



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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February 19, 2020

Derek Bottles  
Newcastle Joint Ventures, LLC.  
600 108th Avenue NE, Suite 840  
Bellevue, WA 98004

**Re: Further Action at the following Site:**

- **Site Name:** Mutual Materials Newcastle Lot 4 Cr Site
- **Site Address:** 6620 Coal Creek Parkway SE, Newcastle, WA 98056
- **Facility/Site No.:** 50608
- **Cleanup Site ID No.:** 15081
- **VCP Project No.:** NW3248

Dear Derek Bottles:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Mutual Materials Newcastle Lot 4 Cr Site facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

**Issue Presented and Opinion**

Is further remedial action necessary to clean up contamination at the Site?

**YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.**

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.



### **Description of the Site**

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This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Chromium in Soil.

**Enclosure A** includes a detailed description and diagrams of the Site, as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

### **Basis for the Opinion**

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This opinion is based on the information contained in the following documents:

1. Environmental Partners, Inc., October 1, 2019, Cleanup Action Report, Lot 4 Chromium Site, Former Mutual Materials Brick Plant Property, Newcastle, Washington.
2. Environmental Partners, Inc., June 7, 2017, Revised Site-Specific Terrestrial Ecological Evaluation Report, Former Mutual Materials Property, 6620 Coal Creek Parkway Southeast, Newcastle, Washington.
3. Environmental Partners, Inc., January 7, 2015, Phase I Environmental Site Assessment, Former Mutual Materials Brick Plant, 6620 Coal Creek Parkway Southeast, Newcastle, Washington.

These documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by completing a Request for Public Record form (<https://www.ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests>) and emailing it to [PublicRecordsOfficer@ecy.wa.gov](mailto:PublicRecordsOfficer@ecy.wa.gov), or contacting the Public Records Officer at 360-407-6040. A number of these documents are accessible in electronic form from the Site web page (<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=15081>).

This opinion is void if any of the information contained in those documents is materially false or misleading.

## **Analysis of the Cleanup**

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Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

### **1. Characterization of the Site.**

Based on all the data collected from the Site, Ecology has determined your characterization of the Site is sufficient to establish cleanup standards, but not sufficient to select a final cleanup action. In accordance to the Cleanup Action Report (CAR, October 1, 2019), contamination at this Site is characterized as follows:

- Chromium detected in soil was determined as the chemical of concern (COC), at the maximum concentration of 98 mg/kg in a composite sample from Test Pit TP-32, which was analyzed in 2012. The source of the contamination was identified as waste brick debris and product stored at the Site (**Enclosure A, Figure 2**), which resulted from the historical brick manufacturing operation approximately between 1957 and 2011.
- The soil impacted with chromium was defined and limited to an area of approximately 361 square feet within the Property and was not detected above the applicable cleanup level in confirmation samples collected at 3 to 6 feet below ground surface (bgs; see **Enclosure A, Figure 4**).

Based on the data contained in the CAR, it is not possible to conclude that this Site meets the requirements for a Site NFA. The following information needs to be provided, clarified, or revised:

#### Missing information

- Geologic log for Test Pit TP-32, including date of test pit excavation and method/date of test pit backfilling.
- Locations, depths, and lithology of soil samples collected from TP-32 and composited to create the single sample with the Total Chromium result of 98 mg/kg.
- Description of lithology encountered in the 19 feet by 19 feet by 6 feet deep remedial excavation, and of the five confirmation soil samples collected at depths of 3 to 6 feet bgs in the excavation.



- Presentation of sufficient lines of evidence to demonstrate that ground water has not been affected by chromium for this Site. In the absence of such a demonstration, ground water sampling will be necessary to assess potential impacts from contaminated soil.
- Revisions
  - Ground surface elevation at TP-32
    - Stated in the CAR report text and Figure 3 (Cross Section A-A') as 390 feet above mean sea level (amsl).
    - King County IMAP and the Lot 4 Dry Well report (VCP project, NW3247) both show ground surface elevation as 375 feet amsl.
    - Revise text to identify ground surface elevation as 375 feet amsl.
    - Revise Figure 3, including expanding the vertical scale, to show the following:
      - Ground surface elevation of 375 feet amsl.
      - Depth, lithology, soil sample locations, and the associated chromium concentrations for test pit TP-32.
      - Depth, lateral extent, lithology, soil sample locations, and chromium concentrations for the remedial excavation (3 feet deep at the margins and 6 feet deep at the center).
      - Ground water elevation, reported on the adjacent Lot 4 Former Dry Well Site (NW3247) at 360 feet amsl.

