Source Control: Legal Authority and Policy Goals

Presented at Business & The Environment
November 8, 2011
Session 4: Source Control–Preventing Downstream Contamination

Joan P. Snyder, Esq.
Stoel Rives LLP
900 SW Fifth Avenue, Suite 2600
Portland, OR 97204
(503) 294-9657
jpsnyder@stoel.com
Regulatory Contexts Where Source Control Applies

- Stormwater permits
  - General permits (e.g. Oregon 1200-Z, 1200-COLS, 1200-C)
  - Individual permits
- AUTHORITY: Clean Water Act
- GOAL: to prevent exceedance of
  - in-stream
  - risk based criteria established for protection of
  - human health and ecological receptors
Regulatory Contexts Where Source Control Applies (cont.)

- Portland Harbor EPA/DEQ Joint Source Control Strategy
- AUTHORITY: Oregon Cleanup Law, ORS 465.200 et seq. and federal Superfund, 42 USC 9601 et seq.
- GOAL: to reduce risks to human health and ecological receptors from sediment and surface water of the Willamette River
What Source Controls Do Stormwater Permits Require?

“Best Management Practices” (1200-C, old 1200-Z) or “narrative technology-based effluent limits” (new 1200-Z). E.g., for 1200-Z:

- Containment, Covering Activities and Stormwater Diversion/Minimize Exposure
- Oil and Grease (eliminate or minimize)
- Waste Chemicals and Material Disposal
- Erosion and Sediment Control
- Debris Control

- Dust generation and Vehicle Tracking of Industrial Materials
- Housekeeping
- Spill prevention and response procedures
- Preventative Maintenance
- Employee Education
- Non-stormwater discharges (eliminating unauthorized discharges)
• Control measures to meet numeric and narrative effluent limits that are “technologically available and economically practicable and achievable in light of best industry practice”
• Corrective Actions required by conditions of the permit (e.g. if permittee determines necessary through its investigation of causes of benchmark exceedance)
• Corrective Actions required by DEQ or its agent to meet narrative or numeric effluent limits
• All as set forth in the permit or in a Stormwater Pollution Control Plan (in 1200-Z) or Erosion and Sediment Control Plan (in 1200-C)
Stormwater Permit Continuous Improvement Cycle

- Do It!
- Implement Action Plans!
- Inspect and Document!
  (DMRs, monitoring reports, monthly inspection reports, Action Plans)
- Communicate It!
  (Employee Education)
- Write It!
  (SWPCP and revisions)
Stormwater Source Control Tips—Write It!

- SWPCP or ESCP
  - *should* address and meet every significant applicable term of stormwater permit
  - *should not* include non-permit-required activities or even more ambitious schedules (use separate documentation):
    - “Failure to implement any of the control measures or practices described in the SWPCP is a violation of the permit.”
  - Retain on site, and submit to DEQ or agent in limited circumstances
Stormwater Source Control Tips--Communicate It!

• Train
  – Employees
    • All employees in areas where industrial materials exposed to stormwater and employees responsible for implementing SWPCP
    • Within 30 days of hire (or rotation into assignment)
    • Annually thereafter
    • Document Training!! (who, what, where, when)
  – Train Up (management, impacted operations)
    • Particularly penalties and cost consequences
Stormwater Source Control Tips--Do It!

• All of it
  – See slide 7 above—SWPCP *should not* include activities not required by permit that you may not do
Stormwater Source Control Tips—Inspect and Document!!

• Monitoring
  – Evaluate permit options to make best choices for your facility (use cost/benefit analysis for decision)
    • Grab or composite
    • Monitoring representative outfalls
  – Monitoring Variances for missed samples
    • If rainfall <20% of average, or no discharge due to retention, etc,
Stormwater Source Control Tips—Inspect and Document!! (con.)

