

PRELIMINARY FINAL

**KING COUNTY DEPARTMENT OF NATURAL RESOURCES
YEAR 2000 CSO PLAN UPDATE PROJECT
SEDIMENT MANAGEMENT PROGRAM**

SEDIMENT MANAGEMENT PLAN

**REVIEW OF FEDERAL AND STATE
LAWS, REGULATION AND STANDARDS**

*Task 2
Technical Memorandum*

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1.0 INTRODUCTION

Contaminated sediments are managed under a number of overlapping federal, state and local jurisdictions. Different sets of laws and regulations address various aspects of sediment contamination. For example, the control of sources contributing to sediment contamination is regulated by at least six provisions of the Revised Code of Washington (RCW). Two major source control regulations have been promulgated under the Clean Water Act to control discharges into national waterways: the National Pollutant Discharge Elimination System (33 USC 1342, 40 CFR) and the national Pretreatment Program. The National Pollution Discharge Elimination System was established to regulate point sources discharging directly into national waters, and the National Pretreatment Program was established to address sources discharging indirectly into national waters via publicly owned treatment works. Separate effluent limitations and pretreatment standards have been developed through each program. The state of Washington is authorized to run the federal program and has its own statute and rules interpreting the federal program.

Similarly, the management of dredged contaminated sediments is regulated under a number of Clean Water Act provisions. Under section 404 of the Act, a permit is required for excavation activities, including sediment capping in waters that may affect navigation. Section 401 of the Act requires that all Federal permits and licenses, including those for the management of dredged materials allowing discharge of materials into national waters, be State certified to be in compliance with applicable state water quality standards. Dredged materials are also regulated under Section 10 of the Rivers and Harbors Act, which requires a permit for any dredging activity that may alter navigable waters. Section 103 of the Marine Protection, Research, and Sanctuaries Act regulates the transport of dredged material to the ocean for the purpose of disposal.

To help understand the laws and regulations applicable to the assessment and remediation of contaminated sediments at King county combined sewer overflow (CSO) sites, this document summarizes current statutes and rules guiding sediment management in Puget Sound. It is organized by general management activity:

- Natural resource management and protection;
- Control of sources contributing to sediment contamination;
- Sediment cleanup;
- Disposal of remediated materials; and
- Other regulations.

Within each management category related statutes and regulations are listed first by: federal law and regulation in “**bold text**”, followed by state law and regulations in “*italicized bold text*” and indented five spaces. Local or regional initiatives are underlined and indented eight spaces.

2.0 NATURAL RESOURCE MANAGEMENT AND PROTECTION

National Estuary Program

33 USC1330 et seq., 40 CFR 320

The National Estuary Program was established in 1987 by amendments to the federal Clean Water Act and authorizes the implementation of the National Estuary Program. The program requires data collection relating to pollutant loading from in-place sediment and point and non-point sources in estuaries of national significance. The National Estuary Program also requires the development of a comprehensive conservation and management plan for protecting the estuary and its resources. In Puget Sound, the National Estuary Program is implemented by the Puget Sound Estuary Program (PSEP). The PSEP is jointly managed by the United States Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology) and the Puget Sound Water Quality Authority (PSWQA) in cooperation with federally-recognized native American Indian Tribes of Western Washington.

The Puget Sound Water Quality Protection Act Chapter 90.70 RCW, Chapter 90.71 RCW (1996 Amendments)

The Puget Sound Water Quality Protection Act passed in 1985, required the development of a comprehensive plan to protect the waters and habitats of Puget Sound. It established PSWQA which guided the development of the plan. The plan was to be updated biennially and the statute was to sunset in 1991. Amendments to the initial act extended the work of the Puget Sound Water Quality Authority through 1995, and changed the plan from a two-years to a four-year cycle. In 1987, the EPA designated Puget Sound as an estuary of national significance and the Sound became part of the National Estuary Program. In 1991, PSWQA completed a plan that was approved as the Comprehensive Conservation and Management Plan for the National Estuary Program as implemented by the PSEP. Sections of the comprehensive plan that were applicable to sediment remediation of CSO sites in Elliott Bay and the Duwamish River include: the Contaminated Sediment and Dredging Action Plan, the Municipal and Industrial Discharge Plan, and the Stormwater and Combined Sewer Overflow Action Plan. The Puget Sound Protocols, developed under PSEP, defined methods to standardize the collection and analysis of Puget Sound marine environmental data.

