

PROPOSED REMEDIAL ACTION DOCUMENT

BAILEY METAL PROCESSORS INC. PROPOSED STATE SUPERFUND SITE

BRADY, MCCULLOCH COUNTY, TEXAS

FEBRUARY 2022

PREPARED BY:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
SUPERFUND SECTION
REMEDIATION DIVISION

Table of Contents

1.0 INTRODUCTION 3 2.0 PURPOSE 3 3.0 LEGAL AUTHORITY 4 4.0 SITE HISTORY 5 5.0 REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY 6 5.1 Geology 7 5.2 Soil Impacts 8 5.3 Groundwater Impacts 8 5.4 Evaluation of Ecological Risk 8 5.5 Community Involvement 9 6.0 CURRENT CONDITIONS 9 6.1 Soil 9

6.2 Groundwater 9

7.0 DESCRIPTION OF REMEDIAL ACTION ALTERNATIVES 9

8.0 THE PROPOSED REMEDIAL ACTION______14

9.0 PUBLIC PARTICIPATION IN THE SUPERFUND PROCESS 14

10.0 REMAINING STEPS IN THE SUPERFUND PROCESS ______15

8.2 Proposed Groundwater Remedial Action_____

8.1 Proposed Soil Remedial Action ______14

1.0 INTRODUCTION

The Bailey Metal Processors Inc. Proposed State Superfund Site (the site) occupies five acres at 509 San Angelo Highway (also known as U.S. Highway 87), northwest of the City of Brady, McCulloch County, Texas. The site is located just outside of the northern city limit of Brady and is surrounded by a mixture of residential properties to the east, a railroad right-of-way to the south, and a Brady Independent School District (Brady ISD) property to the north and west. The Brady ISD property includes transportation and maintenance offices, a parking area for school district buses and vehicles, and livestock grazing areas and pens for agricultural education (See Figure 1, Site Location Map). The nearest occupied residence is located approximately 300 feet north of the eastern portion of the site, and another property planned for residential use is located approximately 120 feet north of the eastern portion of the site. Other residential properties are located on the east side of U.S. Highway 87 across from the site. The site is secured with chain-link fencing and a locked access gate.

The site is the location of a former scrap metal recycling facility that primarily reclaimed copper and lead from coated electrical wire. As early as 1987, the facility mechanically removed or burned off paper, plastic, and lead coatings to reclaim metals from scrap wire. The facility ceased operations in 1999 after filing for Chapter 7 bankruptcy.

The Texas Commission on Environmental Quality (TCEQ) implements certain state laws relating to the protection of public health and safety and the environment. The TCEQ addresses certain properties, such as the site, that may constitute an imminent and substantial endangerment to public health and safety or the environment through the state Superfund program. The TCEQ determined the site was eligible for cleanup through the state Superfund program and has completed its assessment of the site, evaluated potential remedies to address site contamination, and is preparing to select the *Remedial Action* for the site. Words appearing in *bold italics* in this document are defined in Section 11, "Glossary."

2.0 PURPOSE

This **Proposed Remedial Action Document** outlines the proposed **Remedial Action** (also known as the remedy) for the site, which is designed to address contamination and protect public health and safety and the environment. This document:

- describes the actions taken by the TCEQ to investigate and mitigate contamination at the site;
- describes the proposed *Remedial Action*;
- provides an opportunity for public review of the proposed *Remedial Action*;
 and
- provides information on how the public can comment on the proposed Remedial Action.

This document summarizes information that can be found in greater detail in various reports located in the site files and listed below. The TCEQ encourages the public to review these documents to gain a better understanding of the site, the state Superfund process, the actions taken by the TCEQ and the actions proposed by the TCEQ to address the site.

Copies of the documents summarized in this *Proposed Remedial Action Document*, as well as other relevant information, can be viewed at the local repository located at:

The McCulloch County Library 401 E. Commerce Street Brady, Texas 76825 325-597-2617

or at the TCEQ Central File Room:

12100 Park 35 Circle Building E, 1st Floor Austin, Texas 78753 512-239-2900

3.0 LEGAL AUTHORITY

The investigation of the nature and extent of contamination at the site and the selection of the proposed *Remedial Action* is in accordance with the *Solid Waste Disposal Act* (codified as Texas Health and Safety Code (THSC) Chapter 361); Hazardous Substance Facilities Assessment and Remediation rules found in Title 30 Texas Administrative Code (30 TAC) Chapter 335, Subchapter K; and the *Texas Risk Reduction Program* (TRRP) rules found in 30 TAC Chapter 350.

While the Chapter 335 rules are specific to the state Superfund process, the TRRP rules apply to many different types of corrective action administered by the TCEQ. These rules establish procedures for determining the concentration of chemicals of concern (COCs) to which a person or other environmental receptor can be exposed without unacceptable risk to public health and safety and the environment. These acceptable concentration levels are called *Protective Concentration Levels* (PCLs) and can be thought of as the "cleanup level" for contamination. PCLs are developed for each environmental medium (e.g. surface and subsurface soil, groundwater, sediment) and exposure pathway (ingestion, direct contact, ecological, etc.) that may be affected at a site. The lowest applicable PCL for each medium that becomes the cleanup goal is called the critical PCL.

