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August 20, 2021

Mathew Bean Lift Real Estate Partners Fund, LLC 180 Sutter Street, Suite 400 San Francisco, CA 94104

Re: Further Action at the following Site:

- Site Name: Coatings Unlimited Inc Kent
- Site Address: 18420 68th Avenue South, Kent, WA 98032
- Facility/Site No.: 18965792
- Cleanup Site No.: 5652
- VCP Project No.: XN0006

Dear Mathew Bean:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Coatings Unlimited Inc Kent (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 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 70A.305 RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Summary of Opinion

Ecology has received a remedial investigation (RI)/ feasibility study (FS) for the above referenced site. The property consists of King County Parcel Number 640760-0050, which totals 6.55 acres of land. The property consisted of an industrial operation known as Coatings Unlimited from about 1998 to 2018, and then International Coatings Unlimited after 2018, as well as several other tenant businesses on the Property. The Property is being redeveloped as a warehouse facility.

The historical operations at the Site resulted in contamination releases to soil and groundwater. Investigations and remedial actions have taken place at the Site since 1987.

Based on the remedial investigation report, site contaminants in groundwater include arsenic, vinyl chloride (VC) and *cis*-1,2-dichloroethene (c12DCE), both of which are degradation products of Tetrachloroethene (PCE) or Trichloroethene (TCE). Site contaminants found in soil include TCE, heavy range oil, carcinogenic polycyclic aromatic hydrocarbons (CPAHs), and lead.

Site Soil Contamination

Each one of the four contaminants that were found in soil at concentrations above MTCA Method A cleanup levels were detected in only one sample each, as listed in the following table:

Contaminant	Concentration in Soil (mg/kg)	Location and Depth (feet)	MTCA Method A Cleanup level
TCE	0.091	B9-12'	0.03
Heavy Oil	5,000	B5-5'	2,000
CPAHS	0.303	B4-1'	0.1
Lead	460	B4-1'	250

It is Ecology's understanding that the soil cleanup level exceedances at location B4 and B5 will be cleaned up through excavation and offsite disposal. Ecology concurs with this cleanup approach for locations B4 and B5, provided appropriate confirmation soil sampling is done and waste disposal receipts are provided to Ecology. **Ecology suggests that these excavations proceed as an Interim Action**.

Currently, the extent of soil contamination has not been sufficiently defined within the RI **Report.** Current data gaps include:

- Historical data are not sufficiently integrated within the RI/FS Report.
- The area of remaining lead and chromium contamination in soil that could not be removed

during the 1991 interim action is not clearly shown.

• Source areas for the VC in groundwater are not clearly defined.

Integration of Historical Data

Tables presenting soil results within the RI provided data ranging from 2002 to 2021. As discussed in Section 3 of the RI/FS report, additional historical investigations and remedial actions were done at the site, starting in 1987. Figures and tables from historical investigations prior to about 2002 were provided within Appendix C of the RI/FS report. In order to facilitate review of available data that have been collected at the Site and to develop a clear understanding of the known extent of contamination, the historical data needs to be integrated into the figures and tables of the RI report. Incorporation of these data may need to include inset maps if there is too great a data density to clearly show on maps covering the entire site area. Inset maps that may be needed include the sand blasting area and the sump discharge area.

Heavy oil and diesel soil contamination in the compressor area on the adjacent property to the south was removed and Ecology provided a partial sufficiency letter in 1999 for this cleanup. The presentation of data within the RI /FS Report does not needed to include data at the compressor area which resulted in this partial sufficiency letter, unless such data supports the current understanding of the extent of remaining contamination. Although the petroleum in soil was evidently sufficiently removed, there may have been a release of chlorinated solvents to groundwater in this area, based on the VC in groundwater data. Any existing chlorinated solvent data from this area would be expected to help with the understanding of the extent of chlorinated solvents in soil and groundwater. Ecology notes that the presence of petroleum in soil or groundwater can result in PCE or TCE dehalogenating to VC, and this process could have played a role in developing the VC in groundwater contamination at the Site.

Sand Blasting Area Remaining Lead and Chromium Contamination

The RI/FS report indicated that not all lead and chromium in soil could be removed during the 1991 Interim Action. A detailed map and data tabulation are needed showing where this remaining contamination is located, the boundary of the 1991 excavation, and confirmation and subsequent soil sampling locations. As discussed above, an inset map for this area would be expected to be helpful.

