VALLEY CORES INC
REMEDIATION RESPONSE
PROJECT RECORDS
RCRA-C HAZARDOUS WASTE
STARK COUNTY
OHD981956618

Site Name and Location

Former Valley Cores, Inc.
1800 ½ Allen Avenue SE, Canton, OH
Stark County
EPA I.D. No.: OHD 981956618; Site ID# 276002960

Introduction

The Ohio Environmental Protection Agency (EPA) issues this Final Decision for the former Valley Cores, Inc. (Valley Cores) facility located in Canton, Ohio. The property is currently owned by JMW Trucking (JMW) located at 512 45th Street SW, Canton, Ohio 44706. The Final Decision includes this Decision Document and the Statement of Basis (Attachment 1).

The Decision Document selects the final corrective action/remedies to be implemented to address historic contamination at the former Valley Cores facility pursuant to the requirements of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. The Final Decision is based on the Administrative Record.

Ohio EPA issued a Statement of Basis for the former Valley Cores facility on November 14, 2014, identifying the Agency's preferred remedies for addressing known environmental contamination. The Statement of Basis explained the rationale for the selected remedies, solicited public review and comment, and provided information as to how the public could be involved in the final remedy selection process. The Statement of Basis was made available to the public at Ohio EPA's Northeast District Office in Twinsburg and Central Office in Columbus for review during the formal comment period which began on November 14, 2014 and ended on January 5, 2015. Ohio EPA received no comments during the comment period.

Assessment of the Facility

The former Valley Cores facility conducted operations at 1800½ Allen Avenue SE, Canton, Ohio which included an engine block crushing operation and an aluminum smelting operation. While the former facility was operating, the facility would purchase scrap engine blocks and stock pile them on-site. The parts/accessories on the engine block were removed and stored in the shed behind the office. The engine blocks would then be crushed to recover metallic parts which were cleaned with water and detergent and eventually resold. Aluminum smelting occurred on-site as well. During the crushing and metallic recovery process, characteristic hazardous waste sludge was generated from block washing operations. The sludge was disposed in an on-site "pit"; an unlined, unpermitted surface impoundment. A drainage swale ran through the surface impoundment and continued south along the eastern side of the property. These units comprise the RCRA Hazardous Waste Management Units (HWMUs) associated with the site.
Several investigations of environmental conditions have been conducted at the facility beginning in the mid-1980s. Groundwater monitoring investigations were undertaken during closure; one year of quarterly monitoring and two additional years of semi-annual monitoring. Analytical results of the investigation indicated no impact to groundwater from facility operations.

A Closure Plan was submitted to Ohio EPA on November 15, 1990 and later revised on July 25, 1991. Ohio EPA approved the revised Closure Plan with modifications on October 23, 1991. Closure activities commenced January 27, 1992. Soils were excavated and sampling was conducted, which revealed additional contamination. Based on the findings, it was determined that additional closure activity would be necessary at the facility in order to protect human health and the environment.

On December 16, 2002, the former Valley Cores submitted an Amended Closure Plan to Ohio EPA. The public was provided the opportunity to comment on the Plan, however no comments were received. Ohio EPA approved the Amended Closure Plan with modifications on March 20, 2003. The Amended Closure Plan allowed the use of risk-based cleanup standards for soils to demonstrate that the closure performance standard had been achieved and that any remaining contamination was not attributable to the facility's hazardous waste management units (HWMUs).

On July 18, 2003 a Closure Certification (dated July 16, 2003) was submitted and a closure verification inspection was conducted by Ohio EPA on December 11, 2003. On January 13, 2004, Ohio EPA notified Valley Cores that the Closure Certification was accepted and the closure performance standard as specified by Ohio Administrative Code (OAC) rule 3745-66-11 had been met. The closure performance standard was achieved by targeted excavation of contaminated soil and a determination that groundwater was not contaminated. However, the areas where elevated concentrations (not attributable to the HWMUs) of constituents of concern (COC) remained became the focus of RCRA Corrective Action investigations.

**Remedy Evaluation**

Various options were discussed and evaluated for the remediation of the site. These included:

- **No action** – considering the known levels of contamination at the site and the intended future use as industrial, this option was discarded.

- **Excavation of all contaminated soils** – it was determined this would be too costly and not practical considering the intended future use of the property.

- **Construct a barrier (cap) over contaminated areas to prevent exposure by receptors** – this option would have included long term operation and maintenance (O&M) requirements which were not desirable.

- **Excavate areas of identified contamination exceeding protective exposure standards for industrial land use.** The standards chosen were the U.S. EPA Regional Screening Levels (RSLs) for industrial/commercial land use. The standards for the COCs identified at this facility are listed below.
Remediation Standards

Confirmation samples were collected and analyzed in the identified areas. Results indicated that although contamination continued to exist, the levels were below the U.S. EPA RSLs for industrial/commercial land use. The RSL standards applied to the former Valley Cores include:

- Barium - 22,000 mg/Kg
- Chromium - 180,000 mg/Kg
- Cadmium - 98 mg/Kg
- Lead - 800 mg/Kg

FINAL REMEDY

Based on discussions August 18, 2009 and November 16, 2011, Ohio EPA and JMW (owner) agreed upon the fourth option described above; excavation of contaminated soils to achieve remediation standards protective of human health and the environment in an industrial setting. It was agreed that historic, present-day, and anticipated future end use is industrial. It was further agreed that a presumptive remedy would require excavation of contamination exceeding industrial standards and restriction of the property to industrial use via an Environmental Covenant. Discussion between JMW and the Ohio EPA included a presumptive remedy culminating in two focused excavation events south of the RCRA HWMUs; this proceeded as a Corrective Action Interim Measure.