National Environmental Policy Act (NEPA)

42 USC, 4321 et seq., 40 CFR 1500 et al.

NEPA establishes and sets forth the national policy for environmental protection and preservation. The Council on Environmental Quality (CEQ) provides executive guidance on federal responsibility, implementation and specific requirements for documentation. Federal agencies must comply with NEPA pursuant to CEQ policies (40 CFR Parts 1500).

NEPA is applicable to construction and cleanup at CSO sites that will be remediated as part of the Sediment Management Plan. For each site, King County will prepare environmental documentation for review by NOAA.

State Environmental Policy Act (SEPA)
Chapter 43,231C RCW and Chapter 197-11 WAC

SEPA establishes the State's environmental policy for protection and preservation of the environment. The lead agency for each remediation project under the Sediment Management Plan may adopt any environmental analysis prepared under NEPA by following WAC 197-11-600 and 197-11-630. Approval through the NEPA/SEPA process is necessary prior to the issuance of the permits needed for construction and remediation of sites included in the Sediment Management Plan.

Coastal Zone Management Act
16 USC 14511 et seq.

The Coastal Zone Management Act of 1972 establishes a national policy to preserve, protect, develop, and where possible, restore or enhance the resources of the nation's coastal zone. This statute establishes a framework for states to develop and implement state shoreline management programs. The state in turn has the authority to delegate this responsibility to local governments. When a state has its shoreline master program approved by the federal government, the state program supersedes the requirements of the Coastal Zone Management Act.

State Shoreline Management Act of 1971
Chapter 90.58. RCW

Chapter 90.58 RCW defines the State Shoreline Management Act. This act requires the proponent of any substantial development within 200 feet of the high water mark of the shoreline obtain multiple permits if the proposed development or action interferes with the normal use of the shoreline. Permits are granted by the local jurisdiction. In this case, the Seattle Planning Department of Land and Construction would issue the substantial development permit, with copies being sent to the State's Attorney General and to Department of Ecology for review. State concerns regarding permit issuance are presented to the shoreline hearings board. Depending on the nature of the program and special circumstances, two additional permits may be issued, a variance permit and a conditional use permit.

King County Shoreline Master Program
173-26-080 WAC and Title 25 King County Code

As required by 173-26-080 WAC and Title 25 King County Code, King County is to develop and implement a Shoreline Master Program, which regulates shoreline development to ensure compliance with the goals of environmental protection, maximum

beneficial land use, view protection, water use and access. Included in this program are requests for dredging activities.

City of Seattle Shoreline Master Program of 1997
173-14 WAC

The City of Seattle also has a Shoreline Master Program which provides the regulations to implement the State Shoreline Management Act. The Seattle Planning Department of Land and Construction issues substantial development permits, variance permits and conditional use permits. The Shoreline Master Program governs the standards for dredging and material placement along the shoreline.

Endangered Species Act (ESA) of 1973

16 USC 1531

The purpose of the ESA is to provide a means to conserve whereby ecosystems upon which endangered and threatened species and to provide a program for the conservation of such endangered and threatened species. Federal agencies are required to insure that their actions and the actions of state and local jurisdictions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat of endangered or threatened species. The Chinook salmon in the Puget Sound area is currently proposed for listing as an endangered species. Sediment remediation projects will need to consider fish windows and habitat restoration if the project could impact any endangered or threatened species and will need to coordinate with the National Marine Fisheries Service to protect the salmon, if listed.

National Historic Preservation Act of 1966, Section 106

16 USC 470 et.seq.

This act provides for the preservation of potential historical, architectural, archaeological, or cultural resources and requires federal agencies to consider the effects of their undertakings on historic properties. All federal lands, lessees, projects using federal funds, or actions on federal lands are under jurisdiction of this act. The implementing agency is the federal agency undertaking the action, providing funds or managing owned lands. Historic properties could be present in areas of sediment remediation.

Archaeological Resources Protection Act of 1970

16 USC 470

This act provides protection for cultural resources on federal and Indian lands and provides restriction for trafficking in artifacts obtained illegally. All federal agencies, Indian lands and lessees are under the jurisdiction of this act. The implementing agency. Cultural resources could be encountered during sediment remediation.

Native American Graves and Repatriation Act of 1990
Public Law 101-601; 104 Stat. 3048; USC 3001-13

This act requires federal agencies and museums receiving federal funds to inventory human remains and associated funerary objects. It also provides procedures for the repatriation of Native American remains and associated funerary objects. All federal agencies and lessees and all museums receiving federal monies are under the jurisdiction of this act. The implementing agent is the federal agency or museum in possession or control of remains. Remains could be encountered during sediment cleanup.

