

Keeping Pollutants Out of Urban Waters

“Greening up” recycling



The Spokane River flows through the center of the city.

Introduction

Waters in urban areas are especially vulnerable to pollution problems due to their proximity to concentrated human activity. Industries, businesses, and residential areas are all sources of pollutants that can run off to stormwater systems. These stormwater systems then transport the pollutants to streams or groundwater. To address water quality problems in urban areas, the Department of Ecology (Ecology) developed the Urban Waters Initiative. In Spokane, Washington this initiative is a partnership between Ecology and the Spokane Regional Health District, and is a key component of a new Spokane River

Regional Toxics Task Force. This team works with businesses and industries to identify sources of pollution and implement fixes to prevent pollution from reaching the Spokane River through stormwater and combined sewer systems.

Problem

Recycling might be a great practice, but it can be messy and a source of pollution. Recycling facilities collect and process many different materials from many places, which can result in a lot of different potential pollutants all at a concentrated site. The recycling process may produce pollutants, or the recyclable material may have a polluting residue in or on it. If proper best management practices (BMPs) are not in place, a rain event could result in a toxic stew of pollutants running off the site and polluting natural water sources.

Project or event goals

August 2010, Ecology staff from the Urban Waters Initiative conducted an inspection at Pacific Steel and Recycling in Spokane. The inspection revealed several conditions that could result in storm events carrying pollutants off site. For example, recycling bins and dumpsters did not have lids covering them so when it rained, stormwater mixed

with the materials carrying pollutants to the nearby stormwater system. The inspectors also noted there were no catch basins upstream of several drywells. Without catch basins, recycling process waste could reach the drywells, which would be a violation of Underground Injection Control (UIC) requirements. In addition, there were automobile fluid collecting sites and several pieces of machinery leaking fluids that needed to be addressed.



Recycling machinery with evidence of fluid leaks and debris



Scrap metal and open bins

Ted Hamlin, the Urban Waters Initiative inspector, sent a letter to Pacific Steel and Recycling detailing the problems observed and the BMPs that should be put in place to prevent polluted runoff from leaving the site. The letter requested a written plan for implementation of the BMPs or Pacific Steel's proposed alternatives.

Pacific Steel and Recycling hired Schwyn Environmental Services, LLC (Schwyn) to develop the implementation plan, which was submitted to Ecology in October 2010. Several of the recommendations from the inspection had already been put in place, and all recommendations had a schedule by which they would be completed. For issues that could not be addressed immediately, Schwyn and Pacific Steel initiated staff training on containment and housekeeping practices to prevent contaminants from leaving the site.



Milestones and outcomes

In November 2011, Ted Hamlin made a follow-up visit to Pacific Steel and Recycling to ensure all necessary site changes had been made. During this inspection, he did not find any remaining problems. New roof gutter systems were channeling roof runoff away from processing areas to new drywells; a new grassy swale was scheduled for construction; catch basins were in place to intercept debris; and no fluid leaks were evident on site. The only recommendation to come out of the visit was “continue to be vigilant in your pursuit of environmental stewardship.”

Project highlights

Immediately after Ecology's site visit in August 2010, Pacific Steel and Recycling modified existing BMPs and implemented new BMPs to address concerns. Within two months, the recycling company had hired an environmental firm and an engineering firm to develop plans and designs to address the problems. Sometimes a site visit is all that is needed to launch actions that will protect water quality.



Partners

- Ted Hamlin, Water Quality Urban Waters Initiative Inspector, Ecology
- Pacific Steel and Recycling
- Schwyn Environmental Services
- J-U-B Engineers, Inc.

Funding

Pacific Steel and Recycling paid for hired services and BMP implementation.

For more information

Ted Hamlin, Urban Waters Inspector
Water Quality Program
Eastern Regional Office
509-329-3573
ted.hamlin@ecy.wa.gov

Story written by:
Elaine Snouwaert
Water Quality Program

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