Ground water was not encountered during the site assessment (TP-32 at a depth of 12 feet bgs) and soil excavation at the Site (the maximum depth of 6 feet bgs), and was expected to be present at approximately 15 feet below ground surface (bgs). The estimate was based on the ground water table existing at the adjacent Lot 4 Dry Well Site (VCP NW3247). The ground water flow direction reported for the Lot 4 Former Dry Well Site was north to northwest (EPI, October 1, 2019).

Entry of Site data into the Ecology Environmental Information Management (EIM) database must be completed and confirmed prior to issuance of a NFA opinion letter. To date, none of the Site data has been entered. Information regarding EIM can be found at: <https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database>.

2. **Establishment of cleanup standards.**

**Cleanup Levels**

**Soil**

The soil cleanup level suitable for unrestricted land use is appropriate for the Site. For unrestricted land use, human direct contact and the soil-to-ground water pathway, Method A cleanup level defined in MTCA is utilized.

Soil cleanup levels applicable to the Site are summarized as follows:

<b>COC</b>	<b>Cleanup Level, mg/kg</b>
Chromium III	2,000
Chromium VI	19

**Ground Water**

The Method A ground water cleanup level for total chromium (50 µg/L) is appropriate for the Site.

**Points of Compliance**

**Soil**

The points of compliance for contamination in soil at the Site are summarized as follows:

<b>Basis for Point of Compliance</b>	<b>Depths to Meet Cleanup Levels</b>	<b>Standard vs Conditional Point of Compliance</b>
Protection of ground water	All depths throughout the Site, to uppermost ground water	Standard point of compliance
Prevention of direct contact	15 feet below ground surface	Standard point of compliance

### Ground Water

The point of compliance for groundwater is throughout the Site, from the uppermost level of the saturated zone extending vertically and horizontally to the lowest depth which could potentially be affected.

### **3. Selection of cleanup action.**

Ecology has determined the cleanup action you selected for the Site does not meet the substantive requirements of MTCA.

The Site characterization is not complete, as discussed above in this opinion letter. Therefore, it is not possible for Ecology to determine if the cleanup action you selected for the Site meets the substantive requirements of MTCA.

The selected cleanup actions consisted of excavation, off-Site disposal of the chromium-contaminated soil, and soil confirmation sampling to verify the completion of the remediation.

### **4. Cleanup.**

The Site characterization is not complete, as discussed above in this opinion letter. Therefore, it is not possible for Ecology to determine if the cleanup you performed meets the Site cleanup standards for the identified COC. Therefore, the following completed remedial activities are considered interim actions:

- The remedial excavation was a square with an area of approximately 19 feet long, 19 feet wide, and 6 feet in depth (**Enclosure A, Figures 4 and 5**). In April 2015, a total of approximately 142 tons of the impacted soil was removed and disposed at a regulated off-Site facility.
- Five confirmation soil samples collected at bottoms and sidewalls of the excavation demonstrated that the COC was at non-detectable or below the Site cleanup levels (**Enclosure A, Figure 4**).

### **Limitations of the Opinion**

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**1. Opinion does not settle liability with the state.**

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

**2. Opinion does not constitute a determination of substantial equivalence.**

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

**3. State is immune from liability.**

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).



Derek Bottles  
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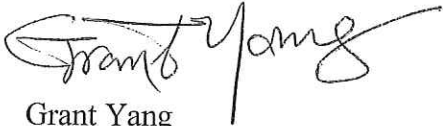
### **Contact Information**

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Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: <https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process/Cleanup-options/Voluntary-cleanup-program>. If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (425) 649-7126 or e-mail at [grant.yang@ecy.wa.gov](mailto:grant.yang@ecy.wa.gov).