Contamination Sources for VC in Groundwater

The sources of the VC in groundwater are not clearly understood at this time. The detection of TCE in soil above cleanup levels at location B9 at a depth of 12 feet below ground surface (ft bgs) may be indicative of one release location; however, based on the distribution of VC in groundwater, it appears that there were likely many release locations. Given that the VC in groundwater is largely located beneath a silt unit that may serve as an aquitard, there could be a significant mass of chlorinated solvents at the top of or penetrating into this silt unit.

The overall extent of VC in groundwater has been generally defined; however, source areas for the chlorinated volatile organic compounds (CVOCs) are not clearly understood. Currently, it is not possible to concluded that there are no continuing sources for the chlorinated solvents in groundwater. However, Ecology recognizes that finding specific release locations can be like the proverbial needle in a haystack, and continued soil investigations may provide limited returns. Hence, the path forward at the Site needs to recognize this limitation.

The lack of a continuing source to groundwater can be demonstrated under MTCA as an empirical demonstration WAC 173-340-747 (3)(f), provided sufficient groundwater data are below cleanup levels. However, if an empirical demonstration is based on data collected where an existing structure currently impedes recharge, then the case would need to be remade in the future should the structure was removed. Therefore, an Environmental Covenant and institutional controls would appear to likely be needed to address potential vadose zone contamination in the building footprint areas prior to any issue of an no further action (NFA) determination. The Environmental Covenant would indicate that if structure was removed in the future, then further action may be needed with respect to chlorinated solvents in soil and groundwater.

Site Groundwater Contamination

VC and c12DCE in Groundwater

Detections of VC and c12DCE in groundwater above MTCA cleanup levels are summarized in the following table:

Contaminant	Potential Cleanup Level (µg/L)	Number of Exceedances/Samples	Maximum Concentration (µg/L)
Vinyl chloride (VC)	0.2**	65/115	670/260***
<i>cis</i> -1,2-dichloroethene (c12DCE)	16*	18/115	90

*Method A cleanup level

**Method B, direct contact cleanup level

*** The 670 μ g/L results was anomalous within a resampled monitoring well; the next highest value was 260 μ g/L.

The extent of VC and c12DCE in groundwater has been generally defined; however, as discussed above, source areas are not clearly understood. The degree to which the extent of contamination needs to be defined is in part constrained by what remedial actions may apply. The RI/FS presents a screening of remedial alternatives for the VC and c12DCE in groundwater. An approach of air sparing (AS) and soil vapor extraction (SVE) has been proposed. The effectiveness of such a remedial system is highly uncertain for the following reasons:

- 1) The areas where AS is proposed is limited based on structure footprints and does not necessarily address all source areas or contamination hot spots.
- 2) There are many areas with VC in groundwater downgradient of the proposed AS areas, hence natural attenuation is evidently a part of the proposed remedy. The natural attenuation of VC in groundwater is uncertain.
- 3) As discussed above, there may be continuous sources of CVOCs in the silt unit that could continuously bleed into the aquifer. SVE will not be particularly effective within a silt unit.

Ecology recognizes that any options for the VC and c12DCE in groundwater may include significant uncertainties and limitations and it is not our wish to prevent cleanup actions from occurring. A No Further Action (NFA) determination would be expected to be contingent on VC and c12DCE in groundwater achieving cleanup levels. Note that in addition to Method A or Method B cleanup levels for the direct contact pathway, the groundwater-to-surface-water pathway is also of potential concern at this site, as mentioned Ecology's 2007 opinion letter.

Ecology recommends that AS/SVE remediation proceed at the Site as an Interim Action. Once cleanup levels have been achieved in site monitoring wells for a minimum of four consecutive quarters after operation of the system, then Ecology can consider issuing a NFA after recording of an Environmental Covenant. Note that issue of the NFA by Ecology will need to also consider other pathways and contamination concerns, including the potential for recontamination of groundwater from an unidentified subsurface source.

