

3.5 ENVIRONMENTAL HEALTH

The following section compares the probable significant impacts associated with environmental health and hazardous materials from the Preferred Alternative and the Straight Street Grid Option to those analyzed under the Redevelopment Alternatives (Alternatives 1 - 3) in the 2008 *New Whatcom Redevelopment Project Draft EIS* (Draft EIS) and identifies any new or increased significant impacts and/or mitigation.

3.5.1 Affected Environment

The Draft EIS (DEIS) provides an overview of environmental cleanup regulations/processes that are pertinent to the New Whatcom site and a description of coordinated cleanup and planning activities that had taken place prior to the issuance of the DEIS. The DEIS provides a summary of the existing environmental health conditions on the site, including the seven cleanup sites located on the New Whatcom site. These sites include the following:

- Central Waterfront Site
- Pulp and Tissue Mill Site
- Chlor-Alkali Site
- Cornwall Avenue Landfill Site
- RG Haley Site
- Whatcom Waterway Site (including the waterway, the ASB and nearby aquatic lands)
- I & J Waterway Site

Conditions at these sites generally remain the same as presented in the DEIS. The specific cleanup process for each site is continuing; a brief update of each site is presented in **Table 3.5-1** below. No other changes to the discussion of existing conditions are warranted in this SDEIS.

3.5.2 Impacts

Draft EIS (Alternatives 1 - 4)

As described in the DEIS, cleanup activities at the seven sites are being implemented under the State Model Toxics Control Act (MTCA) and the Sediment Management Standards (SMS) under the direction of the Department of Ecology (Ecology). Cleanup actions would be performed in coordination with redevelopment activities and would provide adequate mitigation for most of the environmental health and hazardous materials concerns at the site. **Table 3.5-1** provides an update on the status of the cleanup process for each of the seven sites. Due to the similarities (from the perspective of the MTCA and SMS regulations) of assumed land and navigation uses at the site, there would be no significant differences among the Redevelopment Alternatives (Alternatives 1 - 3) related to potential environmental health impacts.

**Table 3.5-1
NEW WHATCOM CLEANUP SITES STATUS UPDATE**

Site	Description	Stage of Cleanup Process
Cornwall Avenue Landfill	This site was used by the City for the disposal of municipal solid waste between 1953 and 1965. The cleanup will support a large waterfront park and mixed-use development along the bluff.	Ecology is expected to release a draft Remedial Investigation and Feasibility Study (RI/FS) for public review and comment in 2008 (Port-lead).
R.G Haley	This site was used for the operation of a wood treatment facility between 1953 and 1986. This site is privately owned and the cleanup process managed by the property owner with oversight from Ecology.	Ecology is expected to release a draft RI/FS for public review and comment in 2008 (Private-lead).
Chlor-Alkali Plant	GP built the Chlor-Alkali Plant in 1963 to produce chlorine gas and caustic soda which were used to bleach wood pulp. The chemical plant closed in 1999 and a number of environmental investigations were completed examining cleanup solutions which supported ongoing heavy industrial uses on the property. The Port acquired this property in 2005 and is developing new cleanup strategies which support mixed-use redevelopment.	Ecology is expected to release a draft RI/FS for public review and comment in 2010 (Port-lead).
Pulp and Tissue Mill	GP acquired Puget Sound Pulp and Timber in 1963 and gradually expanded operations. The pulp mill closed in 2001 and tissue plant closed in 2007. The Port acquired the property in 2005 and is developing cleanup strategies to support mixed-use redevelopment.	Ecology is expected to release a draft RI/FS for public review and comment in 2010 (Port-lead).
Whatcom Waterway	This site is primarily contaminated by mercury discharges from GP's former Chlor Alkali Plant in the late 1960's and 1970's. The cleanup will support a number of habitat restoration and property redevelopment objectives including a new marina, public access to the shoreline, and the creation of near-shore habitat for endangered species.	Ecology has approved a cleanup plan which is going through engineering design and permitting. Construction of the cleanup action is expected to begin in 2010. (Port-lead).
Central Waterfront	This site has historically been used to support a variety of industrial activities including a municipal and wood waste landfill, boat yards, foundry activity, petroleum storage, and pulp and paper mill product storage. The cleanup will support an active Marine Trades area and mixed-use redevelopment.	Ecology is expected to release a draft RI/FS for public review and comment in 2009 (Port-lead).
I&J Waterway	This site has been used since the early 1900's to support a variety of industrial activities including lumber mills, a rock crushing plant, frozen foods processing, and a seafood processing facility. The cleanup will support mixed-use redevelopment of the surrounding uplands and the ongoing light industrial requirements in the I&J Waterway.	Ecology is expected to release a draft RI/FS for public review and comment in 2010 (Port-lead).