Sincerely,



Grant Yang  
NWRO/Toxics Cleanup Program

Enclosures (1) A Description and Diagrams of the Site

Ecc: Thomas Morin, Environmental Partners Inc  
Sonia Fernandez, VCP Coordinator, Ecology NWRO



## **ENCLOSURE A**

### **DESCRIPTION AND DIAGRAMS OF THE SITE**

## Site Description

*This enclosure provides Ecology's understanding and interpretation of Site conditions and forms part of the basis for the opinion expressed in the letter.*

**Site:** The Site is located within a property development with a street address of 6620 Coal Creek Parkway SE in Newcastle, Washington (**Figure 1**), with chemicals of concern (COCs) consisting of chromium in Soil. The Site is recorded within King County tax parcel number 606125-0050.

**Area and Property Description:** The Property, less than 5,000 square feet, is located adjacent to the northern boundary of the City of Newcastle. The Site and surrounding area are currently being developed into apartments, townhomes, retail stores, parks, and shopping plazas. Townhouses are planned for construction on the Site that is bordered by forests to the north and east (**Figure 2**).

**Property History and Current Use:** The Site was occupied by a former brick plant facility that used a portion of the property to store brick debris and brick products approximately between 1957 and 2011. All the historical structures related to the brick plant were demolished and removed. The Property is currently being developed with apartments and the associated parking lots.

**Sources of Contamination:** The Site investigation revealed and confirmed that contamination in the soil originated from releases of operations of the former brick plant facility.

**Physiographic Setting:** The Site is located in the Puget Sound Lowland, which is characterized as a broad, low-lying region situated between the Cascade Range to the east and the Olympic Mountains and Willapa Hills to the west. The Site is generally flat and slopes slightly to the north towards Coal Creek.

**Surface/Storm Water System:** The closest surface water bodies to the Site are a tributary to Coal Creek and the Coal Creek main channel, which are located approximately 330 feet east and 350 feet north of the Site, respectively. Surface water and storm water runoff on and in the vicinity of the Site disperse via sheet flow to the City of Newcastle's storm water drainage system.

**Ecological Setting:** The Site is bounded on the north and east by forested lands. The Revised Site-Specific Terrestrial Ecology Evaluation (TEE) documented that Lot 4 is one of the areas slated for development and will be covered with buildings, paved roads, pavement, or other physical barriers that will prevent plants and wildlife from exposure to soil contamination. Therefore, Lot 4 qualifies for a TEE exclusion.

**Geology:** A mixture of broken brick debris and sand is present at ground surface in some areas of the Site, down to a depth of 4 feet below ground surface (bgs). Below this debris, the Site is underlain by recessional glacial outwash, an unconsolidated deposit characterized by sand with silt and gravel, to a depth of approximately 50 feet below ground surface (bgs). Sedimentary

bedrock comprised of sandstone, siltstone, and shale, with coal seams are present in the Site area, formerly known from the late 1800s through the early 1900 as the Newcastle Coal Mining District.

**Ground Water:** Ground water was not encountered in the Site investigation and the soil excavation, but it is likely present at approximately 15 feet bgs. The estimate is based on the ground water table existing at depths ranging approximately from 17 to 26 feet bgs at the Lot 4 Dry Well Site (VCP NW3247) immediately adjacent to this Site. The ground water flow direction is also likely to the north toward Coal Creek (**Figure 2**).

**Water Supply:** Public water supply system is currently provided to the Site by the Coal Creek Water and Sewer District. According to Ecology's well log database, there are no private drinking water wells located within 1,000 feet of the Property.

**Releases and Cleanup of Contamination:** Soil was contaminated due to releases from the stockpiles of brick debris and brick products, which were stored on-site during the former brick manufacturing operation approximately between 1957 and 2011. In 2015, cleanup efforts were conducted at the Site, which included characterization of the Site contamination, removal of the brick debris and impacted soil, off-Site disposal of all the removal materials, and soil cleanup confirmation sampling.

Based on the Cleanup Action Report (October 1, 2019), the impacted soil with chromium exceeding the Site cleanup level was removed and disposed off-Site. However, detailed information of the remedial activities needs to be provided to Ecology for its evaluation if the cleanup was complete.

