July 2021
Former Anacortes Water Treatment Plant

Final Cleanup Action Plan

Issued by
Washington State Department of Ecology
Toxics Cleanup Program
Bellingham Field Office
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Bellingham, Washington 98225

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ABBREVIATIONS

AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirement
bgs	below ground surface
CAP	Cleanup Action Plan
City	City of Anacortes
CQAP	Construction Quality Assurance Plan
CSGP	Construction Stormwater General Permit
Ecology	Washington State Department of Ecology
EDR	Engineering Design Report
FS	Feasibility Study
FWTP	Former Water Treatment Plant
Method A:U	Model Toxics Control Act Method A Unrestricted Land Use
mg/kg	milligrams per kilogram
MTCA	Model Toxics Control Act
NPDES	National Pollutant Discharge Elimination System
NWCAA	Northwest Clean Air Agency
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
RCW	Revised Code of Washington
RI	Remedial Investigation
SEPA	State Environmental Policy Act
Site	Former Anacortes Water Treatment Plant
SVOC	semivolatile organic compound
TCLP	Toxicity Characteristic Leaching Procedure
TEE	Terrestrial Ecologic Evaluation
VOC	volatile organic compound
WAC	Washington Administrative Code

Executive Summary

This document presents the Cleanup Action Plan (CAP) for the Former Anacortes Water Treatment Plant (the Site) located in Mount Vernon, Washington (Figure 1-1). This CAP was prepared by the Washington State Department of Ecology (Ecology) in collaboration with the City of Anacortes (City). This CAP has been prepared to meet the requirements of the Model Toxics Control Cleanup Act (MTCA) administered by Ecology under Chapter 173-340 of the Washington Administrative Code (WAC). This CAP describes Ecology's proposed cleanup action for the Site and sets forth the requirements that the cleanup must meet.

The City operates a municipal water treatment plant at 14489 River Bend Road in Mount Vernon, Washington. The current facilities, which became operational in 2013, replaced the Former Water Treatment Plant (FWTP) that was constructed between 1969 and 1970. The FWTP facilities included an Administration Building, a Sedimentation Basin, a Filtration Basin, and a Clear Well.

During decommissioning activities performed in 2015, contaminants of potential concern were found in FWTP building materials and in shallow soils immediately adjacent to the FWTP structures. In 2015 and 2016, a Remedial Investigation (RI) was performed in accordance with the MTCA to characterize the nature and extent of contaminants in soil and groundwater at the Site. During that investigation, concentrations polychlorinated biphenyls (PCBs) were detected in soil at concentrations above MTCA Unrestricted Land Use cleanup levels. The results of the RI, which were submitted to Ecology in April 2017, confirmed that the exterior coatings on certain FWTP structures were the source of contaminants at the property. Elevated PCB concentrations were limited to the exterior coatings and the upper 1 foot of soil immediately adjacent to the exterior of the Sedimentation and Filtration Basins (i.e., the coated structures). No impacts to groundwater or surface water were identified.

In response to these findings, the City conducted an Evaluation of Potential Human Health Risks (Intertox 2017) associated with contamination at the FWTP and determined that no adverse health effects are likely to have occurred to customers, workers, or water plant visitors as a result of PCBs at the former plant. Additionally, the City conducted regular sampling of drinking water produced from the FWTP beginning in 1976 and continuing throughout operation. No samples of drinking water contained detectable concentrations of PCBs.

The City plans to demolish the FWTP structures and to achieve permanent source control and prepare the area for possible future reuse. Demolition of FWTP structures will remove the source of contamination, thereby preventing any future migration of PCBs from exterior building coatings to soil. Demolition, transport, and disposal will be performed in compliance with applicable laws to prevent releases of contaminated material during the demolition process. A detailed demolition plan will be developed prior to demolition activities.

Potential alternatives for addressing contaminated soil were evaluated in the Feasibility Study (FS) (Anchor QEA 2020). From the FS evaluation, full removal (i.e., excavation) and off-site disposal of all contaminated soils was identified as the preferred and most permanent alternative that will meet the most stringent cleanup standards under the MTCA. The cleanup action, as described in this CAP, consists of the removal of approximately 260 cubic yards of soil and compliance monitoring to verify that the goals of the cleanup have been achieved.

1 Introduction

1.1 Purpose

This document presents the Cleanup Action Plan (CAP) for the Former Anacortes Water Treatment Plant (the Site) located in Mount Vernon, Washington (Figure 1-1). Pursuant to Agreed Order No. DE16576 between the City of Anacortes (City) and the Washington State Department of Ecology (Ecology), this CAP identifies the proposed cleanup action for the Site. Specifically, this CAP does the following:

- Describes the Site
- Summarizes current Site conditions
- Summarizes the cleanup action alternatives considered in the remedy selection process
- Describes the selected cleanup action for the Site and the rational for selecting this alternative
- Identifies site-specific cleanup levels and points of compliance for each hazardous substance and medium of concern for the proposed cleanup action
- Identifies applicable state and federal laws for the proposed cleanup action
- Discusses compliance monitoring requirements
- Presents the schedule for implementing the CAP

Cleanup conducted in conformance with this CAP will comply with the requirements for selection of a remedy under Washington Administrative Code (WAC) 173-340-360.

1.2 Previous Studies

During the period between 2015 and 2019, the City proactively completed several Site investigations to characterize the nature and extent of contaminants in soil, groundwater, and Former Water Treatment Plant (FWTP) building materials at the Site. The City submitted the draft RI to Ecology in April 2017 after completing the necessary Site investigations to support that report. The City sought Ecology's input on the draft RI and the Site and entered into Agreed Order No. DE16576 to complete the RI and FS in a formal process with Ecology. Previous investigations are summarized in Table 1-1.

Table 1-1
Previous Site Investigations

Investigation	Performed By	Year	Summary of Investigation Activities
Geotechnical Investigation	Shannon & Wilson, Inc.	2010	Geotechnical investigation and review of historical site geotechnical data for engineering design of the current water treatment plant. Work included sampling of eight soil borings and geotechnical testing (e.g., water content, grain size, Atterberg limits) to characterize subsurface conditions (e.g., soil properties, depth to groundwater) at the Site.