Excavation removed known contaminated soils that exceeded U.S. EPA RSLs for Industrial Land Use. To provide an additional source of certainty, the historic lead concentration data that had been collected during the multiple sampling events was evaluated statistically. The results of the statistical analysis found the soils to be acceptable for anticipated industrial land use. The risk associated with invasive activities was evaluated and it was determined to be acceptable for construction workers and trespassers.

The final remedy documented in this Decision Document is necessary to protect human health and the environment. Specifically, the remedy will address risk by restricting land use thereby reducing and/or eliminating human exposure through direct contact with residual contaminated soil.

Ohio EPA has selected the following remedy for the former Valley Cores facility: the facility must enter into an Environmental Covenant which meets the requirements of Ohio Revised Code §§ 5301.80 to 5301.92. The Environmental Covenant prohibits the following activities at the facility:

1) Residential use of the property.

This will control residential exposure to contamination in soils. The covenant will become part of the deed for the property.

Future Actions

The owner, JMW Trucking, must enter into an Environmental Covenant with Ohio EPA. Once executed and recorded, the Environmental Covenant will remain attached to the land records and be enforceable.

The Environmental Covenant will include a legal description of the subject facility, as well as language to prohibit the facility from being used for residential or specific agricultural activities. JMW will submit
a survey plat and legal description with the Environmental Covenant, specifying the entire facility will be restricted to industrial use. Ohio EPA will monitor the facility owner's adherence to the Environmental Covenant to ensure continued protection of human health and the environment.

Administrative Record

The Administrative Record for the final remedies is available at Ohio EPA, Northeast District Office, 2110 East Aurora Road, Twinsburg, Ohio 44087. All documents concerning Valley Cores are located in the Division of Materials and Waste Management files and archives and may be accessed by calling the NEDO, 330.963.1200, and requesting a file review.

Declarations

Based on the Administrative Record compiled for this Corrective Action, Ohio EPA has determined that the final remedies selected for the Former Valley Cores facility are appropriate and protective of human health and the environment.

Craig W. Butler  
Director  
Ohio EPA  

[Signature]  
3-13-15  
Date  

Attachment

IN THE MATTER OF:  
Former Valley Cores, Inc.  
1800 ½ Allen Avenue SE  
Canton, Ohio  
EPA I.D. No.: OHD981956618
Statement of Basis for Remedy Selection at

Valley Cores, Inc.
1800½ Allen Avenue SE
Canton, Ohio

Stark County Ohio
OHD 981 956 618
276002960

Prepared by
The Ohio Environmental Protection Agency
Division of Environmental Response and Revitalization

October 31, 2014
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7.2 Proposed Remedy Selection and Summary

8.0 CONCLUSION

FIGURES

Figure 1: Photograph of 1800 Allen Avenue S.E., Canton; Parcel# 246722.

Figure 2: Valley Cores Inc. Facility within Parcel# 246722

Figure 3: General Site Layout

Figure 4: Site layout showing RCRA Hazardous Waste Management Unit (Disposal Pit) And Limit of Excavation for Closure.
STATEMENT OF BASIS FOR
FORMER VALLEY CORES, INC. FACILITY
CANTON, OHIO

1.0 INTRODUCTION

1.1 Executive Summary

The Ohio Environmental Protection Agency (Ohio EPA) has prepared this Statement of Basis (SB) for remediation of the former Valley Cores, Incorporated (VCI) facility, located at 1800½ Allen Avenue SE, Canton, Ohio. Public participation is one of the responsibilities addressed under the Resource Conservation and Recovery Act (RCRA). This SB identifies Ohio EPA's preferred remedy, explains the reasons for the selection of the remedy, solicits public review and comments, and provides information on how the public can be involved in the remedy selection process.

Under RCRA, the Corrective Action program was created to address threats to human health and the environment from historic or present waste management areas at RCRA treatment, storage or disposal facilities. The former VCI conducted operations, which included unpermitted disposal of hazardous wastes that made the facility subject to RCRA Corrective Action.

Several investigations of environmental conditions have been conducted at the facility beginning in the mid-1980s. During Closure and Corrective Action, the facility sampled and analyzed soil and ground water samples. Based on the findings, it was determined that Corrective Measures would be necessary at the facility in order to protect human health and the environment. The facility completed Closure activities in 2003 and began Corrective Action Interim Measures in 2008.

Ohio EPA is proposing the following remedy for public review and comment. Ohio EPA will select a final remedy for the facility only after the public comment period has ended and the comments received during the comment period have been reviewed and considered.

In brief, Ohio EPA proposes the following measure:

JMW Trucking, Inc. (the current owner of the former VCI facility) and Ohio EPA enter into an Environmental Covenant for the facility restricting future use of the facility to industrial land use.

1.2 How the Corrective Action Process Works

The initial step in the Corrective Action process for facilities regulated under RCRA is site characterization or investigation to define the nature and extent of contamination at the facility. The information collected is used to support the selection and implementation of a remedy or remedies to address issues identified.

Upon completion of the investigation, the facility can either provide Ohio EPA with its proposed remedies or Ohio EPA may propose remedies. Ohio EPA may decide to approve the proposed remedy, tentatively approve a proposed remedy, tentatively select a different remedy, or require additional analysis of remedial alternatives. Ohio EPA will next present a preliminary decision on remedy selection for public comments by issuing a Statement of Basis (this document). Following
public review during the designated Public Comment period, Ohio EPA will respond to all comments received. Ohio EPA will take into account comments received during the Public Comment period in making the final decision. Ohio EPA will then issue a final decision selecting the remedy. The facility is then required to implement the remedy.

