

Completion Summary for City of Portland Outfall Basins 23 and 24

The City of Portland (City) has been addressing source control concerns related to the City conveyance systems for more than four decades, and several City programs have evolved to meet changing regulatory requirements and watershed health objectives. Following the 2000 listing of Portland Harbor on the National Priorities List, the City initiated a new partnership with the Oregon Department of Environmental Quality (DEQ) Cleanup Program to identify specific sources of contaminants to City stormwater conveyance systems in the harbor that were not being adequately controlled. The purpose of this report, which is included in Appendix A of the *Municipal Stormwater Source Control Report for Portland Harbor*, is to demonstrate that the City has met the joint remedial investigation (RI)/source control measure (SCM) objectives of the August 13, 2003, intergovernmental agreement (IGA) between the City and DEQ for Outfall Basins 23 and 24.

Outfall 23 is located within the Portland Harbor Study Area (Study Area), but does not discharge stormwater to the river. The outfall formerly discharged to the west side of the Willamette River near River Mile (RM) 5.2, in the Linnton area.¹ The outfall historically conveyed stormwater from a residential area, until stormwater from the basin was rerouted to the sanitary system in the early 1970s, and subsequently served only as a combined sewer overflow (CSO) point. In 1992, the City abandoned the CSO diversion and eliminated any potential for a pathway through this outfall. A basin source investigation was not needed because there is no current pathway for contaminants to the river via Outfall 23.

Outfall 24 also is located within the Study Area, on the west side of the river near RM 4.4, and does not discharge stormwater to the river. The outfall historically served a residential and commercial portion of the Linnton area. Discharge from the entire drainage basin was diverted to the sanitary system in the early 1970s and the diversion was sealed in 2000. The outfall currently functions only as an emergency bypass for the Linnton Pump Station (i.e., sanitary sewer overflow) and the City has no record of bypasses occurring. Given that there is no stormwater drainage area affiliated with the outfall, a basin source investigation was not needed.

The drainage basins for both Outfalls 23 and 24 were redirected to the sanitary system before the listing of the Portland Harbor Superfund Site and neither basin represents a current or future source of contaminants to the river. Therefore, the City has met the RI/SCM objectives of the IGA and requests source control decisions from DEQ for Basins 23 and 24.

¹ See Figure 4 in the Municipal Report for the location of the Linnton Area and general locations of Outfalls 23 and 24.

Completion Summary for City of Portland Outfall Basin 42

1 Summary

The City of Portland (City) has been addressing source control concerns related to the City conveyance systems for more than four decades, and several City programs have evolved to meet changing regulatory requirements and watershed health objectives. Following the 2000 listing of Portland Harbor on the National Priorities List, the City initiated a new partnership with the Oregon Department of Environmental Quality (DEQ) Cleanup Program to identify specific sources of contaminants to City stormwater conveyance systems in the harbor that were not being adequately controlled.

This report summarizes the results of this collaborative effort in Outfall Basin 42 and includes a weight-of-evidence evaluation to demonstrate that source identification is complete and that there are no current (or anticipated future) major sources of contaminants to the Willamette River.

Basin 42 is located on the east side of the river near the Broadway Bridge and the historical Albina industrial area. The basin is small and consists of open space, parking areas, TriMet light-rail tracks, and City streets. River sediment in the vicinity of the outfall does not contain elevated concentrations of any contaminants (i.e., the U.S. Environmental Protection Agency [EPA] has not identified the potential need for sediment remediation). No known or suspected contaminant sources to the Basin 42 stormwater conveyance system have been identified.

The City concludes that major contaminant sources are not present and ongoing implementation of programmatic source control measures (SCM) is sufficient for ensuring that discharges from Outfall 42 are protective of the river. Therefore, the City has met the remedial investigation (RI) /SCM objectives for Basin 42.

2 Introduction

This Completion Summary presents a weight-of-evidence evaluation of whether further source investigation is needed in Basin 42, and the rationale for concluding that current and future discharges from the basin are not likely to be significant sources of contaminants to river sediment. The purpose of this report is to demonstrate that, for Basin 42, the City has met the joint RI/SCM objectives of the August 13, 2003, intergovernmental agreement (IGA) between the City and DEQ.

This report is included in Appendix A of the *Municipal Stormwater Source Control Report for Portland Harbor* (Municipal Report), which provides additional background and detail regarding the City's harborwide source control efforts, including regulatory and non-regulatory programs to address current and future sources and to minimize recontamination potential.

3 Outfall and Basin Setting

3.1 Basin Location and Configuration

Outfall 42 discharges to the east side of the Willamette River between River Miles 11.7 and 11.8, approximately 400 feet upstream of the Broadway Bridge. The Basin 42 stormwater conveyance system drains approximately 6 acres near the Memorial Coliseum at the N. Broadway Street and N. Interstate Avenue interchange. Figure 1 shows the location of the outfall and drainage basin boundary and provides an overview of the associated stormwater conveyance system. As shown in Figure 1, the basin includes a water quality drainage swale and a sedimentation manhole (at Interstate Avenue, near the downstream end of the conveyance system). These features reduce the total suspended solids loading to Outfall 42 from the majority of the basin drainage area. The bioswale was constructed in 1996 during the Rose Quarter redevelopment to provide stormwater treatment for a portion of an arena parking lot and adjacent roadways. The sedimentation manhole was constructed by TriMet in approximately 2003 during development of the new Interstate Avenue light-rail line. City development standards that result in these types of stormwater improvements are described in the Municipal Report. The only portion of the basin that does not include stormwater treatment is a private parking area at the site of a former hotel on the west side of N. Interstate Avenue and a small portion of N. Thunderbird Way.