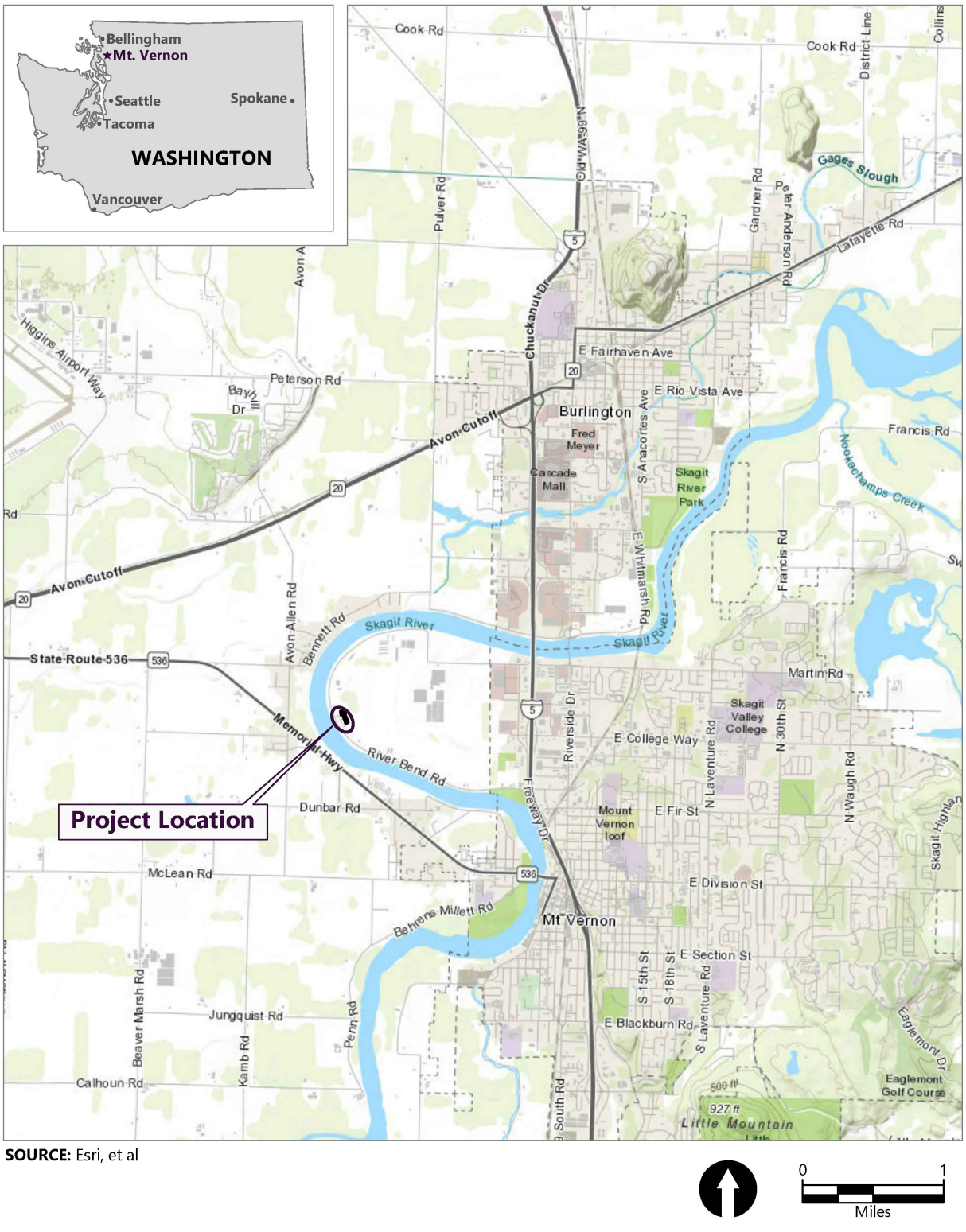
Investigation	Performed By	Year	Summary of Investigation Activities
Hazardous Materials Assessment	DLH Environmental Consulting	2015	Evaluation of FWTP building materials for deconstruction. Work included sampling of concrete, paint, and building materials and testing for metals, SVOCs, PAHs, PCBs, and asbestos. In addition, one composite soil sample was collected from the exterior of the Sedimentation Basin and tested for metals, SVOCs, PAHs, and PCBs.
Remedial Investigation	Stantec Consulting Services, Inc.	2015 to 2017	Phased remedial investigation of Site building materials, soil, and groundwater to identify the nature and extent of contamination identified in the Hazardous Materials Assessment (DLH 2015). FWTP building materials (basin coatings, concrete, paint chips) were tested for PCBs, with a subset of samples also tested for TCLP (leachable) SVOCs, TCLP VOCs, and TCLP metals. Soil and groundwater samples were collected and analyzed for PCBs.
Human Health Risk Assessment	Intertox, Inc.	2017	Toxicity assessment of the possible human health risks associated with exposure to PCBs and other chemicals from building materials at the FWTP. This assessment used data from previous investigations and established toxicity criteria to evaluate human health risks. The assessment determined that no adverse health effects are likely to have occurred to customers, workers, or water plant visitors as a result of PCBs at the former plant.
Conceptual Site Model Refinement	Anchor QEA, LLC	2019	Assessment of PCB concentrations in the exterior walls of the Sedimentation and Filtration Basins of the FWTP. Depth-integrated sampling of concrete, coatings, and subgrade mastic was conducted to profile the nature and extent of PCBs in the exterior walls.

1.3 Regulatory Framework

In August 2019, the City entered into an Agreed Order with Ecology to complete a Remedial Investigation (RI) and Feasibility Study (FS) and draft CAP for the Site. In March 2020, Ecology provided the draft RI and FS reports for public review. A responsiveness summary to public comments was issued by Ecology in May 2020. The Final RI and FS reports were approved by Ecology in July 2020.

The cleanup action described in this CAP must be performed in accordance with the Model Toxics Control Cleanup Act (MTCA). Other regulatory requirements that may be applicable to Site cleanup are summarized in Section 3.5.