State Indian Graves and Records Act of 1989
Chapter 27.44.040 RCW

This act protects prehistoric Indian graves, cairns, petroglyphs, and pictographs on all lands. It also establishes a permit system administered by the Office of Archaeology and Historic Preservation for the scientific excavation/investigation of graves, petroglyphs and pictographs. In addition, the act provides for reburial of the remains, requires notification of concerned Indian tribes, and establishes penalties for digging without a permit.

State Antiquities Act, Archaeological Site and Restoration
Chapter 27.53.060 RCW

This act establishes a permit system administered by the Office of Archaeological and Historic Preservation for the scientific excavation of archaeological sites on public and private lands. It also establishes penalties for digging without a permit.

3.0 CONTROLS OF SOURCES CONTRIBUTING TO SEDIMENT CONTAMINATION

Federal Water Pollution Control Act of 1948 (Clean Water Act)
33 USC 1251-1376; Chapter 758; PL 845; 62 Stat. 1155)

There are several provisions under the Clean Water Act (CWA) regulating the control of sources contributing to sediment contamination. The include:

- Section 304 (a) which establishes authority to develop and publish water quality criteria;
- Section 301, 302, 304(b), 307 which establishes authority to develop and publish effluent limitations;
- Section 307 which establishes toxic pollutant and pretreatment effluent standards and authorizes the pretreatment program;
- Section 402 which authorizes the National Pollutant Discharge Elimination System (NPDES) permitting program to regulate the discharge of pollutants from point sources into navigable waters; and
- Section 303 Total Maximum Daily Loads (TMDLs).

Section 304(a)
33 USC 1313

The CWA requires the establishment of guidelines and standards to control the direct or indirect discharge of pollutants to waters of the United States. Section 304(a) of the CWA requires EPA publish Water Quality Criteria, which are developed for the protection of human health and aquatic life. These water quality criteria are promulgated in 40 CFR 131, also referred to as the National Toxics Rule. Water Quality Criteria are used by the states to set water quality standards for surface water.

Sections 301, 302, 304(b) & 307
33 USC 1311

Section 301 of the CWA grants authority to EPA to establish effluent limitations for point sources that discharge toxic pollutants (other than to publicly-owned treatment works). (Sections 301(h) however, includes provisions for POTW discharges.) It allows EPA to add or delete substances from the list of toxic pollutants and allows for modifications of effluent limitations under certain circumstances. Section 302 (33 USC 1312) allows the establishments of water quality based point source effluent limitations. Section 304(b) (33 USC 1314) requires the EPA to publish effluent limitation regulations. Effluent limitations developed for the regulated pollutants are applied to point source discharges on a case-by-case basis. Section 307 authorizes the EPA to publish a list of toxic pollutants subject to effluent limitations and allows for the revision of the list. It also grants EPA the authority to develop effluent standards (or prohibitions) for source category or categories for pollutants subject to effluent limitations.

Section 402
33 USC 1342, 40 CFR 405 et al.
40 CFR 122, The NPDES Program

Section 402 of the CWA, establishes requirements for point-source discharge permits for pollutant discharges into navigable waters of the U.S. In general, point-source discharges must be conditioned not to exceed the effluent limitation set forth in the statute. Section 402 also requires the EPA to review and grant permits for any discharge of designated pollutants, which include 126 priority toxic, and various conventional and non-conventional pollutants. Through the NPDES Program, EPA regulates the direct discharge of pollutants to surface waters by requiring the adherence to relevant effluent standards and technology-based pollutant controls as well as ambient water quality standards. NPDES permits are implemented through regulations codified in 40 CFR 122. Effluent limitations and standards for toxic pollutant effluents are codified in 40 CFR 129 and on an industry-specific basis in the 400 series of 40 CFR. Wastewater dischargers are required to have a permit establishing pollution limits, and specifying monitoring and reporting requirements.

Section 307
33 USC 1317, 40 CFR 403

The CWA also regulates indirect discharges of wastewater to Publicly-Owned Treatment Works (POTWs) through performance and technology based pretreatment standards. In Washington, discharges to POTWs are regulated by Ecology. (RCW 35.58) Ecology has delegated this authority to local governments in WAC 173-208. In King County, any releases to a sanitary sewer requires approval or a permit from the King County Industrial Waste Program (King County Ordinance No. 11035 as amended by Ordinance No. 11963, September 18, 1995).