Status of the contamination in ground water was not identified. It is necessary to fill this data gap before Ecology is able to determine whether or not further cleanup action is required at this Site.



# SITE DIAGRAMS

Figure 1 Location of the Site (EPI, 2019)

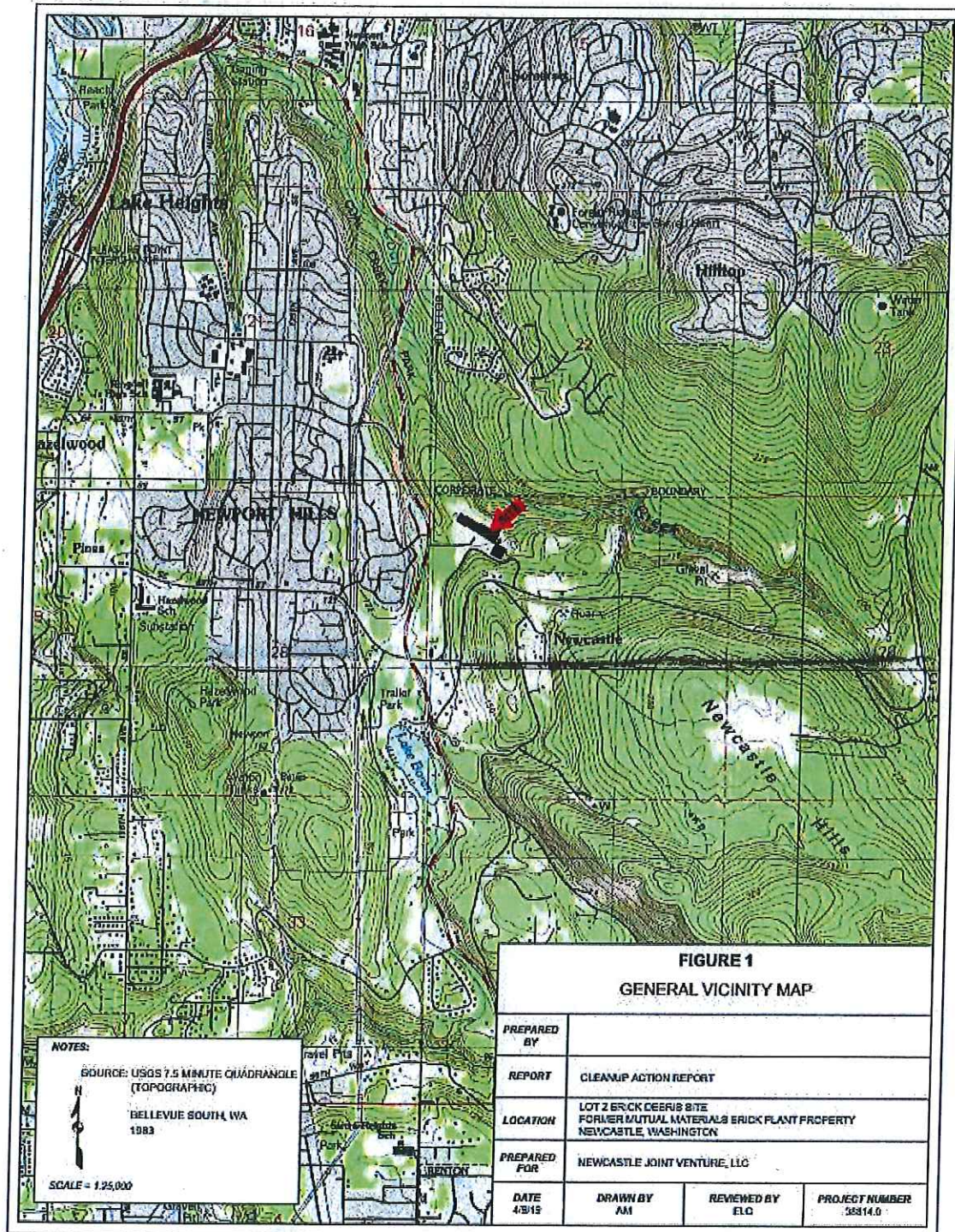




Figure 2 Site Plan and Soil Excavation Area (EPI, 2019)