Figure 1-1
Vicinity Map



SOURCE: Esri, et al

2 Site Description

2.1 Site History and Current Use

The City operates a municipal water treatment plant at 14489 River Bend Road in Mount Vernon, Washington. The current facilities, which became operational in 2013, replaced the FWTP that was constructed between 1969 and 1970. The FWTP facilities included an Administration Building, a Sedimentation Basin, a Filtration Basin, and a Clear Well (Figure 2-1). During decommissioning activities performed in 2015, contaminants of potential concern were found in decommissioned FWTP building materials and in shallow soils immediately adjacent to the FWTP structures. This CAP addresses source control related to FWTP building materials and cleanup of shallow soils immediately adjacent to the FWTP structures.

During decommissioning activities performed in 2015, polychlorinated biphenyls (PCBs) were found in decommissioned FWTP building materials and in shallow soils immediately adjacent to the FWTP structures. In 2015 and 2016, the RI was performed in accordance with the MTCA, Revised Code of Washington (RCW) 70.105D, and WAC 173-340 to characterize the nature and extent of contaminants in Site environmental media (i.e., soil and groundwater). The results of the RI, which were submitted to Ecology in 2017, confirmed that exterior coatings containing PCBs on the Sedimentation Basin and Filtration Basin of the FWTP were the source of PCBs in soil. PCB concentrations in soil above MTCA Method A Unrestricted Land Use (Method A:U) cleanup levels were limited to the upper 1 foot of soil immediately adjacent to the exterior of the Sedimentation and Filtration Basins. No impacts to groundwater were identified.

In 2017, the City conducted an Evaluation of Potential Human Health Risks (Intertox 2017) for the FWTP and determined that no adverse health effects are likely to have occurred to customers, workers, or water plant visitors as a result of PCBs at the former plant. The City conducted regular sampling of drinking water produced from the FWTP beginning in 1976 and continuing throughout operation of the FWTP. No samples of drinking water ever contained detectable concentrations of PCBs.

The RI (Stantec 2019) and FS (Anchor QEA 2020) evaluations were performed to identify the nature and extent of contaminants at the Site, identify cleanup requirements under the MTCA to protect human health and the environment, and evaluate potential cleanup options. In 2019, alternatives for cleanup presented in the FS were evaluated in coordination with Ecology, pursuant to the Agreed Order. The preferred alternative consisted of removal of all soils above the Method A:U cleanup level, which is the most permanent remedial action for the Site. The FS also provided an overview of the FWTP demolition activities that the City will perform to control sources of contaminants at the Site.

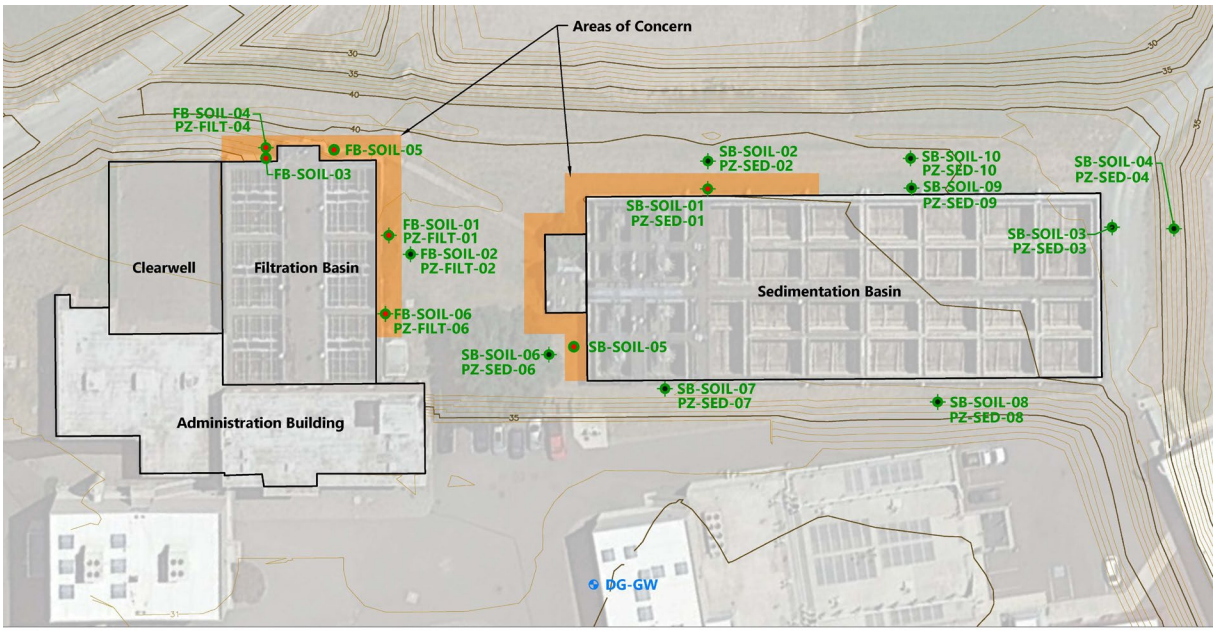
Figure 2-1
Site Map and Structures

SOURCE: Google Earth Pro dated July 15, 2018

2.2 Summary of Contaminants in Environmental Media

As part of the RI, 32 soil samples and 16 groundwater samples were collected for PCB analysis. PCBs were detected above the Method A:U soil cleanup level (1 milligram per kilogram [mg/kg]) in 7 of 32 samples (Figure 2-2), with a maximum concentration of 15.6 mg/kg.

Figure 2-2
RI Soil Sampling Locations and Areas of Concern



All seven soil sample cleanup level exceedances were located in shallow soils close to the exterior walls of the Filtration Basin and the Sedimentation Basin and confined to the upper 1 foot of soil. PCB concentrations in samples from 1 to 3 feet deep in the same borings were below 1 mg/kg. Based on the results of the RI, the following two Areas of Concern (AOCs) were defined, one along the south and east sides of the Filtration Basin, and one along the northern side and the north half of the eastern side of the Sedimentation Basin (Figure 2-2).