Water Pollution Control Act
Chapter 90.48 RCW and 173-201A et al. WAC

Parallel to the federal Clean Water Act, the State Water Pollution Control Act regulates various source control activities related to sediment management. They include:

- Water Quality Standards for the Surface Waters of the State of Washington;
- State Waste Discharge Permits; and
- Pretreatment Program.

Washington State has an antidegradation policy for surface water quality under Chapter 90.48 RCW. Under the authority of Chapter 90.48 and the Clean Water Act, Ecology evaluates water bodies to identify water quality issues and determines municipal and industrial wastewater discharge compliance with the state water quality standards for surface water defined in WAC 173-201A. In addition, Ecology has adopted federal effluent limitations and standards, promulgated under the CWA (173-226-070 WAC) and has established discharge standards in 173-221 and 173-221A WAC. WAC-173-221 and 221A describe the effluent limitations and discharge standards for domestic wastewater facilities and upland fin-fish facilities, respectively. The breadth of discharge limitations does not exist in these state regulations but rather in Ecology's delegated NPDES authority, use of the federal effluent limitations and standards described in the 40 CFR 400 series, and by use of Ecology's 'all known available and reasonable' requirements established in 90.48 and related Washington codes.

Chapter 90.40 RCW and Chapter 173-220, 173-216, 173-226 WAC

NPDES permits are required for point source discharges directly into state waters. State discharge permits are required for indirect discharges of wastes into sewage systems or groundwater. They are also granted to local pretreatment programs.

By enacting the Water Pollution Control Act (90.58 RCW) and associated regulations (173-220 WAC), the State of Washington meets federal requirements to issue NPDES permits. In addition, Ecology has the authority under 90.58 to issue state waste discharge permits (173-216 and 173-226 WAC). Local authorities can apply for delegation of Chapter 173-216 authority allowed under WAC 173-216-150.

Any waters generated from dewatering of excavated sediments that are discharged directly to Elliott Bay or the Duwamish River are subject to NPDES permitting through the State of Washington and EPA. However, water from such activity released to a sanitary sewer would not require an NPDES permit, but rather, approval from the King County Industrial Waste Program. (As a condition of NPDES permit issuance in Washington State, wastewater discharges are subject to sediment source control standards under WAC 173-204-400 through WAC 173-204-429.)

Washington also has an antidegradation policy for groundwater quality under Chapter 90.48. Generally all beneficial uses of groundwater are to be maintained and protected, and existing groundwater quality is to be protected against degradation of groundwater quality standards and codified in Chapter 173-200 WAC.

4.0 SEDIMENT CLEANUP LAWS AND REGULATIONS

Comprehensive Environmental Response Compensation and Liability Act (CERCLA), Superfund Amendments and Reauthorization Act (SARA), and National Oil Hazardous Substances Pollution Contingency Plan (NCP) 42 USC 9601 et seq., 40 CFR 300; 42 USC 9605 et seq., 40 CFR 300.

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. In addition, CERCLA established national policy for environmental investigations and cleanups and detailed procedures for identification and remediation of sites listed on the National Priorities Lists (NPL). CERCLA was amended on October 17, 1986 by the Superfund Amendments and Reauthorization Act. Under the auspices of CERCLA the EPA oversees and directs site investigations and cleanups.

The National Oil and Hazardous Substances Pollution Contingency Plan, more commonly called the National Contingency Plan or NCP, is the federal government's blueprint for responding to both oil spills and hazardous substance releases. It is the primary guidance document for CERCLA response actions. It was originally promulgated as part of the Clean Water Act of 1972, designed to address the removal of oil and other hazardous substances. As required by the Clean Water Act of 1972, the NCP was revised the following year to include a framework for responding to hazardous substance spills as well as oil discharges. Following the passage of CERCLA in 1980, the NCP was broadened to cover releases at hazardous waste sites requiring emergency removal actions. Over the years, additional revisions have been made to the NCP to keep pace with the enactment of legislation. The latest revisions to the NCP were finalized in 1994 to reflect the oil spill provisions of the Oil Pollution Act of 1990.

Provisions of CERCLA and the NCP are interconnected. As they relate to contaminated sediments, CERCLA provides authority to the federal government to remove or mitigate a site in case of a release or threat of a release of hazardous substances or pollutants into the environment

that might affect the public health or welfare. Language in the statute includes the removal of pollutants from any contaminated natural resources. The NCP (42 USC 9605 (d)) allows affected parties to petition the federal government to perform an initial assessment of a release or potential release, by any person who may be affected by a release or threatened release. 42 USC 9605(e) and 40 CFR 300.415(b) and (c) authorizes the federal government to initiate actions to mitigate or remove the release of hazardous substances. Of importance to sediment remediation is that which authorizes the federal government to initiate hazardous substance removals in the event of a release that might impact human or animal populations, contamination of drinking water or sensitive areas.

