

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 7

11201 Renner Boulevard Lenexa, Kansas 66219

STATEMENT OF BASIS

Former SMV Industries

EPA ID No. IAD984566034 Council Bluffs, Iowa

Facility/Unit Type: Former Manufacturing Facility; Current Parking and Vacant Lots

Contaminants: Lead, naphthalene, 2-methylnaphthalene, benzene, ethylbenzene,

isopropylbenzene (Cumene), methylcyclohexane, xylene, benzo(a)pyrene,

Affected Media: Soil, groundwater

Proposed Remedy: Property activity and use limitations

INTRODUCTION

This Statement of Basis describes the proposed remedy for the former SMV Industries facility at 1103 South 6th Street in Council Bluffs, Iowa (Figure 1 and 2). The supporting rationale for the proposed remedy is also presented.

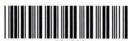
The U.S. Environmental Protection Agency Region 7 is issuing this Statement of Basis as part of its public participation responsibilities under the Resource Conservation and Recovery Act.

This document highlights information that is presented in more detail in the facility Administrative Record which contains key reports, correspondence and data. The EPA encourages the public to review these documents for a more complete understanding of the environmental issues at this facility and the corrective action activities that are proposed. The Administrative Record locations are noted at the end of this document.

PROPOSED REMEDY

The proposed remedy for the Former SMV Industries facility consists of institutional controls in the form of property activity and use limitations. Activity and use limitations are site restrictions that provide protection from contamination and also prescribe actions to be taken if contaminated media are encountered. These limitations include the following conditions: no residential land use; no use of onsite groundwater as a potable water supply; no soil excavation or removal in the restricted area without regulatory agency notification and appropriate protective measures; and, the requirement for structures constructed on the property to be engineered to address vapor intrusion unless sufficient testing is performed by the property owner prior to construction that demonstrates no vapor intrusion concern.

RCRA 5/13/2020



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FACILITY BACKGROUND

The former SMV Industries facility manufactured and distributed a variety of metal products such as posts for electric fences, signs for slow-moving vehicles and decorative windmills for lawns and gardens up until the mid-2000s. During a 1994 closure of a former hazardous waste storage area at the facility, the EPA inspector noted additional potential sources of contamination including an area of oil staining reportedly associated with equipment oil changes, as well as a pallet of opened containers reportedly containing an unknown solvent. These two areas were targeted for future sampling, as the other unit was provided a clean closure certification.

The current property owner, PACE Harvesters, conducted Phase 1 and Phase II Environmental Site Assessments in 2006/2007 as part of a Brownfields development project discussed below. These investigations discovered volatile organic compounds and semi-volatile organic compounds above drinking water standards in groundwater at the facility; however, it was concluded that this contamination is likely due to an upgradient source not associated with the facility. Previous Phase II sampling did not, however, target areas of concern noted in the 1994 sampling compliance evaluation inspection report developed during closure of the clean-closed unit.

PACE has developed the property into a parking lot structure for the Hoff Family Arts and Culture Center currently constructed adjacent and north of the property. Underneath the parking lot structure, a stormwater retention system was constructed underlain by an impermeable membrane. Construction diagrams depicted on Figure 2 show the approximate location of this system.

Based on a review of the Phase I/II ESA data, the EPA determined that data gaps existed and required additional groundwater and soil sampling. The first phase conducted in June 2019 included soil sampling during construction of the stormwater retention system. Test pits were excavated by backhoe to approximately 5-feet below ground surface. During collection of soil samples from these pits, buried debris was noted. The second phase conducted in October 2019 via direct-push boring technology targeted those areas identified as potential source areas of contamination during the 1994 closure activities.

The data collected from these investigations was compared to screening levels established for certain property uses. Screening levels are used to identify areas of contamination and may indicate a need for further investigation. Contamination exceeding a screening level does not necessarily indicate a need for cleanup but may be used as a threshold for remedial action in the absence of other established cleanup levels.