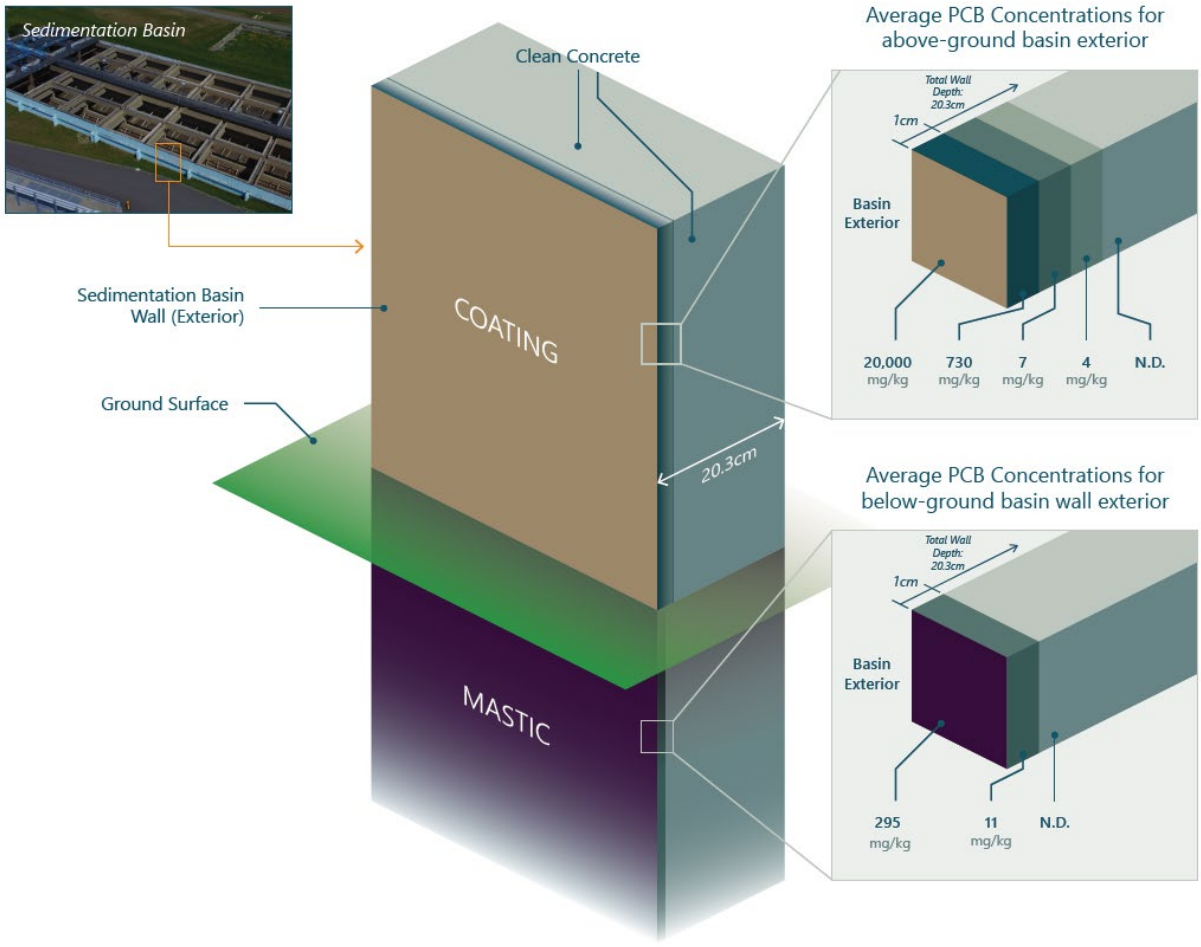
PCBs were not detected in any groundwater samples (Stantec 2019), and no PCBs have been detected in drinking water generated from the FWTP or the current water treatment plant. The Site Human Health Risk Assessment (Intertox 2017) concluded that no adverse health effects are likely to have occurred from PCBs to customers, workers, or trespassers at the FWTP. A simplified Terrestrial Ecologic

Evaluation (TEE) conducted as part of the RI found limited potential for exposure of wildlife to contaminants in soil, and no further ecological evaluation necessary.

2.3 Conceptual Site Model

Industrial coatings on the exterior of the Sedimentation Basin and the Filtration Basin were found to be the source of PCBs at the Site. As graphically described in Figure 2-3, the PCB source exists as a paper-fine veneer on the outer walls of the basins. Over time, PCBs were adsorbed by the outer 1 to 3 centimeters of the concrete and migrated vertically to below the soil line. Shallow Site soils were impacted through periodic weathering of the coating.