The land use classification is critical for selecting a remedy. Under the TRRP rules, current land use shall be determined by comparing the existing land use to TRRP definitions of residential and commercial/industrial (C/I). Residential standards apply to land used for dwellings such as single-family houses and multi-family apartments, as well as properties used for a sensitive potentially exposed population such as day care

facilities, educational facilities, hospitals, and parks. C/I standards apply to any property not used for human habitation or other purposes which would fall under the TRRP definition of residential, and they are protective of persons who may occupy the site as workers. Sites remediated to C/I standards cannot be used for residential-type activities unless further controls are implemented to make the site safe for that use. The TCEQ has determined that a C/I land use classification is appropriate for on-site and the railroad right-of-way south of the site, and a residential land use classification is appropriate for other off-site affected properties. The operator of the railroad right-of-way, Central Texas and Colorado River Railway, LLC, concurs with the C/I land use classification.

The TRRP rules provide for the management of risks posed by the presence of contamination through any combination of the following remedies:

- 1. removal or decontamination of contaminated media;
- 2. physical controls, such as containment cells and caps, which limit exposure to the contaminated media; or
- 3. **institutional controls**, such as restrictive covenants or deed notices, filed in the county real property records, to legally control land use in order to prevent exposure and to inform future owners and the public of contamination on the property.

There are two categories of remedy standards under TRRP: Remedy Standard A and Remedy Standard B. To meet Remedy Standard A requirements, the contaminated media must be removed and/or decontaminated such that physical controls and, in most cases, *institutional controls* are not necessary to protect human and ecological receptors. To meet the requirements of Remedy Standard B, however, physical controls and *institutional controls* may be used in addition to removal and/or decontamination. These standards are described in detail in 30 TAC Sections 350.32 and 350.33. The proposed remedy at the site meets the criteria established for Remedy Standard B.

4.0 SITE HISTORY

The site is located on property owned by BMP Metals, Inc. and was operated by Bailey Metal Processors, Inc. and BMP Metals, Inc. From approximately 1987 through 1999, the site operator accepted and purchased scrap metal for recycling. Two furnaces and special wire stripping and cutting facilities were installed to recover metal, primarily lead and copper, from wiring, cables, and other scrap materials.

In 1995, the Texas Natural Resource Conservation Commission (TNRCC, a predecessor agency to TCEQ) documented that ash and metal waste had been deposited on the ground surface and determined that soil contained elevated levels of lead. Bailey Metal Processors, Inc. entered into an *Agreed Order* (Docket No. 95-1431-IHW-E) with TNRCC in June 1998, under which it agreed to conduct investigation and cleanup activities. On April 29, 1999, Bailey Metal Processors, Inc. filed for Chapter 7

bankruptcy. In May 1999, TNRCC investigated site conditions and determined that it was not in compliance with the terms of the *Agreed Order*. In June 2001, TNRCC conducted another inspection and determined that Bailey Metal Processors, Inc. had not performed required remedial activities. The TNRCC Enforcement Division referred the site for evaluation under the Superfund program in September 2001.

In May 2004, the TCEQ Superfund Site Discovery and Assessment Program collected soil, sediment, and groundwater samples and documented a release or potential release of hazardous substances to the environment.

The TCEQ prepared a *Hazard Ranking System* (HRS) score for the site in August 2004. The HRS is a numerical scoring tool that uses information from initial, limited investigations to assess whether a site qualifies for the state or federal Superfund programs. Sites scoring 28.5 or greater may qualify for the federal Superfund program, while sites scoring 5 or greater may qualify for the state Superfund program. An HRS score of 7.25 qualified the site for the state Superfund program. The site was proposed for listing on the state Superfund registry in 2005.

5.0 REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY

In August 2005, the TCEQ began the **Remedial Investigation** (RI) and **Focused Feasibility Study** (FS) phase of the state Superfund process, which included sample collection, laboratory analysis, and interpretation of collected data for the purpose of determining the nature and extent of contamination and determining an appropriate remedy for the site.

To complete the RI/FS, the TCEQ:

- Installed 20 groundwater monitoring wells and piezometers in the groundwater bearing unit beneath the site;
- Collected and analyzed numerous surface soil, subsurface soil, and groundwater samples to determine the nature and extent of contamination and to develop statistical contaminant trends;
- Completed hydrogeological studies to classify and understand the subsurface groundwater distribution, flow, and quality;
- Conducted stratigraphic characterization studies to investigate and understand the geology of the site;
- Completed ecological risk studies to evaluate the potential impact of contamination on ecological receptors;
- Conducted a treatability study to optimize treatment of waste material on-site to render it non-hazardous;
- Completed an Affected Property Assessment Report to summarize the findings of the RI and identify areas requiring remediation;