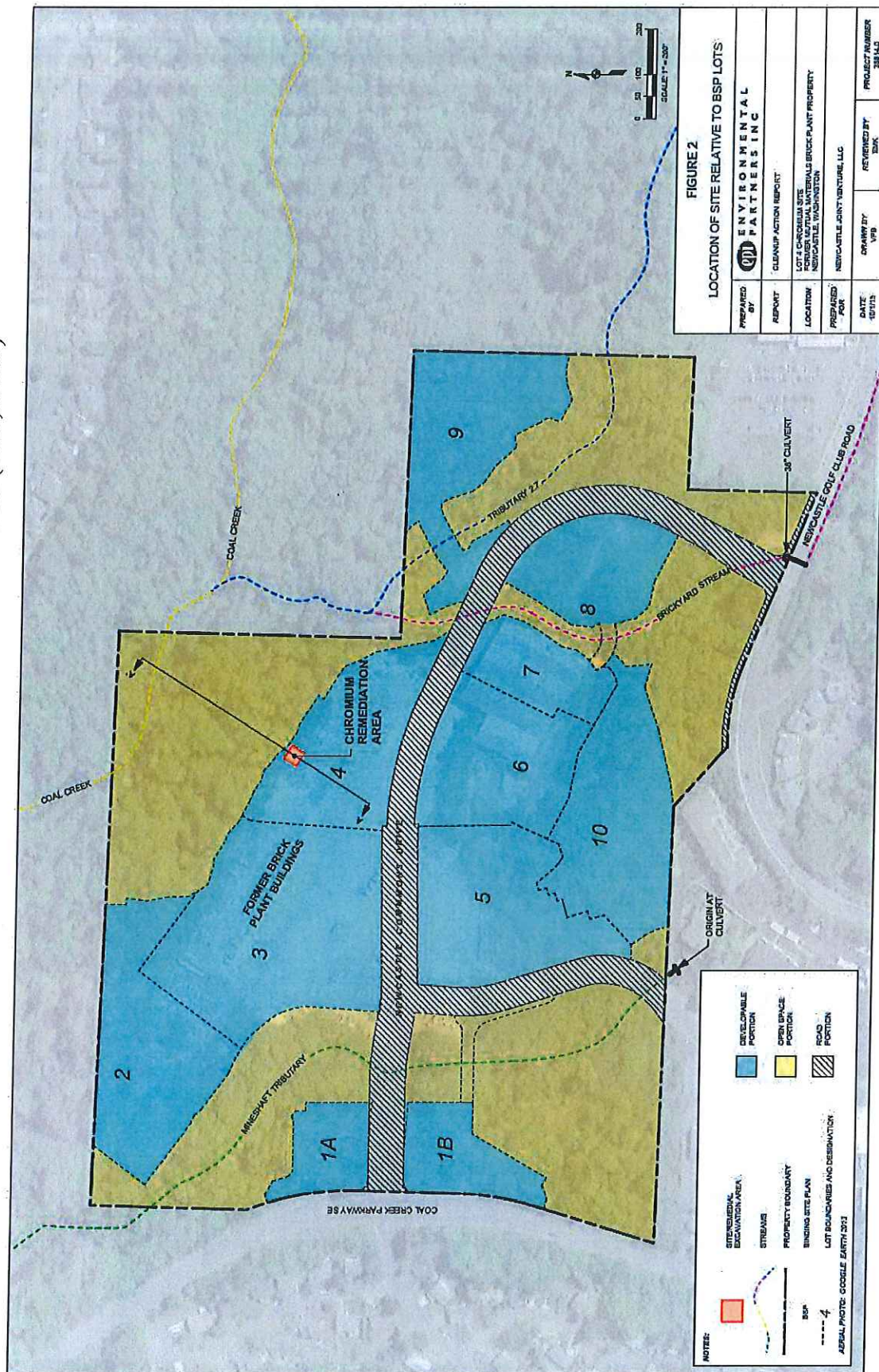




Figure 3 Soil Contaminated by Chromium at the Site (EPI, 2019)