Figure 2-3
Source Material Characteristics

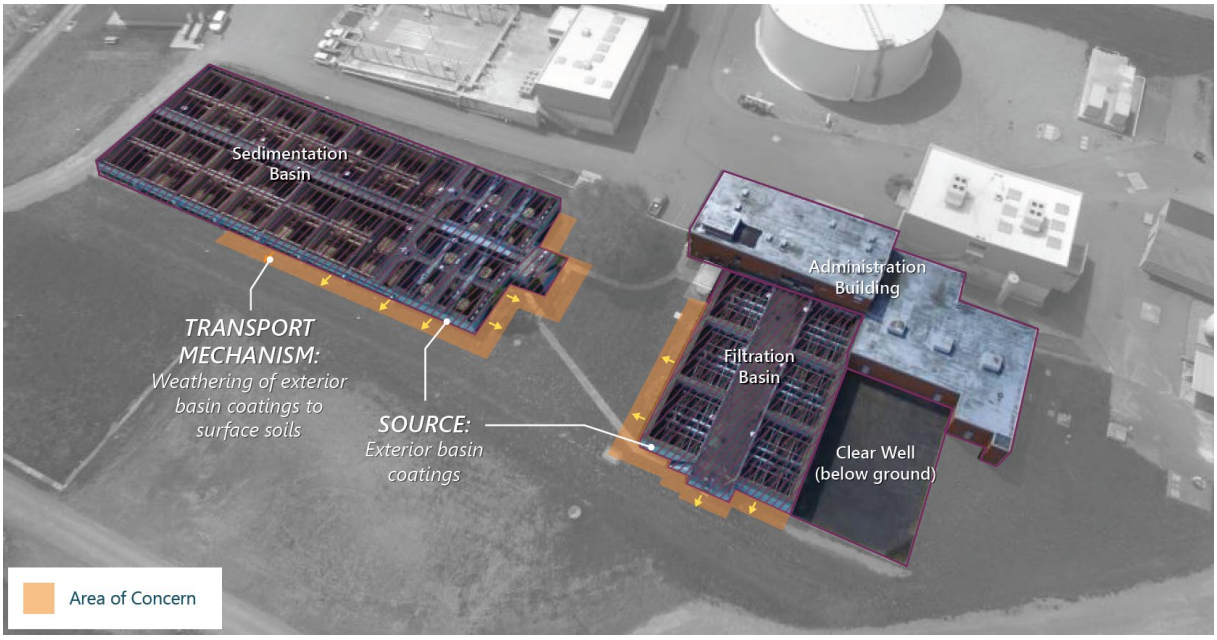


This graphic provides an illustration of the migration pathway of PCBs from the primary source material (i.e., the thin veneer coating on the exterior of the concrete basin walls located above the ground surface) as it was adsorbed into the adjacent concrete. Downward leaching also resulted in PCBs being adsorbed into the below-ground mastic layer and adjacent concrete. The migration of PCBs was very limited.

Possible receptors identified for evaluation consist of water treatment plant workers, contractors, visitors, and trespassers. Possible soil exposure pathways include incidental ingestion and dermal contact through non-routine activities such as excavation, grading, or other soil disturbance. However, any current or future exposure is very unlikely because no workers, contractors, or visitors routinely access the decommissioned FWTP structures at the Site; access to the FWTP area is not needed for operation of the current water treatment plant facility. Due to the secured nature of the Property, which is fully enclosed by high fencing and other security devices, it is unlikely for trespassers to access the Site.

The conceptual site model and Site AOCs are shown in Figure 2-4. Shallow soil samples from two AOCs contained PCBs exceeding the Method A:U soil cleanup level. The AOCs include only shallow soils (0 to 1 foot below ground surface [bgs]). AOC boundaries will be refined during remedial design based on Pre-Design Investigation data. No cleanup actions are necessary for other environmental media at the Site.

Figure 2-4
Conceptual Site Model



The source of PCBs in soil is the coating on the exterior basin walls. The extent of impacted soils is limited. There is no current risk to human health from PCBs contained in coatings on the exterior basin walls.

3 Description of the Selected Remedy

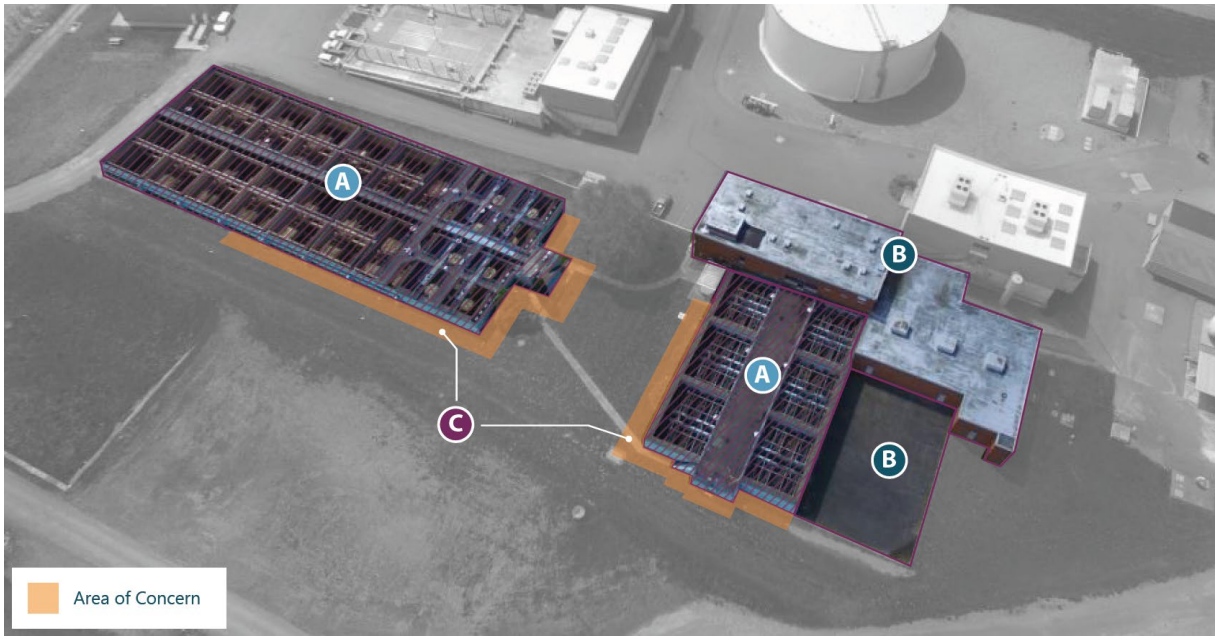
3.1 Site Description

A site is defined under the MTCA as the area where contaminants have come to be located. Figure 2-2 shows the AOCs for soil remediation. The Site boundary includes the Sedimentation Basin and Filtration Basin and the shallow soils immediately surrounding them. The AOC boundaries (i.e., the extent of PCB contamination exceeding the MTCA Method A:U cleanup level of 1 mg/kg) will be further verified during remedial design.

3.2 Description of the Cleanup Action

The selected cleanup action includes source control through demolition of the basin structures, excavation of impacted soils, and off-site disposal of contaminated materials (Figure 3-1).

Figure 3-1
Preferred Alternative Overview



A Structures to be demolished for Source Control

B Decommissioned structures to be demolished as required by Site reuse

C Soil remediation AOCs to be excavated and backfilled

3.2.1 Source Control Through Demolition and Disposal

As discussed in Section 2.2, the exterior coatings on the Filtration Basin and the Sedimentation Basin structures have been identified as the source of PCBs in soils within Site AOCs. While studies have determined that the coatings on these structures pose no risk to human health (Intertox 2017), the City plans to demolish the FWTP structures to achieve a more permanent source control action and prepare the area for potential redevelopment. Source control measures other than demolition and disposal (e.g., encapsulating contaminated material on the Site) are not considered viable because they are not consistent with future property use, as on-site containment of materials would require deed restrictions and long-term engineering controls.

