

# **PUBLIC HEALTH CONSULTATION**

**Willamette Cove  
Portland Harbor  
Multnomah County, Oregon**

Oregon Department of Human Services  
Superfund Health Investigation and Education

under a cooperative agreement with the

U.S. Department of Health and Human Services  
Agency for Toxic Substances and Disease Registry

## Summary

This health consultation, provided by the Oregon Department of Human Services (ODHS), discusses the public health risk posed by physical hazards at Willamette Cove. Chemical contamination at this site will be discussed in a latter consultation. The Cove is located within the Portland Harbor Superfund Site, just downstream of the McCormick and Baxter Superfund Site and is frequently visited by numerous people. Based on physical hazards present in water and at upland locations, ODHS considers Willamette Cove to be a *public health hazard*.

## Background

On December 1, 2000, Portland Harbor was designated a Superfund site under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) National Priorities List. As part of the Superfund investigation process, risks to human health are being investigated at multiple sites within Portland Harbor.

Willamette Cove was chosen for an early health consultation as a result of numerous uses in the area and the evident risks found within the site. Common uses include jogging, biking, dog walking, fishing, transient camping and other activities such as swimming and boating. Vehicular access to the site is problematic and the Cove is used as an illegal dumping ground by the public [1]. In addition, numerous websites and pamphlets were found that discussed access points and recreational opportunities at Willamette Cove.

DHS visited Willamette Cove on November 19, 2002<sup>1</sup> and again on March 10, 2003<sup>2</sup>. Access to the site from Edgewater Drive is supposed to be restricted by a secured gate and concrete barriers. However, during both site visits, the lock on the gate had been cut or was open. Since Metro purchased the property, the lock has been cut numerous times [1]. Numerous agencies, contractors and Burlington Northern Santa Fe Railway, share access to this gate. Willamette Cove is located along the east bank of the Willamette River, just downstream of the Burlington Northern railroad bridge. The coordinates of the site are 45° 34' 45" North Latitude and 122° 44' 40" West Longitude. The site covers approximately 27 acres of riverfront property. The eastern boundary of the Cove ends at a steep bluff. Railroad tracts run east and west, along the northern boundary of the property. The site is dominated by cottonwoods and non-native shrubbery such as Scots Broom and invasive blackberry. Historic uses for this site include a lumber mill, plywood mill, barrel manufacturer and a shipbuilding/repair facility [2].

Currently, environmental samples are being collected by the Oregon Department of Environmental Quality (DEQ) to characterize the extent of contamination associated with the nearby McCormick and Baxter Superfund Site (just upstream of Willamette Cove). The southeastern portion of the cove is fenced to minimize exposure to petroleum

---

<sup>1</sup> DHS toxicologist Dave Stone visited Willamette Cove and McCormick and Baxter with DEQ hydrogeologist Rodney Struck.

<sup>2</sup> DHS health educator Amanda Guay and toxicologist Dave Stone visited Willamette Cove with Metro staff Jim Morgan and Janelle Geddes.

products seeping into the river from the McCormick and Baxter Site. The characterization of the nature and extent of contamination associated with the Portland Harbor Superfund project will take several years to complete. Metro has entered into a Voluntary Agreement for Remedial Investigation and Source Control Measures with the DEQ. The remedial investigation (RI) report for the Willamette Cove upland facility is scheduled for submission to DEQ in 2003. The need for remedial activities for Willamette Cove will be evaluated following completion of the RI and may not be implemented for several years. During this investigation, Willamette Cove remains closed to the public and Metro has devoted many resources to discourage illegal trespassing on-site.

Metro acquired Willamette Cove in 1996 to use the site as an urban and natural area, potentially under the management of the Portland Parks and Recreation Department, who have developed a management plan for Willamette Cove [3]. Included in the plan are recommendations for the protection of human health and safety. The recommendations include stabilizing or limiting access to the eroding bank, preventing access to the river and the removal or management of on-site hazards. Current actions to protect public safety, implemented by Metro, include the removal of non-native shrubbery to reduce the likelihood of camping or criminal activity at the site, the posting of “No Camping” signs and discussing the hazards of Willamette Cove with teachers of the nearby Open Meadows High School [1].

### **Profile of Physical Hazards:**

In-water hazards, which are the responsibility of the Oregon Division of State Lands, are shown in Figure 1. These hazards were most obvious during the November 2002 site visit, since the water in the Willamette River was lower compared with the March 2003 visit. Evident features along the riverbank include numerous reinforcing steel bars (rebar) and broken treated pilings embedded in the sediment. The rebar and pilings project out of the water and present a risk to potential waders, swimmers and boaters at the site. Jagged posts and pilings are found at various distances from the beach area of the Cove as well. At one location, a large piece of scrap metal can be found within a few feet of the beach. The entire Cove area would be extremely dangerous for any water-based activity, especially at night and during high water when the hazards may not be visible.

**Figure 1. Examples of in water hazards at Willamette Cove.**



Bank and non-water hazards are shown in Figure 2. During the first site visit, two large, gaping holes were evident in an abandoned cement structure, shown in Figure 2a. The holes were level with the bank and along a pathway, posing a severe falling and entrapment hazard. Metro demolished the structure (and several others), as noted in the second site visit (Fig. 2b). Concrete beams that overhang the banks of the Cove continue to present a falling hazard (Fig. 2c).

Along the beach, numerous piles of broken cement blocks, sharp slag-like material, rebar, wire and other industrial debris are strewn about. Metro has removed much of the debris using volunteer programs and hired prison labor on many occasions. At the northern end of the Cove is an abandoned barge, as shown in figure 2d. The stern end of the barge is beached on the Cove and the bow faces the Willamette River. Evidence of makeshift

**Figure 2. Examples of upland hazards at Willamette Cove.**

2a.



