Rockwool Superfund Site, September 2003).* The Final ROD has the same Selected and Secondary alternative as the Interim ROD except EPA has switched the Selected and the Secondary alternative. EPA believes that the Selected Alternative (recycling/beneficial reuse) will not be cost effective and will create short term risks associated with large scale transportation e.g. accident ,spillage, and blowing of contaminated dust from trucks. This fact was discovered after completing the Remedial Design (RD) for the Interim ROD. The Secondary Alternative (onsite containment in a multilayered industrial landfill) from the Interim ROD was found to be cost effective and provided the same level of protectiveness for human health and the environment. Thus the onsite containment was chosen as the Selected Alternative. The Remedial Design for the Interim ROD considered only the Selected and Secondary Alternative for detailed cost evaluation.

The costs listed in Table 4 are from the RD process for the Interim ROD and include all engineering, construction, and O&M for the life of the project. As noted earlier no additional remedial measures are needed to address the ecological risks. As stated in the EPA guidance (RD/RA Action Handbook, 1995), these estimated costs are expected to provide an accuracy of plus 15 percent to minus 5 percent. The annual O&M and periodic costs below are expressed in terms of present value. The capital costs are not present value due to the short-term nature of the work.

SELECTED REMEDIAL ALTERNATIVE

The selected remedial alternatives presented here are the same as those presented in the Interim ROD except that EPA has switched the Selected and the Secondary Alternative, as EPA believes the Selected Alternative presented in the Interim ROD (beneficial reuse) will not be cost effective. The Selected Alternative now allows for construction of an onsite containment cell for disposal of the waste as opposed to trucking the waste offsite for beneficial reuse. This cell would provide the same level of protectiveness for human health and the environment as the recycling and beneficial

reuse option. However the onsite containment remedy is more cost effective (see Table 4). The remedies defined herein are presented according to study areas from the RI/FS and are being proposed by EPA in the Final Record of Decision.

Geer Property and Cemetery Area

***Excavation of PRG Exceedances and Onsite Containment* (GC-3)**

This alternative would include excavation and removal of the PRG exceedances identified at the Geer Property and Cemetery Area and disposal onsite in a containment cell. The onsite containment cell would be constructed at the southeast corner of the Central Property to contain the excavated soil/waste. The containment cell would be designed to have a capacity of approximately 66,100 cubic yards(cy) and would prevent infiltration of water into the cell to prevent migration of COCs out of the cell. The estimated volume of PRG exceedances to be excavated and removed is approximately 1,900 cy. Documentation samples will be collected and tested for antimony, arsenic and lead concentrations during the excavation process.

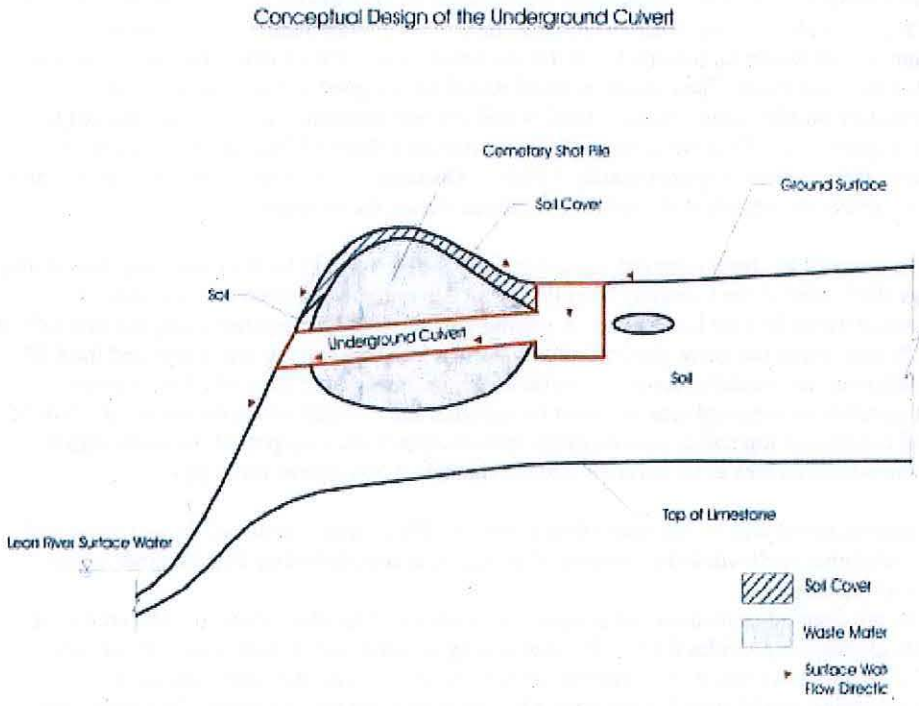
After the material has been removed, an underground culvert would be installed along the existing drainage ditch west of the Cemetery Shot Pile (CSP), to minimize erosion and transport of unexcavated waste into the Leon River. A smaller culvert would be installed along the east side of the CSP (adjacent to the grave sites) to control storm water between the grave sites and the CSP. The smaller culvert would be connected to the larger culvert west of the CSP. The excavation and culvert installation impacted area will then be regraded and covered with a minimum of 1 foot of clay and 6 inches of top soil to prevent direct human contact and transport of the waste into the river. The estimated area to be covered is approximately 4,500 square yards (sy).

Since waste material will be left onsite (that below the PRG), maintenance of the soil cover and onsite containment cell would be required. This will be accomplished by EPA through 5-year reviews of the project.

Based on the detailed evaluation and comparative analysis of the alternatives developed for this area, this alternative provides the best balance among the alternatives with respect to the nine CERCLA evaluation criteria. As compared with other alternatives, the onsite containment alternative option would significantly reduce human health and environmental risks and minimize the future Operations and Maintenance (O&M) efforts by removing the soil and waste from their current locations and placing them in a containment cell located away from the river.

This alternative is designed to achieve the contaminant-specific, location-specific, and action-specific ARARs and is effective and permanent because it would significantly reduce the mobility of the COCs through removal and disposal of the PRG exceedances in an onsite containment cell, and implementation of a soil cover and culverts to stabilize the remaining waste. During the remedial action, short-term health-related risks would be minimized through use of emission control techniques such as dust suppressants and silt fencing. Short-term nuisance noise impacts

Figure 7
Underground Culvert Cross Section
Rockwood Industries, Inc.



and safety-related risks to the community are anticipated to be minimal because the major construction and transportation activities are within the site boundary. The duration of the short-term effectiveness until the Remedial Action Objectives (RAOs) are achieved is a few months.

North Property Area

Excavation of PRG Exceedances and Onsite Containment **(NP-3)**

This alternative would include transferring the waste water in the Evaporation Lagoon to the Brazos River Authority Publicly Owned Treatment Works for treatment; removing the waste pockets and other visible waste materials identified along the Leon River bank and the PRG exceedances identified at the North Shot Pile (NSP) and lagoon areas; disposing of the excavated waste materials in an onsite containment cell to be constructed in the Central Property and covering the remaining waste and construction impacted area with a 1-foot soil cover.

