

TABLE 7- 1

**Key Actions Taken to Control Potential Sources to Storm Water**  
*Northwest Pipe Company, Portland, Oregon*

Storm Water Actions	Best Management Practices and Other Actions	Site Remediation Actions
Completed investigation of potential zinc sources at site; tested and painted 6.7 acres of building roof to reduce zinc in roof runoff by more than 90 percent and zinc in overall site runoff by 79 percent (2009)	Replaced bag houses for sand blast operation with more modern particulate filter system	Independently characterized site and conducted focused soil removal in conjunction with Northwest Pipe taking ownership of the site (1989)
Installed closed loop storm water recycling system and supplemental storage for the cement-mortar lining area (2009)	Enclosed the cement batch plant mixture system to reduce dusting	In conjunction with DEQ, investigated identified areas of potential concern and completed soil removal of limited areas that were classified as hot spots under the Oregon Hazardous Substance Remedial Action rules (2001-2011)
Re-routed storm drainage away from failed offsite storm line on adjacent property and installed pump station to direct site discharge to Outfall 18/WR-123 (2002)	Replaced old paint line to reduce incidental overspray	Completed feasibility study and implemented DEQ-approved capping remedy of previously-unpaved areas of the site with asphalt to prevent storm water and site worker contact with potentially-contaminated soil (2012)
Installed test ports for storm water monitoring (2002)	Moved cement-mortar rebound and recycle sand management operation under roof	
Install and periodically maintain catch basin filters to reduce the potential for suspended solids or oil & grease to enter storm water system (ongoing)	Installed above-ground fuel storage with secondary containment and segregated storm water drainage system with shut-off valve (2012)	
Completed video survey of storm water system and addressed identified issues, such as previously unknown lines and line blockages, where identified (2011)	Periodically jet-clean storm water lines to remove settled solids, if any, in system (ongoing)	
Closed catch basins that had been brought under roof by expanding the main production building roof (2006)	Installed covered exterior waste bins and moved scrap metal staging bins under roof (2011)	
In conjunction with the soil capping remedial action, completed site storm water discharge modeling, designed and constructed new site grading to improve storm water drainage, and installed new catch basins and storm water line cleanouts(2012)	Stored lubricants and cutting oils under roof inside main production building (2002)	

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Install, operate, and maintain two above-ground storm water treatment systems, one for each storm water line leaving the site, to reduce suspended solids and associated concentrations of metals and hydrophobic organic constituents in storm water (2011-present)	Sweep facility roads weekly to reduce potential for entrainment in storm water (ongoing)	

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