



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

OFFICE OF
COMPLIANCE AND ENFORCEMENT

Reply to: OCE-084

DEC 18 2013

Certified Mail – Return Receipt Requested

Mr. Shimon Mizrahi
Managing Partner
Rainier Commons, LLC
3317 3rd Avenue South
Seattle, Washington 98134

Re: Risk-Based Disposal Approval for Polychlorinated Biphenyl Bulk Product Waste at the Rainier Commons Facility, 3100 Airport Way South, Seattle, WA, EPA ID No. WAD 05123 9994

Dear Mr. Mizrahi:

This letter provides approval under the authority of 40 Code of Federal Regulations (C.F.R.) § 761.62(c) for the disposal of polychlorinated biphenyl (PCB) bulk product waste, and §761.61(c) for substrate sampling at the Rainier Commons Facility, 3100 Airport Way South, Seattle, Washington (RC Facility). This approval pertains to the disposal of paint on the exterior surfaces of the buildings that comprise the RC Facility, as documented in the July 25, 2013 revision to the Work Plan dated March 25, 2013 (Enclosure 1, Reference 1, hereinafter “Work Plan”), and subject to the conditions established below. The rationale of the U.S. Environmental Protection Agency (EPA) for establishing these conditions is contained in the Statement of Basis for the Risk-Based Disposal Approval (Enclosure 2).

This written decision for a risk-based method for disposal of PCB bulk product waste is based on documentation provided by Rainier Commons, LLC (Rainier) to the EPA identified in Enclosure 1, supplemental information identified in Enclosure 2. This approval requires a number of future submittals including Individual Phased Work Plans (IPWP), Individual Phase Completion Reports (IPCR) and an overall Project Completion Report (PCR), as described in the Work Plan and the Statement of Basis. Once EPA approves the IPWPs they will be incorporated into and become enforceable conditions of the approval. In issuing this approval, the EPA finds that the method for disposal of PCB bulk product waste and sampling substrates, as described in this approval and subject to the conditions below, will not pose an unreasonable risk of injury to health or to the environment.

Rainier’s application for removal of the exterior paint, and limited interior paint removal, made reference to several regulatory provisions including Rainier’s right to self-implementation under 40 C.F.R. § 761.61(a), and EPA’s authority under 40 C.F.R. §§ 761.62(c) and 761.61(c). EPA would like to make it clear that this approval is granted pursuant to 40 C.F.R. § 761.62(c), applicable to PCB bulk product waste, and § 761.61(c) PCB remediation waste, limited to substrate sampling. EPA is not providing any authorization to cleanup, store or dispose of PCB remediation waste under this approval except for substrate sampling.

The terms and conditions of this approval are established pursuant to 40 C.F.R. §§ 761.62(c) and 761.61(c) and enforceable under the Toxic Substances Control Act (TSCA). Any actions which deviate from the terms and conditions of this approval may result in administrative, civil, or criminal enforcement in accordance with Sections 16 and 17 of TSCA, 15 U.S.C. §§ 2615 and 2616.

Background

Any applied dried paint, wherever found, which contains total PCBs at a concentration equal to or greater than 50 parts per million (ppm), lacks authorization for use under TSCA and is defined as *PCB bulk product waste* at 40 C.F.R. § 761.3. PCB bulk product waste must be disposed of pursuant to the requirements of 40 C.F.R. § 761.62. Any portion of the substrate beneath applied dried paint that contains PCBs at a concentration equal to or greater than 50 ppm which is found to also be contaminated by PCBs is defined as *PCB remediation waste* at 40 C.F.R. § 761.3. PCB remediation waste must be addressed in the manner prescribed by 40 C.F.R. § 761.61.

The presence of PCBs at a concentration greater than or equal to 50 ppm has been documented in applied dried paint covering multiple exterior surfaces at the RC facility, including Buildings 4, 5A, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, red silos, and the chimney (Reference 1). There are no buildings identified as 16 and 17, building 26 was not tested and buildings 1, 2 and 3 samples indicate the presence of PCBs <50 ppm.

Rainier, the owner of the RC Facility, has proposed the removal of applied dried paint from all exterior surfaces at the RC Facility, regardless of the PCB concentration. Although allowing paint manufactured with total PCBs at concentrations <50 ppm to remain in place does not constitute unauthorized use, paint flaking off the exterior surfaces of the RC Facility that contains PCBs <50 ppm may still constitute an unreasonable risk of injury to the environment. Paint chips have been identified in onsite catch basins and offsite sediment traps in the storm sewer system that discharges to the Lower Duwamish Waterway (LDW). The LDW is on the National Priorities List for sediment contamination and PCBs are one of the primary contaminants of concern driving the sediment remediation. Due to the potential for applied dried paint that is not removed to be a continuing source of PCB contamination to the LDW, the EPA has determined that it is appropriate to require, as a condition of this approval, the removal of all applied dried paint on the exterior surfaces of the RC Facility regardless of PCB concentration. This is consistent with Rainier's proposal, including paint with PCB concentrations below 50 ppm. Paint removal shall achieve a visual cleanup standard to ensure the successful removal of paint, verified through inspection, pursuant to Section 5 of the Work Plan.

Rainier is authorized to remove the applied dried paint containing PCBs from all buildings, silo and chimney, and other exterior surfaces by means of blasting the surfaces with an appropriate media, subject to the terms and conditions of this approval. Removed paint and blasting media must be disposed of according to the applicable requirements of 40 C.F.R. § 761.62(a) and (b). Following this paint removal and disposal work, Rainier will evaluate the performance of the blasting method(s) used by measuring the extent to which any paint remains on the surface area with respect to the visual cleanup standard. This evaluation and assessment will include visual observation of the blasted surface area following the procedures set forth in Sections 3, 4, and 5 of the Work Plan and the conditions set forth below.

Rainier concludes in the Work Plan that additional sampling of the substrate is unnecessary because the stairwell demonstration project showed that PCBs did not migrate from the paint to the substrate. EPA disagrees with this conclusion with respect to concrete substrate based on both the Work Summary and Visual Performance Evaluation (Reference 3) and the analytical concrete core data received December 28, 2011 (Reference 4). Nearly every concrete grid element from the demonstration project identified some paint remaining in the visual inspection. Similarly, every concrete core sample analyzed contained detectable levels of PCBs, with concentrations up to 47ppm. Given the data, it is not possible to definitively conclude that PCBs from paint did not migrate into the substrate. However, given the degree to which paint remained on substantial elements of the concrete surfaces, and the possibility that this resulted in the reported levels of PCBs, it is also not possible to conclude that PCBs have migrated from the paint into the substrate. Therefore, EPA cannot rely on the concrete analytical data to evaluate the presence of PCBs in the substrate until the visual performance standard is met.

Once the exterior paint has been removed to achieve the visual standard, Condition 8 of this approval requires Rainier to collect substrate samples in concrete, and any new substrate material not previously analyzed, following the sampling collection and analysis protocol established in the EPA document titled 'Standard Operating Procedures For Sampling Porous Surfaces Contaminated by Polychlorinated Biphenyls (PCBs),' revised May 5, 2011 (SOP). The most recent version of the SOP can be found here <http://www.epa.gov/region1/cleanup/pcbs/pdfs/484692.pdf>. Rainier shall devise a sampling plan that will ensure that the data collected are representative of the PCBs that may remain in the substrate, and include an analysis of the representativeness in their sampling plan. Data shall be sufficient for EPA to conclude that the visual performance standard is adequate to verify both removal of PCB bulk product waste and that no further cleanup is likely to be required for the remaining substrate to satisfy the performance criteria of 40 C.F.R. 761.61(c) and 761.62(c) of no unreasonable risk of injury to health or the environment.