Demolition, transport, and disposal of demolished building materials will be performed in compliance with applicable laws to prevent hazardous substances from being released during the demolition process. A detailed demolition plan will be developed prior to demolition activities. This plan will also include an environmental protection plan that will establish methods and procedures for protecting the environment during demolition.

Building materials that have average concentrations of less than the Method A:U soil cleanup level will also be demolished during source control implementation. These materials will be used as fill during post-demolition grading to prepare the area for future development. The Clear Well and Administration Building are not sources of PCBs to soil; therefore, demolition of these structures is not required to achieve source control at the Site.

3.2.2 Soil Remediation Through Excavation and Disposal

In addition to source control, the selected cleanup action includes excavation and off-site disposal of PCB-contaminated soil. The soil excavation will occur after demolition work has been completed.

Excavation and off-site disposal are common remedial technologies that use standard earthwork construction equipment. Due to the shallow extent of contaminated soil at the Site (up to approximately 1 foot bgs), no shoring or water management will be needed during construction. Contaminated soil will be excavated and placed directly in a lined truck, covered, and transported to a permitted landfill. Soil will likely be disposed of in a Subtitle D landfill, consistent with all applicable laws and regulations. After excavation is complete, earthwork equipment will be decontaminated prior to leaving the Site. Compliance monitoring will be performed following the removal action to verify that cleanup standards have been achieved. The excavation area will be regraded with imported clean backfill to prepare the Site for future redevelopment activities.

3.3 Justification for Selection of Remedy

Two remedial alternatives were evaluated in the FS, summarized as follows:

- Alternative 1: partial removal with soil capping
- Alternative 2: full removal of soils exceeding the MTCA Method A:U cleanup level for PCBs

Both alternatives would protect human health and the environment and meet the minimum requirements specified under the MTCA (WAC 173-340-360(2)(a)). Alternative 2 was selected as the preferred alternative because it is more permanent than Alternative 1, and it is not disproportionately costly compared to Alternative 1. Therefore, Alternative 2 is considered permanent to the maximum extent practicable and was selected as the preferred alternative (WAC 173-340-360(3)(e)).

3.4 Cleanup Standards

A cleanup standard defines the concentration of a hazardous substance in media above which the impacted media may pose a risk to human health and the environment through a specified exposure pathway (i.e., the cleanup level) and the location at which the cleanup level must be met (i.e., the point of compliance). The MTCA Cleanup Regulations (WAC 173-340-720, 173-340-730, and 173-340-740) establish procedures to develop cleanup standards for surface water, groundwater, and soil.

MTCA Method A cleanup standards are applicable to sites that have few hazardous substances and will undergo a routine cleanup action as defined in WAC 173-340-200. At this Site there is a single contaminant of concern (PCBs) of a single medium (soil) in a limited area; therefore, MTCA Method A cleanup standards are applicable.

The MTCA provides the two Method A soil cleanup levels, for unrestricted land use and industrial properties, based on the Toxic Substances Control Act under 40 Code of Federal Regulations 761.61. Because the Site is likely to remain industrial for the foreseeable future, the Method A value for industrial property (10 mg/kg for PCBs) could be applicable at the Site; however, based on the FS alternatives evaluation, the most protective cleanup level for unrestricted land use (1 mg/kg for PCBs; Table 3-1) has been selected for the proposed cleanup action.

The standard point of compliance for direct-contact-based cleanup levels is the upper 15 feet of soil throughout the Site.

Table 3-1
Cleanup Standard

Constituent of Concern	Cleanup Level	Point of Compliance
Total PCB Aroclors	1 mg/kg	Standard

3.5 Applicable Local, State, and Federal Laws

The MTCA requires that cleanup actions comply with local, state, and federal laws determined to be Applicable or Relevant and Appropriate Requirements (ARARs). Though a cleanup action performed under formal MTCA authorities (e.g., an order or consent decree) is exempt from the procedural requirements of most state and all local environmental laws, the action must comply with the substantive requirements of such laws (RCW 70.105D.090 and WAC 173-340-710). For remediation elements required under the MTCA, some local requirements may be met through substantive equivalency. ARARs include applicable laws; legally applicable requirements that specifically address a hazardous substance, cleanup action, location, or other circumstances at the Site; and relevant or appropriate requirements. In addition, any applicable federal permits must be obtained prior to implementation of the cleanup. Appendix A provides a preliminary list of ARARs that could be applicable to either source control (i.e., building demolition), remediation (i.e., soil removal), or both.

Table 3-2 provides a preliminary list of applicable permits and approvals that may be required under the ARARs for source control and/or remediation. Unless otherwise instructed by the permitting agency, the permits and approvals will be applied for to cover both demolition and cleanup activities to streamline the permitting and review process. Any phasing anticipated for the activities can be included in the application materials to cover multiphased construction as needed.

Table 3-2
Applicable Permits and Approvals

Permit or Approval	Agency	Trigger	Notes
SEPA Determination	Ecology	Any proposal that requires an agency decision	SEPA Checklist and supporting materials required to demonstrate compliance with SEPA
Washington State NPDES Construction Stormwater General Permit	Ecology	Earthwork that disturbs one acre or more	Application and notices for coverage
Asbestos and Demolition Notification Approval	NWCAA	Demolition of any structure greater than 120 square feet within NWCAA jurisdiction	Asbestos survey required for application submittal
Demolition Permit	Skagit County	Demolition of any buildings or structures	Signed Demolition Permit application form and site plan required for submittal
Grading Permit	Skagit County	Excavation or fill activities	Signed Grading Permit application form and supporting materials required for submittal

3.5.1 State Environmental Policy Act Determination

Ecology is the review agency for State Environmental Policy Act (SEPA) compliance. A SEPA Checklist and supporting materials will be completed and submitted to Ecology. It is anticipated that a SEPA Determination of Non-Significance will be issued for the Project. There is a 30-day public notice period associated with the SEPA review process.