CERCLA and Sediment Remediation in Elliott Bay and the Duwamish River Consent Decree C90-395 WD, U.S. District Court, Western District of Washington State

The public and other agencies can request EPA to conduct assessments of potential releases of hazardous substances. CERCLA also allows trustees for natural resources to evaluate and seek compensation for damages to natural resources. National Oceanic and Aeronautic Administration (NOAA) has been designated as the primary federal natural resource trustee for coastal resources.

As a natural resource trustee, NOAA filed suit against the city of Seattle and the King County Wastewater Treatment Division (formerly Metro) to cover damages to natural resources attributable to releases into Elliott Bay and the Duwamish River from CSOs and storm drains (filing suit with NOAA were the U.S. fish and Wildlife Service, Washington State Department of Ecology, the Muckleshoot Tribe, and the Suquamish Tribe). This suit led to Consent Decree C90-935 WD, U.S. district Court Western district of Washington State which required the City of Seattle and King County to expend a total of \$24 million for source control, remediation, and habitat restoration to mitigate the alleged damages. In response to the lawsuit, the Elliott Bay/Duwamish Restoration Program (EBDRP) was initiated to identify sites requiring further investigation and possible remediation. In 1992, a technical working group to the EBDRP identified 24 potential sediment remediation sites associated with King County and City of Seattle CSOs and storm drains. Of these 24 sites, four were selected for further investigation: Norfolk CSO, Seattle Waterfront, Pier 53/55 Sediment Capping Project and Duwamish Pump Station CSO/Diagonal Way CSO/Storm Drain. Cleanup studies and work plans were developed for all four sites, and both the Pier 53/55 and Seattle Waterfront projects have been completed. In the future, the EBDRP may identify additional sites for remediation.

Model Toxics Control Act (MTCA)

Chapter 90.105D RCW and Chapter 173-340 WAC

MTCA is the Washington State law paralleling CERCLA. It identifies potential areas for cleanup and defines the methods for investigating sites, site cleanup standards, and site goals. Ecology is responsible for administering the standards, updating them on a regular basis, and listing the sites that contain hazardous materials that pose a potential threat to human health and the environment. This act provides legal authority to establish criteria set forth in the Sediment Management Standards (a subsequent applicable regulation).

MTCA establishes cleanup standards and requirements for the cleanup of sites contaminated with hazardous substances. The regulation applies to all media: air, water, soil and sediment. MTCA has a reporting requirement for the release or potential release of hazardous substances that may threaten human health or the environment, and requires investigation by Ecology within 90 days of a report. If an initial investigation confirms contamination is present, and cleanup necessary, the property is entered on Ecology's Site Management Information System. All confirmed sites are ranked and placed on the State Hazardous Sites List. MTCA establishes strict liability for cleanup.

Sediment Management Standards (SMS)
90.105D RCW, and 173-204 WAC

The Sediment Management Standards are developed and enforced by Ecology under the provisions in the Water Pollution Control Act (90.48 RCW) and MTCA. Adopted in 1991, the Sediment Management Standards were approved by EPA as part of the water quality standards of the state of Washington pursuant to Section 303 of the Clean Water Act.

These standards establish sediment quality criteria for freshwater, estuarine, and marine sediments in the State of Washington. The SMS define two criteria: the lower Sediment Quality Standard (SQS) below which no adverse effects are expected and above which minor adverse effects are expected, and the higher Cleanup Screening level (CSL or also called the minimum cleanup level – MCUL) above which adverse biological effects are expected. The SMS also define the procedure for site rankings and requirement for sediment cleanups (173-204-570 and 173-204-580 WAC). The regulation is applicable to remediation of intertidal and subtidal sediments.

5.0 DISPOSAL OF MATERIALS REMOVED DURING REMEDIATION

Resource Conservation and Recovery Act (RCRA) **42 USC 6901 et seq. And 40 CFR 260, et al.**

RCRA was enacted in 1976 to regulate the management of hazardous wastes; to ensure safe treatment, storage, and disposal of wastes; and to provide resource recovery from the environment by controlling hazardous wastes from "cradle to grave." A number of provisions of RCRA Subtitle C (Hazardous Waste Management) currently apply to the management of contaminated sediments. They include: Section 3001 942 USC 6921)(a) and (b) which require the development of regulatory criteria for the identification and listing of hazardous wastes. The listed hazardous wastes, component hazardous constituents, and hazardous waste characteristics are codified in 40 CFR 261. Sediments are screened to determine if they are hazardous or not based on these criteria. Section 3002 942 USC 6922) establishes labeling, reporting and record keeping criteria which are applicable to sediments found to be hazardous (40 CFR 262).