- Completed a *Focused Feasibility Study* to select, develop, and evaluate appropriate response action alternatives at the site; and
- Conducted *Removal Actions* between 2005 and 2020 to secure the site and to reduce the potential for waste materials and contaminated soil to migrate from the site or to impact site groundwater. These Removal Actions consisted of the following:
 - 2005 Removal Action treated, removed and disposed of 1,048 cubic yards of waste material (chopped wire and insulation containing hazardous levels of lead) that had been left in uncontrolled piles at the site and installed chain-link fence around the site perimeter to control site access;
 - 2015 Removal Action treated, removed and disposed of 9,400 cubic yards of waste materal (wire casing) that had been left in piles at the site to allow access to underlying contaminated soil. Disposed of 34,000 gallons of wastewater and 12 tons of sludge generated by the on-site treatment:
 - 2016 Removal Action treated, removed and disposed of 8,000 tons of metals-contaminated soil from the site;
 - 2019 Removal Actions treated, removed and disposed of 1,020 cubic yards of casing materials and 3,598 tons of metalscontaminated soil from the site; and
 - 2020 Removal Actions removed contaminated soil from adjacent East Parcel and used as fill for site areas, as material was acceptable for C/I land use. Removed and disposed of 135 cubic yards of hazardous waste and 5,537 tons of metals-contaminated soil from the site.

Each of these RI/FS activities was conducted in accordance with applicable work plans, sampling plans, and quality assurance plans. The Removal Actions were determined necessary under THSC Section 361.133, and **potentially responsible parties** (PRPs) were notified and provided an opportunity to perform the Removal Actions. The results of these efforts are documented in the reports listed in Appendix A.

5.1 Geology

The site is located in the eastern part of the Edwards Plateau region of Texas. The surface geology in the area includes Quaternary terrace and floodplain deposits of clay, silt, sand, and gravel. Beneath these deposits are Pennsylvanian age limestone and shale of the Canyon Group.

The Canyon Group is underlain by the Hickory Sandstone, which underlies most of the county, including the site. The Hickory Sandstone is the principal aquifer in McCulloch County. All water supply wells for the City of Brady are completed to the base of the Hickory Sandstone. Water from the Hickory Aquifer meets public drinking water standards and large supplies of water are available from storage in the Hickory Aquifer.

The direction of the groundwater movement in this aquifer is generally to the north and northeast. The Hickory Sandstone is approximately 300 feet thick, and the city wells produce water primarily from depths near 2,000 feet, although productive groundwater zones are present at depths as shallow as 1,200 feet.

During the RI, groundwater was encountered from 14 to 19 feet below ground surface at the site in monitoring wells and piezometers that are completed within the alluvial deposits to total depths between 15 to 40 feet below ground surface. The groundwater bearing zone ranges from approximately three to seven feet thick and is bounded at the bottom by the Canyon Group, which acts as a confining unit. The groundwater piezometric surface is essentially flat in the eastern half of the site but flows toward the west and southwest in the western half.

TRRP specifies three classes of groundwater resources based on current use, water quality, and sustainable well yield. The TCEQ determined that the shallow groundwater beneath the site is a Class 2 groundwater resource based on aquifer tests. Class 2 groundwater resources are considered usable or potentially usable drinking water supplies.

5.2 Soil Impacts

Onsite soil was impacted with antimony, benzo-a-pyrene, bis(2-ethylhexyl) phthalate, copper, lead, mercury, and polychlorinated biphenyls, at concentrations above the critical PCLs. Soils on two offsite properties, the Eastern Offsite Parcel and the railroad right-of-way adjacent to the site (depicted on Figure 2 to this document), were impacted by antimony, copper and lead. Following the 2020 *Removal Action*, no soils in the Eastern Offsite Parcel exceed critical PCLs for these COCs. Surface soils impacted by antimony, copper, and lead remain onsite and in the adjacent railroad right-of-way. The critical PCLs for antimony, copper, and lead are 310 milligrams per kilogram(mg/kg), 94,000 mg/kg, and 1,600 mg/kg, respectively. No subsurface soils (below five feet) exceed critical PCLs.

5.3 Groundwater Impacts

Shallow groundwater that occurs in the alluvial deposits beneath the site is impacted with antimony that exceeds the critical PCL of 0.006 milligrams per liter at one piezometer located in the central eastern portion of the site. No offsite groundwater impacts from the site were identified in the RI.

5.4 Evaluation of Ecological Risk

In 2018, the TCEQ completed a Screening Level Ecological Risk Assessment (SLERA) for the site and for two off-site properties, the Brady ISD property and the Eastern Offsite Parcel (depicted on Figure 2 to this document), and concluded that there is minimal risk to potential ecological receptors from site contaminants in soils and sediment. The SLERA found that additional assessment of ecological exposure of metals or any organic contaminants at the site is unnecessary following the removal of metals-contaminated soil from the Eastern Offsite Parcel. As such, no ecologically-based *PCLs* are necessary for the site.

5.5 Community Involvement

The TCEQ published a notice of intent to list the facility on the state registry of Superfund sites and proposed a non-residential land use designation for the site in the *Texas Register* on April 1, 2005 (30 TexReg 1974). A public meeting was held on May 12, 2005 to propose the site for listing on the state registry of Superfund sites and obtain public input and information regarding the appropriate use of land on which the site is located. Following that meeting, the TCEQ selected C/I land use as the appropriate land use for the site. The site's webpage

(https://www.tceq.texas.gov/remediation/superfund/state/baileymetal.html) is periodically updated to reflect the site's current status in the TCEQ Superfund process and relevant points of contact.