Soil

Sampling revealed lead contamination in the buried debris that was above industrial-scenario screening levels. However, during construction of the stormwater retention system (shown in Figure 2) the majority of the buried material was excavated and disposed of off-site as special waste. Several other metals (aluminum, arsenic, iron and manganese) constituents were detected above the applicable EPA Residential Soil Risk-Based Soil Level values during direct-push soil sampling. Arsenic was detected in all soil samples collected above the applicable EPA Residential and Industrial RSL values. Except for lead, metals concentrations appear to be consistent across all soil samples locations and intervals collected and do not appear to be indicative of source area contamination. Lead was not detected above the EPA Residential or Industrial RSL values in any of the soil samples collected during the October 2019 sampling event; however, a sample was not collected adjacent and east of the stormwater retention

system due to poor recovery in the upper 5-foot sampling interval. It is also worth noting that the direct-push sampling equipment hit resistance at approximately two feet below ground surface in other borings advanced adjacent and east of the stormwater retention system. No other constituents were detected in soil above applicable Residential or Industrial Soil RSL values.

Groundwater

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Naphthalene, 2-methylnaphthalene, isopropylbenzene (Cumene) and xylene were the only constituents detected above the applicable EPA Tapwater RSL during the October 2019 sampling event. Federal Maximum Contaminant Levels¹ have not been set for naphthalene, 2-methylnaphthalene or isopropylbenzene. Neither a Tapwater RSL nor an MCL has been set for methylcyclohexane. Benzene and ethylbenzene were both detected at concentrations above MCLs. No other VOCs or SVOCs were detected above applicable EPA Tapwater RSL values or MCLs.

Constituents in groundwater were detected above screening levels near the downgradient facility boundaries and within or near the road rights-of-way. Constituents detected in the groundwater samples collected from these locations were not detected in either soil or groundwater samples collected upgradient during this sampling event which targeted potential source areas. Additionally, these constituents were not detected in groundwater samples collected near the upgradient facility boundary. However, other VOCs and SVOCs were detected at low levels below RSL or MCL values in groundwater during this sampling event at upgradient sampling locations. Based on this information, it does not appear that detections of constituents in groundwater above the RSL or MCL values are emanating from an on-site source area targeted based on the 1994 closure activities, but may be indicative of widespread groundwater contamination within an industrial setting or contamination emanating from other sources beyond the scope of the 2019 investigation as identified during the 2006/2007 ESA.

SUMMARY OF FACILITY RISKS

Risk assessment considers various exposure paths. No ecological risk assessment is relevant for this property due to a lack of suitable habitat for potential ecological receptors. Based on sampling data and current land use conditions, potential human exposure paths at this site are soil exposure for industrial worker and construction workers and groundwater use or consumption.

Risk of exposure to contaminated soil is relevant but is assessed as low. Arsenic detections in soil were above the EPA's screening level for arsenic in soil at an industrial setting. However, a consistently similar range of arsenic detections suggests a local background condition. Lead was detected in soil well above industrial-setting screening levels; however, these detections were only found in buried debris encountered during sampling greater than 2-feet below ground surface with limited extent.

Concentrations of lead in deeper soil sampled (i.e., more than 5-feet below ground surface) were below residential screening levels. For soil sampled at shallower depths outside of the buried debris, lead concentrations were also below residential screening levels; however, direct push samples located adjacent to the observed buried debris had no recovery indicating that buried debris still exists at the property. If facility operational activities normally involved soil disturbance, then exposure risks from airborne dust contaminant or from contact with contaminant-laden dirt would be greater. Since soil disturbance does not occur or is limited, exposure risks are assessed as lower.

¹ "Maximum contaminant level" is defined in 40 CFR § 141.2 as "the maximum permissible level of a contaminant in water which is delivered to any user of a public water system".

Groundwater sampling results also reveal a low risk situation. The groundwater data collected in 2006/2007 ESA showed VOCs and SVOCs above screening levels and MCLs. October 2019 groundwater data collected indicates the presence of four constituents above the screening levels for tap water use, and two constituents exceeding MCLs, but groundwater is not drawn or consumed from the property. Local drinking and irrigation water sources are not within the near vicinity of the property and have a very low potential to be impacted by groundwater contamination from the facility.

The cumulative vapor intrusion risk from VOC constituents in groundwater on the southern portion of the property exceeded the carcinogenic and non-carcinogenic screening risk levels for the commercial land use scenario and exceeded action levels for the residential land use scenario.