2.0 PUBLIC PARTICIPATION

The Ohio EPA is seeking comments from the public on the proposed remedy presented in this SB document. The actual approval for the final remedy will be made after the comments received during the public comment period have been reviewed. All comments received during the public comment period will be summarized and addressed in a Responsiveness Summary that will be available for public review. Ohio EPA, after considering all public comments will then issue a Declaration and Decision Document identifying the final remedy selection.

Historic documents pertaining to this facility are available for review by the public at Ohio EPA's Northeast District Office, 2110 East Aurora Road, Twinsburg, Ohio 44087. To review these records, please call Ohio EPA at (330) 963-1200 to make an appointment.

The comment period for this Statement of Basis will run from November 20, 2014 to January 5, 2015. Comments regarding information contained in this Statement of Basis must be submitted before the end of the public comment period. The comment period may be extended by Ohio EPA if a specific request for a comment period extension is received within the original comment period. All persons, including JMW Trucking, Inc. may submit written comments relating to this matter.

Your comments may either be submitted in writing by mail to:

Ohio EPA Northeast District Office
Division of Environmental Response and Revitalization
Attn: Ms. Patricia Dunbar
2110 East Aurora Road
Twinsburg, OH 44087

Or by e-mail to:

patricia.dunbar@epa.ohio.gov

When submitting your comments, please identify the document, "Statement of Basis for Remedy Solution at Valley Cores Incorporated".

3.0 FACILITY BACKGROUND

3.1 Facility Operational History

Figure 1 illustrates that the former VCI facility is a small portion of parcel # 246722. It is for this parcel that the deed information listed was obtained. On June 5, 1980 the property including the former VCI facility was transferred from I.K. Kline and M. Kline to the Luntz Corporation. On December 31, 1996, the property was transferred from Luntz Corporation to Luntz Services Corporation (LSC). On July
26, 2002, the property was transferred from LSC to PSC Metals, Inc. On August 15, 2003, the Stark County Health Department received an odor complaint for the property located at 1800 Allen Avenue. The complaint listed LSC as the owner and the facility as a mixed waste and construction debris operation. The facility was inspected on September 26, 2003 and the complaint was closed. On December 12, 2003 the property was transferred to Slutz Properties, LLC.

With regard to the possible property use of the former VCI facility, the Luntz Services Corporation operates scrap, recycling, and salvage facilities. Ohio EPA was not able to determine the property use of the former VCI facility prior to 1986.

The former VCI facility conducted operations at 1800½ Allen Avenue SE, Canton, Ohio from March 1986 to October 1986. Facility operations included an engine block crushing operation and an aluminum smelting operation. While the former VCI facility was operating, the facility would purchase scrap engine blocks and stock pile them on-site. The parts/accessories on the engine block were removed and stored in the shed behind the office. The engine blocks would then be crushed to recover metallic parts which were cleaned with water and detergent and eventually resold. Aluminum smelting occurred on-site as well. During the crushing and metallic recovery process, characteristic hazardous waste sludge was generated from block washing operations. The sludge was disposed in an on-site "pit", an unlined, unpermitted surface impoundment. A drainage swale ran through the surface impoundment and continued south along the eastern side of the property.

The facility appeared to be shut down from at least 1987 to 1990. All equipment was decontaminated and removed by August 1989. The secondary aluminum sweating furnace which was used to recycle scrap aluminum was removed from the site in January 1990.

During a 1993 Ohio EPA inspection, it was noted that the Luntz Corporation was operating a business called the Scrap Shack in the on-site building formerly occupied by VCI. The Scrap Shack may have been used to operate an aluminum recycling operation. During a 2001 Ohio EPA inspection, it was noted that the facility was non-operational.

In 2003, Slutz Properties, LLC purchased the former VCI property. The facility is currently used by their company, JMW Trucking, Inc. (JMW), as a truck trailer parking lot. Modifications to the facility have been made, including the addition of a limestone/slag mixture to the driveway for grading purposes. In 2008, the on-site building was used by a roofing contractor who stored his equipment inside. As of July 2014, the building was being used by JMW for the storage of equipment.

3.2 Physical Setting

The former VCI is located on an approximately three (3) acre parcel of land in an industrial area south of Canton, Ohio (Figure 2). The facility is bordered by woods and then a residential area to the north and by land used for industrial purposes to the east, south, and west. The facility includes one building situated on an elevated region of the tract with the remaining grounds fanning out radially towards regions of lower elevations and enclosed by a chain link fence.

The rest of the property is a driveway and parking area, which are covered with graded slag/gravel and concrete. This gravel area is now used by JMW to store empty roll-offs, trailers, and tankers. Access to the site is controlled by natural terrain and the chain link fence. Figure 3 presents general site features.
In general, the lithology across the facility consists of a thin veneer of unconsolidated fill and native soils overlying bedrock. The bedrock is characterized as sandstone, shale, coal, and limestone of the Pennsylvanian Period. Underlying the topsoil, fill material was found at depths ranging from the ground surface to three feet below ground surface (bgs). Generally, the fill consisted of varying amounts of clay, silt, fine to coarse sand, fine to coarse gravel and occasional metal fragments. Slag was encountered in almost all borings near the surface impoundment and swale. In a few areas, glacially derived native soils were encountered overlying the bedrock.