Rainier has already established interim measures to control ongoing releases of PCBs into the storm sewer system that discharges into the LDW, and to control human exposure to paint chips and dust which may enter or be tracked into occupied spaces in the RC Facility. These steps include filter fabric in storm sewer drains and periodic vacuuming or sweeping of the building grounds to collect and properly dispose of visible paint chips. Currently, performance of the interim measures are verified through daily visual inspection of the filter fabric to ensure there are no tears or holes, and by the removal of any visible paint chips in the parking lot or filter fabric using a wet-vac. EPA is concerned that given the active nature of the parking lot paint chips on the asphalt may be ground up to sizes not visible to the naked eye and possibly smaller than the filter fabric can contain. Therefore, Condition 6 of this approval requires Rainier to verify that the filter fabric is effective at protecting the storm sewer system from transporting any particles of PCBs not visible to the naked eye.

Rainier will provide the EPA with the evaluation and assessment information described above in the completion reports prepared for each completed area, and also in the final project completion report.

Rainier requested approval for the collection of 3 paint samples along the north section of East Wall at building 1. This approval does not provide approval for the interior paint sample collection at this time because the extent of PCB contamination in the interior spaces is not fully understood. Rather than characterize the north end of East Wall at building 1 under this approval, Rainier should characterize the extent of PCB contaminated paint within the entirety of interior spaces. EPA requests that Rainier submit a separate Work Plan for characterizing the extent of PCB contamination within the interior spaces of the RC Facility, subject to a separate approval.

Conditions

- 1) Rainier's application included a request to approve work for limited interior applied dried paint removal within the sixth floor stairwell. Rainier is authorized to remove the PCB bulk product waste from the sixth floor stairwell demonstration area following the same protocol and verification requirements established in the Work Plan and this approval for all exterior paint abatement. Rainier must submit an IPWP for the stairwell paint removal and a phase completion report. Completion of paint removal in the stairwell is required as part of the overall project requirements, and therefore must be completed to obtain approval of the final project completion report by EPA.
- 2) In its application for a risk-based disposal approval, Rainier enclosed the Work Plan. The Work Plan presents a general plan for completing the work which provides for the preparation of additional, specific work plans for individual phases of the work, hereafter referred to as Individual Phased Work Plans (IPWP). EPA agrees with the IPWP approach and requires that each IPWP be submitted to the EPA for review a minimum of thirty (30) calendar days prior to the scheduled start of the phase. Rainier is not authorized to begin work on any phase without prior approval from EPA. EPA will use its best efforts to provide timely approval of the IPWPs. This approval may be amended to modify the amount of time EPA requires to review the IPWP, as appropriate. The first IPWP shall be submitted to EPA within thirty (30) calendar days following receipt of this approval.
- 3) IPWPs shall contain detailed information about the paint removal plans for each phase, including but not limited to: sections undergoing remediation, containment construction and operation, secondary site protection, spill prevention and response plans, visual verification plans, sample verification and analysis plans including Quality Assurance/Quality Control (QA/QC) parameters, performance monitoring and analysis plans for sewers and catch-basins, and contingency plans. The final IPWP will also include detailed plans for cleaning the storm and combined sanitary sewer lines at RC.
- 4) Rainier is authorized to remove applied dried paint (PCB bulk product waste) from all building, silo and chimney exterior surfaces by means of any of the listed Accepted Abatement Methods in Section 3 of the Work Plan. Rainier is authorized to conduct post-blasting cleanup and removal of containment structures, as documented in the Work Plan. Rainier will prepare written and photographic field notes, including all blasting operating parameters, containment area operating parameters, visual inspection of the exterior surface, visual inspection of the catch-basins, filter fabric and any wet-vac activity. Rainier shall initiate work on the exterior paint removal project, as authorized by approval of the IPWP, within thirty (30) calendar days following receipt of the IPWP approval.
- 5) Rainier shall dispose of the paint/blasting media as PCB bulk product waste and maintain disposal records pursuant to the applicable requirements of 40 C.F.R. § 761.62(a) or (b), and shall also dispose of containment structure materials, personal protective equipment, and all non-liquid cleaning materials in a manner consistent with 40 C.F.R. § 761.61(a)(5)(v). All liquid wastes generated during paint abatement, including but not limited to decontamination activities and dust control must be contained by the containment system, and not allowed to enter storm drains. Liquid wastes shall be disposed of in accordance with 40 C.F.R. § 761.61(a)(5)(iv). The storage of all waste on site shall comply with the storage regulations at 40 C.F.R. § 761.65(b) or 761.65(c).

- 6) Throughout the exterior paint removal project, Rainier shall ensure that the interim measures to protect the storm and combined sanitary sewer systems, described both in the Work Plan and as conditions of this approval, are working effectively. Interim measures that Rainier is responsible for include: conducting the paint removal activities in a containment structure that maintains constant negative pressure; maintaining barriers over any windows or openings to the buildings and inlets to sewer systems adjacent to work areas; providing secondary containment around the main containment structure; daily visual inspections of the containment and barrier devices, as well as catch basins and facility property; removal of any visible paint chips from catch basins or facility property; filter fabric installed in on-site catch basins; daily air samples; aqueous and sediment sampling of catch basins and storm and sanitary sewer systems; and any other interim measure described in this approval. To ensure that the interim measures are effective, Rainier shall complete an inventory of all inlets and pathways to the storm and sanitary sewer systems on their site to include in the first IPWP. This shall include roof drains, manholes, catch basins and any other inlet or pathway to the storm and combined sanitary sewer systems. Rainier shall provide detailed plans for ensuring that the inlets adjacent to the building and/or work area are completely protected from any possible infiltration of blast media or PCB bulk product waste during removal activities. Further, Rainier shall submit both aqueous and catch-basin sediment performance monitoring and sampling plans for both the storm sewers and combined sanitary sewers located across the entire site to assess PCB releases prior to removal activities, during removal activities, and post-removal as part of the IPWPs. The sampling plans must identify proposed sampling locations, sampling schedule, media sample volume requirements, analytical method detection limits, contingency plan, and procedures for reporting results to applicable regulatory agency. Prior to removal activities, EPA requires Rainier to sample catch-basin sediments from all catch-basins with an adequate amount of sampling material prior to removal activities, and to co-locate aqueous samples as conditions permit. EPA further requires aqueous and catch-basin sediment monitoring and sampling to continue for a minimum of twelve (12) months after removal activities conclude. The detection of PCBs > 0.1 Micrograms/Liter in aqueous samples, or >1 ppm in catch basin sediments during active removal shall trigger an evaluation of the containment structure and interim measures by both Rainier and EPA at the project management level to devise and implement appropriate improvements where applicable. The sampling plan shall include QA/QC details necessary to ensure that the resulting data are of acceptable quality, including sensitivity, to be acceptable for comparison to these decision criteria. Furthermore, if PCBs are detected in aqueous or catch basin sediments in the twelve (12) months following paint removal EPA may require that Rainier submit an investigation plan to EPA to determine the source of PCBs.
- 7) Upon completion of paint removal in each IPWP, Rainier shall evaluate the performance of the work through visually examining 100 percent of the surface from which paint was removed, and conducting detailed verification visual analysis of 2 percent of the substrate pursuant to the description provided in the Work Plan and the conditions herein. EPA requires complete removal of all visible paint to satisfy the requirements of this approval. If paint remains after blasting is conducted additional remediation is necessary to meet the terms of this approval. If a remediation method that is not listed in the Accepted Abatement Methods on Page 8 of the Work Plan is deemed necessary by Rainier to remove all exterior paint, Rainier will seek EPA approval prior to commencing paint abatement activities following the procedures in Section 3, page 9 of the Work Plan. Rainier proposed randomly selecting the location of the inspection areas without explaining how those random selections would be made. EPA requires the use of a numbered grid and a random number selector for this process. Given that the removal areas will not be uniform in size or distribution, one grid size may not be applicable to all removal areas.

