SPU Source Control: Spill Response and Water Quality Investigations

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Source Control Program

- Business Inspections
- Stormwater Facility Inspections
- Illicit Discharge Detection and Elimination
- **Spill Response**
- **Water Quality Investigations**

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What's the Difference?

Spill

- Spills are active discharges where there is an imminent threat to the environment (immediate clean up is needed)

SWQ Investigations

- A situation where there is not an active imminent threat to the environment (education and technical assistance is needed)

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SPU Spill Responders

- Network of SPU employees
- Available 24/7
- Goal is to protect SPU system and the environment
- Under rigorous training
- Train annually
- Meet quarterly

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Training

- Hazardous Materials Emergency Response Technician (ERT) 24HR (In House)
- Hazardous Waste Operations and Emergency Response (HAZWOPER) 40 HR
- National Incident Command & Management System
- Annual refresher for HAZWOPER and ERT
- Advanced Respiratory Protection

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Responsibilities of Spill Responders

- Site Safety & Security
- Spill Cleanup / Containment
- Infield regulatory reporting
- Document spill activities
- Act as a technical resource
- Incident Command (as warranted)
- Mobilize SPU Resources (including contractors)
- Coordinate with response agencies (USCG, ECY, EPA)

Available Equipment

- 16' 75HP Aluminum Boat
- Spill Response Trailer
- Cache of absorbents
- Monitoring equipment
- Sampling equipment
- Spill Response Van
- Containment / Decon Equipment
- Portable 800Mhz Radio

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How Dispatch Occurs

- **Citizen or agency report to Operations Response Center(ORC)**

- **Dispatcher gathers vital information and logs it into intake page**
  - □ Type of material and quantity , location, contact info, description of issue

- **Alphanumeric page generated and Spill Responder automatically activated**

- **Spill Responder gathers initial data and reports to scene immediately**

  Approximately 125-150 spill responses per year

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Interagency Cooperation

Typical Response Partners:

- WA Ecology
- Seattle Transportation
- Seattle Fire
- Seattle Police
- Seattle Harbor Patrol
- King County Industrial Waste
- King County Metro Transit
- King County Surface Water
- EPA
- WSDOT
- Coast Guard

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Interagency Cooperation

Minor Incidents

☐ SPU response as primary regulatory agency

☐ Communication with Ecology Responders

Moderate Spills

☐ SPU may respond as initial agency and communicate back with en route Ecology Responders

☐ SPU may coordinate contractor resources depending on affected area.

☐ No predetermined roles but usually arranged in first few minutes of response utilizing ICS

☐ Coordinated Public Information

Major/Large Spills

☐ SPU will take an investigative, response, unified command and public information role as needed

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BNSF Train Derail

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Accident I5- Milk Spill

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Water Quality Investigation Program

- SPU Web Form
- WQ Hotline
- ERTS
- ORC Dispatch

HOTLINE

Only Rain Down the Drain

**Stormdrains are for stormwater
Please report violations**

(206) 684-7587

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WQ Investigation Process

- Receive call

- Gather initial information (generate map, check for prior reports, etc.)

- Conduct site visit to gather information

- Determine outcome

- Call back reporting party with results of investigation

Approximately 300-350 calls per year

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'Typical'
Water Quality Investigations

- Leaking Vehicles
- Business Not Implementing Best Management Practices (BMPs)
- Broken Private Side Sewer Lines
- Abnormal Surface Water Conditions (green, white)
- Illicit Discharges

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Example of a
Water Quality Investigation

The Issue: Several reports of discolored water from an outfall.

Initial response to location - no pollutant in system

- **Survey area looking up stream**

    - Nothing found, last MH below summer lake level

- **Sample water in outfall**

    - Samples indicate products

      associated with sewage

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Develop Response & Sample Plan
- Local business on the look out & reporting issue immediately
  - Lake level delay causing problem again
- Key response locations to isolate key sections of the drainage basin
  - Poor results after several events (lake level)
- Sample key points in basin
  - Identified hot spots and isolated sections of the system

CCTV of Hotspot area
- Found illicit connection (office building)

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Next Day….

So then…

- **Consult with monitoring group**
  - Installation of pH and flow monitors to automatically page SWQ group with events
- **Alarms initiated the response plan**
- **Two weeks and five alarms later we found an active discharge in the pipe**

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Enforcement

- Source Control team uses education, technical and enforcement to get compliance with Seattle Stormwater Code.

- Generally issue 20 - 30 Notices of Violation per year

- Issue penalties and suspended penalties (when appropriate)

- Generally, penalties are associated with negligence

- Use Ecology enforcement matrix to determine penalty amounts

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We Depend on the Citizens of Seattle

If you see something, say something ☺

Only Rain Down the Drain!

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