It is estimated that the lagoon contains approximately 800,000 gallons of water. Once drained, culverts will be installed from the lagoon inlet sumps to the top of Leon River bank because the lagoon inlet sumps receive storm water from the former processing area (OU2). The lagoon will then be back filled with the soil generated during construction of the onsite containment cell and/or low level material from the Leon River bank and South Shot Pile excavations. Waste pockets and other visible waste materials along the Leon River bank will be identified and removed (to the extent practical). An interceptor ditch will be installed along the top of the Leon River bank to control storm water and reduce erosion of the river bank. Rip-rap (or equivalent) will be placed on the bank at the excavation points and from the interceptor ditch to the Leon River.

Waste and contaminated soil containing COCs exceeding direct contact PRGs will be excavated at the NSP and the areas around the Evaporation Lagoon up to two feet below ground surface. Documentation samples will be collected and tested for antimony, arsenic and lead concentrations during the removal. The estimated material requiring excavation is approximately 6,100 cy for the NSP and 4,600 cy for the areas adjacent to the lagoon. The excavated material will be disposed of in a onsite containment cell. The area will be regraded after excavation to a slope between 2% to 6%, and a minimum of 1-foot of clay and 6-inches of top soil will be placed over the impacted areas. The soil cover will be seeded with a grass variety capable of providing long-term erosion control. The cover over the NSP and lagoon areas will be approximately 15,800 sy and 13,700 sy in size, respectively. The impacted Leon River bank will also be covered and stabilized.

This alternative will include implementation of Institutional Controls to: prevent future use of the shallow ground water; prevent any disturbance of the clay cap that would negatively effect the function of the cap, excepting temporary utility construction or repair; and provide for the continued effectiveness of the interceptor trench and surface flow controls or their substitutes. Deed restrictions will be placed on the affected property, as appropriate or as allowed by law to protect industrial worker from contacting the Site waste and effected soil that does not meet Site PRGs and prohibit accessing the shallow ground water. In addition the property is zoned for heavy industrial use and industrial zoning will be maintained by the City. The TCEQ will enforce the

Institutional Controls. This alternative will require annual inspection and maintenance of the soil cover, collecting ground water samples semiannually for 5-years from four existing wells (analyzing for antimony, arsenic, and lead); and conducting a site review no less than every five years. The five year review will include an analysis of the efficacy of the ICs.

Based upon the detailed evaluation and comparative analysis of the alternatives developed for this area, this alternative provides the best balance among the alternatives with respect to the nine CERCLA evaluation criteria. It provides reasonable protection of human health and the environment as the soil/waste containing COCs at concentrations exceeding PRGs would be removed and disposed of in an onsite containment cell. The soil cover over the residual waste and the interceptor ditch along the top of the Leon River bank would minimize the transport of the residual waste into the Leon River. As compared with other alternatives, it would significantly reduce human health and environmental risks and minimize the future O&M effort by removing the soil/waste containing COCs exceeding PRGs from their current locations.

This alternative can be designed and implemented to achieve the contaminant-specific, location-specific, and action-specific ARARs. It is an effective and permanent remedy because the waste material posing relatively high risks to human health and the environment will be managed in a way that offers a significant reduction in waste mobility by placement in the onsite containment cell and use of the soil cover. The short-term effectiveness is measured with respect to the time until the RAOs are achieved. It would take a only few months for implementation.

Central Property and OU2 Area

Excavation of Soil/Waste and Onsite Containment (CP-4)

This alternative would include excavation and removal of the soil/waste containing COCs exceeding direct contact PRGs and all above ground waste at the South Shot Pile (SSP). Confirmation samples would be collected to confirm that the direct contact PRG exceedances have been completely removed using an exposure point concentration averaged basis. The estimated material requiring excavation is approximately 51,900 cy. The excavated material will be disposed of in an onsite containment cell.

In addition to the above remedial activities, this alternative would also include collecting ground water samples semiannually for five years from eight existing wells and analyzing for antimony, arsenic and lead, as well as conducting a site review no less than every five years for 30 years to ensure that the remedy remains protective of human health and the environment.

Based upon the detailed evaluation and comparative analysis of the alternatives developed for this area, it provides the best balance among the alternatives with respect to the nine CERCLA evaluation criteria providing reasonable protection of human health and the environment, as the soil/waste containing COCs at concentrations exceeding PRGs and remaining waste would be removed and managed.

This alternative will include implementation of Institutional Controls as previously described to prevent future use of the shallow ground water, to protect the integrity of the containment cell and its cap and to provide for the protection of, and access to, all monitor wells.

This alternative would be designed and implemented to achieve the contaminant-specific, location-specific, and action-specific ARARs. It would be effective and permanent because the waste pile and contaminated surface soil will be removed to the onsite cell. During the remedial action, short-term, health-related risks would be minimized through emission control techniques. Short-term nuisance noise impacts and safety-related risks to the community are anticipated to be minimal because the major construction and transportation activities are within the site boundary. The short-term effectiveness, with respect to the time until the RAOs are achieved, is several months.

SECONDARY REMEDIAL ALTERNATIVE

EPA switched the Selected and Secondary remedial alternatives since publishing the Interim ROD. The Selected Alternative now includes disposing of the excavated waste in an onsite lined and covered containment cell. This switch was made to lessen the cost and improve the chances of the project being done successfully because there are a very limited number of recycle/disposal facilities that can handle the waste. For the Final ROD, both remedial options will have a design completed and both designs will be offered for bid to construction firms for the purpose of competitive pricing. The response with the best value will be selected. Value in this case will be judged by offering an increase in human health and environmental protectiveness, for a reasonable price.

The waste materials identified at the Site includes shot, slag, brick, and contaminated soils. Since the wastes contain large amount of aggregate, by properly sizing the aggregate and adding appropriate amount of stabilization agents and other additives into the treatment process, the wastes can be treated/processed to meet the road base material specifications, for beneficial reuse as base material in road construction projects. This secondary remedial alternative includes excavating wastes/contaminated soil containing antimony, arsenic, and lead exceeding the PRGs, processing and stabilizing the excavated wastes/contaminated soils to meet the applicable engineering and environmental specifications, and recycling the wastes/contaminated soils for beneficial reuse as a road base material. Depending on the specific needs by the different type of road construction projects, additional aggregate from other offsite sources may be required to meet the engineering specifications. The non-hazardous wastes to be recycled and applied in the road construction projects have to meet the standard engineering criteria and certain environmental criteria established by EPA, TxDOT, and TCEQ.

The recycling remedy became the secondary remedy by virtue of it not being cost effective. Also the degree of protection of human health and the environment of the recycling remedy was approximately the same as that of the onsite containment remedy.

MEETING REMEDIAL ACTION OBJECTIVES

Eight RAOs were established as part of the Interim ROD. RAOs are goals for remedial alternatives that specify the specific chemical wastes, types of receptors exposed to those wastes (groups of humans or wildlife), exposure routes, and cleanup levels that must be met by the

selected remedial alternatives. The RAOs are listed earlier in this document. The following section describes how each remedy meets the RAOs

Selected Remedial Alternative
The RAOs No. 1 through No. 6 will be met by removing the Site related waste and contaminated soil exceeding the PRGs from their current locations and placing these material into an onsite containment cell, which is at a location away from the surface water. The clay soil and geotechnical membrane used to construct the containment cell will prevent the direct contact with Site related wastes by humans and wildlife and minimize the leaching of COCs into the ground water.