Therefore, EPA will allow Rainier to modify the grid as necessary for each removal area. The proposed grid, sample locations, sample methodology and QA/QC shall be included in each IPWP for EPA approval.

- 8) Rainier shall collect verification samples of concrete and any other substrate type not analyzed as part of the September 2011 RBDA (Enclosure 1, Reference 2) demonstration project once the visual standard for paint removal is met. Rainier shall use the grid system established in Condition 7 and collect a minimum of three samples per substrate, per phase of removal activity covered by the IPWP. As part of the IPWPs, Rainier shall devise a detailed sampling plan that will ensure that the data collected are representative of the PCBs that may remain in the substrate, and include an analysis of the representativeness in their sampling plan. The sampling plan shall also include sample collection methods, sample locations, and QA/QC. Sampling shall follow the guidelines provided in the EPA document titled 'Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)', revised May 5, 2011 (SOP). The most recent version can be found here: <http://www.epa.gov/region1/cleanup/pCBS/pdfs/484692.pdf>. Data shall be sufficient for EPA to conclude that the visual performance standard is adequate to verify both removal of PCB bulk product waste and that no further cleanup is likely to be required for the remaining substrate to satisfy the performance criteria of 40 C.F.R. 761.61(c) and 761.62(c) of no unreasonable risk of injury to health or the environment. If results of the sampling represent that the substrate presents no unreasonable risk of injury to health or the environment, Rainier may request a modification of this approval to eliminate the substrate sampling requirements.
- 9) Ninety (90) working days following completion of paint removal work and verification sampling for each phase, Rainier shall provide the EPA with the Individual Phase Completion Report (IPCR) which shall be a written report documenting the performance and evaluation required by this Approval and the Conditions herein. In addition to the text of this report, Rainier shall include complete supporting documentation, including field notes, photographic documentation, copies of manifests, and laboratory data. This report will identify and document the removal process, key operating parameters for media blasting as applied to each substrate material and any sub-sections of the project area, the construction, maintenance and operation parameters of the containment area, waste handling, storage and disposal details, verification inspection and sampling procedures and results for the building exterior and interior surface, visual inspection results and verification sampling results for aqueous and catch-basin sediments, and will include the field notes required by Condition 4. Prior to approving a completion report, EPA may require that Rainier address identified problems, deficiencies, or take additional actions to comply with applicable regulatory requirements or the conditions of this approval. EPA will approve the completion report for each work phase upon determining that the removal work is completed and all applicable conditions of this approval and requirements of the approved work plan have been met. EPA's review of a completion report does not preclude Rainier from submitting an IPWP for approval or commencing work under an approved IPWP.
- 10) Rainier shall construct and maintain the containment structure proposed in its Work Plan in a manner that adequately encloses the paint removal area during each phase of work. Rainier shall further provide secondary containment around the containment structure. The purpose of the containment structure and secondary containment is to prevent any releases of PCB contaminated paint or blasting media to the air or to areas outside the containment area including the parking lot, site soils, or storm sewers. Rainier shall implement the daily housekeeping activities proposed in its application. Any releases of PCBs outside of the containment area shall be addressed under the PCB Spill Cleanup Policy at 40 C.F.R. §§ 761.120 to 761.135.

- 11) **Ninety (90) working days following EPA approval of all IPCRs, Rainier shall prepare and submit a project completion report (PCR) to EPA. The PCR shall explain and describe in detail the successful completion of the following work for the entire facility: all paint was removed from all exterior surfaces of the buildings and the sixth floor stairwell at the RC Facility; 100 percent of all exterior and sixth floor stairwell surfaces were examined; 2 percent of all exterior and sixth floor stairwell surfaces underwent detailed visual examination; concrete and any non-brick substrate underlying paint with PCBs >50 ppm were sampled to verify migration of PCBs did not occur into the substrate or presented no unreasonable risk of harm or injury to human health and the environment; all phases of paint removal were completed with the approval of EPA; all PCB waste was properly transported off-site to an appropriate disposal facility; verification sampling of the storm water and sediments during removal activities in catch basins demonstrates that the interim measures were effective or that appropriate steps were taken to remedy any found problems, and the sewer lines were cleaned of all sediment and debris. The project completion report shall also include all relevant documentation necessary to support the successful completion of the project. EPA will review the final project completion report and will issue a determination as to whether Rainier has successfully completed all required work under this approval.**
- 12) **Condition 6 requires aqueous and catch-basin sediment monitoring and sampling to continue for a minimum of twelve (12) months after removal activities conclude. Sixty (60) working days after the post-removal monitoring of catch-basins has concluded, Rainier shall submit a final Monitoring Completion Report (MCR) to EPA. The MCR shall explain and describe in detail the successful completion of the following: the sample collection plan, including QA/QC parameters, sample data for both aqueous and sediment samples, analysis of the data, and analysis of any outliers or data qualifiers.**
- 13) **Rainier shall ensure that all on-site personnel who will be conducting activities pursuant to this approval have appropriate qualifications and training for such activities, including 40-hour Hazardous Waste Operations and Emergency Response certification. Rainier will ensure that all records of personnel qualifications and training are maintained in project files and are available for inspection by EPA.**
- 14) **Rainier shall be responsible for conducting all work subject to this approval according to a written Health and Safety Plan (HASP) to maintain a safe work environment, including appropriate training, communication of chemical and physical hazards, use of personal protective equipment, which prevents dermal, inhalation, or other exposure to PCB bulk product waste, PCB remediation waste, and blasting media which may pose an unreasonable risk of injury to health and the environment. Rainier shall provide a copy of this HASP to the EPA with the first IPWP, and with any other IPWP if the conditions change to warrant a modification to the HASP.**
- 15) **Rainier shall prepare and maintain records documenting the work conducted under this approval. At a minimum, records shall include all field notes and photographs of activities as well as laboratory data, work plans and completion reports as required by Conditions 2-9, 11,12, and 14. These records shall be maintained by Rainier for a minimum period of five years following EPA's determination that all work subject to this approval has been completed pursuant to Condition 11.**
- 16) **At least thirty (30) working days prior to the effective date of any sale or transfer of ownership, in whole or part, of real property subject to requirements of this approval, Rainier shall provide a copy of this approval to all prospective owners. Rainier shall establish, as an enforceable**

condition of such sale or transfer, that each new owner must provide the EPA a written request to modify this approval to establish each owner as being responsible for compliance with the requirements of this approval.