6.0 CURRENT CONDITIONS

6.1 Soil

The nature and extent of contamination in the soils at the site has been adequately characterized and delineated. Figure 2 shows the extent of soil that exceeds critical PCLs including:

- surface soil to a depth of 1 foot in central and eastern portions of the site;
- surface soil to depths up to 5 feet in three locations in the central portion of the site; and
- surface soil to depths up to 5 feet in one location in the railroad right-of-way to the south of the site.

At this time, the volume of soil requiring *Remedial Action* is estimated to be approximately 3,200 in-place cubic yards.

6.2 Groundwater

The nature and extent of contamination in the groundwater at the site has been adequately characterized and delineated. Antimony has been consistently detected in one piezometer, PZ-10 depicted on Figure 3, at levels above the critical PCL.

7.0 DESCRIPTION OF REMEDIAL ACTION ALTERNATIVES

In the *Focused Feasibility Study* Report, TCEQ developed remedial alternatives for soil and groundwater. TCEQ evaluated and estimated costs for each alternative. The remedial alternatives are listed below:

7.1 Soil Remedial Action Alternatives

- SOIL-1: Off-site Treatment and Off-site Disposal (Proposed Remedial Action): Removal of soil that exceeds critical PCLs, transportation to an off-site facility, treatment if necessary, and disposal.
- **SOIL-2: On-site Treatment and Off-site Disposal:** Removal of soil that exceeds critical PCLs, on-site treatment for portion determined to be hazardous, and transportation of all removed and treated soils to an off-site facility for diposal. On-site soil treatment would stabilize the soil by mixing it with amendments. Treated soil would then be tested to confirm it is no longer hazardous before transport for final disposal.
- **SOIL-3: On-site Containment Cell:** Removal of soil that exceeds critical PCLs, construction of a containment cell on-site for soil that is non-hazardous, and transportation of hazardous portion for off-site disposal. The containment cell would include a multi-layered clay bottom liner and cap.

Institutional controls are required for all soil remedial alternatives to notify current and future landowners that the site property and the adjacent railroad right-of-way are suitable for commercial/industrial land use only.

7.2 Groundwater Remedial Action Alternatives

- **GW-1: Plume Management Zone (Proposed Remedial Action):** On-site impacted groundwater will be managed using a **Plume Management Zone** (PMZ). A PMZ is defined as the area of the groundwater contamination, plus any additional area allowed in accordance with 30 TAC Section 350.33(f)(4). A PMZ modifies the standard groundwater cleanup objectives by controlling and preventing the use of and exposure to the groundwater within the PMZ through **institutional controls** in the property records. A network of monitoring wells would be tested periodically to ensure that groundwater contamination is not expanding and does not cross the property boundary.
- **GW-2: In-Situ Treatment:** Impacted groundwater will be treated in-situ by injecting reagents to reduce the solubility of antimony. This treatment would bind antimony to soil and reduce concentrations in groundwater. Following the treatment, groundwater would be monitored to confirm that treatment was successful.

7.3 Evaluation of Remedial Action Alternatives

In accordance with THSC Section 361.193 and 30 TAC Section 335.348(l), the TCEQ selects the *Remedial Action* for a site by determining which remedial alternative is "the lowest cost alternative which is technologically feasible and reliable, effectively mitigates and minimizes damage to the environment, and provides adequate protection of the public health and safety and the environment." To help with this determination, the TCEQ evaluated each of the *Remedial Action* alternatives against a subset of

evaluation criteria:

- 1. Cost;
- 2. Feasibility;
- 3. Reliability (including long-term effectiveness and permanence);
- 4. Overall Protection of Human Health and the Environment (over both the short-and long-term); and
- 5. Compliance with Applicable Regulations.

Cost includes both capital costs to install or construct a remedy as well as long-term operation and maintenance costs. For the feasibility and reliability criteria, the TCEQ assigned numerical ratings (scores) for each of the *Remedial Action* alternatives from o to 5, where a score of o represents the least value and a score of 5 represents the best value. For the final two evaluation criteria, TCEQ assigns a "Yes" or "No" response. A response of "Yes" is favorable and indicates that the evaluated remedial action alternative will meet the criteria, while a response of "No" is unfavorable and indicates that the evaluated remedial action alternative will not meet the criteria. These evaluations, and the estimated costs, are shown in Table 1 – Remedial Action Alternatives Evaluation for Groundwater.

All of the *Remedial Action* alternatives would provide adequate protection of public health and safety and the environment and comply with applicable regulations. However, the TCEQ selects the lowest cost alternative that meets the requirements of THSC Section 361.193. Therefore, the score and the cost were taken into consideration to select soil remedial action alternative SOIL-1 and groundwater remedial action alternative GW-1 to remediate the site.