The RAOs No. 7 and No. 8 will be met by implementing underground culverts along the west side of the CSP and between the Evaporation Lagoon inlet sump and the Leon River bank; covering the remaining waste at CSP and NSP with a minimum one foot clay soil and 6-inch top soil; installing an interceptor ditch along the top of Leon River bank to control storm water and reduce degradation of Leon River bank; and removing residual waste at SSP and visual waste along the Leon River bank above and below the water line, and placing the wastes into the onsite containment cell. Surface water runoff and erosion of the residual waste/contaminated soil will be minimized upon implementing the remedy.

Secondary Remedial Alternative
The RAOs No. 1 through No. 6 will be met by removing the Site related waste and contaminated soil exceeding the PRGs, processing the waste material and soils to meet the TXDOT Item 247 specification at an onsite or offsite treatment facility, and beneficially reusing the material into offsite road construction projects. The human and ecological exposure pathways to the Site related waste materials and soils are eliminated because the contaminated materials are completely removed from the site and processed into a useful construction material.

The RAOs No. 7 and No. 8 will be met by implementing underground culverts along the west side of the CSP and between the Evaporation Lagoon inlet sump and the Leon River bank; covering the remaining waste at CSP and NSP with a minimum one foot clay soil and 6-inch top soil; installing an interceptor ditch along the top of Leon River bank to control storm water and reduce degradation of Leon River bank; and removing residual waste at SSP and visual waste along the Leon River bank above and below the water line, processing the waste material to meet the TXDOT Item 247 specification at an onsite or offsite treatment facility, and beneficially reusing the material with offsite road construction projects. Surface water runoff and erosion of the residual waste/contaminated soil will be minimized upon implementing the remedy.

COMPLIANCE WITH APPLICABLE OR RELEVANT APPROPRIATE REQUIREMENTS (ARARs)

The remedies in this Final ROD are unchanged from the Interim ROD. This resulted from the bioassay which showed that no additional remedial measures are required to address the ecological risks. Thus the Applicable and Relevant Appropriate Regulations (ARARs) remain the same as

in the Interim ROD. However the ARARs are briefly restated below for the benefit of interested reviewers.

The contaminant specific ARARs associated with the Selected and secondary remedial alternatives are the Texas Surface Water Quality Standards (TSWQSs) (30 TAC 307), the Federal Water Quality Criteria (FWQC) (40 CFR Part 131), and the Texas Risk Reduction Standards (RRS) (30 TAC 335 Subchapter S). The TSWQSs establish limits for constituents for the protection of surface water quality in Texas and the FWQC apply to water classified as a fisheries resource. The RRS establish the basis for development of the soil PRGs. The PRGs evaluate the extent of soil remediation necessary, and establish the residual contaminant levels allowable after treatment. Both the Selected and secondary remedial alternatives are designed to achieve the contaminant specific ARARs.

In addition to the above contaminant specific ARARs, the key location and action specific ARARs associated with the Selected and secondary remedial alternatives also include the Texas Pollutant Discharge Elimination System (TPDES); Construction Stormwater Permit (30 TAC 205); Standards for Waste Piles and Landfills (40 CFR Part 264 Subparts L and N); Texas Industrial Solid Waste and Municipal Solid Waste Regulations (30 TAC 335); and Control of Air Pollution from Visible Emissions and Particulate Matter (30 TAC 111). The TPDES permit is addressed relative to stormwater discharges associated with industrial activity. It requires the development and implementation of a stormwater pollution prevention plan or a stormwater best management plan during the facility operation or site remediation. The Standards for Waste Piles and Landfills Subparts L sets design and operating requirements for the storage or treatment of wastes in piles. If the waste piles are closed with wastes left in place, Subpart N requirements must be met. The Texas Industrial Solid Waste and Municipal Solid Waste Regulations set forth guidelines for generators to determine if a solid waste is a hazardous waste and require adherence to storage, treatment, and disposal requirements. The Control of Air Pollution from Visible Emissions and Particulate Matter ARAR requires that all reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including use of water or chemicals for control of dust in the demolition of existing structures, construction operations, clearing of land, and on dirt roads or stockpiles. The Selected and secondary remedial alternatives can be designed and implemented to achieve the key location and action-specific ARARs.

REMEDIAL ALTERNATIVE COST COMPARISONS

Presented below in Table 4 is a breakdown of the costs for the remedial alternatives selected for the Site. The costs presented in Table 4 are based on the 90% Remedial Design(RD) and are thus more accurate than the costs from the FS presented in the Interim ROD. The table presents the differences in both the onsite disposal and offsite recycling options as well as presenting the overall costs as a function of the capital costs, operations and maintenance costs and periodic costs. In summary, EPA believes the alternatives presented above that include onsite containment cell disposal will be significantly less expensive ($3.2 million less) than the beneficial reuse option. At the same time this remedy (on-site containment) will provide about the same level of risk reduction as the recycle/reuse remedy. See Table 4 below for the detailed costs.

Table 4
Rockwool Industries, Inc.
Remedial Action Cost Estimate Breakdown

	Cemetery-Geer Property	North Property	OU2 & Central Property	Total Cost
Selected Remedial Alternative *Excavate & Onsite Containment Cell*				
Capital	$187,000	$850,000	$3,822,000	**$4,859,000**
Operation & Maintenance (NPV)	$30,000	64,000	$80,000	$174,000
Periodic (NPV)	$22,000	43,000	$43,000	$108,000
Total	$239,000	$957,000	$3,945,000	**$5,141,000**
Secondary Remedial Alternative *Excavate & Transport to Recycle Facility*				
Capital	$267,000	$1,515,000	$6,386,000	**$8,168,000**
Operation & Maintenance (NPV)	$30,000	64,000	$33,000	$127,000
Periodic (NPV)	$22,000	43,000	$43,000	$108,000
Total	$319,000	$1,588,000	$6,461,000	**$8,368,000**

Notes:
NPV is Net Present Value of annual costs for next 30-years.

STATUTORY DETERMINATION

The selected remedy for the site will excavate soil in which the Antimony concentration exceed PRGs to prevent direct human contact (surface soil/waste) . The excavated material will be consolidated in an on-site multilayer industrial landfill . The remedy will also dredge wastes which have washed into the Leon River from the river's south bank (along the Site). This is likely the cause of the higher than background Antimony concentration in fish tissue. The dredged material and the sediments from Leon River will be consolidated in an on-site industrial landfill (containment cell). Waste in the North Property and Geer-Cemetery Area that is below the PRGs, will be covered with one foot of clay to prevent rainfall infiltration and further leaching of contaminants into ground water, which unloads into the Leon River through seeps. Institutional Control (IC) will be implemented to preserve the integrity of the cap. Deed restrictions will be placed on the property as appropriate or as allowed by law to maintain the integrity of the cap. In addition the industrial zoning will be maintained by the City. In the Central Property area soil/wastes containing COCs exceeding direct contact PRG exceedances will be excavated and consolidated in the onsite containment cell (industrial landfill) along with wastes from other parts of the Site. Wastes in the Central Property area are a thin veneer over the uncontaminated soil and do not require a cap. An Institutional Control will be implementd for the Central Property and the containment cell to prevent future use of the shallow ground water, to protect the integrity of the containment cell and its cap and to provide for the protection of,and access to,all monitor wells.