3.5.2 Construction Stormwater General Permit

Ecology is the review agency for the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit (CSGP). The CSGP is required for projects that include clearing, grading, or excavation activities that disturb an area of 1 acre or more and discharge stormwater to surface waters of the state. To obtain this permit, a Notice of Intent form is prepared and submitted electronically to Ecology after a SEPA determination is issued. The review time frame for this permit is approximately 2 months. There is a 30-day public notice timeframe that is initiated after a complete application is determined. Additionally, the application requires publication in a local newspaper.

3.5.3 Asbestos and Demolition Notification Approval

The Northwest Clean Air Agency (NWCAA) administers the asbestos and demolition notification process in Island, Skagit, and Whatcom counties. An asbestos and demolition notification is required for the demolition of any structure greater than 120 square feet within NWCAA jurisdiction that includes or could include asbestos. The notification process requires an asbestos survey to be completed and submitted with an online application to NWCAA. Applications must be submitted at least 10 days prior to construction (i.e., demolition); there is no review time or public notice associated with this approval.

3.5.4 Demolition and Grading Permits

Skagit County is the local review agency for both demolition and grading permits. These permits are common development permits that can be reviewed and issued within 1 to 2 months of issuance of a SEPA determination. Application forms and supporting materials can be found and submitted online via the Skagit County Planning and Development Services website. An asbestos survey is required prior to submitting an application for a demolition permit. There is no public notice associated with these permits.

3.6 Restoration Time Frame

Cleanup standards will be met immediately following excavation of the contaminated soils (restoration time frame = 0 years). Performance monitoring will be used to verify that cleanup standards are met upon excavation and demolition of the FWTP structures.

4 Implementation of the Cleanup Action

4.1 Schedule

An outline of the tentative schedule for implementation of the remedial action activities is given below in Table 4-1.

Table 4-1
Anticipated Schedule for Implementation of Cleanup Action Activities

Action	Time Frame
Development of Draft CAP	August 2020
Public Notice Draft CAP and Consent Decree	March 2021
Finalize CAP and Consent Decree	April 2021
Pre-Design Investigation and EDR[1]	2021
Permitting	2021
Implement Source Control, Soil Cleanup, and Compliance Monitoring	2022 to 2023

Notes:
[1] The EDR related to this cleanup action will be developed in parallel and coordination with the demolition design, which includes source control and non-MTCA components.

The soil cleanup action will be performed in coordination with FWTP demolition (i.e., source control) activities. The remedial design process for the soil removal will consist of the following documents, to be submitted and approved by Ecology:

- **Pre-Design Investigation Plan:** This describes additional field sampling that will be performed to verify the delineation of the extent of soils exceeding cleanup standards (i.e., the final removal area). Sampling will be performed prior to demolition work.
- **Draft Engineering Design Report (EDR):** This describes the design criteria for the removal action. Attachments to the Draft EDR will include 90% plans and specifications and a Construction Quality Assurance Plan (CQAP). The CQAP will describe procedures that will be used to verify and document that the design criteria are met during construction (i.e., demolition, soil excavation, and grading), including confirmational and performance monitoring requirements.
- **Final EDR:** This includes 100% plans and specifications based on the results of the Pre-Design Investigation and observations and data collected during the demolition project.

These documents will also describe permit requirements, permit exemptions, and substantive requirements, as well as any other information necessary to secure required permits and approvals. The EDR will be finalized following Ecology approval and the City acquisition of required permits or

approvals. After this effort is complete and Pre-Design Investigation samples have been collected, 100% construction plans and specifications will be prepared.

The design process for the demolition of FWTP structures will occur on a parallel track alongside the design for the soil removal action. Though building demolition is not regulated under the MTCA, numerous regulations, requirements, and approvals are required for demolition to prevent any potential exposure to, or release of, contaminated building material (refer to Section 3.5 and Appendix A).

4.2 Compliance Monitoring

Compliance monitoring and will be implemented in accordance with WAC 173-340-410. The MTCA specifies the following three types of monitoring:

- Protection monitoring to confirm that human health and the environment are adequately protected during the construction period of the cleanup action
- Performance monitoring to confirm that the cleanup action has attained cleanup standards and other performance standards
- Confirmation monitoring to confirm the long-term effectiveness of the cleanup action once performance standards have been attained

Under this framework, protection monitoring will consist of procedures and oversight (e.g., observation and record keeping) during construction (i.e., demolition, soil excavation, and grading) to show that human health is protected during construction. Performance monitoring will consist of post-construction sampling to verify that all soil exceeding the cleanup level has been removed. Because all potential sources and all media exceeding Site cleanup standards will be removed from the Site, post-construction sampling will also serve the purpose of confirmation monitoring. No long-term confirmation monitoring will be required. The final details of the compliance monitoring plan will be described in the EDR.

4.3 Institutional Controls

The selected alternative removes all source material and removes material above the Method A:U cleanup level (1 mg/kg). As such, no institutional or engineering controls are required to be in place following cleanup. Following performance and confirmation monitoring, the City will request that Ecology issue a Certificate of Completion and delist the Site.

4.4 Public Participation

Following Ecology review of the Draft Cleanup Action Plan, a Public Review Draft will be distributed for public comment. The comment period will last 30 days, after which comments will be reviewed and addressed.

5 References

Anchor QEA, LLC (Anchor QEA), 2020. *Final Feasibility Study*. Former Anacortes Water Treatment Plant. May 2020.

DLH (DLH Environmental Consulting), 2015. *City of Anacortes Water Treatment Plant Hazardous Materials Assessment*. Former Anacortes Water Treatment Plant. January 28, 2015.

Intertox (Intertox, Inc.), 2017. *Evaluation of Potential Human Health Risks Associated with Contamination Identified in Building Materials at the Former Anacortes Water Treatment Plant*. Former Anacortes Water Treatment Plant. March 30, 2017.

Shannon & Wilson (Shannon & Wilson, Inc.), 2010. *Geotechnical Data Report, Anacortes Water Treatment Plant, Mount Vernon, Washington*. Former Anacortes Water Treatment Plant. September 24, 2010.