Arsenic in Groundwater

Arsenic was found in groundwater at three locations (FMW-3, FMW-4, and MW-3) above the Puget Sound Basin regional background concentration of 8 μ g/L. Arsenic is commonly found above cleanup levels in groundwater in the region as result of reducing conditions due to carbon sources within the subsurface. Such carbon source can include natural carbon (e.g. naturally deposited wood materials or peat) or human-caused (anthropogenic) carbon (e.g. fill materials containing wood waste or petroleum hydrocarbons). Arsenic in groundwater due to human causes is regulated under MTCA, whereas arsenic mobilized due to natural causes is not regulated under MTCA.

Ecology has not received sufficient information to date that would allow us to conclude that the carbon source(s) in the subsurface resulting in mobilized arsenic in groundwater are natural, as asserted within the RI/FS Report. Therefore, cleanup of arsenic in groundwater is anticipated to be required prior to Ecology issuing a NFA determination, unless a sufficient case can be made that the mobilization is naturally occurring. Ecology notes that the boring logs for the three monitoring wells with arsenic exceedances in groundwater were not found in Appendix B of the RI/FS report.

As discussed above, Ecology understands that air sparging (AS) and soil vapor extraction (SVE) are planned to clean up the VC and c12DCE in groundwater. This is a commonly employed remedial approach for these contaminants in groundwater, provided soils are sufficiently

permeable and the system is appropriately designed (e.g. an appropriate radius between air sparge and SVE points and appropriate rate of air injection and extraction). Although AS should result in reducing conditions in groundwater becoming aerobic, AS may not result in dissolved arsenic concentrations in groundwater dropping to below cleanup levels. That is because highly oxidizing conditions can result in arsenic mobilization, just as reducing conditions commonly do. Ecology does not wish to discourage cleanup of the VC and c12DCE in groundwater; however, arsenic concentrations in groundwater must be considered prior to issue of a NFA determination at the Site.

Soil Vapor Contamination

Soil vapor samples were collected at 18 locations between 2019 and 2020, and analyzed for PCE, TCE, c12DCE, and VC. Commercial land use-based sub-slab soil vapor screening levels were exceeded for PCE at one location and for TCE at eight locations.

It is Ecology's understanding that an active vapor mitigation system is planned to be installed to address the soil vapor to indoor air (vapor intrusion) pathway. We anticipated that for this institutional control, prior to Ecology issuing a NFA determination, an Ecology-approved and signed Environmental Covenant would need to be recorded with the County, including a monitoring plan to ensure the continued effectiveness of the mitigation system.

Summary

- Ecology recommends reissue of the RI/FS Report, including the incorporation of the historical data discussed above.
- Ecology recommends proceeding with the proposed excavation and offsite disposal interim action to address the soil contamination at locations B4 and B5.
- If a case can be made supporting naturally occurring carbon source for arsenic in groundwater at FMW-3, FMW-4, and MW-3, Ecology recommends providing that case to Ecology for our review.
- Ecology recommends proceeding the proposed interim actions to address the VC in groundwater. After VC results are below potential cleanup levels in all site monitoring wells for a minimum of four consecutive quarters after cessation of the remedial system, then a NFA request can be submitted to Ecology.
- Prior to issue of an NFA determination, Ecology will need to review the design of the mitigation measures and institutional controls addressing the vapor intrusion concern.

Description of the Site

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

- PCE (suspected), TCE, Petroleum (heavy range oil), CPAHs, Lead (confirmed), into the soil.
- PCE and TCE (suspected) and c12DCE and VC (confirmed) into groundwater.
- PCE and TCE into air (suspected).

The incorporation of the historical data into the RI/FS Report is needed to verify the completeness of the above list of contaminants. For example, chromium was reportedly a site contaminant in the 1990 report, but these chromium results were not reported within the RI/FS Report.

Enclosure A includes detailed 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.

Ecology notes that the property adjacent to the Coatings Unlimited property to the south is listed within Ecology's Confirmed and Suspected Contaminated Sites List (CSCSL) as West Valley Business Park, CSID 1006. As discussed above, a partial sufficiency letter was issued by Ecology in 1999 for a cleanup of petroleum in soil at this site. Available data suggests that the area of VC in groundwater above cleanup levels at the Site includes the northern portion of the West Valley Business Park property.

Basis for the Opinion

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

• Farallon Consulting. *Remedial Investigation and Feasibility Study Report, 18420 68th Avenue South.* June 29, 2021.