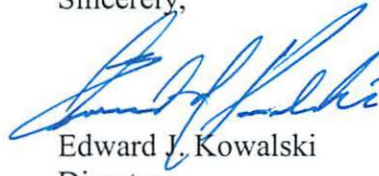
- 17) Rainier is responsible for the actions of all officers, employees, agents, and contractors involved in activities conducted under this approval. Rainier shall provide each contractor conducting work subject to this approval a written or electronic copy of this approval at least five (5) working days prior to the start of such work.
- 18) Rainier shall allow authorized representatives of the EPA to inspect areas of the RC Facility subject to conditions of this approval at reasonable times, and to take samples as may be necessary to determine compliance with the PCB regulations and this approval. Any refusal by Rainier to allow access for inspection (as authorized by Section 11 of TSCA) or sampling may be grounds to revoke this approval or for enforcement.
- 19) This approval does not relieve Rainier from its duty to comply with all other applicable federal, state, and local requirements, and does not release Rainier from any liability it may have with respect to releases of hazardous substances at or from the RC Facility.
- 20) If any time before, during or after conduct of activities subject to this approval, Rainier possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application for this risk-based disposal approval) indicating that activities approved herein may pose an unreasonable risk of injury to health or the environment, Rainier shall immediately cease all such activities and report such data or information via e-mail to the EPA project manager within 48 hours, and in writing to the Regional Administrator within ten (10) calendar days of first possessing or becoming aware of such data or information. Such activities shall not resume until the EPA provides written notification that the activities in question no longer pose an unreasonable risk of injury to health or the environment. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be timely resolved without modification of this approval.
- 21) The EPA reserves the right to modify or revoke this approval based on Rainier's failure to comply with material conditions of the approval or applicable federal regulations, or based on any available information that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment. Rainier may request modification of this approval by providing written notice to the EPA. If the EPA agrees with a request for modification, the EPA will provide written approval to Rainier. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be timely resolved without modification of this approval. A request to modify the written approval shall not replace or stay any existing condition, and Rainier shall continue to comply with the existing approval conditions until EPA approves the modification request in writing.
- 22) Submissions, reports, or notices required by or submitted pursuant to this approval shall be provided to the EPA as follows:

Michelle Mullin, PCB Coordinator
U.S. Environmental Protection Agency
1200 6th Ave., Suite 900, OCE-084
Seattle, Washington 98101

E-mail: Mullin.Michelle@epa.gov
Facsimile: (206) 553-1616

Should you have any questions or comments, please contact Michelle Mullin at (206) 553-1616, or Mullin.Michelle@epa.gov.

Sincerely,



Edward J. Kowalski
Director

Enclosures

1. Documentation Supporting Risk-Based Disposal Approval
2. Statement of Basis

cc w/enc: Jo M. Flannery
Ryan, Swanson & Cleveland, PLLC

Richard Thomas
Washington Department of Ecology

Dan Cargill
Washington Department of Ecology

Arnaud Gerard
King County

Bruce Tiffany
King County

Beth Schmoyer
Seattle Public Utilities

Enclosure 1
Documentation Supporting Risk-Based Disposal Approval
Rainier Commons, Seattle, Washington

- 1) Rainier Commons, LLC-Old Rainier Brewery Exterior Paint Abatement Work Plan Application and Request for Risk-based Disposal Approval”, prepared by NVL Labs Hazardous Materials Services, dated March 25, 2013 and revised July 25, 2013.
- 2) Risk Based Disposal Approval for Polychlorinated Biphenyl Waste at the Rainier Commons Facility, 3100 Airport Way South, Seattle, Washington”, issued by US EPA, dated September 21, 2011.
- 3) Work Summary and Visual Performance Evaluation, Building 6, Level 600/700 Paint Removal Rainier Commons Facility, 3100 Airport Way S., Seattle, Washington” Prepared by CDM, Bellevue, WA, dated December 9, 2011.
- 4) Summary Data analytical substrate data received December 28, 2011.

Enclosure 2

Statement of Basis Risk-Based Disposal Approval Rainier Commons, Seattle, Washington

Background

The Lower Duwamish Waterway (“LDW”) is a navigable water of the United States which receives discharges of water and solids from various sources. Due in large part to the presence of polychlorinated biphenyls (PCBs), the LDW has been placed on the National Priorities List for remediation by the EPA in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

As part of uplands source control work associated with the LDW remediation, the City of Seattle Public Utilities Department (SPU) conducted an inspection of the storm water drainage system at the Rainier Commons Facility (RC Facility), located at 3100 Airport Way S., Seattle, Washington, in 2005 (Rainier Commons, LLC Inspection Report, King County Industrial Waste and Seattle Public Utilities, October 12, 2005)¹. The results of this action indicated the presence of PCBs at concentrations ranging from 17 to 2,200 parts per million (ppm). In 2006, Rainier Commons, LLC (Rainier) performed additional sampling and analysis of the storm water drainage system at the RC Facility (Catch Basin Sediment Field Sampling Results Report, Vernon Environmental, Inc., June 2006). Results of this analysis of sediment samples identified PCBs in this system at concentrations ranging from 3.2 to 9.8 ppm, confirming that the water and solids discharged from the storm water drainage system at the RC Facility are a potential source of PCBs to the LDW.

Suspecting that a potential source of these PCBs was dried paint which had peeled and dislodged from buildings at the RC Facility, Rainier obtained a sample of dried paint in 2006 from the exterior surface of one of these buildings. The analysis of this sample confirmed PCBs in the dried paint at a concentration of 2,300 ppm. In 2009, the U.S. Environmental Protection Agency (EPA) conducted two inspections at the RC Facility. During these inspections, the EPA observed dried paint peeling from the exterior surfaces of buildings, and also found pieces of dried paint on ground surfaces and in the storm water drainage system. Sampling of exterior paint on the RC Facility buildings indicated the presence of PCBs in numerous locations, including 18,000 ppm PCBs in dried paint on the exterior surface of Building 6.

The use of PCBs, other than in a totally enclosed manner, is prohibited by Section 6(e)(2)(A) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e)(2)(A). PCBs in paint is not identified at

¹In the context of finding contaminant sources to LDW sediments, SPU “traces” sources by sampling the storm water solids that collect in catch basins, manholes, in-line sediment traps, or other structures. These structures are located within primarily public rights-of-way, but also on private properties which are sampled during storm water site inspections. In general, SPU uses 1 ppm (solids, dry weight, total PCBs) as a signal the additional investigation and source control are needed.

40 C.F.R. § 761.20 as the use of PCBs in a totally enclosed manner, and the use of PCBs in paint is not an authorized use identified at 40 C.F.R. § 761.30.

Under TSCA and implementing regulations at 40 C.F.R. Part 761, PCBs not authorized for use must be disposed of in accordance with Federal law. Any applied dried paint, wherever found, which contains PCBs at a concentration of equal to or greater than 50 ppm is defined as *PCB bulk product waste* at 40 C.F.R. § 761.3, and as such must be disposed of pursuant to the requirements of 40 C.F.R. § 761.62. If any portion of the substrate of buildings underlying the PCB bulk product waste is found to also be contaminated by PCBs, then the contaminated material is defined as *PCB remediation waste* at 40 C.F.R. § 761.3, and as such must be addressed in the manner prescribed by 40 C.F.R. § 761.61.

