STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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June 27, 2018

Mr. Josh Baldi
King County Water and Land Resources Division
201 South Jackson Street, Suite 600
Seattle, WA 98104

Re: Request for Additional Information to Provide Opinion on the Investigation and Cleanup under the VCP for the following Contaminated Site:

- **Site Name:** Pacific City Park
- **Site Address:** 600 3rd Ave SE Pacific, Washington 98047
- **Cleanup Site ID:** 21
- **Facility/Site ID:** 2160
- **VCP Project ID:** NW3204

Dear Mr. Baldi:

Thank you for submitting the Sampling And Analysis Plan, Environmental Investigation Phase I Environmental Site Assessment, and the Phase II Environmental Site Assessment for review by the Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Based on a preliminary review, Ecology determined the reports are incomplete. Additional information regarding the cleanup is needed. The enclosed Checklists identify what additional information Ecology needs.

Ecology wants to provide you an opportunity to update and resubmit the report to include the additional information specified in the enclosed Checklist and any existing site characterization information available for the Site while you wait for a Site manager to be assigned. The Site's position on the VCP Wait List will remain the same. However; if an updated report is not received when a Site manager is assigned, the position in the Wait List cannot be guaranteed. By providing the requested information, Ecology can then provide a written opinion on the submitted reports.

When updating the report/s, please reference our report Template, available at https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Cleanup-report-checklists-and-templates. Ecology developed both the Checklists and Template to provide clarity on our expectations for work plans and reports. We hope you find them useful.

If you have any questions about this request or how to complete your report, please contact me at (425) 649-7233 or sofe461@ecy.wa.gov. Thank you for your cooperation, and we look forward to working with you.

Sincerely,

Sonia Fernández
VCP Coordinator
Toxics Cleanup Program, NWRO

Enclosure (1) RI Checklist

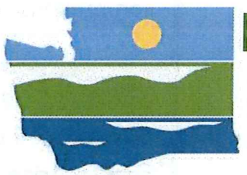
cc: Ecology Site File

Incomplete Report: A Sampling and Analysis Plan to conduct additional field Investigation to address data gaps was submitted for review. The proposed work is necessary prior to prepare a Feasibility Study for cleaning up the Site. Once this work is completed, a comprehensive RI/FS summarizing all investigations conducted at the Site and potential cleanup options should be submitted for review.

2018

Remedial Investigation Checklist
Pacific City Park—NW3204

Toxics Program



DEPARTMENT OF ECOLOGY
State of Washington

May 2016

Publication No. 16-09-006

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FSID: 2160

Report Name: Sampling and Analysis Plan, Environmental Investigation, Phase II Environmental Site Assessment, Phase I Environmental Site Assessment.

Date Submitted: 6/29/18

Reviewed By: G. Yang

Review Date: 7/20/18

Remedial Investigation (RI) Checklist Guidance

The Model Toxics Control Act (MTCA) regulation Washington Administrative Code (WAC) 173-340-350(7) broadly describes the elements necessary to complete a RI. The purpose of a RI is to collect and evaluate sufficient information to fully characterize the nature and extent of contamination at a site.

This RI checklist is considered guidance based on the MTCA cleanup regulation WAC 173-340. Cleanup project managers with the Washington State Department of Ecology (Ecology) have discretion when reviewing and accepting RI reports as site-specific circumstances dictate the necessary scope and breadth of each report.

Remedial Investigation Report Body

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Adequate	Incomplete	Missing	N/A	Comments
X				

I. Cover Letter. Include a letter describing the submittal and specifying the desired department action or response.

II. Introduction.

a. **General Site Information.** Include contact information for project coordinators (Ecology site manager, consultants, potentially liable persons (PLP), and current owner/operator). Include the site name and identification numbers, general description, and location (e.g., GPS coordinates, assessor parcel number, Quarter Section Township Range, address).

X				In VCP application.

b. **Site History.** Describe site from earliest known time of habitation and/or development. Describe previous owners/operators, past uses of the site, and all potential/known sources (both on-site and off-site) of contamination (e.g., petroleum storage tanks, manufacturing processes, chemical storage, etc.). Include approximate dates or periods of past product and waste spills, identification of the materials spilled, and amount/location of the spill.