Table 1 - Remedial Action Alternatives Evaluation for Soil

EVALUATION CRITERION	SOIL-1	SOIL-2	SOIL-3
	Off-site Treatment and Off-site Disposal	On-site Treatment and Off-site Disposal	On-site Containment Cell
Cost	\$1,380,000	\$1,460,000	\$1,900,000
Feasibility	5	4	4
Reliability (including long- term effectiveness and permanence)	5	4.5	4
Protection of human health and the environment (over both the short- and long-term)	Yes	Yes	Yes
Compliance with applicable regulations	Yes	Yes	Yes
Subtotal for Balancing Criteria (before Cost)	10	8.5	8

Table 2 – Remedial Action Alternatives Evaluation for Groundwater

EVALUATION CRITERION	GW-1	GW-2
	PMZ	In-Situ Treatment
Cost	\$269,000	\$564,000
Feasibility	5	3
Reliability (including long-term effectiveness and permanence)	4	4
Protection of human health and the environment (over both the shortand long-term)	Yes	Yes
Compliance with applicable regulations	Yes	Yes
Subtotal for Balancing Criteria (before Cost)	9	7

GW- Groundwater

PMZ - Plume Management Zone

8.0 THE PROPOSED REMEDIAL ACTION

The TCEQ proposes the following *Remedial Actions* for the site:

8.1 Proposed Soil Remedial Action

The proposed soil remedy is SOIL-1: Off-site treatment and off-site disposal. Figure 2 shows the location of soil that exceeds critical PCLs. Contaminated soil will be excavated and transported off-site to a disposal facility. Confirmation samples will be collected to document that remaining soils do not exceed critical PCLs. Once the extent of removal has been confirmed, excavated areas will be backfilled with clean soil to restore the site to a level ground surface.

8.2 Proposed Groundwater Remedial Action

The proposed groundwater remedy is Alternative GW-1: PMZ. The PMZ will be established with *institutional controls* that will be secured and implemented in accordance with TRRP and will remain in place until it is demonstrated that antimony in groundwater no longer exceeds the critical PCL. The implementation of the PMZ will include the collection and analysis of groundwater samples. This monitoring from existing wells and from new monitoring wells will confirm that the groundwater plume remains stable and does not expand beyond the boundaries of the PMZ. Figure 3 shows the proposed location of the PMZ and potential locations for new monitoring wells.

9.0 PUBLIC PARTICIPATION IN THE SUPERFUND PROCESS

The TCEQ will schedule a public meeting to discuss the proposed *Remedial Action* presented in this document and to obtain additional information concerning the facility and the identification of additional PRPs. The public meeting will be legislative in nature and not a contested case hearing under Chapter 2001, Government Code. The TCEQ will publish a public notice in the *Texas Register*, and in a newspaper of general circulation in the county in which the facility is located, at least 30 days prior to the public meeting. This notice will include the purpose of the meeting, the meeting date, time, and location. Persons desiring additional information about public participation in the Superfund process may contact the site community relations liaison, Crystal Taylor, at (800) 633-9363, or by email *superfnd@tceq.texas.gov*.

Public meeting participants may comment on the proposed *Remedial Action*. Written comments on the proposed *Remedial Action* may be submitted during the public comment period, which ends at the close of the public meeting. Written comments concerning the proposed *Remedial Action* should be submitted to the site project manager during the comment period.

Comments should be submitted by mail or email to:

Eric White, P.E.
Superfund Project Manager
Texas Commission on Environmental Quality
P.O. Box 13087 MC-136
Austin, Texas 78711-3087
Email: superfnd@tceq.texas.gov

Any unanswered questions at the public meeting will be addressed in writing by the TCEQ after the meeting and will be placed in the site files.

10.0 REMAINING STEPS IN THE SUPERFUND PROCESS

TCEQ will consider all comments received during the public comment period relating to the proposed *Remedial Action*. The TCEQ will then select the *Remedial Action* for the site in an administrative order pursuant to THSC Section 361.188 (188 Order).

PRPs are allowed a period of 60 days from the date of the public meeting to make a good faith offer to fund or perform the selected *Remedial Action*. If any PRPs make such an offer, they will be provided an additional 60 days to negotiate the terms of an *Agreed Order* with the commission to fund or perform the selected *Remedial Action*. If no PRPs make such an offer, TCEQ will issue the 188 Order unilaterally.

Following issuance of the 188 Order, TCEQ will ensure the completion of the detailed design and construction of the selected remedy, either by overseeing the work performed by the PRPs that agree to the 188 Order or by performing the work directly. At any time in this process, the TCEQ may determine that a change should be made to the *Remedial Action*. If a *minor change* is implemented, the TCEQ will document the change in the site files without the necessity for another public meeting. If a *significant change* is made, a notice describing the changes will be posted in the *Texas Register* and in a newspaper of general circulation in McCulloch County. If a *fundamental change* is considered, another public comment period and public meeting will be held to discuss the proposed change.

Upon completion of the *Remedial Action* and if certain other criteria are met, the TCEQ may propose to delete the site from the state registry of Superfund sites. A public meeting will be held before the site is deleted from the registry.

11.0 GLOSSARY

Agreed Order – An administrative order issued by the commission and agreed to by one or more PRPs for the purpose of settling potential liability for the *Remedial Investigation* and/or *Remedial Action*.

Focused Feasibility Study (FS) - A streamlined process for developing and screening potential remedial components and forming the *Remedial Action* alternatives to be analyzed in detail for a site.