3.2 Land Use and Potential Upland Sources

Basin 42 is located near the historical Albina area in north Portland. Land use in the basin is commercial and open space (see Figure 1). With the exception of a small open space area in the middle of the basin, the remainder consists of parking lots used for event parking for the Rose Garden and Memorial Coliseum, TriMet light-rail tracks, and paved rights-of-way. The former hotel site at 1225 N. Thunderbird Way was demolished in 2001; TriMet subsequently used this area as a staging area for gravel and asphalt during construction of the Interstate MAX line. These construction operations ceased in 2009, and the site currently is used for event parking.

No current or historical pollutant sources have been identified in Basin 42. No DEQ Cleanup Program sites currently (or historically) are located within the basin, and no industrial sites have held permits to discharge to the Basin 42 conveyance system under National Pollutant Discharge Elimination System (NPDES) stormwater regulations.

3.3 Outfall Setting

Outfall 42 discharges upstream of the Broadway Bridge and the historical Albina industrial area. It does not discharge to a river reach identified by EPA as an area of potential concern (AOPC) for contaminant concentrations in river sediment (EPA, 2010).

4 Basin Screening and Source Investigations

Basin screening consisted of an evaluation of current and past land use, inriver sediment, and existing stormwater treatment, as described in Section 3. Based on a lack of evidence to indicate Basin 42 was likely to contain major sources of contaminants to the City conveyance system, no source investigations were conducted in Basin 42.

5 Completion of Source Identification

The lines of evidence evaluated to confirm that source evaluation objectives have been met with regard to Basin 42 include (1) inriver sediment concentrations near the outfall, (2) information on potential sources of contaminants, (3) drainage basin characteristics, and (4) land use. Findings from this evaluation are summarized below.

- *Inriver Sediment Concentrations.* River sediment in the vicinity of Outfall 42 does not contain elevated concentrations of any contaminants (i.e., the outfall does not discharge to an AOPC).
- *No Upland Sources:* Basin 42 contains no known or suspected upland sources of contaminants to the City stormwater conveyance system (e.g., DEQ Cleanup Program sites or NPDES permitted facilities).
- *Drainage Basin Characteristics:* Basin 42 is small (approximately 6 acres). Most of the stormwater discharging through this outfall is treated before discharging to the river (see Figure 1). The only area in the basin that does not receive treatment is the private event parking lot at 1225 N. Thunderbird Way.
- *Land Use/Zoning:* The basin is not zoned for industrial use, and consists primarily of open space, commercial parking, light-rail lines, and paved rights-of-way. No future industrial connections to the basin are anticipated.

Based on these lines of evidence, the City concludes that Basin 42 source investigation is complete and there are no major contaminant sources in the basin.

6 Basin Source Controls

Because no known or suspected major sources were identified in Basin 42, additional coordination between DEQ and the City to identify control mechanisms was not needed in this basin.

Conveyance system source controls in Basin 42 consist of a water quality treatment swale installed in 1996 (in the open space area between N. Larrabee Avenue and N. Interstate Avenue), and a sedimentation manhole that was installed in 2003 downstream of the bioswale as part of the stormwater system redevelopment affiliated with the Interstate light-rail construction project. These conveyance system source controls are shown in Figure 1. Together, these controls treat most of the stormwater discharging to Outfall 42.

Other municipal programs (e.g., street sweeping) provide additional source control benefits in the basin and will help to address minor sources for which specific control measures have not been required. City programs that control current and future contaminant discharges to the conveyance system are described in the Municipal Report. The City anticipates that these programs will provide additional future stormwater source control in the basin if changes in land use warrant it.

7 Conclusion

Based on the information summarized above, there are no major sources of contaminants in Basin 42. Therefore, future discharges from Outfall 42 are unlikely to represent a significant source of contaminants to the river. The City concludes that it has met the RI/SCM objectives of the IGA and requests a source control decision from DEQ for Basin 42.

8 References

EPA. 2010. Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240. Portland Harbor Feasibility Study Source Tables. Letter from EPA to Mr. Bob Wyatt, Chairman, Lower Willamette Group. November 23, 2010.

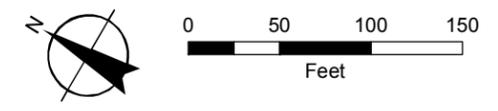
List of Figures

Figure 1: Basin 42 Overview and Conveyance System Source Controls

FIGURE 1
Basin 42
Overview and Conveyance
System Source Controls



- Basin 42
- Conveyance System**
- Storm Line
- Water Quality Swale
- Sediment Removal Structure
- Catch Basin
- City Outfall
- Non-City Outfall
- Land Use/Zoning**
- Light Industrial
- Commercial
- Parks and Open Space
- All Other Data**
- River Mile (RM)
- Tax Lot
- Discharges to City Outfall
- Portland Harbor Hydroboundary



MAP NOTES:
 Date: January 6, 2014
 Data Sources: BES, METRO, Air Photo Taken 2012

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