– Monitoring Waivers
  • Establish that geo mean of four consecutive sampling events < benchmark, then submit request to DEQ
  • Important with new permit, given cost
    – Approx. cost now for 3 metals ($45), O&G ($50), TSS ($15)=$105 per outfall
      » Assume 2 outfalls and $700 to pay for sampling = $910 per event
      » 4 sampling events a year = $3640
    – E.g. with new permit discharging to Lower Willamette
      » Same from above = $3640
      » Add 303(d) impaired list twice a year—two more metals ($20, more if need low DL), Pesticides (to get aldrin, dieldrin, DDX) ($225), PCBs ($170), pentachlorophenol ($90), PAHs ($300) = $805 per outfall extra x 2 outfalls x 2 samples per year = $3220 extra
      » Add cadmium, chromium and nickel, 4 x a year for 2 years = $240
      » Total $7100 in stormwater monitoring direct costs
Stormwater Source Control Tips—Inspect and Document!! (cont.)

- Monthly Inspections
  - Follow documentation requirements of permit, need to be able to show that BMPs applied
  - Keep for three years
- Reporting noncompliance which may endanger health or the environment
  - Within 24 hours
  - Written explanation within 5 days (or 4 days for upset or bypass)
- Reporting Any Other Noncompliance
  - At the time monitoring reports are submitted
Stormwater Source Control Tips—Inspect and Document! (cont.)

• When you have a benchmark exceedance:
  – The benchmark exceedance is *not* a permit violation
  – These *are* permit violations if you have a benchmark exceedance:
    • Failure to investigate and determine if corrective action is required or if SWPCP revisions are required
    • Failure to prepare an Action Plan/Tier I or II reports
    • Failure to implement the corrective action
    • DOCUMENT EACH STEP!
Policy Thoughts About Source Control Under Stormwater Permit

• All permittee actions under Stormwater permit should be in furtherance of goal to prevent exceedances of in-stream risk based criteria established for protection of human health and ecological receptors.

• Ask:
  – Am I/or is DEQ correctly interpreting the permit requirements?
  – Would my facility be better off with an individual permit?
Policy Thoughts About Source Control Under Stormwater Permit (con.)

- Does Oregon need a more nuanced approach to stormwater permitting?
  - Do we need a 93 page permit for every facility? Could industry-specific (and/or water body specific) permits be both shorter and more specific, including targeted (and therefore lower) monitoring requirements?
    - Instead, focus on what we are exceeding in the water body and which sources need control? Focused on load rather than concentration?
    - Could that include less onerous general permits based solely on BMPs for low-flow, low-risk facilities, with fee to support outfall monitoring?

- If we are focused on the goal of reducing human health and eco risk in-stream, does this effort give the biggest bang for the buck? Are we better off focusing some of this effort on sources other than those currently regulated under the 1200-Z?

Compilation/annotation of a number of studies
Especially sediment cores from Lake Ballinger sampled through USGS National Water-Quality Assessment Program (recently posted at http://tx.usga.gov/coring/)
Figure 15.
History of Benzo(a)Pyrene Contamination in Lake Washington and Lake Ballinger Sediments

[Graph showing data points and trends over time for Benzo(a)Pyrene contamination in Lake Washington and Lake Ballinger sediments.]

Origin: Bill Yale
Sediment Core Data: "Van Metre, et al., 2008"
If I’ve got a stormwater permit, do I still need to worry about Source Control under the DEQ Cleanup Program?

Business & The Environment
Tuesday, November 8, 2011, Portland, Oregon
Portland Harbor Source Control Goes Beyond Stormwater

- “Source Evaluation” and “Source Control Measures” required
  Under the Portland Harbor EPA/DEQ Joint Source Control Strategy for:
  - Direct discharges
  - Groundwater
  - Erosion/leaching
  - Overwater activities
  - Air Pollution

- Compliance with Your Stormwater Permit May Not Shield You From Additional Source Control Requirements Relating to Stormwater
“Recent laboratory tests of bottom-dwelling critters exposed to [Thea Foss] Waterway sediment confirm it has been recontaminated. The problem is excess phthalates, or plasticizers, which enter the waterway through Tacoma's storm drain system, said EPA, city officials and others. . . . Portland-based PacifiCorp and two other utilities spent $8.5 million to clean up that part of the Superfund project. The rest of the Foss cleanup - costing more than $90 million - was coordinated by city officials.”
But what’s the authority?