	X			In cover letter and various reports. However, the info is too brief and needs to be incorporated in a comprehensive RI report.

c. **Site Use.** Describe current site uses, land use/zoning, and future use plans.

X				

III. Field Investigations

a. **Previous Environmental Investigations.** Discuss prior work performed, samples obtained, why sampling locations were chosen, etc. Cite any previous environmental reports.

	X			The information presented in each report needs to be summarized in a comprehensive RI report.

b. **Site Characterization.** Discuss current site characterization activities for each site media (surface water/sediments, soils, groundwater systems, air, and cultural history/archeology, if applicable). Name site contaminants of concern (COCs) and discuss why they were chosen for analysis. Describe how prior and current work efforts contribute to the understanding of the nature and extent of contamination.

	X			GW plume needs to be further characterized.

c. **Sampling/Analytical Results.** Discussion of sampling/analytical results should include contaminants analyzed for in samples from each applicable site media (soil, groundwater, vapor, surface water). Include comparison of the results to the applicable Method (A, B, or C) cleanup level, sampling method, laboratory method, and any special sampling or analytical protocols (silica gel, filtration, etc.). Evaluate the quality of the data.

IV. Conceptual Site Model

a. **Conceptual Site Model (CSM).** Discuss contaminant release, fate and transport, exposure pathways (surface water, groundwater wells, air, direct contact, etc.), and potential receptors (human, aquatic, terrestrial). Describe typical concerns for this type of environmental contamination, and include a discussion of site specific concerns (hydro-geologic setting, receptors, current or future site zoning/land use etc.).

V. Proposed Cleanup Standards

a. **General.** Clearly identify proposed cleanup levels for each media and rationale for selected level. Explain/justify mixing MTCA methods for different media. Must include a demonstration of conditions that require a calculated solution if one is to be use (e.g., background calculations, use of Method B or C, etc.) and show calculation of the cleanup level, including a list of the input parameters. Include point(s) of compliance.

b. **Terrestrial Ecological Evaluation (TEE).** A TEE should be performed, if required, as part of cleanup level selection. Reference WAC 173-340-7491 to see if the site qualifies for an exclusion.

www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm

VI. Summary, Conclusions, and Recommendations

a. **Summary and Conclusions.** Summarize what is known about the site and contamination (updated CSM). Include discussion of COCs that exceed MTCA or are "indicator hazardous substances." Ensure conclusions are supported by the tables and figures included with the report.

b. **Recommendations.** Outline possible interim/remedial actions if appropriate.

Remedial Investigation Figures

General – Figures should include a north arrow, scale, complete legend, measurement units, and annotated clarification as necessary. Figures should not be cluttered and must be legible and explicable. Document text must reference figures and draw conclusions consistent with information presented on figures. Consider using multiple figures when showing large amounts of information.

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	X		

The analytical data presented in each report needs to be summarized in a comprehensive RI report.

		X	

CSM was not discussed in the SAP or the previous investigation reports. A through discussion of the CSM needs to be included in the RI report.

Adequate	Incomplete	Missing	N/A
	X		

Additional fieldwork is needed to fully identify COCs and fully characterize contamination in soil and GW.

		X	

A TEE was not included with the documents submitted. The TEE is a requirement of the VCP and needs to be included with the RI report.

	X		

Further site investigation was proposed to assess the contamination source, identify all the COCs, and characterize the contamination at this Site. This information needs to be summarized in a comprehensive RI.

	X		

Additional investigation is necessary to fill the data gaps.

RI report figures will need to include at least all current and historical Site features, potential sources, all sampling locations, MTCA boundary, extent of remedial actions, cross section, and direction of groundwater flow.

I. Vicinity Map(s)

a. Show property in relation to surrounding region. Area covered by Vicinity Map should be proportional to site size.

b. Show other applicable items including (but not limited to): surface topography, natural areas, surrounding land uses, location of groundwater supply and monitoring wells within a one mile radius.