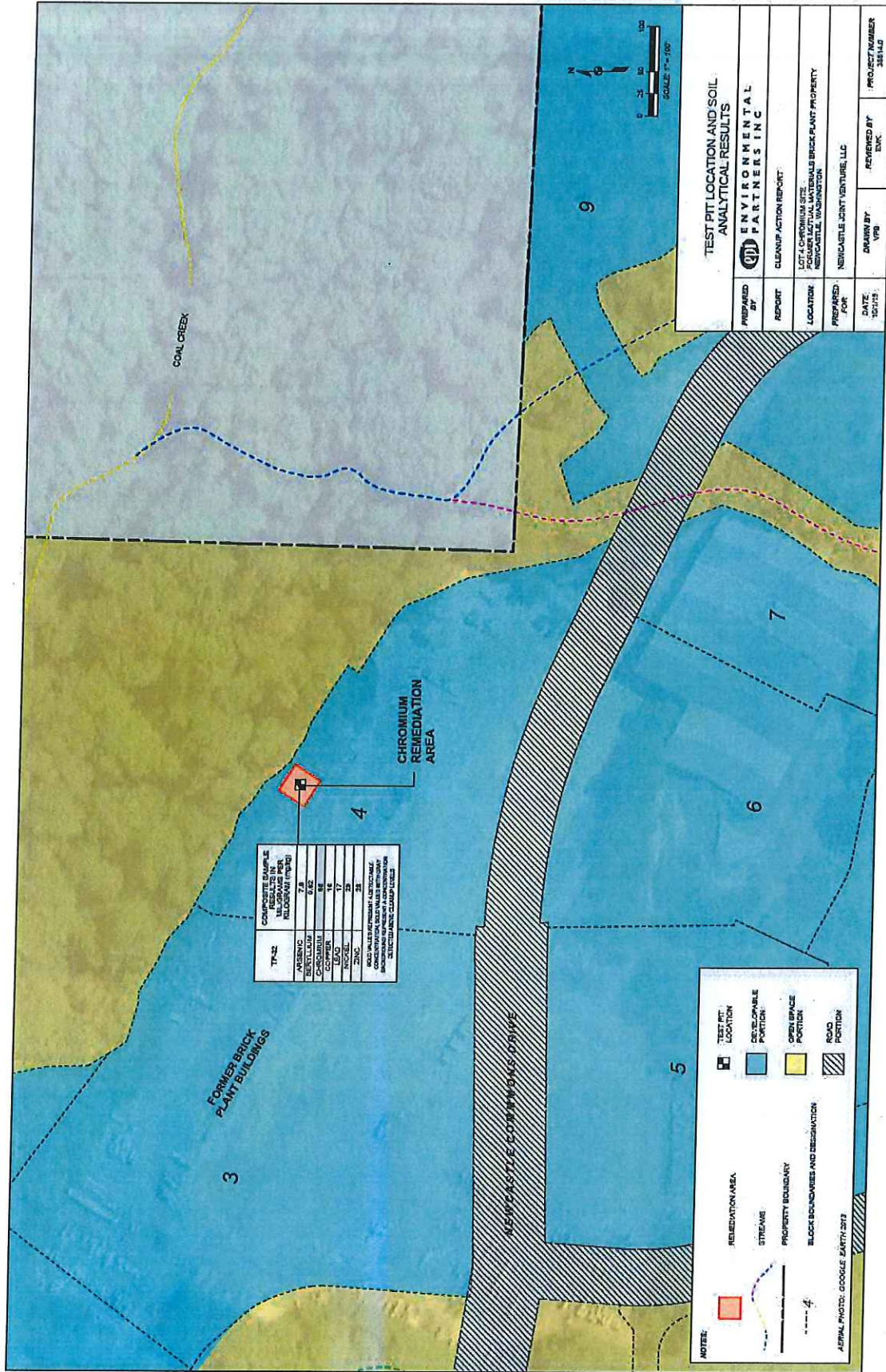




Figure 4 Soil Excavation Boundary and Confirmation Sampling Locations at the Site (EPI, 2019)