Section 3004 (42 USC 6924) subsections (c), (d), (e), (g) establish performance standards for owners and operators of hazardous waste treatment, storage and disposal facilities. Subsection c, prohibits the disposal of liquids in landfills or materials that release liquids when compressed. Subsections d, e and g set prohibitions on land disposal of hazardous wastes and require treatment of waste prior to placement in land disposal facilities. Land disposal restrictions are codified in 40 CFR 268, which describes treatment specifics and performance criteria for RCRA waste types. Prior to land disposal, “RCRA sediments” would need to comply with the performance criteria associated with their waste category. Section 3004 (o) provides minimum technological requirements (MTRs) for RCRA land disposal facilities. The design of a land disposal facility for “RCRA sediments” would need to comply with these provisions. Section 3005, 42 USC 6925 requires permits for treatment, storage or disposal of hazardous waste and establishes requirements for permit applications. Regulations are found in 40 CFR 270.

EPA Hazardous Waste Management Policies Contained-In Policy

The contained in policy was first articulated in an EPA memorandum “RCRA Regulatory Status of Contaminated Groundwater” November 13, 1996. It has been updated many times in Federal Register preambles, EPA memos and correspondence. The contained in here applies only to environmental media and has not been codified.

The determination that any given volume of contaminated media does not contain hazardous waste is called a “contained-in determination.” In the case of media that exhibit a characteristic of hazardous waste, the media are considered to “contain” hazardous waste as long as they exhibit a characteristic. Once the characteristic is removed, the media no longer contains the hazardous waste and the waste is no longer subject to land disposal restrictions. However, in the case of media that are contaminated by listed hazardous waste, even after the listed hazardous waste is determined to no longer contain a listed hazardous waste, RCRA land disposal restrictions will continue to apply if the contaminated media still contains hazardous constituents at concentrations above land disposal restriction treatment standards. This may apply to the disposal of sediments that once contained listed hazardous wastes.

Hazardous Waste Remediation Waste Management Requirement (HWIR-Media)

In 1996, EPA issued a proposed rule was designed to lessen the regulatory burden for the management of contaminated media generated through the course of a cleanup. The rule was finalized in November 1998 (Final Rule 40 CFR 260, et al. FR Vol. 63/No. 229/Monday, November 30, 1998), and if adopted by the State of Washington, will lessen some of the requirements for managing contaminated sediments. Several aspects of the new rules exempt contaminated media management from some corrective action regulations set in 40 CFR 264.

Those applicable to sediment management and disposal include:

- Changes to existing definitions of remediation wastes, miscellaneous units and Temporary Units to allow flexibility in how contaminated sediments may be managed in the future by

removing the existing limitations requiring remediation wastes to be managed under certain specific corrective action authorities.

- Addition of a new definition of Remediation Waste Management Site – this defines a new site (as opposed to an existing site) for managing remediation wastes that would be eligible for a streamlined RCRA permit. These sites are also exempt from corrective action regulations in parts of 40 CFR 264.
- Creation of a set of separate requirements for Remediation Waste Management Sites and Facilities Managing “as generated” hazardous wastes – sets performance standards similar to but less stringent than those set in 40 CFR 264 and excludes Remediation Waste Management sites from corrective action regulations.
- Streamlining of RCRA permit requirements for certain wastes – HWIR allows the issuance of a Remedial Action Plan (RAP), or streamlined RCRA permit, for treating, storing, and disposing of hazardous remediation waste. The EPA will issue raps or State (40 CFR 270) and will allow for off-site management of sediments. EPA anticipates that Raps will be granted during remedy selection

Another change to current RCRA regulations that may apply to managing contaminated sediments includes an exemption to RCRA permitting for dredged materials regulated under section 404 of the Federal Water Pollution Control Act Amendments of 1972 (as amended by the Clean Water Act of 1977 or under Section 103 of the Marine Protection Research, and Sanctuaries Act (PMRSA or Ocean Dumping Act). 40 CFR Part 261.4 excludes dredged material (as defined in 40 CFR 232.2) from the definition of hazardous waste.