Thus the remedy will remove the source of contamination, as well as prevent wastes from washing into the river in the future. The primary focus in the Final ROD is protection of human health and the environment. Concurrent with the Remedial Design (RD) for the Interim ROD a bioassay of the Leon River sediments with the highest values of chemicals of concern (COCs) determined that the sediments are not toxic to biota.. Thus no additional remedial measures are required to address the ecological concerns. However the sediments along the Site will be excavated from the Leon River as planned in the Interim ROD. At this point there is no direct evidence that higher than background Antimony in fish tissue is due to the sediments in the Leon River. However proactively removing the sediments and preventing any future discharge into the Leon River will provide an opportunity to check if fish tissue Antimony values decrease during the Five Year Review. If there is no decrease in the fish tissue Antimony then the source of the antimony must be something other than the Site wastes.

The selected remedy and alternate remedy are protective of human health and the environment in the short term; comply with those Federal and State requirements that are applicable or relevant and appropriate for this limited-scope action; and are cost effective. Although the final action is not intended to address the statutory mandate for permanence and treatment to the maximum extent practicable, the selected action provides the same level of protection at a lower cost than the recycling remedy which satisfies the preference for treatment

Because the selected remedy and the alternate (contingent) remedy provide for cleanup suitable for industrial use but will result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be

conducted within five years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

RESPONSIVENESS SUMMARY

1. Q: We have an industry interested in using the structures on the 14 acre site which, as you recall, was deeded to the City as a result of a tax (Sheriff's) sale. Is an industrial use allowed before clean up, since EPA will not be involved in those locations: the office building, the concrete walled bins, and the asphalt parking lot?

1. A: As provided under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Section 104(e), 42 U.S.C. § 9604(e), EPA is authorized to access property when it has a reasonable basis to believe there may be a release or threat of release of hazardous substances or pollutants or contaminants on the property. The Remedial Investigation/Feasibility Study demonstrated there has been a release of hazardous substances at the RWI Superfund Site. CERCLA Section 104(e) also allows EPA to access property where entry is needed to effectuate a response action. Here, EPA is prepared to effectuate a response action as identified in the Proposed Plan and Record of Decision for the Site.

To the extent an industrial use of the property occurs before the cleanup or during the cleanup of the RWI Superfund Site, it shall not interfere or otherwise limit any EPA cleanup activity conducted at the Site. Pursuant to CERCLA 104(e), EPA may issue an order directing compliance with an EPA request to neither interfere, nor engage in activities which limit EPA's ability to conduct response actions at a Site. Such orders are enforceable, and may result in the imposition of a penalty for noncompliance.

2. By what authority can EPA create a containment cell on a privately owned parcel of land, the 80.4 acre tract for example? Is notification required? Concurrence of the property owner needed?

Pursuant to CERCLA Section 121(a), 42 U.S.C. § 9621(a), and the National Contingency Plan (NCP), EPA is authorized to conduct remedial actions at sites where there has been a release or threat of a release of hazardous substances, pollutants, or contaminants which constitute a threat to human health or the environment. The NCP directs EPA to produce a Record of Decision documenting all the facts, analyses of facts, and site specific policy determinations considered in the course of selecting a remedial action. In addition, EPA is required to utilize nine remedy selection criteria consistent with 40 C.F.R. § 300.430(f).

Pursuant to CERCLA Section 117, 42 U.S.C. § 9617, and the NCP, before EPA adopts a plan for remedial action, it must allow public participation in the remedy selection process. The public participation process affords public and private parties with notice and an opportunity to provide written and oral comments, and to review the contents of the administrative record file. The administrative record file includes information which forms the basis for the selection of the response action consistent with 40 C.F.R. § 300.810. While the public participation process and

nine remedy selection criteria certainly consider private parties' input, there is no private party concurrence right in the remedy selection process.

3. If we acquire the 80.4 acre tract by eminent domain, by condemnation, does any liability accrue to the City of Belton for the clean up costs? How would this work, and is it different from acquisition by a tax (Sheriffs's) sale?

To protect certain parties from liability, CERCLA Sections 101(20)(D), 107(b)(3), and 9601(35)(A) and (D), 42 U.S.C. §§ 9601 and 9607, contains both liability exemptions and affirmative defenses to liability. As such, if the City acquires property through the exercise of eminent domain by condemnation, it will have a third party-party defense to CERCLA owner/operator liability under CERCLA Sections 107(b)(3) and 101(35)(A). It is EPA's policy to treat such acquisitions as involuntary, and thus, the third-party defense to CERCLA owner/operator liability attaches to public entities. Note however, the City would not have the above-mentioned affirmative defense if it has caused or contributed to the release or threatened release of contamination from the RWI Superfund Site. Thus, if the City acquires Site property, it should ensure that it does not cause or contribute to the Site's contamination after such acquisition.

It is EPA's policy to treat acquisitions by tax sale or foreclosure as involuntary as well. CERCLA Section 101(20)(D), specifically exempts from the definition owner or operator, any unit of state or local government which acquired ownership or control of a facility involuntarily through tax delinquency. Therefore, the City would be exempt from CERCLA owner/operator liability, and would also have the affirmative defense under CERCLA Section 107(b)(3). The City would not be covered by neither the liability exemption, nor the third party defense if it has caused or contributed to the release or threatened release of contamination from the RWI Superfund Site. Accordingly, if the City acquires Site property, it should ensure that it does not cause or contribute to the Site's contamination after such acquisition.

4. Will the clean up liability accrue to Nev-Tex (current listed owner) after EPA cleans up the site with no change in ownership? If the City acquires it? If Nev-Tex tries to sell it? Will a lien in the amount of clean up costs be placed on the property for any future private purchaser?

Under CERCLA Section 107(a), Nev-Tex is liable as a current owner of the RWI Superfund Site. The response provided in item three (3) provides a response to the City's acquisition of the property within the RWI Superfund Site. Private party liability will attach to a private party's acquisition of Site unless it qualifies as a bona fide prospective purchaser under CERCLA Sections 101(40) and 107(r), or an innocent landowner pursuant to CERCLA Sections 107(b)(3) and 101(35). Although EPA has not exercised its enforcement discretion to record a lien on the Site property to date, the Agency has the authority to record a lien under CERCLA Sections 107(l) and (r). The Agency may or may not perfect a lien on the Site property depending on the circumstances. Some of those circumstances include but are not limited to whether substantial un-reimbursed cleanup costs are unlikely to be recovered from liable parties, and whether an entity

who acquires or sells the property will reap a significant windfall directly from EPA's expenditure of Superfund money.

5. Q: Is clay cap the only on-site option for the shot waste? Could the waste be spread out, covered with dirt, with grass allowed to grow over it, with the leaching at river bank eliminated?