Locally, the facility is drained on the west and southwest by Nimishillen Creek and on the south by Sherrick Run (a Nimishillen Creek tributary). Nimishillen Creek continues to flow south into the Sandy Creek, a tributary of the Tuscawaras River. The shale bedrock represents the uppermost aquifer with ground water occupying the many fractures and joints of the weathered shale. The ground water appears to flow south and southeast. The depth to water ranges from five feet bgs to 12.5 feet bgs.

4.0 CLOSURE INVESTIGATIONS AND REMEDIATION

4.1 Discovery of Hazardous Constituents

Acting on a complaint, Ohio EPA conducted an inspection on October 21, 1986 and discovered that the former VCI facility was discharging waste water sludge into an unlined pit (surface impoundment) on-site. The former VCI facility was advised to cease the on-site disposal of sludge and ordered to remove all sludge residues and oily waste water from the site. During the investigation, RCRA hazardous waste management units (WMUs) identified included a surface impoundment (the unlined pit) and a drainage swale (aka trench). Ohio EPA also requested that the former VCI facility submit a copy of the laboratory analysis of the waste water sludge. The results indicated an elevated lead level (38 mg/L; the regulatory limit was 5.0 mg/L). Primary constituents of concern included lead, cadmium and chromium. Based on the data, Ohio EPA determined that the former VCI facility disposed of hazardous wastes in the surface impoundment without a permit. This unpermitted disposal made the facility subject to the RCRA Closure and Corrective Action requirements.

4.2 Regulatory History and Plan Submittals

The facility was referred to the Ohio Attorney General’s Office for enforcement action on April 3, 1987. A complaint was filed on August 11, 1988 by the State of Ohio, and a consent order was entered into on June 28, 1991 by the State of Ohio and the defendants, the former VCI facility and owner, James Valentine.

A Site Investigation Work Plan was submitted to Ohio EPA in order to identify the nature and extent of potential heavy metal, and oil and grease contamination associated with the former surface impoundment and drainage swale. The Site Investigation Work Plan, submitted to Ohio EPA on May 5, 1989, included soil and ground water sampling. On June 5, 1989 Ohio EPA sent comments on the Site Investigation Work Plan to the former VCI facility. The Work Plan was implemented during August and September 1989 and the Site Assessment Final Report was submitted to Ohio EPA on March 14, 1990.

A Closure Plan for the former surface impoundment was submitted to Ohio EPA on November 15, 1990 and later revised on July 25, 1991. Ohio EPA approved the revised Closure Plan with modifications on October 23, 1991. Closure activities commenced January 27, 1992. Soils were excavated and sampling was conducted, which revealed additional contamination. Closure activities
were delayed, and on December 7, 1994 an Agreed Order (Case No. 88-1258) State of Ohio, ex rel. Fisher v. Valley Cores, Inc. and James Valentine, was entered in the Stark County Ohio Court of Common Pleas.


On January 23, 2002, an additional Consent Order between Ohio EPA and the former VCI facility was filed requiring the facility to submit an Amended Closure Plan. The plan, dated March 4, 2002, included a sampling plan to determine the volume of contaminated media to be remediated during final closure of the surface impoundment and drainage swale. Upon completion of the proposed investigation, the boundaries of the area(s) to be remediated during final closure were to be determined and a second Amended Closure Plan was to be submitted.

On December 16, 2002, the former VCI facility submitted an Amended Closure Plan to Ohio EPA. The public was provided the opportunity to comment on the Closure Plan, however no comments were received. Ohio EPA approved the Amended Closure Plan with modifications on March 20, 2003. The Amended Closure Plan allowed the use of risk-based cleanup standards for soils to demonstrate that the closure performance standard had already been achieved and that any remaining contamination was not attributable to the WMUs.

On July 18, 2003 the former VCI facility submitted a Closure Certification to Ohio EPA. A closure verification inspection was conducted by Ohio EPA on December 11, 2003. On January 13, 2004, Ohio EPA notified VCI that the Closure Certification was accepted and that VCI had met the closure performance standard as specified by Ohio Administrative Code (OAC) rule 3745-66-11. The closure performance standard was achieved by targeted excavation of contaminated soil and a determination that ground water was not contaminated.

4.3 Closure Activities

The former VCI facility operated a business where engine blocks were crushed, yielding various engine parts which were cleaned with water and detergent and eventually sold. Residue from the wash water was discharged from an elevated hopper into a large metal tub. The residue filled the tub, at which time it was discharged into an unlined pit (unpermitted surface impoundment) on at least one occasion. The surface impoundment was located along the eastern side of the site, east of the main building, and was determined to be approximately 18 feet long, 12 feet wide and 6 feet deep. A small drainage swale also existed eastward along the north end of the facility, then turned south through the surface impoundment and splayed out along the southern end of the site. For closure estimation purposes, the swale was assumed to average two feet in width and six inches in depth with 2:1 side slopes. After facility operations ceased, the contents of the surface impoundment were removed and it was refilled with soil. However, these activities were not documented and did not meet the closure performance standard.

An investigation was conducted in August and September 1989 to define the extent of potential heavy metals and oil and grease contamination associated with the surface impoundment. Closure activities began in January 1992 with soil excavation and the installation of ground water monitoring wells. Additional soil and ground water investigations were then conducted during 2001 and 2002. In June
2003 the former VCI facility conducted soil excavation activities associated with closure of the WMUs and closure was certified by the Ohio EPA in 2004.

4.4 Soil Sampling during Closure

The former VCI facility submitted a copy of the laboratory analysis of the sample of waste water sludge that was collected in October 1986. In December 1986, Ohio EPA sampled soil from the drainage swale area adjacent to the surface impoundment. The two soil samples collected showed lead concentrations above acceptable limits.