***Hazardous Waste Management – Chapter 70.105 RCW
Dangerous Waste Regulations – Chapter 173-303 WAC***

Washington State has been authorized by EPA to run the RCRA program. Chapter 70.105 RCW, Hazardous Waste Management Act, provides the authority for the Department of Ecology to administer the program. The regulations that implement the State’s authority under RCRA are found in Washington Dangerous Waste Regulations 173-303 WAC. These rules parallel 40 CFR 260 et al. In a number of ways. The specify waste generator requirements for determining if waste is dangerous or hazardous and detail requirements for handling, treatment, manifesting, disposal, and storage of substances defined as dangerous or hazardous. If contaminated sediments are designed as dangerous wastes, they are subject to Chapter 70.105 and 173-303 WAC. (If adopted by the state of Washington, the federal HWIR rule will be effective in June 1999) If contaminated sediments are designated as solid or problem wastes, they are subject to the Solid Waste Management Laws.

***Solid Waste Management Reduction and Recycling
Chapter 70.95 RCW and 173-304 WAC***

The Solid Waste Management Laws (Chapter 70.95 RCW) define the State of Washington's policy on solid waste disposal and 173-304 WAC defines the regulations for solid waste disposal. The act sets a solid waste management hierarchy with reduction being the preferred management alternative and landfilling the last. A special class of "problem-waste" is designated with include dredged sediments: unsuitable for open-water disposal, not dangerous waste or not subject to a Clean Water Act Section 404 permit.

**Toxic Substances Control Act (TSCA)
15 USC 2601 et seq. 40 CFR 760, et al.**

The Toxic Substances Control Act (TSCA) authorizes EPA to establish regulations pertaining to the control of chemical substances or mixtures that pose imminent hazards. 15 USC 2605 (e) provides the statutory authority for the promulgation of rules for the management and disposal of PCBs. EPA has published these rules in 40 CFR 760 et al. 40 CFR 761 Subpart D regulates the storage and disposal of PCBs including soils and sediments excavated from regulated units which have PCB concentrations greater than 50 mg/kg dry weight. PCB-contaminated materials at these concentrations must be incinerated or disposed of in a qualifying chemical waste landfill. PCB-contaminated liquids may alternatively be disposed of in a qualifying chemical waste landfill. PCB-contaminated liquids may alternatively be disposed in high efficiency boilers that meet specific criteria. PCB dredged material management is specified in 40 CFR 761.60 (a)(5).

Sediments removed from King County CSO sites with PCB concentrations greater than 50 mg/kg will have to be managed under TSCA regulations.

**Federal Water Pollution Control Act (Clean Water Act – Section 401)
State Certification of Projects Discharging into Navigable Waters 33 USC134**

Section 401 of the CWA requires the state to certify that any project that may result in any discharge into navigable waters, such as dredging, will comply with effluent limitations required under the statute. State certification under Section 401 is granted (or denied) by Ecology. The United State Army Corps of Engineers (COE) issues the permit once state certification is granted. Chapter 173-201 WAC sets forth the details of the state water quality standards. With the exception of federal Superfund sites, a Section 401 certification is required for active cleanup of contaminated sites. The SMS will be applied through the 401 certification to this type of cleanup action.

**Federal Water Pollution Control Act (Clean Water Act Section 404)
Discharges of Dredged or Fill Material 33 USC 1344**

Section 404 of the Clean Water Act (33 UCS 1344) governs discharges of dredged material into waters of the United States, including all waters landward of the baseline of the territorial sea. EPA and COE each administer specific aspects of Section 404. COE has the primary responsibility for issuing permits, which are required for the discharge of dredged or fill material into navigable waters at specified disposal sites designated in accordance with guidelines specified in Section 404 (b) and codified in 40 CFR 230. A Section 404 permit will be required

in the case of capping a contaminated sediment site to address dredged material discharge or if contaminated sediments are removed from a site and disposed in an aquatic or nearshore environment. EPA has the role in developing the environmental guidelines (in conjunction with the COE) by which permit applications must be evaluated.

**River and Harbors Act of 1899 (Section 10)
16 U.S.C. 401 and 403**

Section 10 of the Rivers and Harbors Act prohibits the unauthorized obstruction or alteration of any navigable waters of the United States. A Section 10 permit requires a recommendation from the Chief of Engineers and is required for in-place or ex-situ capping, treatment, or subaqueous containment of sediments if the activity has the effect of altering the navigable waterway's course. A Section 10 Permit is required if sediments are placed in a near-shore or offshore confined aqueous site.