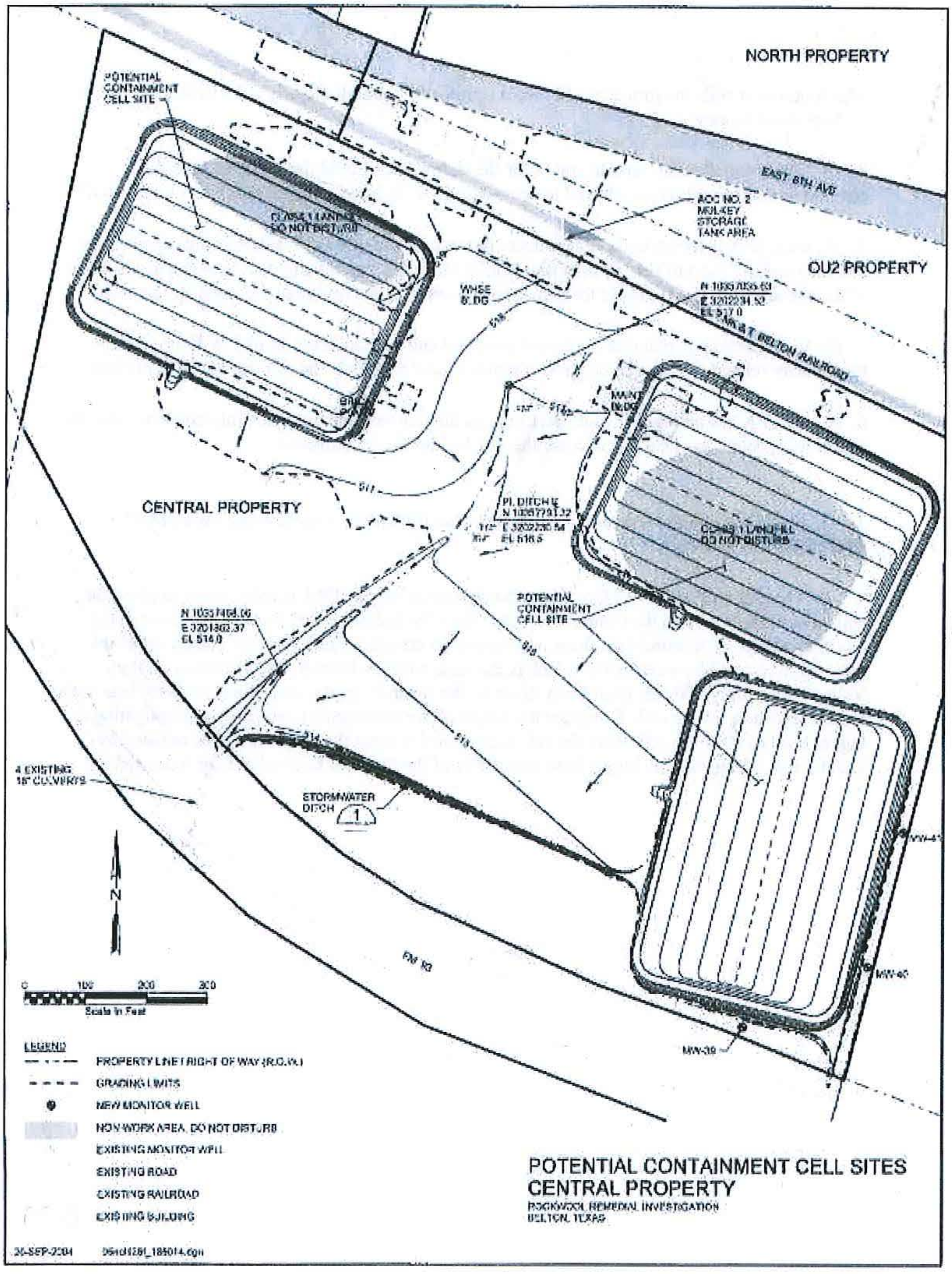
5. A: what EPA is trying to do is to collect all contaminants and consolidate in the contaminant cell thus making most of the site area usable after clean up. By creating the containment cell 95 % of the site area will be available for industrial use which is the designated zoning for the area.

6. Q: What cleanup is planned for the rail road bed and railroad track itself ? Will the track be temporarily relocated, the road bed gravel removed and replaced, and rail ties put back in place ?

6. A: No EPA has no plans to pull tracks out as the railroad has minimal contamination. Also the gravel will protect workers from contacting any low level contamination.

7. Q: How high will the containment cell be ? Can EPA place it as far away from FM 93 as possible?

7. A: The cell will be 7 to 10 foot tall as the maximum height. EPA is redesigning to place the cell away from FM 93 in the Central Property. The City had requested if it can be placed in the North Property. EPA found that Texas regulations do not allow landfills to be placed closer than 500 feet from a public water body which is the case with the Leon River. Moreover Taylors Valley road is only 600 feet from Leon River at the North Property, thus North Property was not a feasible location for the cell. To reduce the height of the containment cell EPA is investigating a bigger base area for the cell. With the cell occupying 5-6 acres the height could be reduced by about 5 feet. Even with the bigger base area 95 % of the Site will be available for industrial use.


NORTH PROPERTY
POTENTIAL CONTAINMENT CELL SITE
EAST 6TH AVE
AOC NO. 2 MULKEY STORAGE TANK AREA
OU2 PROPERTY
WHSE BLDG
CENTRAL PROPERTY
POTENTIAL CONTAINMENT CELL SITE
STORMWATER DITCH
4 EXISTING 18" CULVERTS
FM 93
MW-39
MW-40
Scale in Feet
LEGEND
PROPERTY LINE / RIGHT OF WAY (R.O.W.)
GRADING LIMITS
NEW MONITOR WELL
NON-WORK AREA, DO NOT DISTURB
EXISTING MONITOR WELL
EXISTING ROAD
EXISTING RAILROAD
EXISTING BUILDING
POTENTIAL CONTAINMENT CELL SITES
CENTRAL PROPERTY
ROCKWOOL REMEDIAL INVESTIGATION
BELTON, TEXAS

EXPLANATION OF SIGNIFICANT DIFFERENCES

ROCKWOOL INDUSTRIES, INC. SUPERFUND SITE
EPA ID TXD06637964

Belton, Bell County, Texas

United States
Environmental Protection Agency
Region 6
Superfund Division

August 2005

Exhibit "B"

1. INTRODUCTION

Site Name: Rockwool Industries, Inc., Superfund Site

Site Location: City of Belton, Bell County, Texas

Lead Agency: U.S. Environmental Protection Agency, Region 6 ("EPA" or "the Agency")

Support Agency: Texas Commission on Environmental Quality ("TCEQ")

A Record of Decision ("ROD") for the Rockwool Industries, Inc., Superfund Site ("Site") was issued on September 30, 2004. This Explanation of Significant Differences (ESD) is issued in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Section 300.435(c)(2)(i). This ESD significantly changes, but does not fundamentally alter, the remedy selected in the ROD with respect to scope, performance, or cost. This document will be incorporated into the Administrative Record maintained for this Site, as required by NCP Section 300.825 (a)(2). The Director of the Superfund Division has been delegated the authority to sign this Explanation of Significant Differences.

Description of the Selected Change to the Remedy

This ESD modifies the previously selected remedy in the 2004 ROD for contaminated soil in the Central Property and the OU2 Area of the Site. The remedy selected in the ROD for other areas of the Site remain unchanged.

In the ROD, the EPA required that waste material and contaminated soil located in the Central Property and the OU2 Area of the Site, which include the South Shot Pile (SSP), would be excavated and consolidated in the on-site containment cell. All waste and soil contaminated with arsenic, antimony, and lead above the direct human contact preliminary remediation goals (PRGs) was to be removed from these areas. The ROD estimated that approximately 51,900 cubic yards would require excavation from these areas. The selected remedy also included the placement of institutional controls to protect the integrity of the containment cell and its cap, to prevent future use of the shallow ground water, and to provide for protection and access to ground water monitoring wells.