- Federal Superfund:
- CERCLA 107(j):
  “Recovery by any person (including the United States or any State or Indian tribe) for response costs or damages resulting from a federally permitted release shall be pursuant to existing law in lieu of this section.”
- CERCLA 101(10):
  “The term ‘federally permitted release’ means (A) discharges in compliance with a [NPDES permit], [or] (B) discharges resulting from circumstances identified and reviewed and made part of the public record with respect to a [NPDES permit] and subject to a condition of such permit, [or] (C) continuous or anticipated intermittent discharges from a point source, identified in a [NPDES permit] or permit application, which are caused by events occurring within the scope of relevant operating or treatment systems . . .”
But what’s the authority?

- Oregon Cleanup Law:
  - **OAR 340-122-030 (2)**
    “Conditional Exemption of Permitted Releases. These rules do not apply to permitted or authorized releases of hazardous substances, unless the Director determines that application of these rules might be necessary in order to protect public health, safety or welfare, or the environment. These rules may be applied to the deposition, accumulation, or migration resulting from otherwise permitted or authorized releases.”
  - **OAR 340-045-0080(1):**
    “A permittee in compliance with a [NPDES permit] during its term is considered to be in compliance for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403, and 405(a)-(b) of the federal Clean Water Act (CWA) and ORS 468B.030, 468B.035, and 468B.048, and implementing rules, applicable to effluent limitations, including effluent limitations based upon water quality basin standards, and treatment systems operation requirements.”
What does Cleanup-based Source Control Require, and What Do I Need to Do?

- EPA/ DEQ PORTLAND HARBOR JOINT SOURCE CONTROL STRATEGY -- FINAL, DECEMBER 2005
  - Upland Site Characterization
    - Identify complete migration pathways
    - Identify site COIs
    - Collect appropriate samples and screen against against JSCS Table 3-1 Screening Level Values and apply weight of evidence approach to identify pathway specific COPCs
    - For stormwater and storm line solids, compare to DEQ “Tool for Evaluating Stormwater Data, Appendix E to Guidance for Evaluating the Stormwater Pathway at Upland Sites, as updated October 2010
  - Perform Source Control Evaluation
  - If necessary, implement Source Control Measures
Portland Harbor JSCS Source Control --Tips

• Actions should always be informed based on the GOAL: to reduce risks to human health and ecological receptors from sediment and surface water of the Willamette River
  – Don’t implement DEQ guidance mechanistically if it does not support that goal
    • e.g. preference for treatment at the source may not achieve best results if there is a more effective end-of-the-pipe treatment option
  – Table 3-1 screening values are just screening values
    • Pay attention to derivation of values; e.g. Metals screening values apply to dissolved concentrations
Portland Harbor JSCS Source Control – Tips (cont.)

- Even the stormwater and storm line solids concentrations in Appendix E Tool in *Guidance for Evaluating the Stormwater Pathway at Upland Sites* are just values for comparisons.
  - Concentration-based screening tools do not explain the load to the receiving water body or generally the relevant in-stream concentrations that will be created by that discharge.
- If your discharge does not cause an exceedance of the applicable in-stream water quality criteria, there should not be a need for source control.
DEQ’s authority for source control is the same as its authority to require remedial investigations or remedial action. THERE ARE LEGAL LIMITS

- There must be a “release or a threaten release of a hazardous substance” AND
- The party ordered to perform the source control evaluation or source control measures must be a liable party under ORS 465.255

- Owner/operator at the time of the release
- Owner/operator who bought knowing of the release
- Owner/operator who sold knowing but without disclosure
- Someone who exacerbated the release
- Someone who hindered or delayed entry or investigation
Portland Harbor JSCS Source Control --Tips (cont.)

- If a party who is not liable performs under DEQ order, they have the right to seek reimbursement of costs from the State of Oregon within 60 days of completion (ORS 465.265(7)), although DEQ’s form voluntary agreement has parties waive this right

- EPA’s authority adds ability to require response from “current owner” if not protected by innocent purchaser defense and if CERCLA hazardous substance (e.g. not pure petroleum)