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Appendix A
Applicable or Relevant and Appropriate Requirements

Appendix A
Applicable or Relevant and Appropriate Requirements

Authorizing Statute	Criteria	Citation	Description
Clean Water Act/ National Toxics Rule	Federal Ambient Water Quality Criteria	33 USC 1251 40 CFR 131	Requires the establishment of guidelines and standards to control the discharge of pollutants to waters of the United States. Human health criteria contained in the NTR are State Water Criteria under WAC 173-201a.
Federal Clean Air Act	National Ambient Air Quality Standards Ambient Air Quality Monitoring Standards of Performance for New Stationary Sources National Emission Standards for Hazardous Air Pollutants National Emission Standards for Hazardous Air Pollutants for Source Categories	42 USC 7401 42 USC 7671 40 CFR 50 40 CFR 58 40 CFR 60 40 CFR 61 40 CFR 63 40 CFR 82	Establishes air quality standards for protection of human health. Applies to asbestos abatement, pre-demolition activities (associated with recovery of CFCs), and demolition activities.
Washington Clean Air Act	General Regulations for Air Pollution Sources Controls for New Sources for Toxic Air Pollutants Ambient Air Quality Standards for Particulate Matter Emission Standards and Controls for Sources Emitting VOCs	Chapters 70.94 and 43.21A RCW WAC 173-400 WAC 173-460 WAC 173-470 WAC 173-490	Establishes air quality standards for protection of human health. Applies to demolition activities.

Appendix A
Applicable or Relevant and Appropriate Requirements

Authorizing Statute	Criteria	Citation	Description
OSHA/Asbestos Worker Protection Rule	OSHA and state standards for handling asbestos-containing materials	40 CFR 763 Subpart G	Worker protection requirements that pertain to the demolition of buildings that contain asbestos.
Washington State Asbestos Laws		WAC 296-62 WAC 296-65 WRD 23.10 WRD 23.25 WRD 23.30 WRD 23.35	
Toxic Substances Control Act	Criteria for the management of PCBs	40 CFR 761	Worker protection requirements that pertain to the demolition of buildings that contain asbestos.
NPDES	Point source discharge of pollutants to surface waters of the United States	40 CFR Parts 122–125	Applicable construction work requires a Washington State NPDES Construction Stormwater General permit to manage stormwater during construction.
Discharge Permit Program		Chapter 90.48 RCW Chapter 173-226 WAC	
State of Washington Water Pollution Control Act	Management of stormwater from construction activities	Chapter 90.48	Regulations for developing stormwater pollution prevention plans and implementing sediment, erosion, and pollution prevention control measures.

Appendix A
Applicable or Relevant and Appropriate Requirements

Authorizing Statute	Criteria	Citation	Description
Solid Waste Disposal Act	Regulation of any handling, treatment, or off-site disposal of non-hazardous solid waste	40 CFR 257–258	These regulations establish federal and statewide minimum standards for solid waste management and handling (including beneficial reuse of inert building materials).
Solid Waste Handling Standards		Chapter 173-350 WAC Chapter 70.95 RCW	
RCRA	Generation and transportation of hazardous waste and waste management activities at TSDFs; consideration of off-site land disposal; state equivalent of RCRA requirements for designating certain solid wastes as "dangerous waste"	42 USC 6921–6922 40 CFR Parts 260–263, 268, 273, and 279	Any hazardous and/or dangerous waste transported from the Site must be managed in accordance with these regulations.
Washington Hazardous Waste Management Act		Chapter 173-303 WAC Chapter 70.105 RCW Chapter 173-303	
NEPA	Consideration, evaluation, and analysis of environmental impacts of major proposed actions and definition of appropriate measures for impact mitigation	42 USC Chapter 43.21C	A SEPA checklist is expected to satisfy these requirements. Requirements are the functional equivalent of NEPA. Construction activities associated with implementing a MTCA CAP and demolition activities.
SEPA		Chapter 197-11 WAC	

Appendix A
Applicable or Relevant and Appropriate Requirements

Authorizing Statute	Criteria	Citation	Description
OSHA	Governance of worker safety during the cleanup action implementation	29 CFR 1910 and 1926	Compliance is met through preparation and implementation of Site-specific Health and Safety Plan(S) with appropriate controls, worker training and certifications, and occupational monitoring.
WISHA		Chapter 296-62 WAC Chapter 296-65 WAC	
Washington State Water Well Construction Regulations	Regulation of groundwater well construction as part of the cleanup action	Chapter 18.104 RCW Chapter 173-160 WAC	These regulations establish minimum standards for the construction and decommissioning of all wells in the State of Washington.
USDOT/WSDOT	Regulation of transport of hazardous materials	49 CFR Parts 105, 107, and 171–180	These regulations apply if excavated soils and demolition materials need to be transported off site as part of the cleanup action.
Hazardous Materials Transportation Act	Regulation of transport of hazardous materials	49 USC 5101–5128	Transportation of hazardous demolition debris or other hazardous materials.
Endangered Species Act	Effects on listed endangered or threatened species	16 USC 1531 et seq. 50 CFR Part 17	Actions authorized, funded, or carried out by federal agencies may not jeopardize the continued existence of endangered or threatened species or adversely modify or destroy their critical habitats.

Appendix A
Applicable or Relevant and Appropriate Requirements

Authorizing Statute	Criteria	Citation	Description
Skagit County, Washington State	County code regulating construction and demolition projects	Title 1–16	These codes apply to aspects of construction, including but not limited to: work hours, noise ordinances, demolition permits, environmental controls, and transportation regulations.
City of Mount Vernon, Washington State	City code regulating construction and demolition projects	Titles 1–19	These codes apply to aspects of construction, including but not limited to: work hours, noise ordinances, demolition permits, environmental controls, and transportation regulations.

Notes:
CFC: chlorofluorocarbon
CFR: Code of Federal Regulations
MTCA: Model Toxics Control Act
NEPA: National Environmental Policy Act
NPDES: National Pollutant Discharge Elimination System
NTR: National Toxics Rule
OSHA: Occupational Safety and Health Act/Administration
SEPA: State Environmental Policy Act
TSDF: Treatment, Storage, and Disposal Facility
USC: United States Code
USDOT: U.S. Department of Transportation
WISHA: Washington Industrial Safety and Health Act
WRD: Washington Industrial Safety and Health Act Regional Directives
WSDOT: Washington State Department of Transportation
WAC: Washington Administrative Code
RCW: Revised Code of Washington