Fundamental change - A change to the *Remedial Action* which uses a different approach to achieve the *Remedial Action* goals or one that uses the same approach but results in a *Remedial Action* that is less protective than the originally proposed *Remedial Action*.

Hazard Ranking System (HRS) - The method used by the U.S. Environmental Protection Agency (EPA) and the TCEQ to evaluate the relative potential of hazardous substance releases to cause health or safety problems, ecological or environmental damage. The scoring system was developed by the EPA as set out in 40 Code of Federal Regulations (CFR) Part 300, Appendix A, as amended.

Institutional control - A legal instrument placed in the property records in the form of a deed notice, Voluntary Cleanup Program Certificate of Completion (VCP Certificate of Completion), or restrictive covenant which indicates the limitations on or the conditions governing use of the property which ensures protection of human health and the environment or equivalent zoning and governmental ordinances.

Minor change - A change to the *Remedial Action* which does not significantly affect the scope, performance, or cost of the originally proposed *Remedial Action*.

Plume Management Zone (PMZ) –The area of the groundwater protective concentration level exceedence zone at the time of response action plan submittal, plus any additional area allowed in accordance with 30 TAC Section 350.33(f)(4) (relating to Remedy Standard B).

Potentially Responsible Parties (PRPs) - Persons or entities that the TCEQ considers potentially responsible for the contamination of the site pursuant to THSC Section 361.271.

Proposed Remedial Action Document - The document which describes the TCEQ's proposed *Remedial Action*.

Protective Concentration Level (PCL) - The concentration of a chemical of concern which can remain within the source medium and not result in levels which exceed the applicable human health risk-based exposure limit or ecological *protective* concentration level at the point of exposure for that exposure pathway.

Remedial Action - An action, including remedial design and post-closure care, consistent with a remedy taken instead of or in addition to a *removal action* in the event of a release or threatened release of hazardous substances into the environment to prevent or minimize the release of a hazardous substance so that the hazardous substance does not cause an imminent and substantial danger to present or future public health and safety or the environment. A remedial action shall be conducted in accordance with 30 TAC Chapter 350, Subchapter B.

Remedial Investigation (RI) - An investigative study which may include removals, and/or a *Feasibility Study*, in addition to the development of *Protective Concentration Levels*, designed to adequately determine the nature and extent of a release or

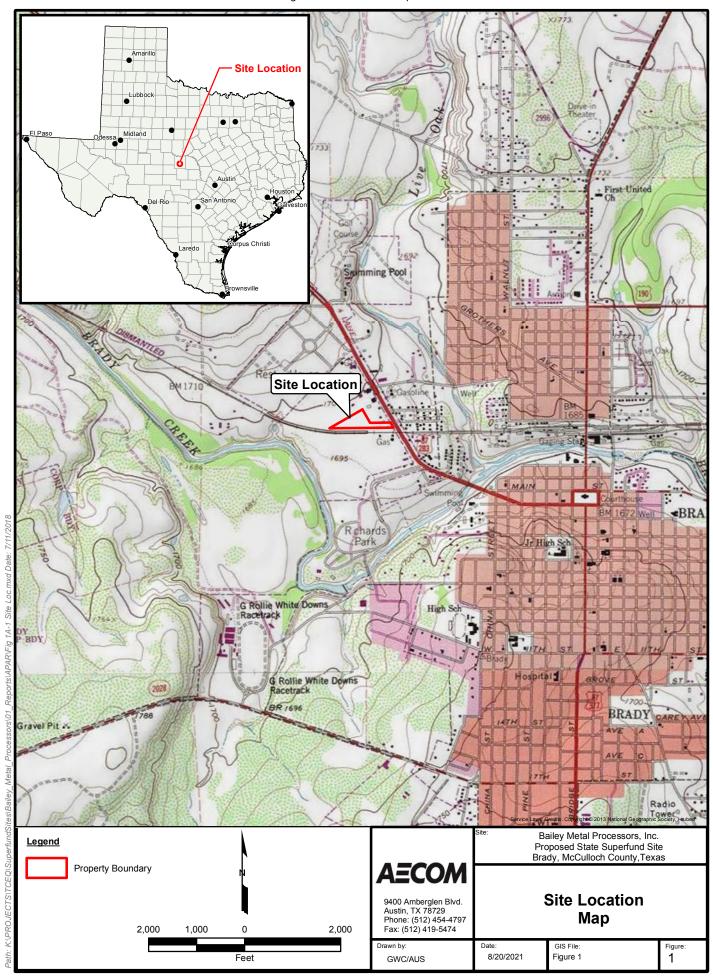
threatened release of hazardous substances and, as appropriate, its impact on air, soils, groundwater and surface water, both within and beyond the boundaries of the facility.