II. Site Map(s)

a. Show overall site layout with site features and existing well, boring, and sampling locations labeled consistently with current and historical site data and sample names used in the report. If multiple names exist for a sampling location or area of the site indicate this.

b. Include COC locations, concentrations, and estimated vertical and horizontal extent of contamination for site media, as applicable. Include waste materials present on site as well as hazardous substance treatment, storage, or disposal areas (show current and historical features).

c. Show geologic/hydrogeologic information including soil types, wells, screened intervals, and water levels (cross sections are useful for showing this information). Show groundwater flow direction and gradient.

d. Show other relevant information including (but not limited to): site and property boundaries, buildings/facilities on site, historical site features, underground storage tanks (USTs), previous excavation/interim action activity, etc.

III. Conceptual Site Model

a. Provide figures showing contaminant release(s), fate and transport, exposure pathways, and potential and/or actual receptors. The lateral and vertical extent of contamination, as currently understood, should be clearly conveyed.

Remedial Investigation Tables

General - Tables should include detailed notes that explain any laboratory or other designations, assumptions, and references. All acronyms used in the table should be defined in a section of the notes even if they are defined in the body of the report, so table information can be quickly understood.

a. **Sampling Information/Laboratory Methods.** Include current and historical sampling methods and numerical cleanup levels, lab methods, reporting limits, and any special sampling protocols with justification or explanation (e.g. silica gel, filtration).

b. **Cleanup Levels.** Include potentially applicable ARAR values and recommended cleanup levels.

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Adequate	Incomplete	Missing	N/A	Comments
X				
	X			Need to illustrate GW and soil data gaps in figures.
	X			None of the reports has cross sections showing the vertical extent of contamination and relationship to groundwater. Cross sections need to be included in the RI report.
	X			Make sure these are included in the RI report Figures.
		X		See general comments and II b, c, and d.
				RI Tables should be clear and comprehensive presenting all data currently and historically collected at the Site. Tables for each media sampled can be arranged chronologically and by area with date and depth of sample collection, detection limits, and cleanup levels. Exceedances to cleanup levels should be highlighted.
	X			See general comments.
X				

c. **Site Data.** Include current and historical analytical and field-measured data. Group by media type. For larger data sets, consider making a summary table of exceedances. Tables should include proposed cleanup levels with any contaminant exceedances clearly indicated using bold font or shading. Non-detectible levels should be noted as 'U' with the numerical laboratory reporting limit (RL) provided rather than 'ND'.

Remedial Investigation Appendices

General. Appendices should contain a description of content and explain how to interpret the information for use. Not all of the following suggestions will apply to all sites.

a. Exploratory logs, well installation diagrams, groundwater sampling logs, and field records.

b. Analytical laboratory report and Quality Assurance/Quality Control report.

c. **Limitations.** Explain any limitations that apply to the work.

d. Details of field and analytical methods used in former and current investigations and remedial activities. If applicable, append Work Plan/Sampling and Analysis Plan/Quality Assurance Project Plan/Health and Safety Plan.

e. Other documents that provide additional context or contribute to the understanding of the site – see suggested report format for additional information.

Miscellaneous Items

a. **Environmental Information Management (EIM).** All sampling data must be uploaded into Ecology's EIM database. This allows Ecology to access data, check results, and/or perform additional analyses. For more information, reference:

www.ecy.wa.gov/programs/tcp/data_submittal/Data_Requirements.htm

b. **Certification (Licensed Professional Stamp).** Engineering, geologic, and hydrogeologic work must be performed under seal of an appropriately licensed professional (RCW 18.43 and 18.220).

c. **Additional information may be requested by Ecology as required to fully define the site.**

d. **Submittal Requirements:** Ecology requests three copies of reports submitted per WAC 173-340-850. Please contact the cleanup project manager for specific submittal requirements.

To request ADA accommodation or materials in a format for the visually impaired, call Ecology at 509-454-7834, Relay Service 711, or TTY 877-833-6341.

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Adequate	Incomplete	Missing	N/A	
	X			See general comments.
	X			Make sure all of the items from a to e are included in the RI report.
		X		Scattered in different reports. Should all be included in the RI report
X				Include all data collected in the RI report.
			X	
X				
			X	
			X	Data needs to be submitted to EIM if not already done so.
		X		None of the reports submitted were stamped by a licensed professional. This is a requirement of the VCP. Make sure RI is stamped.
	X			More GW MWs could be needed.
X				Only one hardcopy and an electronic copy of the RI report is needed.