

Memorandum

To: Jesse Aviles, EPA RPM, VB/I70 Superfund Site

From: Timothy C. Shangraw

Date: October 17, 2017

Re: **POLREP #27 - Vasquez Boulevard/Interstate 70 (VB/I70) Superfund Site, Operable Unit 2, Removal Action**

On behalf of the City and County of Denver (Respondent), Engineering Management Support, Inc. (EMSI) is submitting this Pollution Report (POLREP #27) in accordance with Section 4.c of Appendix C to the Administrative Settlement Agreement and Order on Consent for Removal Action, for the subject Superfund Site (the Site). This report follows the outline detailed in Section 4.c of Appendix C, and contains pertinent new information specified in the Superfund Removal Procedures, Removal Response Reporting: POLREP and On-Scene Coordinator (OSC) Reports (EPA, 1994).

Section I – Heading

The date, site name, report author, report recipient, and report number are presented above.

Section II – Response Information

This reporting period extended from September 1 through 30, 2017 during which time, the following activities occurred:

- Excavation of Regulated Asbestos-Contaminated Soils (RACS) and hauling to and disposing at the Denver Arapahoe Disposal Site (DADS);
- Excavation of non-Regulated Asbestos-Contaminated Soils (non-RACS) and stockpiling it for future use onsite or hauling to and disposing at DADS;
- Construction of the concrete box conduit, outlet wing walls, and open channel sidewall footings through the Coliseum Parking Lot (CPL);
- Pumping and treatment of groundwater from dewatering zones 1, 2, 3a, and 3b;
- Construction of the drop inlet structure and reinforced box conduits (RBCs) in dewatering zone 2 (beneath Delgany sanitary sewers);
- Construction of the lateral drain box in dewatering zone 3a; and
- On-site and off-site monitoring for air quality, dust, and odors.

The volumes of RACS and non-RACS excavated and managed, and the volumes of water pumped, treated, and returned to the South Platte River, are summarized in Table 1.

On-site monitoring for volatile organic compounds (including methane), odor, and visible dust

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emissions occurred continuously during excavation and drilling activities. In addition, monitoring for airborne asbestos fibers proceeded in accordance with Section 5.5 of the Colorado Department of Public Health and Environment (CDPHE) Solid Waste Regulations. Due to their overall size, daily monitoring reports for volatile organic compounds, odor, dust, and asbestos are being submitted under separate cover.

Off-Site monitoring by Denver for PM₁₀, airborne lead and arsenic at four locations within the monitoring boundary continued throughout the reporting period. Sampling from these stations occurred every sixth day throughout the month. Results were all below Occupational Safety and Health Administration 8-hour limits and National Ambient Air Quality Standards. Monthly monitoring reports are posted on the Globeville Landing Outfall (GLO) project web site at: <https://www.denvergov.org/content/denvergov/en/environmental-health/environmental-quality/land-use-and-planning.html>.

As part of the GLO project's Community Outreach program, a community hotline was operated. No complaints were received during the reporting period. The Community Advisory Group (CAG) held its seventh and eighth meetings on September 12th and October 10th, respectively. Meeting minutes are posted on the VB/I-70 Superfund Community Advisory Group web site. The next CAG meeting is scheduled for November 14th.

The following project meetings were held in September:

- Weekly GLO Project Status Meetings (September 7, 14, 21, and 28, 2017); and
- EPA monthly progress meeting (September 20, 2017).

Lastly, a 3-week look-ahead Construction Schedule is attached to this POLREP.

Section III – Issues, Resolutions, and Planned Activities

A Quality Assurance Audit was performed on Asbestos-Containing Soils Daily Reports (ACSRs) prepared by Kleinfelder during the month of August for consistency with Section 5.5 of Colorado's Solid Waste Regulations (CSWRs) and the Final Materials Management Plan (MMP) (EMSI, 2016). No deficiencies were noted. A copy of this Audit Report is attached to this POLREP.

Monitoring of treated effluent from the GLO project continued during the reporting period in accordance with Discharge Permit Number CO0049002. All monitored parameters met discharge limits.

The U.S.EPA and the Respondent have exchanged correspondence in agreement of updating the Remedial Investigation and Feasibility Study for the VB/I-70 Operable Unit 2 site. The agreement correspondence letters are attached to this report.

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Planned activities for the next reporting period consist of:

- Continued construction of the concrete box conduit, outlet wing walls, and open channel sidewall footings through the CPL;
- Grading and preparation of subgrade material for installation of the strengthening layer in the CPL;
- Continued installation of the inlet drop structure and RBC conduits in the GLP;
- Continued construction of lateral drain boxes in dewatering zone 3a;
- Continued dewatering in zones 1, 2, 3a and 3b; and
- Continued on-site and off-site monitoring of air quality.

To maintain effective and transparent communication during GLO implementation, EPA and CDPHE personnel are invited to participate in weekly coordination meetings at Kiewit's RiNo office. The next EPA Monthly Status meeting will be held on October 18th at 9:00 in the Webb building.

Please call Jennifer Luthi (720.865.5432) or me (303.619.5179) if you have any questions.