Rainier has already established certain interim measures to control migration of PCBs to the LDW through the storm and combined sanitary sewer systems, and to control human exposure to paint chips and dust which may enter or be tracked into occupied spaces in the RC Facility. These steps include filter fabric in storm sewer drains, and periodic vacuuming of the building grounds to collect paint chips and properly dispose of them. Currently performance of the interim measures are verified through daily visual inspection of the filter fabric to ensure there are no tears or holes, and removal of any visible paint chips in the parking lot or filter fabric using a wet-vac.

Rainier submitted an application for Risk-Based disposal of PCB waste under 40 C.F.R. § 761.62(c) to remediate the exterior paint from all buildings and surfaces at the RC Facility. Rainier explains the general plan to accomplish the remedial work in a document titled "Rainier Commons, LLC-Old Rainier Brewery Exterior Paint Abatement Work Plan Application and Request for Risk-based Disposal Approval", prepared by NVL Labs Hazardous Materials Services, dated March 25, 2013 and revised on July 25, 2013 (Work Plan). Rainier will be removing paint from approximately 99,000 square feet of exterior wall surfaces by means of blasting, and disposing of the removed paint and blasting media, according to the requirements of the risk-based disposal approval. Following paint removal, Rainier will perform an evaluation of the removal activities, and conduct sampling and analysis to verify that all paint has been removed to the visual standard set forth in the approval and that no undue risk to human health or the environment is caused by PCB contamination in the building substrate from which paint has been removed, pursuant to 40 C.F.R. § 761.61(c).

EPA's Evaluation of Rainier's Risk-Based Disposal Approval Application

As noted above, any applied dried paint, wherever found, which contains PCBs at a concentration of equal to or greater than 50 ppm lacks authorization for use under TSCA and is defined as *PCB bulk product waste* at 40 C.F.R. § 761.3. PCB bulk product waste must be disposed of pursuant to the requirements of 40 C.F.R. § 761.62. The Work Plan documents the presence of PCBs at a concentration greater than or equal to 50 ppm in applied dried paint covering multiple exterior surfaces at the RC facility, including Buildings 4, 5A, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, red silos, and the chimney. Paint flaking off the exterior surfaces of the RC Facility has been identified in onsite catch basins and offsite sediment traps in the sewer system that discharges to the LDW. Due to the potential for applied dried paint that is not removed to be a continuing source of PCB contamination to the LDW, the EPA has determined that in order to avoid presenting an unreasonable risk or injury to health or the environment, it is appropriate to require that all applied dried paint on the exterior surfaces of the RC Facility be removed, including paint with PCB concentrations below 50 ppm, to a visual cleanup standard established in the approval.

Rainier has proposed blasting media to remove applied dried paint from the exterior surfaces. EPA recognizes that during the course of removal activities, Rainier may wish to implement alternate paint removal methods, particularly for the stairwell paint removal. Rainier may request a modification to the approval to use a method not authorized by the approval. The EPA expects that the effectiveness of removal will be verified following the visual inspection procedures described in the Work Plan, and detailed in the Individual Phase Work Plans (IPWPs) to be submitted following receipt of the approval, and pursuant to the conditions explained below.

Rainier did not address verifying performance of the interim measures, but EPA requires both aqueous and sediment sampling of the storm and combined sanitary sewers and catch basins to verify that containment and housekeeping measures are effectively preventing migration of PCBs off-site. Rainier will provide evidence of compliance with the approval and appropriate TSCA regulations through the submission of completion reports for each phase of work completed, as well as an overall project completion report once all remediation and waste disposal activities are completed.

Discussion of Conditions

- 1) Rainier's application included a request to approve work for limited interior applied dried paint removal within the sixth floor stairwell. Rainier is authorized to remove the PCB bulk product waste from the sixth floor stairwell demonstration area following the same protocol and verification requirements established in the Work Plan and this approval for all exterior paint abatement. Rainier must submit an IPWP for the stairwell paint removal and a phase completion report. Completion of paint removal in the stairwell is required as part of the overall project requirements, and therefore must be completed to obtain approval of the final project completion report by EPA.
- 2) In its application for a risk-based disposal approval Rainier enclosed the Work Plan. The Work Plan presents a general plan for completing the work which provides for the preparation of additional, specific work plans for individual phases of the work, hereafter referred to as Individual Phased Work Plans (IPWP). EPA agrees with the IPWP approach and requires that each IPWP be submitted to the EPA for review a minimum of thirty (30) calendar days prior to the scheduled start of the phase. Rainier is not authorized to begin work on any phase without prior approval from EPA. EPA will use its best efforts to provide timely approval of the IPWPs. This approval may be amended to modify the amount of time EPA requires to review the IPWP, as appropriate. The first IPWP shall be submitted to EPA within thirty (30) calendar days following receipt of this approval.

EPA is aware that work on each phase cannot begin without approval from EPA, and that delay may be both costly and impair the control of contamination and thus the protection of the environment and human health. EPA will conduct the review of the IPWPs in order to ensure that the remedial activities proposed are appropriate and do not cause any unreasonable risk of injury to health and the environment. EPA will promptly review the applications and attempt to grant timely approvals as appropriate. After several phases have been completed, and if the overall process is functioning smoothly, EPA will re-evaluate whether the same level of review is necessary for remaining phases and may streamline the review process through an amendment to this approval.

- 3) IPWPs shall contain detailed information about the paint removal plans for each phase, including but not limited to: sections undergoing remediation, containment construction and operation, secondary site protection, spill prevention and response plans, visual verification plans, sample verification and analysis plans including Quality Assurance/Quality Control (QA/QC)

parameters, performance monitoring and analysis plans for sewers and catch-basins, and contingency plans. The final IPWP will also include detailed plans for cleaning the storm and combined sanitary sewer lines at RC.

This condition outlines what EPA expects in the IPWPs. The purpose of the IPWPs is to provide the details of how the work will be conducted, how the work will be monitored and verified, what quality assurance program will exist, and what contingency plans will be implemented. After all removal work has been completed, RC shall clean the sewer lines on site to ensure that no PCBs previously generated on-site are available for transport downstream. RC shall include a detailed work plan for cleaning the lines as part of the final IPWP.

- 4) Rainier is authorized to remove applied dried paint (PCB bulk product waste) from all building, silo and chimney exterior surfaces by means of any of the listed Accepted Abatement Methods in Section 3 of the Work Plan. Rainier is authorized to conduct post-blasting cleanup and removal of containment structures, as documented in the Work Plan. Rainier will prepare written and photographic field notes, including all blasting operating parameters, containment area operating parameters, visual inspection of the exterior surface, visual inspection of the catch-basins, filter fabric and any wet-vac activity. Rainier shall initiate work on the exterior paint removal project, as authorized by approval of the IPWP, within thirty (30) calendar days following receipt of the IPWP approval.

These conditions provide authorization to remove from service applied dried paint from all exterior building surfaces. Rainier proposed removal of all exterior paint in the application and work plan, but also wished to retain the right to remove some surface areas from paint removal work if data gap sampling confirmed the areas had <50 ppm PCBs. Given the documented releases from the building into the sewer systems and the potential contamination of LDW sediments, EPA finds that leaving paint with PCBs <50ppm on the building exterior surface, which is subject to flaking and release from the building, is not protective of health and the environment. Therefore, EPA is not authorizing Rainier to remove any buildings from the general work plan, or conduct any further data gap sampling. EPA requires Rainier, under the authority of 40 C.F.R. § 761.62(c), to remove all exterior paint in order to ensure no unreasonable risk of injury or harm to health or the environment. Field documentation (field notes and photographs) are to be maintained to describe all removal, disposal and verification procedures for both the exterior surfaces and the storm sewer systems.