For areas of the Site outside of the Central Property/OU2 Area, the selected remedy consisted of a partial excavation and consolidation in the on-site containment cell. The remaining contaminated soil underlaying the removed material was to be covered by a minimum of 1-foot of clay and 6-inches of top soil to prevent direct human contact and transport of the waste material into the Leon River.

Both of the above soil remediation approaches (i.e., removal of soil with contamination above PRGs, and partial removal and capping) satisfy the Remedial Action Objectives (RAOs) stated in the ROD for the Site. These RAOs include, in part, the prevention of direct human contact with the contaminated surface soil and waste, and the prevention of leaching of contaminants into surface water and ground water.

The ROD estimated that the total waste volume to be placed in the containment cell was approximately 66,000 cubic yards. However, during the performance of the remedial action, a significantly larger volume of waste and contaminated soil was encountered in the Central Property and the OU2 Area. Since the containment cell does not have the capacity to hold this additional material, it is necessary to revise the remediation approach for the this area. Instead of removing all contaminated materials from the Central Property/OU2 Area, a partial removal of the waste material will be completed and the remaining contamination will be covered with a minimum of 1-foot of clay and 6-inches of top soil as proposed for the other soil contamination areas at the Site. The modified remedy will also include institutional controls and 5-year reviews to ensure the long-term protectiveness of the remedy. This remedy change will provide the Central Property/OU2 Area with the same remedy as is being used for the rest of the Site.

II. SUMMARY OF SITE HISTORY AND CONTAMINATION

The currently inactive Rockwool Site includes 100 acres located at 1741 Taylors Valley Road about one mile east of downtown Belton, Texas. The property is zoned for heavy industrial use. The Site consists of three main areas. The area north of Taylors Valley Road includes the North Property, Geer Property, and Cemetery Area. The area south of Taylors Valley Road, which contains the Rockwool production building, is known as the Central Property and extends south to FM 93. The third area south of FM 93, consisting of a 40-acre parcel, is the non-process area.

The Rockwool Site manufactured mineral wool insulation from the mid-1950s until February 1987. The mineral wool was manufactured in blast furnaces using slag from copper and antimony smelting, waste from limestone mining, as well as coke and basalt. The raw materials were melted in a coke-fired furnace and then extruded by blowing air over spinning drums to form fibers. The residue left in the furnace from the heating of the slag was a metal material called "shot". This "spent iron shot" was the main waste type generated as part of the Rockwool production process. This material was stockpiled in the North Shot Pile (NSP), the South Shot Pile (SSP), and the Cemetery Shot Pile (CSP).

The northern edge of the NSP is located on the southern bank of the Leon River. The NSP began receiving wastes in the mid-1950s. By 1982, it covered more than three acres. The operator reduced the pile to two acres by hauling wastes to an off-site disposal area. In 1983, a soil cover was placed over the pile to reduce dust and erosion. A french drain system was

installed along the northern edge of the pile to intercept and collect rain water that was seeping through the pile and flowing into the river.

The SSP is located in the Central Property. Some of the waste in the SSP was removed in 1984 and was recycled in the plant as an ingredient to make bricks. The shot material was mixed with cement and "baghouse dust", which is a hazardous waste. The process produced bricks that were used as feed material and recycled back into the furnaces.

The CSP is located on the western edge of the cemetery north of Taylors Valley Road. The pile is a primary source of waste material discharged to the Leon River. This area received large amounts of process waste over the years and extends as far west as the eastern edge of the Geer Construction Company Property.

In March 2000, Jones- Bell, L.L.C., purchased a 2.9-acre triangular lot containing the main Site production building and warehouses. EPA defined this triangular lot as Operating Unit 2 (OU2). The rest of the Site, including the Northern Area, the Geer-Cemetery Area, and the Central Property is known as Operating Unit 1 (OU1).

Most of the Site is currently abandoned, except for the production and warehouse buildings in OU2, which are used for light industrial manufacturing. The City of Bolton plans to restore the Site into an industrial area.

The primary surface water features in the vicinity of the Rockwool Site are the Leon River and Nolan Creek. The designated water uses of the Leon River are contact recreation, high-quality aquatic habitat, and public water supply. Arsenic and antimony contaminated ground water is currently seeping into the Leon River and Nolan Creek at concentrations greater than surface water quality standards.

EPA completed its preliminary assessment of the Site in December 1995, and a Site Screening Inspection in 1996. The Site was proposed to the National Priorities List (NPL) on March 6, 1998, and was placed on the list on September 29, 1998. EPA began the remedial investigation (RI) and feasibility studies (FS) in 1998 as a fund-lead study since no potential responsible parties could be located for the Site. The RI was essentially completed in August 2001, however, a second round of fish sampling was done in 2002.

The Site contains shot material, waste and contaminated soil resulting from previous industrial processes. The shot material is scattered over the surface soil. In its current condition, arsenic and lead in the waste (shot, slag, and brick) have low leachability. The leachability will significantly increase, however, if the waste is broken into fine particles and if the pH of water contacting the waste is either highly acidic or highly alkaline. Analysis of samples collected from the major shot piles (CSP, NSP, SSP) show that antimony has higher leachability than arsenic or lead. The EPA's remedial investigation has shown that metals from the shot piles have leached into shallow ground water over the years. Additionally, shot material has visibly

eroded into the Leon River, and the metals associated with the shot (primarily antimony) were detected in fish tissue.

The uppermost water-bearing zone at the Site occurs at depths between 20 and 35 feet. The saturated thickness of the water bearing zone is typically less than 3 feet, and it is not uncommon for many of the monitor wells to go dry while being sampled. Consequently, the water-bearing interval is best described as a perched zone. Ground water north of Taylors Valley Road generally flows north-northeast and discharges through seeps into the Leon River. Analysis of the fish samples collected from the Leon River at locations adjacent to and down gradient of the Site revealed the presence of many of the same metals detected in on-site soil and ground water. Antimony was detected in fish samples at a high frequency of detection (80%) at concentrations significantly higher than background.

The Proposed Plan to address Site risks was released for public review and comment on August 20, 2004, and a public meeting was held at Belton City Hall on August 31, 2004. EPA issued the ROD on September 30, 2004, to select the remedial actions for the Site, which are described below.

III. SELECTED REMEDY

The PRGs for waste and contaminated soil at the Site as selected in the ROD are 200 mg/kg for arsenic, 310 mg/kg for antimony, and 1,754 mg/kg for lead.

The selected remedy for the Geer Property and Cemetery Area includes excavation and removal of the surface layer of soil exceeding the PRGs and consolidation in the on-site containment cell. The on-site containment cell would be constructed at the southeast corner of the Central Property to contain the excavated soil and waste. The containment cell would be designed to have a capacity of approximately 66,100 cubic yards(cy) and would prevent infiltration of water into the cell to prevent migration of contaminants out of the cell.

The estimated soil volume with PRG exceedences to be excavated and removed from this area is approximately 1,900 cy. Following excavation to the design depth, samples from the excavated areas will be collected and tested for antimony, arsenic and lead concentrations to document the soil contamination levels remaining under the cover. The impacted area will then be covered with a minimum of 1-foot of clay and 6-inches of top soil to prevent direct human contact and transport of the waste into the river. The estimated area to be covered is approximately 4,500 square yards (sy).