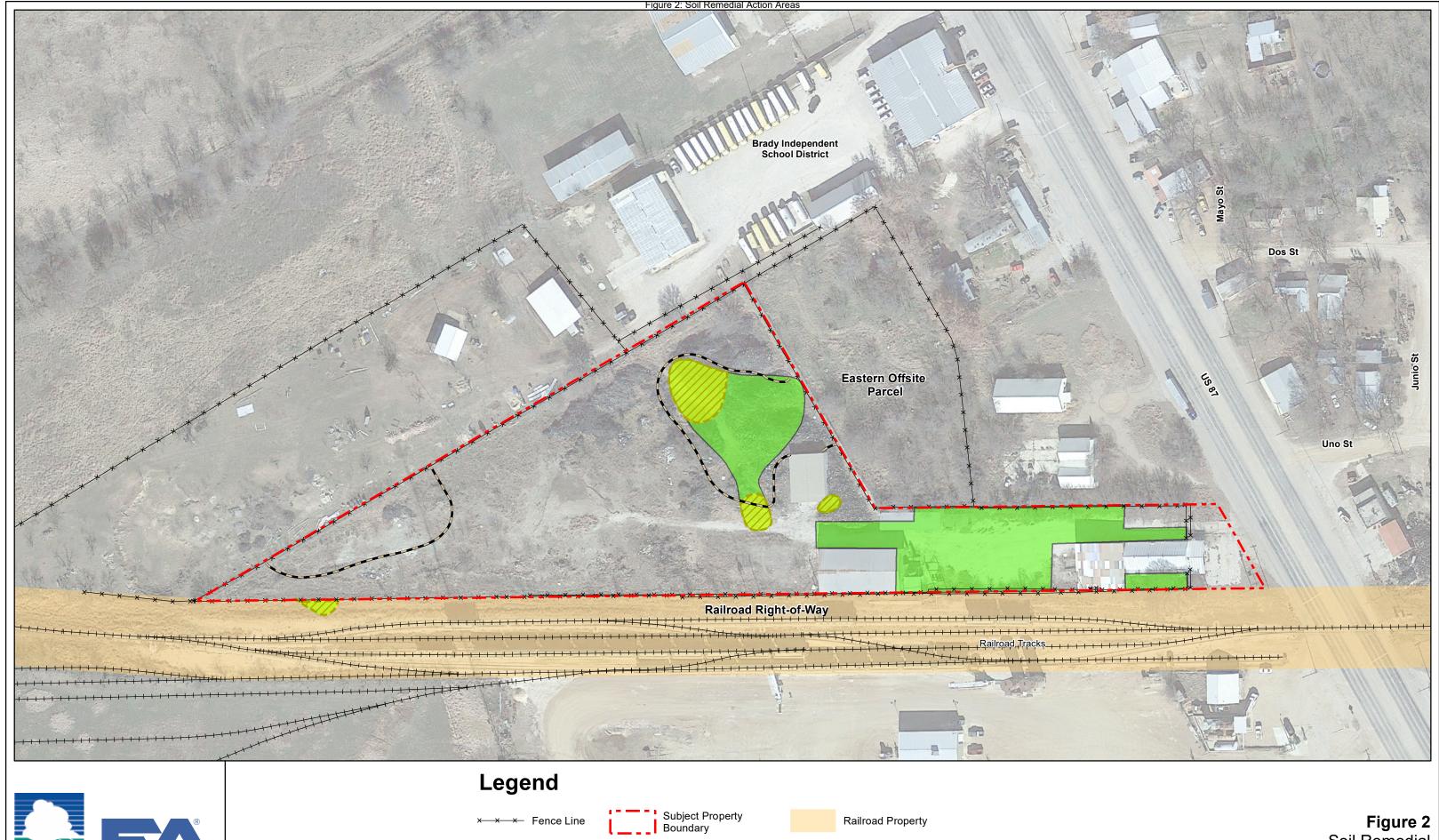
Removal Action - An action which removes a source or potential source of contaminants before the *Remedial Action* is conducted where immediate action is appropriate to protect human health and environment.

Significant change - A change to the *Remedial Action* which materially affects the scope, performance, or cost of the *Remedial Action*, but which uses the same approach and results in a *Remedial Action* at least as protective as the originally proposed *Remedial Action*.

Solid Waste Disposal Act – THSC Chapter 361. The purpose of the *Solid Waste Disposal Act* is to safeguard the health, welfare, and physical property of the people and to protect the environment by controlling the management of solid waste, including any hazardous waste that is generated. Subchapter F of Chapter 361 relates to the state Superfund process. The Texas Health and Safety Code is available online at: http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.361.htm.

Texas Risk Reduction Program (TRRP) - A program of the TCEQ that provides a consistent corrective action process directed toward protection of human health and the environment balanced with the economic welfare of the citizens of the state. The rules for this program are located in 30 TAC Chapter 350. The Texas Administrative Code is available online at: http://www.sos.state.tx.us/tac/.