- 5) Rainier shall dispose of the paint/blasting media as PCB bulk product waste and maintain disposal records pursuant to the applicable requirements of 40 C.F.R. § 761.62(a) or (b), and shall also dispose of containment structure materials, personal protective equipment, and all non-liquid cleaning materials in a manner consistent with 40 C.F.R. § 761.61(a)(5)(v). All liquid wastes generated during paint abatement, including but not limited to decontamination activities and dust control must be contained by the containment system, and not allowed to enter storm drains. Liquid wastes shall be disposed of in accordance with 40 C.F.R. § 761.61(a)(5)(iv). The storage of all waste on site shall comply with the storage regulations at 40 C.F.R. § 761.65(b) or 761.65(c).

This condition documents storage and disposal requirements for wastes expected to be generated from the authorized work activities. Although the cited regulatory requirements are generally self-implementing, the EPA is including this condition for the sake of clarity and completeness.

- 6) Throughout the exterior paint removal project, Rainier shall ensure that the interim measures to protect the storm and combined sanitary sewer systems, described both in the Work Plan and as conditions of this approval, are working effectively. Interim measures that Rainier is responsible for include: conducting the paint removal activities in a containment structure that maintains

constant negative pressure; maintaining barriers over any windows or openings to the buildings and inlets to sewer systems adjacent to work areas; providing secondary containment around the main containment structure; daily visual inspections of the containment and barrier devices, as well as catch basins and facility property; removal of any visible paint chips from catch basins or facility property; filter fabric installed in on-site catch basins; daily air samples; aqueous and sediment sampling of catch basins and storm and sanitary sewer systems; and any other interim measure described in this approval. To ensure that the interim measures are effective, Rainier shall complete an inventory of all inlets and pathways to the storm and sanitary sewer systems on their site to include in the first IPWP. This shall include roof drains, manholes, catch basins and any other inlet or pathway to the storm and combined sanitary sewer systems. Rainier shall provide detailed plans for ensuring that the inlets adjacent to the building and/or work area are completely protected from any possible infiltration of blast media or PCB bulk product waste during removal activities. Further, Rainier shall submit both aqueous and catch-basin sediment performance monitoring and sampling plans for both the storm sewers and combined sanitary sewers located across the entire site to assess PCB releases prior to removal activities, during removal activities, and post-removal as part of the IPWPs. The sampling plans must identify proposed sampling locations, sampling schedule, media sample volume requirements, analytical method detection limits, contingency plan, and procedures for reporting results to applicable regulatory agency. Prior to removal activities, EPA requires Rainier to sample catch-basin sediments from all catch-basins with an adequate amount of sampling material prior to removal activities, and to co-locate aqueous samples as conditions permit. EPA further requires aqueous and catch-basin sediment monitoring and sampling to continue for a minimum of twelve (12) months after removal activities conclude. The detection of PCBs > 0.1 Micrograms/Liter in aqueous samples, or >1 ppm in catch basin sediments during active removal shall trigger an evaluation of the containment structure and interim measures by both Rainier and EPA at the project management level to devise and implement appropriate improvements where applicable. The sampling plan shall include QA/QC details necessary to ensure that the resulting data are of acceptable quality, including sensitivity, to be acceptable for comparison to these decision criteria. Furthermore, if PCBs are detected in aqueous or catch basin sediments in the twelve (12) months following paint removal EPA may require that Rainier submit an investigation plan to EPA to determine the source of PCBs.

EPA is establishing this condition to establish the interim measures required under this approval. Although filter fabric, daily inspections and vacuuming of visible paint chips have been put in place at the RC Facility, additional controls were proposed by Rainier in the Work Plan, and other measures are included as conditions of the approval to verify that the all of the controls are effective at protecting the storm and sanitary sewer systems from PCB contamination. Currently there is no data to support the effectiveness of existing measures at controlling PCB releases from the building from entering the storm or combined sanitary sewer systems and potentially the LDW. It is possible that the blasting activities and/or automobile traffic on the site will reduce paint chips to a size not visible to the naked eye and not large enough to be trapped by the filter fabric. Any detection of PCBs in the aqueous or sediment samples above 1ppm will indicate that the containment and barrier structures and/or daily housekeeping activities are not effective at preventing migration and dispersion of PCBs from the paint removal activities, and Rainier must improve the on-site interim measures to prevent distribution of PCBs. The purpose of ongoing aqueous and sediment for the twelve months following project completion is to verify that no undocumented releases occurred to the surrounding surfaces. If PCBs are detected in the storm water or catch-basin sediments after paint removal activities are completed, a secondary source may be present. Rainier is responsible for all PCBs at the RC Facility and would be required to identify the source and mitigate any identified PCB problem. This could be accomplished through an application

to modify the conditions of the approval granted by this letter for characterization and clean-up of the secondary source, subject to EPA approval.

- 7) Upon completion of paint removal in each IPWP, Rainier shall evaluate the performance of the work through visually examining 100% of the surface from which paint was removed, and conducting detailed verification visual analysis of 2% of the substrate pursuant to the description provided in the Work Plan and the conditions herein. EPA requires complete removal of all visible paint to satisfy the requirements of this approval. If paint remains after blasting is conducted additional remediation is necessary to meet the terms of this approval. If a remediation method that is not listed in the Accepted Abatement Methods on Page 8 of the Work Plan is deemed necessary by Rainier to remove all exterior paint, Rainier will seek EPA approval prior to commencing paint abatement activities following the procedures in Section 3, page 9 of the Work Plan. Rainier proposed randomly selecting the location of the inspection areas without explaining how those random selections would be made. EPA requires the use of a numbered grid and a random number selector for this process. Given that the removal areas will not be uniform in size or distribution, one grid size may not be applicable to all removal areas. Therefore, EPA will allow Rainier to modify the grid as necessary for each removal area. The proposed grid, sample locations, sample methodology and QA/QC shall be included in each IPWP for EPA approval.

Rainier states on page 4 of the Work Plan “the goal will be complete removal of the paint, with the understanding that the infrequent, small fleck of paint remaining post-abatement is functionally unavoidable as a practical matter. Complete removal and completely clean to visual inspection will be required of the Contractor.” This condition establishes that complete removal is a requirement for compliance with the approval.

Rainier completed a demonstration project under a 2011 risk based disposal approval granted by EPA. *See Risk-Based Disposal Approval for Polychlorinated Biphenyl Waste at the Rainier Commons Facility, 3100 Airport Way South, Seattle, Washington, September 21, 2011 (2011 RBDA).* The purpose of the project was to demonstrate that complete removal of exterior paint was possible, and to determine if any PCBs migrated from the paint into the substrates. In a report submitted by Rainier’s contractor CDM Smith, a detailed visual inspection of the treatment area revealed that abatement activities did not remove all the paint. *See Work Summary and Visual Performance Evaluation, Building 6, Level 600/700 Paint Removal Rainier Commons Facility, 3100 Airport Way S., Seattle, Washington, December 9, 2011 (2011 Work Summary and Visual Performance Evaluation).* The inspection identified visible paint on both the brick and concrete walls. “On the brick wall much of the residual paint occurred in difficult to reach locations, such as bricks in alcoves that faced a nearby wall or bricks near the ceiling. The brick/grout interface was also a location where residual paint was frequently observed.” Similar observations were made on the concrete surfaces, which included cast in place walls, cast in place foundation and cinder blocks. “On the concrete surfaces, a very thin residual paint layer was observed across some areas. Small pores in the cinder blocks appeared to have retained bits of paint. In other areas, small remnant paint bits were thicker.” Rainier should take care to pay special attention to difficult to reach places, brick/grout interfaces, concrete surfaces in general, and pores in concrete cinder blocks. PCB removal and disposal at RC facility is not complete while PCB contaminated paint remains on the building surfaces.