Source: CollinsWoerman, 2008.

During construction at the New Whatcom site, exposure to and/or disturbance of contaminated soils, exposure to soil vapors or other hazardous substances, disturbance of containment structures for groundwater quality, and disturbance of capped sediment could occur. This includes construction associated with building demolition, grading and soil management, dredging, and subsurface construction for buildings or infrastructure. Final cleanup plans

(institutional control plans) may specify the use of soil and/or asphalt caps (capping with a layer of clean fill material or new impervious surfaces), vapor mitigation systems, restrictions on excavations in certain areas and/or restrictions on ground-floor residential uses in limited areas of the site. Operation of the assumed redevelopment under Alternatives 1 - 3 could result in disturbance to and/or re-exposure of contaminated soils or sediment from certain activities such as navigation uses, utility maintenance, and storage, use or disposal of hazardous materials. The design, permitting and construction of cleanup actions including within the Whatcom Waterway, will be implemented in coordination with proposed New Whatcom redevelopment to ensure effective integration of projects.

The extent of cleanup required under Alternatives 1 - 3 would generally be more stringent than the level required to support ongoing industrial use. This more stringent cleanup level would result in reductions in residual environmental risks and an overall improvement in environmental protection of the site.

Under the No Action Alternative, institutional controls for each of the cleanup sites would specify the requirements for future industrial redevelopment. The scope of the requirements for cleanup actions on the site would generally be less extensive for industrial uses as compared to the requirements for mixed-uses (Alternatives 1 - 3). Operation of industrial uses on the site would result in a potential increase in the use, storage and/or processing of hazardous materials at the site.

Preferred Alternative

As described in **Chapter 2** of the SDEIS, redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1 – 3. Redevelopment under the Preferred Alternative would mix and match elements of DEIS Alternatives 1 – 3 and would generally include similar uses and density levels to DEIS Alternative 2 (6 million square feet). As described in the DEIS, cleanup actions for the seven sites would be completed in phases and institutional control plans for each of the cleanup actions would specify where appropriate, the implementation of soil caps or vapor mitigation systems that are required as part of site redevelopment. Cleanup required for mixed-use redevelopment would be more stringent than the level required for ongoing industrial uses. This would result in reductions in residual environmental risks and overall improvement in environmental protection of the site.

Potential construction impacts under the Preferred Alternative would be similar to those described for DEIS Alternatives 1 – 3 including exposure/disturbance of contaminated soils, exposure to soil vapors or other hazardous substances, disturbance of containment structures, and disturbance of capped sediments. Potential operational impacts would also be similar to the DEIS and could include disturbance and/or exposure to capped sediment from operational activities (navigation uses, utility maintenance, and storage or use of hazardous materials).

As part of the Preferred Alternative, it is assumed that portions of the site would be capped (via a fill layer or new impervious surfaces i.e., building or road surfaces) as a result of institution controls plans for each of the cleanup sites. Based on the proposed grading plan under the Preferred Alternative, it is expected that substantial excavation into contaminated soils or groundwater would not be required for building foundations or the infrastructure network (see **Section 2.3.3** of Chapter 2 of the SDEIS for more information on the grading plan). Compliance with soil management provisions of cleanup plans, and other applicable controls, would preclude significant impacts.

Straight Street Grid Option

Redevelopment under the Straight Street Grid Option would include a similar mix of land uses and densities to those proposed under Preferred Alternative. Accordingly, it is assumed that potential construction and operation-related environmental health impacts that could result from redevelopment on the site would be similar to those described under the Preferred Alternative.

3.5.3 Conclusions

The potential for significant environmental health impacts that could result under the Preferred Alternative or the Straight Street Grid Option would be within the range of impacts presented under DEIS Alternatives 1 – 3. Similar to DEIS Alternatives 1 - 3, cleanup required for mixed-use redevelopment under the Preferred Alternative and Straight Street Grid Option would be more stringent than the level required for ongoing industrial uses. The more stringent cleanup standards would result in reductions in residual environmental risks and an overall improvement in environmental protection of the site. No additional potential impacts would be anticipated under the Preferred Alternative or the Straight Street Grid Option.

3.5.4 Mitigation Measures

Mitigation measures to address the potential for environmental health impacts under Alternatives 1 – 3 were identified in the DEIS (see DEIS Section 3.5.3 for a list of these measures). These mitigation measures would also apply to the Preferred Alternative and the Straight Street Grid Option. Because no additional significant impacts were identified for the Preferred Alternative or the Straight Street Grid Option, no additional mitigation measures would be warranted.

3.5.5 Significant Unavoidable Adverse Impacts

No significant adverse environmental impacts would be anticipated to result from redevelopment under the Preferred Alternative or the Straight Street Grid Option.