Bailey Metal Processors, Inc. Proposed State Superfund Site McCulloch County, Brady, Texas

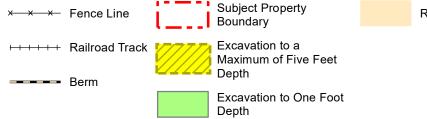
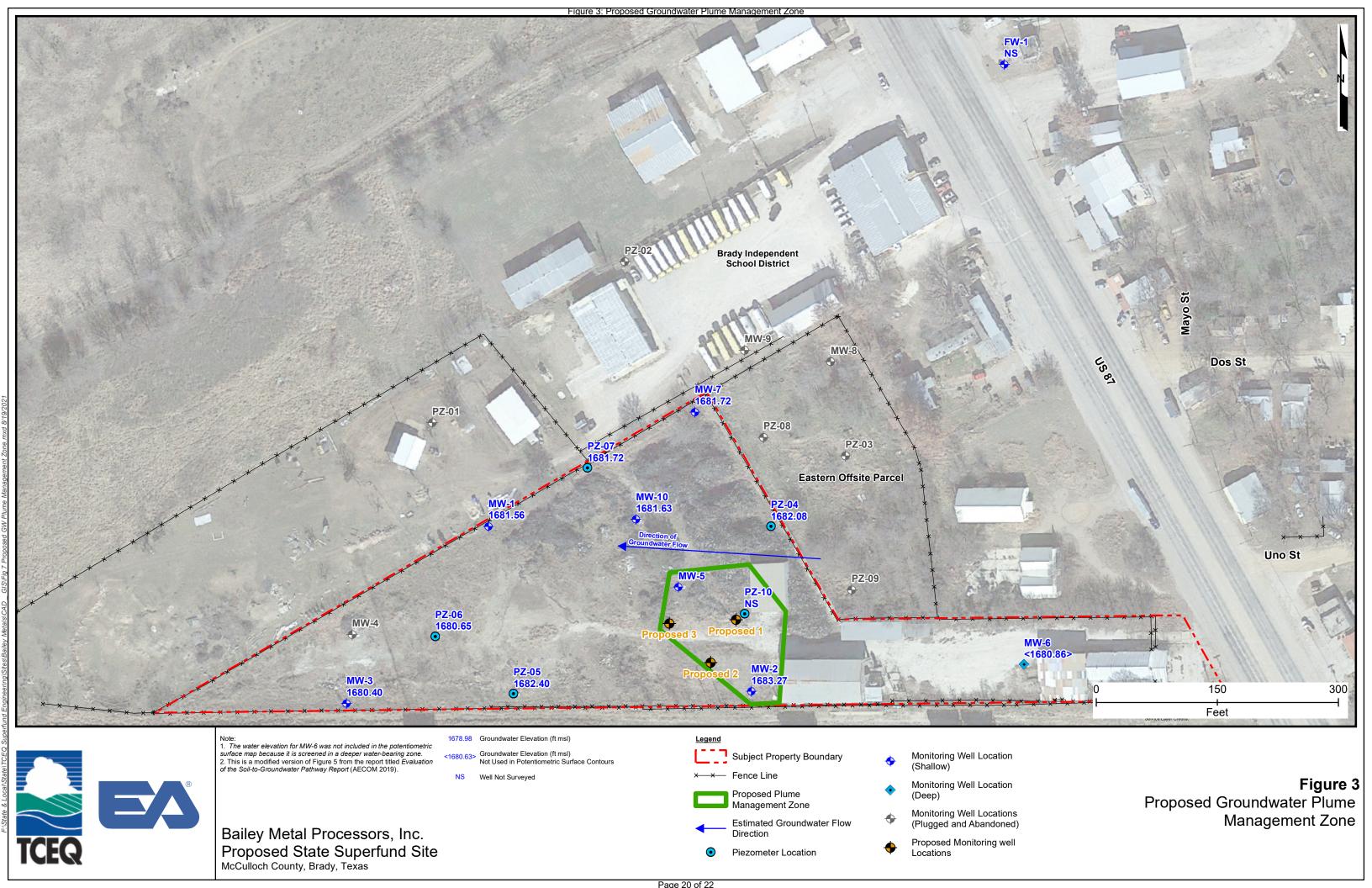


Figure 2 Soil Remedial Action Areas



APPENDIX A LIST OF REPORTS

Bailey Metal Processors - List of Reports

- Field Sampling and Analysis Report (July 2004)
- 2. Removal Action Reports (June 2005, August 2017, February 2020, November 2020)
- 3. Remedial Investigation Technical Memoranda (May 2007, October 2007, December 2011, August 2012, August 2013)
- 4. Remedial Investigation Work Plan (July 2011)
- 5. Aquifer Test Report (January 2012)
- 6. Soil Background Concentrations (October 2012)
- 7. Tier 2 Screening Level Ecological Risk Assessment (November 2012)
- 8. Protective Concentration Levels Document (January 2013)
- 9. Remedial Investigation Work Plan Revision 1 (April 2013)
- 10. Memorandum on Leachate Data (August 2013)
- 11. Addenda No. 1 and No. 3 to Field Sampling Plan (June 2012, May 2014)
- 12. Memorandum on Metals in Groundwater (August 2014)
- 13. Affected Property Assessment Report (August 2015)
- 14. Amended Tier 1 Exclusion Criteria Checklist (February 2016)
- 15. Addendum to Tier 2 Screening Level Ecological Risk Assessment (June 2018)
- 16. Affected Property Assessment Report Update (August 2018)
- 17. Technical Memorandum on Soil to Groundwater Pathway (April 2019)
- 18. Technical Memorandum on Eastern Offsite Parcel Soil Screening (March 2020)
- 19. Groundwater Monitoring Reports (multiple dates, most recent November 2020 includes cumulative data)
- 20. Focused Feasibility Study (June 14, 2021)