- 8) Rainier shall collect verification samples of concrete and any other substrate type not analyzed as part of the September 2011 RBDA (Enclosure 1, Reference 2) demonstration project once the visual standard for paint removal is met. Rainier shall use the grid system established in Condition 7 and collect a minimum of three samples per substrate, per phase of removal activity covered by the IPWP. As part of the IPWPs Rainier shall devise a detailed sampling plan that

will ensure that the data collected are representative of the PCBs that may remain in the substrate, and include an analysis of the representativeness in their sampling plan. The sampling plan shall also include sample collection methods, sample locations, and QA/QC. Sampling shall follow the guidelines provided in the EPA document titled 'Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)', revised May 5, 2011 (SOP). The most recent version can be found here:

<http://www.epa.gov/region1/cleanup/pcbs/pdfs/484692.pdf>. Data shall be sufficient for EPA to conclude that the visual performance standard is adequate to verify both removal of PCB bulk product waste and that no further cleanup is likely to be required for the remaining substrate to satisfy the performance criteria of 40 C.F.R. 761.61(c) and 761.62(c) of no unreasonable risk of injury to health or the environment. If results of the sampling represent that the substrate presents no unreasonable risk of injury to health or the environment, Rainier may request a modification of this approval to eliminate the substrate sampling requirements.

In the Work Plan Rainier states that the previous demonstration project conducted under the 2011 RBDA indicates that PCBs migrating from the paint into the concrete substrate are not a concern. EPA disagrees based on both the 2011 Work Summary and Visual Performance Evaluation and on the analytical concrete core data received by EPA on December 28, 2011. Nearly every concrete grid element identified some paint remaining in the visual inspection. Similarly, every concrete core sample analyzed contained detectable levels of PCBs with concentrations up to 47ppm.

Once the exterior paint has been removed to the visual standard, Rainier shall collect substrate samples in concrete to verify that cleanup to the visual standard is sufficient to protect human health and the environment. Once sufficiently representative data (as established in the IPWPs) are available to allow EPA to make a decision that the visual performance standard is adequate to verify both removal of PCB bulk product waste and that no further cleanup is likely to be required for the remaining substrate, substrate sampling can cease. Throughout the paint removal project new substrate types may be encountered that have not been previously analyzed. Any new substrate shall also be subject to sample and analysis following the procedures established by EPA and consistent with the SOP to assess the effectiveness of paint removal at preventing undue injury or harm from PCBs to human health or the environment. Rainier may use the same grid established in Condition 7.

- 9) Ninety (90) working days following completion of paint removal work and verification sampling for each phase, Rainier shall provide the EPA with the IPCR which shall be a written report documenting the performance and evaluation required by this Approval and the Conditions herein. In addition to the text of this report, Rainier shall include complete supporting documentation, including field notes, photographic documentation, copies of manifests, and laboratory data. This report will identify and document the removal process, key operating parameters for media blasting as applied to each substrate material and any sub-sections of the project area, the construction, maintenance and operation parameters of the containment area, waste handling, storage and disposal details, verification inspection and sampling procedures and results for the building exterior and interior surface, visual inspection results and verification sampling results for aqueous and catch-basin sediments, and will include the field notes required by Condition 4. Prior to approving a completion report, EPA may require that Rainier address identified problems, deficiencies, or take additional actions to comply with applicable regulatory requirements or the conditions of this approval. EPA will approve the completion report for each work phase upon determining that the removal work is completed and all applicable conditions of this approval and requirements of the approved work plan have been met. EPA review of a completion report does not preclude Rainier from submitting an IPWP for approval or commencing work under an approved IPWP.

EPA expects all paint to be removed from the exterior surfaces of the buildings at the RC Facility. The examination and verification sampling in Conditions 7 and 8 are anticipated to provide the data demonstrating that removal has been properly completed. Additionally, the previous demonstration project provided evidence supporting the use of soda blasting technology to remove paint contaminated with PCBs from the buildings at the RC Facility, and provided the particular operating parameters necessary for successful application of soda blasting. The inclusion of the operating parameters that Rainier used during blasting will help EPA understand the remedial conditions at each phase.

Rainier is authorized to begin working on any phase after EPA has approved the IPWP for the phase. Rainier does not need approval from EPA on an IPCR to begin work on another phase provided EPA has approved the IPWP for such phase. EPA is including this provision in order to allow Rainier to move forward with the removal activities as it completes the data and reporting requirements for a previous phase. Notwithstanding this authorization, if EPA finds deficiencies in the IPCR that indicate removal was not satisfactorily completed; Rainier shall remedy such deficiencies and complete all necessary work for each phase. Therefore, while reporting the visual examination results, lab verification data, etc. is not required until submittal of the IPCR, it is in Rainier's best interest to maintain open and frequent communication with EPA to avoid unnecessary delays. For example, if Rainier becomes aware that verification sampling indicates the presence of PCBs in the substrate, it should promptly report this to EPA in advance of the IPCR so that any appropriate actions can be quickly determined and communicated. Such a process may promote cost savings and efficiency by allowing Rainier to implement requisite actions prior to removing any scaffolding, and to submit only one IPCR to demonstrate that the phase is complete.

- 10) Rainier shall construct and maintain the containment structure proposed in its Work Plan in a manner that adequately encloses the paint removal area during each phase of work. Rainier shall further provide secondary containment around the containment structure. The purpose of the containment structure and secondary containment is to prevent any releases of PCB contaminated paint or blasting media to the air or to areas outside the containment area including the parking lot, site soils, or storm sewers. Rainier shall implement the daily housekeeping activities proposed in its application. Any releases of PCBs outside of the containment area shall be addressed under the PCB Spill Cleanup Policy at 40 C.F.R. §§ 761.120 to 761.135.

Rainier has proposed a containment structure that will enclose the work area during each phase of work. EPA requires that this containment structure also be within a secondary containment structure. The purpose of the containment structure and secondary containment is to prevent any releases of PCB contaminated paint from occurring to the surrounding landscape, including the parking lot, surrounding soils, or catch basins and sewers. Rainier has also proposed daily housekeeping activities to assure that any releases are immediately taken care of. The purpose of this condition is to assure that if the containment structure fails in a detectable way, such as visible paint or dust outside of the structure or instrumentation indicating the containment structure is not under appropriate pressure, Rainier will follow appropriate measures to protect human health and the environment from releases of PCB contaminated paint to the surrounding surfaces by mitigating the cause of containment failure and following the Spill Cleanup Policy.