On August 30, 1989, ERM-Midwest, Inc. collected six composite soil samples; two from the surface impoundment and four from the drainage swale. Sixteen background samples were collected from locations north and northeast of the limits of facility activities. These samples were analyzed for total RCRA metals four of the samples were analyzed for volatile organic compounds (VOCs), and total petroleum hydrocarbons (TPH).

The samples taken from the surface impoundment indicated that the eight RCRA metals were present in elevated levels when compared to the background levels. All eight RCRA metals, except mercury, were detected in samples collected from the drainage swale. ERM-Midwest, Inc. started excavation activities on January 27, 1992.

Four additional sampling events were conducted both within the two hazardous waste disposal units as well as across the site. The third sampling event collected samples to further evaluate site wide conditions as well as to delineate the extent of contamination along the margins of the WMUs.

Closure activities, including soil excavation, occurred from June 10 through June 12, 2003. Confirmation samples were collected from the WMUs and analyzed for lead, chromium, cadmium, and barium and a determination was made that the closure performance standard had been met. A Closure Certification was submitted by VCI to the Ohio EPA in July 2003.

4.5 Ground Water Sampling during Closure

On September 5, 1989 ERM-Midwest began the installation of four ground water monitoring wells (MW-1 through MW-4). On September 11, 1989, one round of ground water samples was collected. All samples were analyzed for VOCs, total RCRA dissolved metals, TPH, pH, and specific conductivity. No VOCs were detected. Barium was the only metal detected in the ground water samples, but it was below the Maximum Contaminant Level (MCL), i.e., the regulatory drinking water standard. The TPH analyses showed no detectable levels of petroleum hydrocarbons.

It was determined that MW 1 and MW-3 were not located down-gradient of the surface impoundment hazardous waste management unit (WMU). Therefore, on April 19, 2000, two additional monitoring wells (MW-5 and MW-6) were installed to establish a total of three downgradient wells from the WMU.

The ground water monitoring system consisted of one upgradient monitoring well (MW-2) and three downgradient monitoring wells (MW-4, MW-5, and MW-6) encompassing the WMU undergoing closure. During the first year of monitoring, samples were collected and analyzed on a quarterly basis (April 28, July 27, October 31, 2000 and February 14, 2001). During the second and third year, ground water was sampled semi-annually (September 6, 2001, February 26, August 28, 2002, and April 2, 2003).
The former VCI facility monitored the ground water for the eight RCRA metals, VOCs, and TPH. No VOCs were detected in any of the wells throughout the monitoring period. TPH was detected in MW-6. No metals were detected above the detection limit except for lead in MW-6 which ranged from non-detect to 0.082 mg/L. The concentrations of TPH and lead in MW-6 were found to be statistically insignificant. The most downgradient wells (MW-4 and MW-5) were non-detect for all analytes during the entire monitoring period. Therefore, it was determined that ground water was not impacted. The six monitoring wells that were used during closure activities were later properly abandoned on April 30, 2008.

4.6 Soil Removal during Closure

As stated earlier, after facility operations ceased in 1986, the contents of the surface impoundment hazardous waste management unit (WMU) were removed and refilled with soil. Even though these activities were not documented, it is noted that on March 24, 1987, 9.79 cubic yards of hazardous waste sludge was removed from the facility and shipped under a hazardous waste manifest. During Ohio EPA's August 24, 1989 inspection, it was noted that the surface impoundment WMU was covered over.

Additional excavation activities commenced at the facility on January 27, 1992. Soils that were determined to be hazardous waste were placed into two roll off containers and soils that were determined to be non-hazardous were placed into piles on-site and covered with Visqueen. The soils were ultimately disposed off-site. Sampling at that time revealed additional on-site contamination.

Further excavation activities occurred from June 10 through June 12, 2003. Prior to beginning excavation activities, water present in the surface impoundment was pumped into an above ground mobile steel tank. Soils were then excavated from the area. The excavation dimensions around the surface impoundment WMU were 77 feet by 48 feet. Soils were excavated to bedrock (one to three feet deep); to approximately three feet deep on the east side and approximately two feet deep on the west side. Additional limited excavation was performed in the drainage swale hazardous waste management unit. Confirmation soil samples were then collected and the excavation was backfilled to grade with clean fill. During the 2003 closure activities, 347 tons of soil were removed from the surface impoundment and drainage swale WMUs and 3000 gallons of non-hazardous water were transported off-site.

5.0 CORRECTIVE ACTION INVESTIGATIONS AND REMEDIATION

According to the Closure Certification, dated July 16, 2003, eight confirmation soil samples were collected from the sidewalls of the excavation outside the surface impoundment WMU. The confirmation samples (as described in the Closure Certificate) were collected by hand, 0 to 6 inches into the sidewall at the midpoint between ground surface and the base of the excavation, or so as to be above bedrock. Figure 4 shows the RCRA WMU, the area excavated to bedrock, and the limit of excavation surrounding the unit. It is along the outer limit of excavation that the confirmation samples were collected.

As described in the Amended Closure Plan received by Ohio EPA on December 12, 2002, remediation standards selected consisted of risk-based standards developed by Ohio EPA.
standards for the contaminants of concern were (in mg/kg):

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</tbody>
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Based on the sample results, seven of the eight samples collected contained cadmium concentrations above the closure remediation standard and six of the eight samples collected contained lead concentrations above the closure remediation standard. However, the Closure Certification stated that given the definition of the RCRA units (surface impoundment and drainage swale) and the separation and nature of these other, isolated sample locations from the limits of the hazardous waste management units, it was not reasonable to consider these isolated areas as part of or associated with the RCRA units based on proximity, constituent type, topography, etc.