**Marine Protection, Research, and Sanctuaries Act (MPRSA)
33 USC 1401 - 1414, 40 CFR 248**

The Marine Protection, Research, and Sanctuaries Act (MPRSA) governs all discharges of waste into oceans of the United States. It also regulates transportation of dredged material seaward of the baseline (in ocean waters) for the purpose of disposal. A permit for ocean dumping is required and issued by the COE. MPRSA also regulates the designation of sites for disposing of dredged materials. EPA is responsible for designating disposal sites, and is charged with developing ocean dumping criteria to be used in evaluating permit applications.

Puget Sound Dredged Disposal Analysis (PSDDA)

Federal navigation channels, port terminal ship berths, and small boat harbors in Puget Sound must be dredged periodically to maintain the commercial and recreational services provided by these facilities. Much of the material removed during dredging is disposed in Puget Sound. Concerns about the appropriateness of disposing this material in Puget Sound, the selection of appropriate aquatic disposal sites and the lack of consistent dredged material evaluation procedures, led in part to the Puget Sound Dredged Disposal Analysis (PSDDA) study completed in 1990. The PSDDA established guidelines for unconfined open-water disposal sites for dredged material. PSDDA has developed procedures for the sampling, testing, and evaluation of dredged material to ensure that material is acceptable for unconfined open-water disposal. These evaluation procedures are used to assess projects conducted under CWA Section 401 and 404 guidelines.

Puget Sound Confined Disposal Site Study

As part of the 1987, Puget Sound Management Plan, the Puget Sound Water Quality Authority identified the importance of having a multi-user disposal site (MUDS) for contaminated sediments in the region. In response, Ecology prepared a series of fact finding reports supporting the need for MUDS. The 1994 Puget Sound Management Plan called for an interagency group to conduct a feasibility study and in 1995, COE prepared a Reconnaissance Study Report showing there is a federal interest in the feasibility of building a MUDS. In 1996, the Washington State Legislature approved matching funds to work with COE on a study that compares the merits of several alternatives for disposing of contaminated sediments. In 1997, COE, EPA, Ecology, Washington State Department of Natural Resources (WADNR), and The Puget Sound Water Quality Action Team, began a three year study to explore three options for disposal of contaminated sediment at: confined aquatic disposal, nearshore confined disposal and upland disposal. The study will include a programmatic environmental impact statement (PEIS) addressing disposal alternatives, siting decision process and siting criteria as well as facility ownership, site selection. The draft PEIS will be completed in early 1999. Pending conclusions of the final PEIS and public and peer review comments, the cooperating agencies may prepare a site-specific EIS.

6.0 OTHER REGULATIONS

Federal Water Pollution Control Act (Clean Water Act) 33 USC 1254, 33 USC 1264

33 USC 1254 (Section 104 (n)(1) of the Clean Water Act) authorizes the study of the effects of pollution, including sedimentation, on sport and commercial fishing, on recreation, on water supply and power, and other beneficial uses.

33 USC 1265 (Section 115 of the Clean Water Act) directs the Administrator of EPA to identify the location of in-place toxic pollutants in harbors and navigable waterways.

Washington Hydraulic Code, Chapter 75.20 RCW and Chapter 220-110 WAC

The Washington Hydraulic Code and the accompanying regulations define the requirements pertaining to any activity that would use, obstruct, alter, or impact the seabed or the natural flow of marine or fresh waters. The Washington Department of Fish and Wildlife reviews the hydraulic project proposal. The general project plan and complete construction plans at or below the established high water mark are evaluated for the protection of fish and aquatic life and compliance with SEPA. If the Department of Fish and Wildlife determines that the proposed project has any indirect or direct deleterious effect on fish, the project will be denied unless sufficient mitigation can be assured. This regulation is applicable to all sediment remediation projects.

State Aquatic Lands Management, Chapter 79.90 RCW and 332-30 WAC

This act sets forth the State of Washington land use policy and is implemented through 332-30 WAC. The Washington Department of Natural Resources (WADNAR) administers and authorizes the uses of state-owned land. The beds of navigable waters, harbors, and state-owned tidelands and shorelands are under the authority of WADNAR. WADNAR Aquatic Lands Division is empowered to review and authorize proposed use of state-owned aquatic lands. Use of state-owned aquatic lands, if approved, will entail a contract with WADNAR, with terms and limited conveyance of rights. Operating practices and performance standards for the lease of state-owned lands are defined in 332-30 WAC. Most contaminated sediments off CSO outfalls into Elliott Bay and the Duwamish River are located on state-owned lands.

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