- 11) Ninety (90) working days following EPA approval of all IPCRs, Rainier shall prepare and submit a project completion report (PCR) to EPA. The PCR shall explain and describe in detail the successful completion of the following work for the entire facility: all paint was removed from all exterior surfaces of the buildings and the sixth floor stairwell at the RC Facility; 100% of all exterior and sixth floor stairwell surfaces were examined; 2% of all exterior and sixth floor stairwell surfaces underwent detailed visual examination; concrete and any non-brick substrate underlying paint with PCBs >50 ppm were sampled to verify migration of PCBs did not occur

into the substrate or presented no unreasonable risk of harm or injury to human health and the environment; all phases of paint removal were completed with the approval of EPA; all PCB waste was properly transported off-site to an appropriate disposal facility; verification sampling of the storm water and sediments during removal activities in catch basins demonstrates that the interim measures were effective or that appropriate steps were taken to remedy any found problems, and the sewer lines were cleaned of all sediment and debris. The project completion report shall also include all relevant documentation necessary to support the successful completion of the project. EPA will review the final project completion report and will issue a determination as to whether Rainier has successfully completed all required work under this approval.

This condition establishes the requirement to submit a project completion report in order to document that all phases of work have been completed and approved by EPA, and that elements of the project which may not have been concluded in a specific phase were completed to the satisfaction of EPA, including but not limited to verification that all PCB waste has been transferred off site for disposal, and the sewers were protected during the extent of the project.

- 12) Condition 6 requires aqueous and catch-basin sediment monitoring and sampling to continue for a minimum of twelve (12) months after removal activities conclude. Sixty (60) working days after the post-removal monitoring of catch-basins has concluded, Rainier shall submit a final Monitoring Completion Report (MCR) to EPA. The MCR shall explain and describe in detail the successful completion of the following: the sample collection plan, including QA/QC parameters, sample data for both aqueous and sediment samples, analysis of the data, and analysis of any outliers or data qualifiers.

This condition establishes a reporting requirement for the continued monitoring required in Condition 6. EPA will use the information in this report to decide whether additional releases of PCBs are occurring at the RC Facility and whether further action is necessary to protect human health and the environment.

- 13) Rainier shall ensure that all on-site personnel who will be conducting activities pursuant to this approval have appropriate qualifications and training for such activities, including 40-hour HAZWOPER certification. Rainier will ensure that all records of personnel qualifications and training are maintained in project files and are available for inspection by EPA.

This condition ensures that workers have the appropriate training to conduct work authorized by this approval in a safe manner. While the EPA is not specifying the particular training requirements, the EPA expects they will include applicable Community and Worker Right-to-Know and Chemical Hazard Communication information.

- 14) Rainier shall be responsible for conducting all work subject to this approval according to a written Health and Safety Plan (HASP) to maintain a safe work environment, including appropriate training, communication of chemical and physical hazards, use of personal protective equipment, which prevents dermal, inhalation, or other exposure to PCB bulk product waste, PCB remediation waste, and blasting media which may pose an unreasonable risk of injury to health and the environment. Rainier shall provide a copy of this HASP to the EPA with the first IPWP, and with any other IPWP if the conditions change to warrant a modification to the HASP.

Similar to Condition 13, this condition will ensure that work authorized by this approval will be conducted in a manner that does not pose an unreasonable risk of injury to health or the environment.

- 15) Rainier shall prepare and maintain records documenting the work conducted under this approval. At a minimum, records shall include all field notes and photographs of activities as well as laboratory data, work plans and completion reports as required by Conditions 2-9, 11,12, and 14.

These records shall be maintained by Rainier for a minimum period of five years following EPA's determination that all work subject to this approval has been completed pursuant to Condition 11.

This condition establishes recordkeeping requirements that will allow the EPA to confirm that work conducted pursuant to this approval reflects full compliance with the approval's conditions.

- 16) At least thirty (30) working days prior to the effective date of any sale or transfer of ownership, in whole or part, of real property subject to requirements of this approval, Rainier shall provide a copy of this approval to all prospective owners. Rainier shall establish as an enforceable condition of such sale or transfer that each new owner must provide the EPA a written request to modify this approval to establish each owner as being responsible for compliance with the requirements of this approval.

This condition ensures that any prospective purchaser of the RC Facility is fully aware of the requirements of this approval, and is willing and able to assume responsibility for complying with its requirements following sale or transfer of the property.

- 17) Rainier is responsible for the actions of all officers, employees, agents, and contractors involved in activities conducted under this approval. Rainier shall provide each contractor conducting work subject to this approval a written or electronic copy of this approval at least five (5) working days prior to the start of such work.

This condition ensures that all individuals and organizations that will be conducting work authorized by this approval are aware of the conditions and requirements of the approval, and that Rainier has responsibility for ensuring compliance with the approval.

- 18) Rainier shall allow authorized representatives of the EPA to inspect areas of the RC Facility subject to conditions of this approval at reasonable times, and to take samples as may be necessary to determine compliance with the PCB regulations and this approval. Any refusal by Rainier to allow access for inspection (as authorized by Section 11 of TSCA) or sampling may be grounds to revoke this approval or for enforcement.

This condition ensures that the EPA has adequate access to the RC Facility to ensure full compliance with requirements of this approval.

- 19) This approval does not relieve Rainier from its duty to comply with all other applicable federal, state, and local requirements, and does not release Rainier from any liability it may have with respect to releases of hazardous substances at or from the RC Facility.

This condition clarifies that this TSCA approval does not relieve Rainier of any other duty or obligation it may have under federal, state, or local laws, and that the TSCA approval does not release or protect Rainier from any potential liability associated with the release or threat of release of hazardous substances at or from the RC Facility.

- 20) If any time before, during or after conduct of activities subject to this approval, Rainier possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application for this risk-based disposal approval) indicating that activities approved herein may pose an unreasonable risk of injury to health or the environment, Rainier shall immediately cease all such activities and report such data or information via e-mail to the EPA project manager within 48 hours, and in writing to the Regional Administrator within ten (10) calendar days of first possessing or becoming aware of such data or information. Such activities shall not resume until the EPA provides written

notification that the activities in question no longer pose an unreasonable risk of injury to health or the environment. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be timely resolved without modification of this approval.

- 21) The EPA reserves the right to modify or revoke this approval based on Rainier's failure to comply with material conditions of the approval or applicable federal regulations, or based on any available information that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment. Rainier may request modification of this approval by providing written notice to the EPA. If the EPA agrees with a request for modification, the EPA will provide written approval to Rainier. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be timely resolved without modification of this approval. A request to modify the written approval shall not replace or stay any existing condition, and Rainier shall continue to comply with the existing approval conditions until EPA approves the modification request in writing.

Conditions 20 and 21 establish a communication protocol between Rainier and EPA to promote open and frequent at the project manager level. The conditions also ensure that if any information not available to the EPA at the time this approval is issued becomes known to Rainier (including its agents, consultants and contractors), it will be promptly made available to the EPA for purpose of ensuring that activities subject to this approval continue to pose no unreasonable risk of injury to health or the environment. These conditions also provide Rainier the opportunity to request revisions to the approval and ensure the EPA's ability to make changes to the authorized activities, including withdrawing approval, as necessary to ensure no unreasonable risk of injury to health or the environment.

- 22) Submissions, reports, or notices required by or submitted pursuant to this approval shall be provided to the EPA as follows:

Michelle Mullin, PCB Coordinator
U.S. Environmental Protection Agency
1200 6th Ave., Suite 900, OCE-084
Seattle, WA 98101

E-mail: Mullin.Michelle@epa.gov

Facsimile: (206) 553-7176