The selected remedy for the North Property Area includes removing waste and soil with PRG exceedances in the surface soil of the North Shot Pile and evaporation lagoon areas. In addition, waste pockets and other visible waste materials identified along the Leon River bank would be removed to the extent practical. All excavated material would be consolidated in the on-site containment cell. Following excavation, documentation samples will be collected and

tested for antimony, arsenic and lead concentrations. The estimated material requiring excavation is approximately 6,100 cy for the NSP and 4,600 cy for the areas adjacent to the lagoon. The area will be regraded after excavation to a slope between 2% to 6%, and a minimum cover of 1-foot of clay and 6-inches of top soil will be placed over the remaining contaminated areas. The cover over the NSP and lagoon areas will be approximately 15,800 sy and 13,700 sy in size, respectively. The impacted Leon River bank will also be stabilized by placement of rip-rap or equivalent.

The selected remedy for the Central property and OU2 Area includes excavation and removal of all soil and waste material exceeding the direct contact PRGs, and all above ground waste at the South Shot Pile (SSP). Confirmation samples would be collected to confirm that the direct contact PRG exceedances have been removed using an exposure point concentration averaged basis. In the ROD, it was estimated that the material requiring excavation in this area is approximately 51,900 cy. The excavated material will be consolidated in an on-site containment cell. The remedy selected in the ROD for this area did not include a clay/soil cover since all waste and contamination that exceeded the PRGs was to be removed. In addition to the above remedial activities, the selected Site remedy also includes the following:

- All Site areas with the clay/top soil cover will be seeded with grass to provide long-term erosion control.
- Implementation of institutional controls to prevent any disturbance of the clay caps that would negatively effect the function of the cap, to protect the integrity of the containment cell and its cap, to prevent future use of the shallow ground water, and to provide for the protection of, and access to, all monitor wells. The property is zoned for heavy industrial use and industrial zoning will be maintained by the City.
- Collection of ground water samples from ground water monitoring wells semi-annually for five years and analyzing for antimony, arsenic and lead.
- Maintenance of the soil covers and on-site containment cell.
- Site reviews will be conducted no less than every five years to ensure that the remedy remains protective of human health and the environment.

IV. DESCRIPTION OF THE SIGNIFICANT DIFFERENCES AND THE BASIS FOR THOSE DIFFERENCES

This ESD modifies the remedy selected in the 2004 ROD for the Central Property and OU2 Area. The modified remedy will continue to meet the remedial action goals that were specified for the Site. The remedy for the these areas is modified from removal of contaminated soil and consolidation in the on-site containment cell to a partial removal and capping the remaining contaminated waste and soil in the Central Property/OU2 Area. The cover for the

remaining contaminated soil will consist of 1-foot of clay and 6-inches of top soil as was done for other Site areas. This change will result in implementing the same remedy in the Central Property/OU2 Area as was done for the other soil contamination areas of the Site.

As a result of the Site investigation and remedial design activities, it was determined that approximately 69,000 cubic yards of waste material would be placed in the on-site containment cell. However, during excavation activities it was discovered that the actual waste volume is significantly larger than the anticipated amount, and the containment cell did not have sufficient capacity to hold this material. The additional waste volume is approximately 33,000 cy. The total waste volume, about 102,000 cy, is about 48% larger than the original waste volume that was to be consolidated in the containment cell.

To implement the remedy selected in the ROD for this additional waste (i.e., consolidation in the on-site containment cell), the existing containment cell would require expansion because its waste capacity is insufficient. Expansion of the containment cell would add a significant additional cost to the project. Since partial removal and covering the remaining contaminated material in place with the clay/soil cover will achieve the RAOs, it is not necessary to expand the containment cell in order to achieve protectiveness. In addition, covering the contaminated soil with the clay/soil cover will cost significantly less than expanding the containment cell. The modified remedy for the Central Property/OU2 Area is appropriate because it will achieve the RAOs for the Site (i.e., prevention of direct human contact with contamination and prevention of leaching to ground and surface water) and is consistent with the remedial action selected in the ROD for other contaminated soil areas at the Site. Further, this modified remedy has been included as the preferred remedy for other areas of the Site in the Proposed Plan and during the public meeting.

Because this modification will result in contaminated soil remaining in additional areas of the Site (i.e., Central Property/OU2 Area), the institutional controls for the Site will be revised to include these additional areas. Further, the modified remedy will include the additional actions associated with the other clay/soil covered waste areas at the Site, which include seeding with grass to prevent erosion, maintenance of the clay/soil cover, and Site reviews every five years to ensure that the remedy remains protective of human health and the environment. The modified remedy does not fundamentally alter the remedy selected in the ROD. Both the original and modified remedies are protective of human health and the environment and provide an equivalent reduction in the potential for exposure by capping the contamination. As a result of this ESD, the ROD continues to meet ARARs (Applicable or Relevant and Appropriate Requirements).

V. SUPPORT AGENCY COMMENTS

The support agency, TCEQ, has been consulted and provided the opportunity to comment on this ESD in accordance with NCP §§ 300.435 (c)(2) and 300.435 (c)(2)(i) and CERCLA § 121 (f). TCEQ orally agreed with the modified remedy in a conference call with EPA on August 17, 2005.

VI. STATUTORY DETERMINATIONS

The EPA has determined that these significant changes comply with the statutory requirements of CERCLA § 121, 42 U.S.C. § 9621, are protective of human health and the environment, comply with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, are cost-effective, and utilize permanent solutions to the maximum extent practicable. Although the modified remedy for the Central Property/OU2 Area, which is the selected remedy for other Site areas under the 2004 ROD, is not intended to address the statutory mandate for treatment to the maximum extent practicable, the modified remedy provides the same level of protection at a lower cost than the remedy selected in the 2004 ROD.

VII. PUBLIC PARTICIPATION

This ESD will become part of the Administrative Record (NCP 300.825(a)(2)), which has been developed in accordance with Section 113 (k) of CERCLA, 42 U.S.C. § 9613 (k), and which is available for review at:

Belton City Hall
333 Water Street
Belton, Texas 76513
Monday - Friday (8:00 am to 5:00 pm)

Texas Commission on Environmental Quality
12100 Park 35 Circle, Building E, 1st Floor
Austin, Texas 78753
Monday - Friday (8:00 am to 5:00 pm)

United States Environmental Protection Agency, Region 6
Seventh Floor Reception Area
1445 Ross Avenue
Dallas, Texas, 75202
Monday - Friday (9:00 am to Noon; 1:00 pm to 4:00 pm)

As required by NCP § 300.435(c)(2)(i)(B), a Notice of Availability and a brief description of the ESD has been published in the local paper.