Analytical results of ground water monitoring indicated no impacts to ground water from facility operations. The existing limits of excavated soils were considered to provide closure for the surface impoundment and drainage swale WMUs and RCRA Closure obligations were determined to be complete by Ohio EPA as stated in the January 13, 2004 letter to the facility. However, the areas where elevated concentrations remained became the focus of RCRA Corrective Action investigations.

5.1 Discussion of Other Facility Units/Areas

A RCRA Facility Assessment Report (containing the Preliminary Review (PR) and Visual Site Inspection (VSI)), dated January 1994, was completed for the former VCI facility by Metcalf & Eddy, Inc., under contract from U.S. EPA. Following the preliminary review of U.S. EPA and Ohio EPA documents, U.S. EPA identified the following Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) based on file information.

The VSI occurred on September 24, 1990 whereby it was confirmed that the waste pit (known herein as the surface impoundment), the sludge waste pile (based on photographs taken during an Ohio EPA inspection), and a trench (known herein as the drainage swale) were considered waste management units. Areas of concern (AOC) are defined as any area where a release of hazardous constituents or waste to the environment has occurred or is suspected to have occurred on a non-routine or non-systematic basis, or any area where such a release in the future is judged to be a strong possibility. AOCs evaluated during the VSI included a washing system tank, waste drum storage area 1, waste drum storage area 2, waste drum storage area 3, two storage tubs, and the secondary aluminum sweating furnace.

The investigation determined that the secondary aluminum sweating furnace was not an AOC based on Ohio EPA permits that revealed the furnace was used as a recycling process furnace and not a storage unit. The washing system tank was decontaminated and removed from the facility, thereby removing this unit from the list of AOCs. The drums in the waste drum storage areas (1, 2, and 3) were shipped off-site under manifest by Erieway, Inc. The removal of the drums and lack of apparent releases of any hazardous waste resulted in the decision not to consider the three drum storage areas as an AOC.
The following Waste Management Unit (WMUs) and AOCs remained:

- **Waste Pit WMU (referred to in this Statement of Basis as the Closure Unit or the Unpermitted Surface Impoundment).** The surface impoundment was reported to contain heavy metals including lead, cadmium, and chromium. The contents of the surface impoundment were excavated and the surface impoundment refilled with soil before the time of the visual site inspection. However, at the time of the PR/VSI, the closure of the unit had not yet been certified by Ohio EPA. The former VCI facility eventually completed closure for the surface impoundment and Ohio EPA issued a final closure letter for the facility on January 13, 2004.

- **Trench (referred to in this Statement of Basis as the drainage swale) WMU.** The runoff from the waste pit appeared to drain into a trench. Soil samples from the trench were collected by Ohio EPA and indicated the presence of the same heavy metals as reported to have been in the surface impoundment. Therefore, the trench was considered a WMU. The former VCI facility eventually completed Closure for the trench/drainage swale as part of the surface impoundment closure and Ohio EPA issued a final closure letter for the facility on January 13, 2004.

- **Sludge Waste Pile WMU.** During the VSI, Ohio EPA indicated that a sludge waste pile was observed during an Ohio EPA inspection. The sludge waste pile could not be located during the VSI, but as a result of photographic evidence, the sludge waste pile was considered a WMU. The sludge waste pile was observed west of waste drum area 1. Although no longer visible during the PR/VSI, there is no documentation regarding the cleanup of the waste pile. Ohio EPA photographs included in the PR/VSI indicate the dumping of sludge beyond a concrete pad on the west side of Building A. The constituents of the sludge pile were unknown. The pictures indicated that the pile was located in the foliage, beyond the concrete pad, and west of the storage shed. The exact period of dumping was unknown; however the dumping did occur prior to September 1988, when the photographs were taken. U.S. EPA recommended soil sampling in the area beyond the concrete pad and west of the building to locate the sludge pile. During the closure process, the former VCI facility collected site wide soil samples. In particular, soil sample SB-3 collected in April 2002 appears to be where the waste pile may have been located. The results from that sample did not indicate any elevated concentrations of metals.

- **Two Storage Tubs AOC.** Two metal tubs were located on a concrete pad during the VSI. These tubs were used to store the discharged wash water and sediment from the elevated washing system tank. The tubs were used to store the oil, grease and sediment before it was discharged into the waste pit. The tubs were decontaminated by ERM-Midwest, Inc. Although the tubs remained empty, they were still located on a concrete surface at the facility and, due to their potential for use, were considered an AOC during the VSI. The tubs were later removed from the site and with their removal, the potential for use was terminated and the AOC was removed from the list.

- **Southeast Area of Facility AOC.** During Closure and Corrective Action, site wide soil data was collected. After evaluating the sample results, it was determined that RCRA metals at
elevated concentrations remained on-site. Specifically in the southeast area of the facility as identified through the confirmation sampling of the WMUs. These areas of elevated metal concentrations were considered to be areas of concern that needed to be addressed under the RCRA Corrective Action program.

5.2 Sampling and Excavation Activities during Corrective Action

In order to further assess the site, on July 9, 2008, JMW collected ten additional soil samples at the facility where previous data indicated elevated levels of constituents of concern (COCs) existed. These samples were analyzed for total RCRA metals plus nickel. Further characterization of the facility occurred on September 4, 2008. Samples were collected at 12 locations at one foot below ground surface and two feet below ground surface and were again analyzed for total RCRA metals plus nickel.