Attachments:

- September 2017 Summary of GLO Construction Activities
- 3-Week Look-Ahead Schedule
- QA Audit Report #5

Table 1: Summary Construction Report for September 2017

	Current Month QTY	QTY to date	Comments
EXCAVATION/HAULING			
# of days Excavation occurred Globeville park	6	76	
# of days Excavation occurred Municipal Landfill		31	
Volume of Racs Excavated (CY)	5,950	75,359	From Globeville Park and Coliseum Parking lot
Volume of Racs hauled to DADS (CY)	5,950	75,359	From Globeville Park and Coliseum Parking lot
Volume of Non-Racs Excavated (CY)		58,577	
Volume of Non-Racs stockpiled onsite (CY)		12,606	Claystone from drop inlet stockpiled for reuse
Volume of Non-Racs hauled to DADS (CY)		45,971	
Volume Hauled to Clean Harbors (CY)		0	
GROUT AND STONE COLUMNS			
number of grout columns installed this month	0	1,091	All Stone and Grout columns are complete
Grout column SPT testing results	0	0	All Stone and Grout columns are complete
number of stone columns installed per month	0	575	All Stone and Grout columns are complete
stone column test results	0	0	All Stone and Grout columns are complete
REMEDIATION DEWATERING AND TREATMENT			
LF of underdrain/wick wells installed		600	
Volume of water transported and treated at MFEI	2,436,900	20,180,375	
Volume of treated water, including dilution, discharged to S. Platte	2,359,468	20,596,404	
Analytical results		0	AUGUST DMR submitted
CONSTRUCTION DEWATERING			
status of permit compliance			
LINER INSTALLATION			
% complete during the month	N/A		
QC/QA testing results	N/A		
Issues and Resolutions	N/A		
MODCP RESULTS			
Daily Methane, Odor, and Dust monitoring reports			
Issues and Resolutions			
COMMUNITY OUTREACH			
Summary of Calls to hotline			
Issues and Resolutions			

QA Audit Report #5

To: Matt Ceresa, Kiewit,
From: Tim Shangraw, EMSI
cc: Jennifer Luthi, DEH; Steve Gonzales, DEH; Bret Banwart (DPW); Brian McLaren (DPW); and Patrick Riley (DPW)
Date: October 9, 2017
Re: Audit of Kleinfelder CABI Notes, August 2017, Globeville Landing Outfall Project

Representatives from Engineering Management Support, Inc. (EMSI) reviewed Asbestos-Containing Soils Daily Reports (ACSRs) prepared by Kleinfelder during the month of August 2017 for consistency with Section 5.5 of Colorado's Solid Waste Regulations (CSWRs) and the *Final Materials Management Plan* (MMP) (EMSI, 2016). Documentation of the review is presented in the attached summary table.

AUDIT FINDINGS

Quality Control continues to be implemented well. As shown in the attached table, all audited parameters complied with Section 5.5 of the CSWRs and the MMP.

ACTION REQUIRED

No corrective action is required. Denver and EMSI will continue to monitor Ames/Kleinfelder's implementation of agreed-to reporting procedures and identify any area(s) in need of improvement during weekly progress meetings and if necessary, in subsequent QA Audit Reports.

Personnel	Date	Grid per CABI Notes	Grid diagram agree w CABI	Site description including location	Description of site activities	Description of equipment use	1C Description of hand removals including locations	1A Description of types of debris	1B Description of suspect materials	1D Friability of ACMs discussed
Lanaia Carveth	8/21/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Tyler Godby	8/21/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/22/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Billy Godby	8/22/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/23/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Tyler Godby	8/23/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/24/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/25/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/26/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/28/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Tyler Godby	8/28/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/29/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/30/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Tyler Godby	8/30/17	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lanaia Carveth	8/31/17	yes	yes	yes	yes	yes	yes	yes	yes	yes

Notes:

- 1) NVE = no visible emissions observed
- 2) in the table "yes" designates that documentation was completed

Personnel	Date	Bulk sampling documentation	2A and 2B Decontamination visual inspection and clearance	4 Spill response activities	5B Observations of visible emissions / Reponses	1E Observations of non-earthen material / commented	1F Observations of other indicators of soil impact	Photo-log / description
Lanaia Carveth	8/1/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/1/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/2/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Mitchell Reese	8/2/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/3/17	yes	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/3/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/4/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/4/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/5/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/7/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/8/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/8/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/9/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/9/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/10/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/10/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/11/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/11/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/12/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/14/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Billy Godby	8/14/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/14/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Billy Godby	8/15/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/16/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/16/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/17/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/17/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/18/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/18/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/19/17	Not conducted	yes	No spills	NVE	yes	yes	yes

Personnel	Date	Bulk sampling documentation	2A and 2B Decontamination visual inspection and clearance	4 Spill response activities	5B Observations of visible emissions / Reponses	1E Observations of non-earthen material / commented	1F Observations of other indicators of soil impact	Photo-log / description
Lanaia Carveth	8/21/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/21/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/22/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Billy Godby	8/22/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/23/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/23/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/24/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/25/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/26/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/28/17	yes	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/28/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/29/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/30/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Tyler Godby	8/30/17	Not conducted	yes	No spills	NVE	yes	yes	yes
Lanaia Carveth	8/31/17	Not conducted	yes	No spills	NVE	yes	yes	yes