EVALUATION OF THE PROPOSED REMEDY

A remedy must satisfy the EPA's four "General Standards for Corrective Measures." These four standards are identified as "Overall Protection of Human Health and the Environment," "Attainment of Media Cleanup Standards," "Control the Sources of Releases," and "Compliance with Standards for the Management of Wastes." The proposed remedy for the former SMV facility meets the standard for overall protection of human health and the environment; if activity and use limitations are imposed and complied with, human exposure to contaminants should not occur. No cleanup levels are established for the property, although screening levels were used to guide remedy assessments and decisions. If activity and use limitations are followed to prevent disturbance and movement of contaminated media, hazardous constituents will remain isolated and controlled. No waste management discrepancies are known to exist.

Corrective measure alternatives must also be evaluated using the five selection decision factors of Short-Term Effectiveness; Long-Term Reliability and Effectiveness; Reduction of Toxicity, Mobility, or Volume of Wastes; Implementability; and Cost. The proposed remedy will be effective in the short-and long-term; activity and use restrictions can be implemented immediately and maintained indefinitely. Adhering to the proposed property controls and maintaining overall compliance with environmental regulations will prevent migration and further deposition of hazardous constituents. The projected activity and use limitations are easily implemented and low-cost; specialized plans and costly equipment solutions are not required in the remedy. In summary, the proposed remedy is a reasonable approach to meeting the goals identified above.

PUBLIC PARTICIPATION

The EPA solicits input from the public on the proposed remedy for the Former SMV Industries facility. The EPA will make a remedy decision for the facility only after the public comment period has ended and all comments have been reviewed and responded to in writing. The EPA may modify the proposed remedy or select another remedy based upon new information or comments received from the public during the public comment period.

The EPA has set a public comment period from May 27, 2020 to June 26, 2020, to encourage public participation in the remedy selection process. A notice will be published in the Daily Nonpareil that the Statement of Basis and supporting documents are available for review. A public availability session to share information and answer questions has not been scheduled. A request for a public availability session must be in writing and state the issues to be raised. The EPA will evaluate any such request and hold a session if it finds that a session will contribute to the decision-making process and clarify issues

affecting the remedy decision. The Administrative Record, where the public may review the Statement of Basis and other relevant documents, is available at the following locations:

EPA Region 7 website: https://www.epa.gov/ks/region-7-public-notices

U.S. Environmental Protection Agency Region 7 Regional Records Center 11201 Renner Boulevard Lenexa, Kansas 66219

Or a compact disc with the Statement of Basis and Administrative Record can be requested by contacting:

Ben Washburn
Community Engagement Specialist
U. S. EPA Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219
Toll-free: 1-800-223-0425
Email: washburn.ben@epa.gov

CONTACT:

U.S. Environmental Protection Agency, Region 7

Attn: Ms. Lisa Messinger 11201 Renner Boulevard Lenexa, Kansas 66219 Phone: (913) 551-7403

Email: messinger.lisa@epa.gov

Figure 1: Site Location

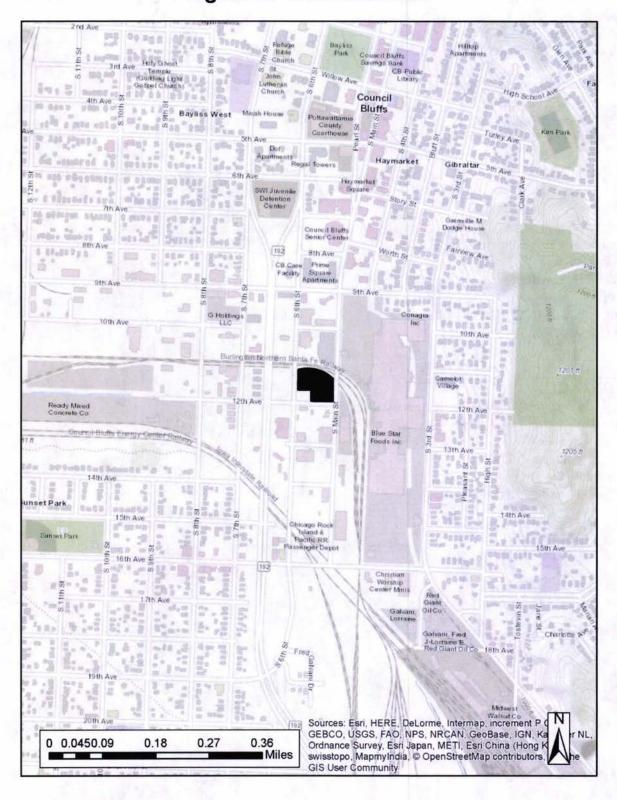


Figure 2: Facility Boundary