After reviewing all the soil data collected from the site, Ohio EPA determined that elevated concentrations of COCs, mainly lead, remained. As a Corrective Action Interim Measure, JMW performed soil excavation activities on December 16, 2011 and confirmation samples were collected from five locations within the excavation area. The confirmation samples collected from the sidewalls and bottom of the excavation were analyzed for total RCRA metals. Results showed concentrations of metals that remained in the soil to be below the U.S. EPA Regional Screening levels (RSLs) for industrial/commercial land use.

In June of 2014, interim soil excavation activities were again performed by JMW to remove soil exhibiting lead concentrations above industrial-use RSLs. The second excavation location was north and slightly east of the area excavated in 2011. A rectangular area measuring approximately 15 feet north/south and 26.5 feet east/west was excavated to a depth of approximately three feet. A geotextile/fabric was observed 14 to 17 inches below ground surface. Confirmation composite and multi-incremental samples were collected below the fabric, from the sidewalls and bottom of the excavation and analyzed for total RCRA metals (minus mercury) and hexavalent chromium. Laboratory results showed concentrations of constituents of concern were below U.S. EPA's RSLs for industrial land use.

5.3 Excavation during Corrective Action

Based on discussions August 18, 2009 and November 16, 2011, Ohio EPA and JMW agreed on a soil sampling and analysis strategy for the former Valley Cores facility to address concerns for Corrective Action. It was agreed that historic, present-day, and anticipated future end use is industrial and that a presumptive remedy would require excavation of contamination exceeding industrial standards and restriction of the property to industrial use via an Environmental Covenant. Discussion between the facility and the Ohio EPA included a presumptive remedy culminating in two focused excavation events located south of the RCRA WMU; this proceeded as a Corrective Action Interim Measure.

As stated above, on December 16, 2011, JMW performed the first round of excavation activities at one of two areas showing elevated soil concentrations of metals (COC) remaining at the facility. The excavation was the shape of a triangle approximately 26 feet by 29 feet by 25 feet and approximately 3.5 to 4 feet deep.

The excavated soils were placed in six roll off boxes lined with plastic. Samples from each roll off box were analyzed for toxicity characteristic leaching procedure (TCLP) metals and determined to be non-
hazardous. The soil was disposed at a solid waste landfill. Clean fill material was obtained from a location JWM Trucking uses for fill material. Prior to using the fill, samples were collected and analyzed for RCRA metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). The fill was determined to be acceptable.

In June 2014, JMW excavated the second area characterized by elevated soil concentrations of metals, primarily lead. As with the first excavation in 2011, this excavation was undertaken in order for the facility to achieve remediation standards protective of human health and the environment in an industrial setting. The second area was north and slightly east of the first excavation location along the eastern portion of the facility.

A rectangular area measuring approximately 26.5 feet north/south and 15 feet east/west was excavated to a depth of approximately three feet. Confirmation samples were collected employing both composite and multi-incremental methodologies along the sidewalls and base of the excavation pit. Contaminated soils were removed until the lead concentration was reported below the accepted industrial risk based standard.

Four 20 cubic yard roll-off boxes were filled during the excavation; TCLP methodology for RCRA metals was performed. Analytical results revealed one of the boxes contained soil characterized as a hazardous waste (concentrations above the TCLP standard). The waste was assigned a U.S. EPA hazardous waste code, D008, for lead. It was transported to a hazardous waste facility and treated prior to disposal in accordance with EPA rules and regulations. The other three boxes were transported to a solid waste facility for final disposition.

Upon receipt of laboratory results of the confirmation sampling, the excavated area was filled with clean fill.

5.4 Contamination Remaining on Site

Excavation as a Corrective Action Interim Measure removed known lead contaminated soils that exceeded U.S. EPA Regional Screening Levels for Industrial Land Use. To provide an additional source of certainty, the historic lead concentration data that had been collected during the multiple sampling events on site was evaluated statistically. The results of the statistical analysis found the soils to be safe for anticipated industrial land use. The risk associated with invasive activities was evaluated and it was determined to be acceptable for construction workers and trespassers.

6.0 RISK ASSESSMENT

6.1 Human Health Risk Assessment

The facility is located in an industrial area south of Canton, Ohio. Previous investigations have demonstrated elevated levels of chemicals of concern (COCs) in the soil. The analytical results from the soil samples collected during Closure and Corrective Action were used to determine the nature and extent of contamination compared to U.S. EPA Regional Screening Levels (RSLs). The COCs identified during investigations included arsenic, barium, cadmium, chromium, lead, selenium, silver, and nickel in the soil. It was determined during closure activities that ground water had not been impacted by facility operations.
Utilizing all available data, Ohio EPA conducted a human health risk assessment. Potential current and future receptors evaluated during the risk assessment included residential, on-site industrial workers, construction workers, and trespassers. After conducting the risk assessment, it was determined that the levels of COCs remaining in the soil are higher than would be acceptable for an unrestricted use property scenario, but do not pose a human health risk or a risk to the environment based on exposure to on-site industrial workers, construction workers, and trespassers.

### 6.2 Ecological Risk Assessment

During a site visit, Ohio EPA conducted a scoping ecological risk assessment at the former VCI facility. Based on this assessment, it was determined that important ecological resources were not present at the site and that further ecological investigations were not necessary.

### 7.0 REMEDY EVALUATION AND SELECTION

#### 7.1 Description of Remedies Considered

For a proposed remedy to be considered viable when implemented, it must meet the threshold criteria to be protective of human health and the environment.