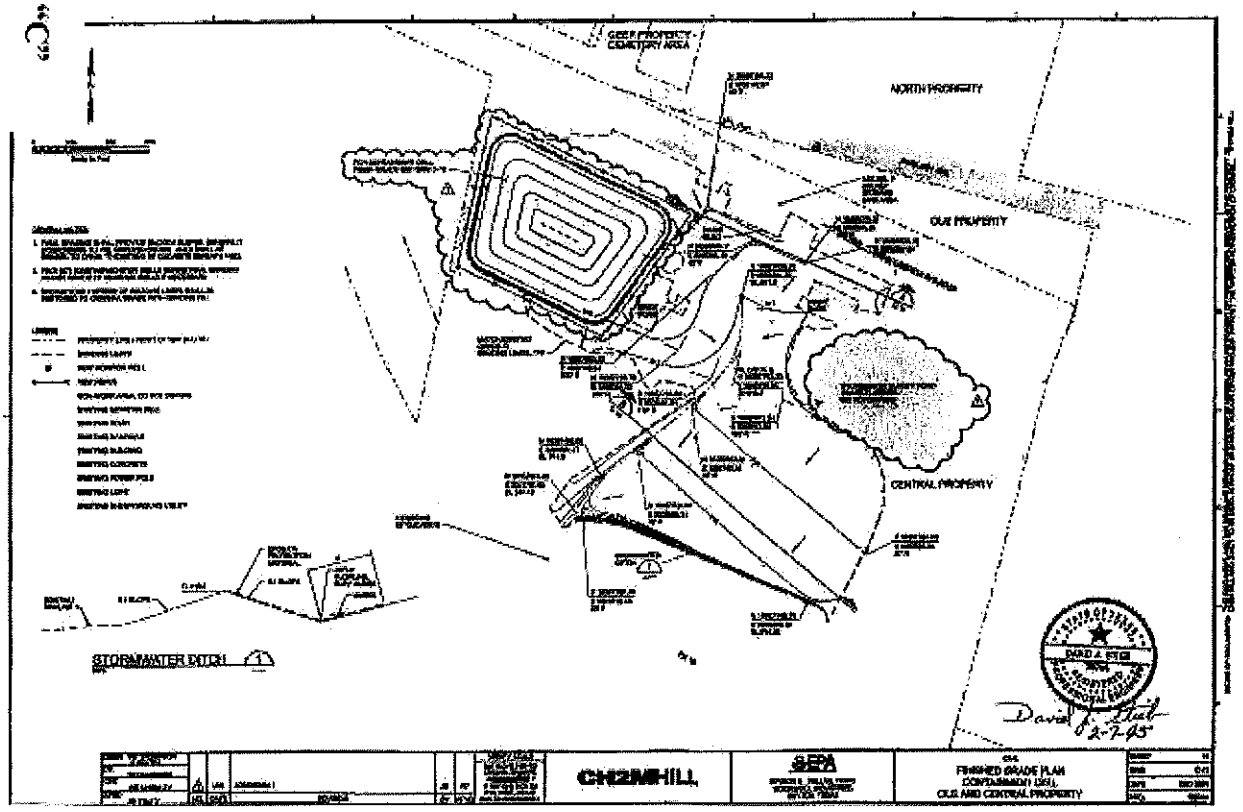
VIII. AUTHORIZING SIGNATURE

This ESD documents the significant changes related to the remedy at the Rockwool Industries Inc., Superfund Site. These changes were selected by EPA with the concurrence of the Texas Commission on Environmental Quality.

U.S. Environmental Protection Agency

By: Pamela Phillips, Acting Date: 8/19/2005
Samuel Coleman, P.E.
Director
Superfund Division

Exhibit "C"


GOLF PROPERTY - CEMETERY AREA
NORTH PROPERTY
OLIN PROPERTY
CENTRAL PROPERTY
STORMWATER DITCH
CH2MHILL
SCALE
FINISHED GRADE PLAN
CONTAINMENT CELL
OLIN AND CENTRAL PROPERTY

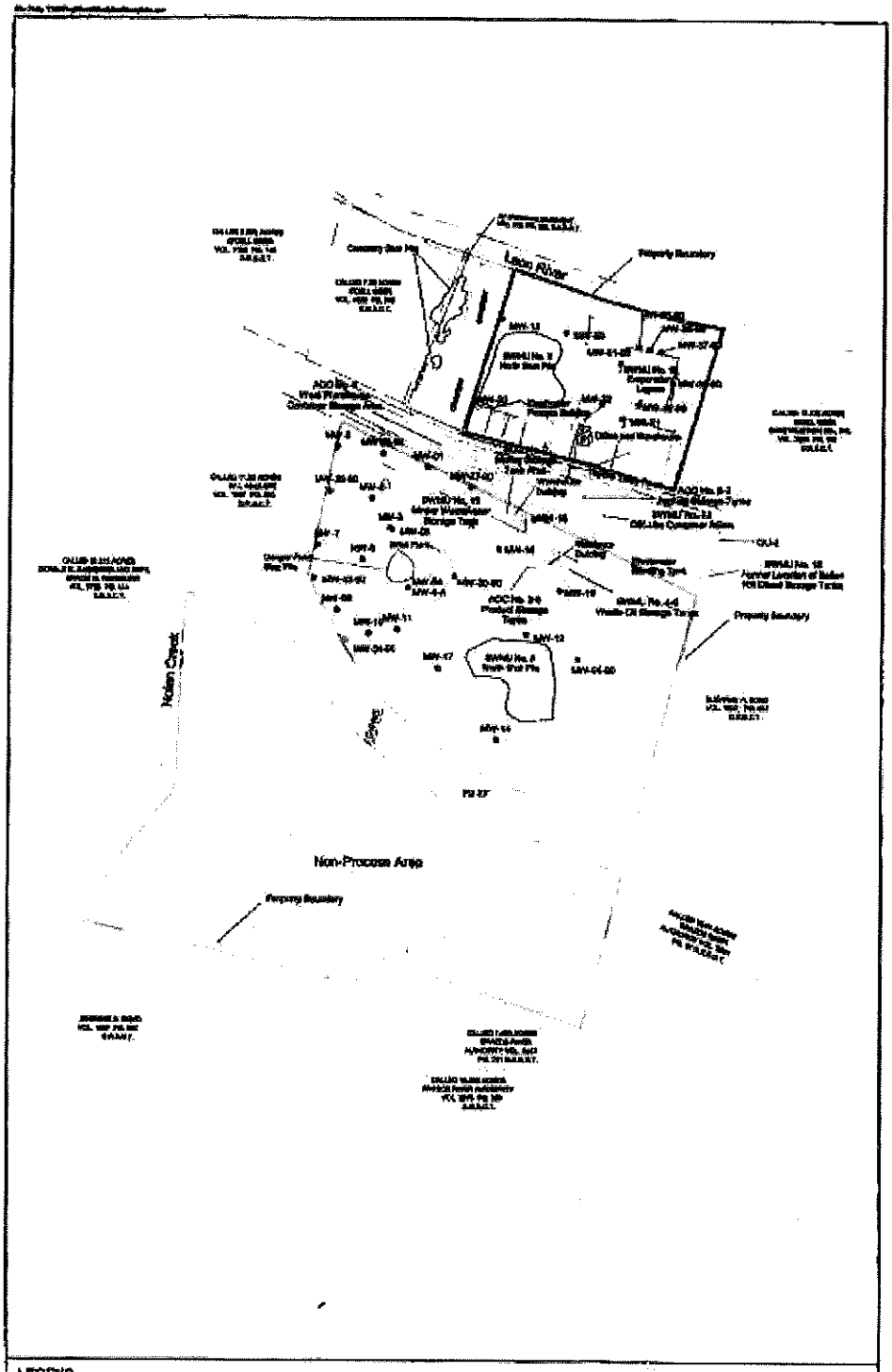


Figure 2-2
Site Map
Rockwool Industries
Belton, Texas

CH2MHILL

Exhibit "D"