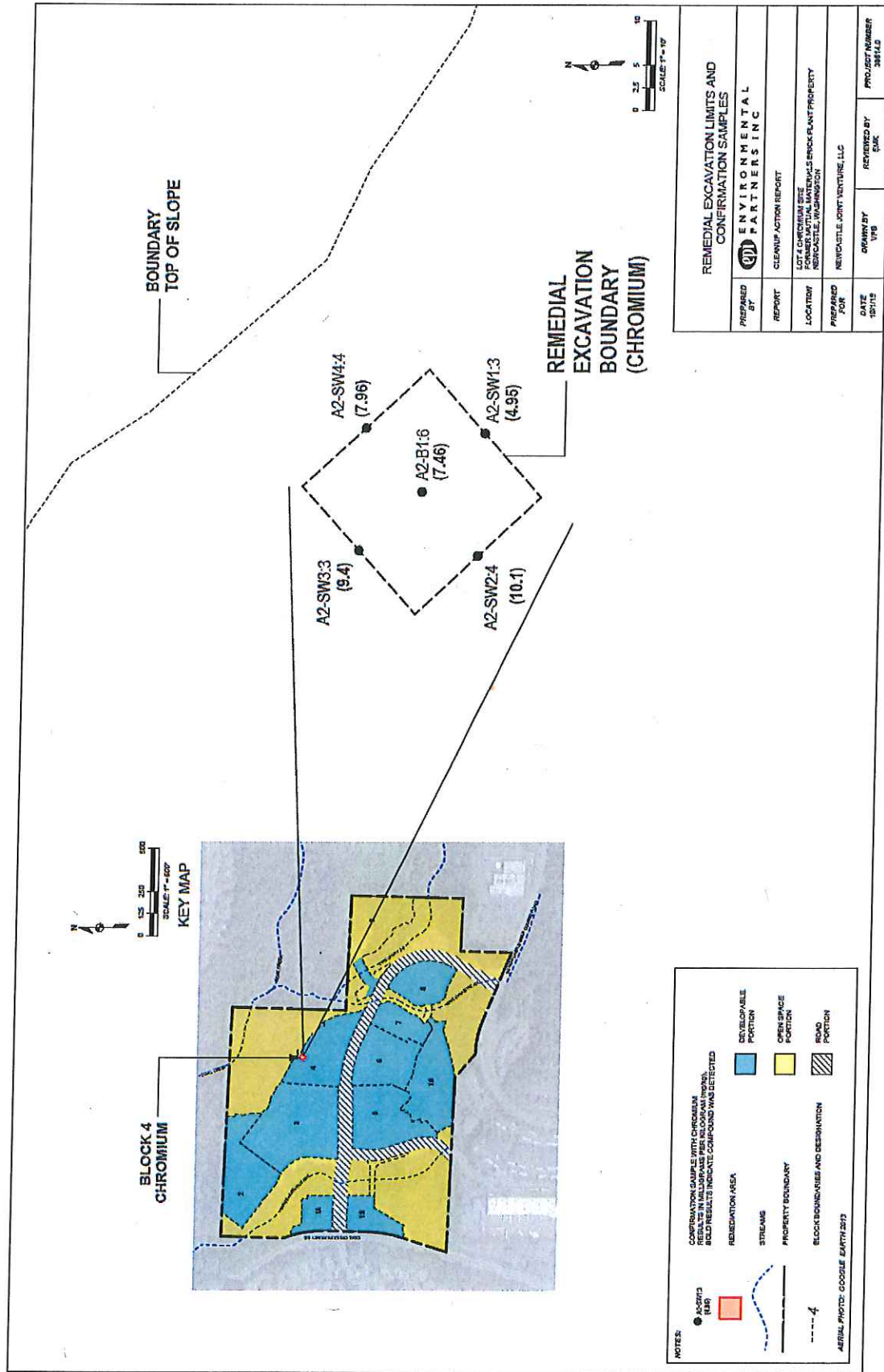


Figure 5 Geological Cross-Section at the Mutual Materials Newcastle Lot 4 Cr Site (EPI, 2019)