**Threshold Criteria**

1. **Protect human health and the environment.** Corrective measures shall be evaluated to determine if they can adequately protect human health and the environment, in both the short and long term, from unacceptable risks posed by environmental contaminants present at the facility.

2. **Attain media cleanup standards set by the implementing agency.** Corrective measures shall be evaluated to determine if the final numerical standards for the subject environmental media will be achieved. The evaluation will include the method of verification, and its supporting quality assurance and quality control procedures, used to make the determination.

3. **Control source of the release(s) to reduce or eliminate, to the extent practicable, further releases that may pose a threat to human health and the environment.** A corrective measure shall be evaluated to determine if it is practicable to physically remove the source of environmental contamination as part or all of the corrective measure.

4. **Comply with applicable standards for management of waste.** Corrective measures shall be evaluated to determine if they meet all of the applicable requirements of state, federal, and local environmental laws for waste management.

The following alternative remedies were considered by the facility and Ohio EPA to address corrective action.

1. **No Action.** This alternative is selected if the facility has no known exposures to human health and the environment such that environmental conditions meet the threshold criteria.

2. **Excavation to Meet Unrestricted Use.** This alternative would require the removal of all residual
contamination in soil to meet the human health risk standards for unrestricted use of the property.

3) Institutional Controls. This alternative consists of land use restrictions which may be recorded as a deed restriction or become part of an environmental covenant between the facility and the regulatory agency. The purpose of these controls is typically to manage or limit human exposures at the site.

To ensure the facility continues to be used for the appropriate designated purpose, Ohio EPA proposes as a remedy that the facility owner and Ohio EPA enter into an Environmental Covenant. An Environmental Covenant is a legally enforceable mechanism that would describe the facility and limit its use to designated purposes. The Environmental Covenant would list appropriate land use while also describing what uses would not be allowable. The Environmental Covenant would run with the land, be attached to the deed, and could not be changed without written agreement of both the facility owner and Ohio EPA, even if the facility was sold at some point in the future. Ohio EPA will monitor the facility to ensure that its use is consistent with the allowed uses listed in the Environmental Covenant.

7.2 Proposed Remedy Selection and Summary

Ohio EPA has evaluated alternatives in consideration of the threshold and balancing criteria. The evaluation is as follows.

1) No Action. An alternative of "no action" at the facility is not acceptable to Ohio EPA. It had been determined that levels of contamination in the soil presented an unacceptable exposure or risk for unrestricted facility use. Therefore, corrective measures are required to achieve the corrective action threshold criteria listed above. Additionally, while the use of the facility currently is industrial, there is no legally enforceable mechanism in place to prevent the facility from being converted to residential use in the future.

2) Excavation to Meet Unrestrictive Use. The residual contamination at the site consists of metals that pose an unacceptable risk due to direct contact in an unrestrictive use scenario. The general dispersed nature of contamination above unrestrictive use risk standards would require extensive source removal. While this alternative meets the threshold criteria, the implementation and costs make this option unfeasible based upon current and reasonable anticipated future land use.

3) Institutional Controls. Institutional control requiring property use restrictions meets the threshold criteria of protecting human health and the environment by restricting the property to industrial use.

Ohio EPA's preferred remedy for the VCI facility is for JMW (the current property owner) and Ohio EPA to enter into an Environmental Covenant restricting future use of the facility. Ohio EPA proposes that the facility will have use restrictions through enactment of an Environmental Covenant, an enforceable mechanism under Ohio law that can be used to restrict land use. This restriction will run with the land and be binding upon all future property owners should the facility be transferred or sold.
The Environmental Covenant will include a legal description of the subject facility, as well as language to prohibit the facility from being used for residential or specific agricultural activities.

JMW will submit a survey plat and legal description with the Environmental Covenant, specifying the entire facility will be restricted to industrial use. Ohio EPA will monitor the facility owner’s adherence to the Environmental Covenant to ensure continued protection of human health and the environment. The Environmental Covenant will restrict the facility to the following industrial/commercial land use.

**Land Use Limitations.** The facility shall not be used for residential or agricultural activities, but may be used for industrial/commercial activities. The term “residential activities” shall include, but not be limited to, the following:

- a. Single and multi-family dwelling and rental units;
- b. Day care centers, elementary and high schools, and preschools;
- c. Outdoor Parks and Playgrounds;
- d. Correctional Facilities;
- e. Transient or other residential facilities;
- f. Soils from the site will not be used for the production of food-chain products by agricultural means for animal or human consumption.

The term “industrial activities” shall include:

- a. facilities which supply goods or services to the public;
- b. facilities engaged in manufacturing, processing operations and office and warehouse use;
- c. facilities engaged in production, storage, and sales of durable goods; and
- d. facilities parking/driveway use.

8.0 **CONCLUSION**

In conclusion, the property was investigated; contaminated soils were excavated as an interim measure with remaining soils meeting industrial standards as defined by U.S. EPA’s Regional Screening Levels. The Ohio EPA’s preferred final remedy for the former Valley Cores, Inc. facility is an Environmental Covenant restricting the facility to industrial use.
FIGURES
FIGURE 1: 1800 Allen Avenue S.E., Canton, Ohio.
Parcel# 246722
valuation core Facility

FIGURE 2
FIGURE 3: GENERAL SITE LAYOUT
FIGURE 4: RCRA WASTE MANAGEMENT UNIT AND THE LIMIT OF EXCAVATION FOR CLOSURE
VALLEY CORES, INC., CANTON, OHIO