2b.



2c.



2d.



camps can be observed between the rudders of the barge. A large branch has been secured to the barge from the nearby bank, permitting access to the vessel. The floor and sides of the barge consist of numerous protruding spikes and jagged, fire-damaged planks. Unfortunately, the barge may be an enticing attraction for visitors. Children have been observed sitting at the far (riverward) end of the barge [4]. During the March 2003 site visit, a fisherman walked across the barge to the far end. The holes in the barge deck and abundance of broken planks and spikes pose a hazard to site trespassers. Metro has erected a chain-link fence around the barge to limit access. The fence was destroyed within two weeks [1].

It is evident that young adults and transients frequent Willamette Cove. During the March 2003 site visit, two children were walking around the southern edge of the Cove. The majority of the abandoned structures are covered in graffiti and remnants of camping material are visible. Paraphernalia found during our site visit included lighters, alcohol containers, newspapers, food cans, and discarded clothing. It is likely that substance abuse occurs at the site, which would increase the danger posed by the physical state of Willamette Cove.

## **Community Survey**

The City of Portland issued a final report for McCormick and Baxter Site Reuse Assessment in June 2001. The North Beach Community was asked what were the most important issues related to the future use of Willamette Cove. Sixty-three percent responded that safety associated with swimming in the Cove was their most important issue [5]. In addition, open space, riverfront access and cultural and entertainment opportunities ranked highly among respondents.

## **Conclusions**

As a result of the physical hazards throughout the site, DHS categorizes Willamette Cove as a *public health hazard*. Physical hazards are present in the water and at upland areas of the site that require remedial actions to be protective of public health. In addition, public access should continue to be restricted until remediation can occur.

## **Recommendations**

1. Until the site can be remediated as planned by Metro, areas that are frequently accessed should be posted with visible “Public Health Hazard-No Trespassing” warnings.
2. All concrete overhangs should be demolished or made inaccessible.
3. Access to the barge should continue to be discouraged or restricted until it can be dismantled or removed.

4. Rebar, posts and pilings should be pulled from the sediment, especially near shore, when permitted by appropriate regulatory agencies.
5. Concrete blocks, wire and other debris should continue to be removed from the site.

***Author of Report:***

Dave Stone, Ph.D.  
Public Health Toxicologist  
Environmental Services and Consultation  
Oregon Department of Human Services

***Staff members:***

Amanda Guay, M.P.H.  
Community Health Educator  
Oregon Department of Human Services

Janice Panicello, M.P.A.  
Program Coordinator  
Oregon Department of Human Services

**References:**

- [1] Personal Communication, Jim Morgan, Metro. January 2, 2003.
- [2] Oregon Department of Environmental Quality. Environmental Site Information Database, Nov. 2002.
- [3] Willamette Cove Management Plan: Draft Recommendations. Portland Parks and Recreation. May, 1999.
- [4] Personal Communication, Rod Struck, Department of Environmental Quality. November 19, 2003.
- [5] McCormick & Baxter Site Reuse Assessment: Final Report, Appendix 4. City of Portland Bureau of Planning, 2001.

## Responses To Public Comments

All comments to the health consultation report are reproduced here in their entirety. Comments by different authors have not been combined.

1. The Willamette Cove property is closed to the public, as are all of Metro's open space properties. This particular site is closed pending completion of environmental investigations pursuant to the Portland Harbor Study and pending adoption of a Master Plan for the property. In November of 2000, Metro, along with the Port of Portland entered into a Voluntary Agreement for Remedial Investigation and Source Control Measures with the DEQ, regarding the Willamette Cove property. Metro's action on the property has been taken in coordination with DEQ and the Voluntary Agreement.

*Response: Included in the final comment version of the PHC is the statement that, "Metro has entered into a Voluntary Agreement for Remedial Investigation and Source Control Measures with the DEQ." In addition, I included the statement, "During this investigation, Willamette Cove remains closed to the public and Metro has devoted many resources to discourage illegal trespassing on-site."*

2. Access to the property is not "uncontrolled." There is a gate and concrete barriers that prohibit vehicular access to the site. Metro has repeatedly installed No Trespassing signs, though these signs tend to be removed and or vandalized beyond Metro's control.

*Response: "Uncontrolled vehicular access to the site is problematic..." has been changed to "Vehicular access to the site is problematic..." The gate is already mentioned in the existing document and concrete barriers will be included in the final PHC.*

3. Embedded pilings and reinforcing steel bars as well as structures below ordinary high water mark are the responsibility of the Division of State Lands, not Metro Regional Parks. DEQ is currently investigating whether it will remove the pilings and the barge as part of its mitigation for the neighboring McCormick and Baxter site.

*Response: Included in the final version of the PHC is the statement, "In-water hazards, which are the responsibility of the Oregon Division of State Lands, are shown in Figure 1."*

4. The public activities cited as occurring on the site are a result of unauthorized access and trespass. Access via the gated road has been a result of a long-standing issue of individuals cutting locks on the gate. Metro shares access with Burlington Northern Santa Fe Railroad as well as DEQ, DEQ subcontractors and the City of Portland. Portland Fire Bureau and Portland Police Department also have to

access the site occasionally. When there is active work occurring on the site, we coordinate with the various contractors to ensure that the gate is secured following their work.

*Response: Included in the final version of the PHC is the statement, “Numerous agencies, contractors and Burlington Northern Santa Fe Railway, share access to this gate.”*

5. Concrete overhangs that could be removed without extensive and expensive permitting has been completed.

*Response: The public comment version of the PHC mentions the former concrete structures that were demolished by Metro. The recommendation that all concrete overhangs be demolished will remain in the final version of the PHC.*