A number of these documents are accessible in electronic form from the Site webpage <u>https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=5652</u>. The complete records are stored in the Central Files of the Headquarters Office of Ecology, for review by appointment only. Visit our Public Records Request page <u>https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests</u>, to submit a public records request or get more information about the process. If you require assistance with this process, you may contact the Public Records Officer at <u>publicrecordsofficer@ecy.wa.gov</u> or 360-407-6040.

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

Analysis of the Cleanup

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.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action.

Data gaps identified by Ecology are discussed above under "Summary of Opinion." These data gaps include:

- Incorporation of historical data into the RI/FS Report.
- Presentation of data supporting the assertion that the arsenic in groundwater is from naturally occurring carbon causing reducing conditions in groundwater

Ecology notes that additional data gaps could be identified after our review of a revised RI/FS report that incorporates historical data.

2. Establishment of cleanup standards.

Concentrations of site contaminants were compared within the RI Report with the following cleanup levels:

Contaminant	Method A Cleanup level for soil (mg/kg)	Method A Cleanup level for
		groundwater
		(µg/L)
Gasoline range organics	100/30*	1,000/800*
Diesel range organics	2,000	500
Heavy oil range organics	2,000	500
Benzene	0.03	5
Toluene	7	1,000
Ethylbenzene	6	700
Xylenes	9	1,000
Tetrachloroethene (PCE)	0.05	5
Trichloroethene (TCE)	0.03	5

Contaminant	Method A Cleanup level for soil (mg/kg)	Method A Cleanup level for groundwater (µg/L)
<i>cis</i> -1,2-dichloroethene (c12DCE)	160**	16**
Vinyl chloride (VC)	0.67**	2
Arsenic (As)	20	5***
Lead (Pb)	250	15
Chromium (Cr)	2,000****	50
CPAHs	0.1	0.1

*Higher cleanup level applies if no benzene is present.

**Method B cleanup level – no Method A value established.

***The regional background concentration for As is 8 µg/L.

****Trivalent chromium value.

Ecology notes that the comparison of contaminant concentrations with Method A cleanup levels within the RI does not preclude the possible application of Method B cleanup levels at the Site. Ecology notes that the above soil cleanup levels for c12DCE and VC are based on the direct contact pathway. Soil-protective-of groundwater cleanup levels apply to soil, unless an empirical demonstration of a lack of impact to groundwater from the soil can be made. In addition, surface water cleanup levels apply to groundwater where the groundwater-to-surface water pathway is potentially active.

A standard point of compliance (throughout the Site) is anticipated to be applied for soil and groundwater. For the direct contact soil pathway, this is from the ground surface to fifteen feet below the ground surface.

The Site is located in a relatively dense urban setting. Approximately 1.4 acres of open space are located with 500 feet of the site (the banks of the Green River). However, based on completion of MTCA Table 749-1, the Site is exempt from further Terrestrial Ecological Evaluation.

3. Selection of cleanup actions.

Some cleanup has been previously done at the Site, including some air sparging (AS) treatment of VC and c12DCE in groundwater, and some excavation and offsite disposal in three areas (sand blasting area, sump discharge area, and compressor area at the West Valley Business Park site). A partial sufficiency letter was issued by Ecology in 1999 for the compressor area. After excavation in the sand blasting area in 1991, soil contamination reportedly remained under the structure. The RI/FS report proposed further excavation and offsite disposal at locations B4 and B5, where soil cleanup level

exceedances occurred. Ecology suggests that these excavations proceed as an Interim Action.

Cleanup of VC and c12DCE in groundwater via air sparging (AS) and soil vapor extraction (SVE) is proposed within the RI/FS report. Although there are significant uncertainties with respect to this cleanup action achieving cleanup levels. Ecology suggests that this cleanup work proceed as an Interim Action.

Limitations of the Opinion

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 70A.305.040(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 70A.305.080 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 70A.305.170.

Contact Information

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 contact us 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: <u>www.</u> <u>ecy.wa.gov/programs/tcp/vcp/vcpmain.htm</u>. If you have any questions about this opinion, please contact me by phone at (509) 454-0738 or at frank.winslow@ecy.wa.gov.

Sincerely,

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Frank P. Winslow, LHG Toxics Cleanup Program Headquarters Section

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Enclosure: A –Diagrams of the Site

cc: Pete Kingston, Farallon

Enclosure A

Diagrams of the Site







