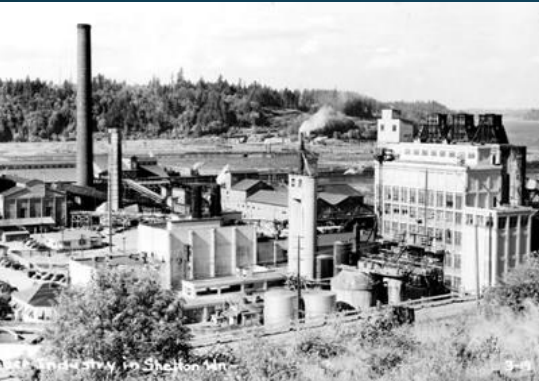


C Street Landfill



Rebecca S. Lawson, P.E., LHG Southwest Region Office Section Manager
Jason Landskron, P.E., Cleanup Project Manager, Toxics Cleanup Program-SWRO
Megan MacClellan & Stacy Galleher, Public Involvement

February 9, 2016

Overview

- Ecology
- State Cleanup Process
- Site history and background
- Agreed Order
- Next Steps and timeline
- Ways people can provide input
- Answer your questions



Toxics Cleanup

Who we are and what we do

- Our job is to implement the statutes of the Model Toxics Control Act
- Cleanup must protect human health and the environment
- Is designed for transparency and public engagement
- Important to be thorough and follow all of the steps of state cleanup regulations.
- Each site is unique and many factors can impact cleanup time frames.
- Public input is very important along the way.

Model Toxics Control Act Cleanup Process



```
graph LR; A[Site Discovery and Investigation] --> B[Site Hazard Assessment And Hazard Ranking]; B --> C[Remedial Investigation]; C --> D[Interim Actions]; D --> E[Feasibility Study]; E --> F[Selection of Cleanup Actions (Cleanup Action Plan)]; F --> G[Ecology's Final Cleanup Action Plan]; G --> H[Final cleanup];
```

**Site
Discovery
and
Investigation**

**Site Hazard
Assessment
And Hazard
Ranking**

**Remedial
Investigation**

**Interim
Actions**

**Final
cleanup**

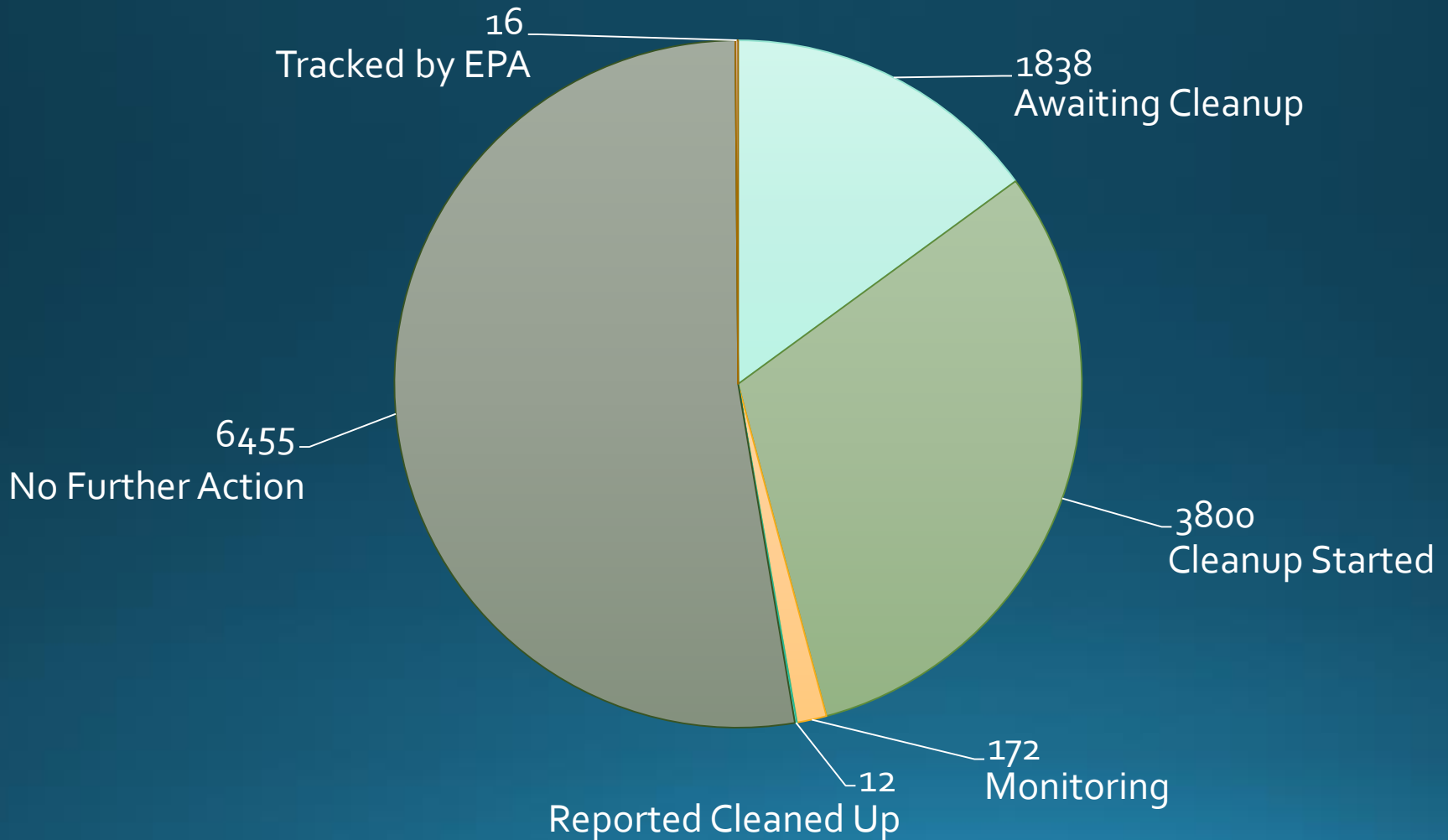
**Ecology's
Final
Cleanup
Action Plan**

**Selection of
Cleanup
Actions
(Cleanup
Action Plan)**

**Feasibility
Study**

Confirmed & Suspected Contaminated Sites

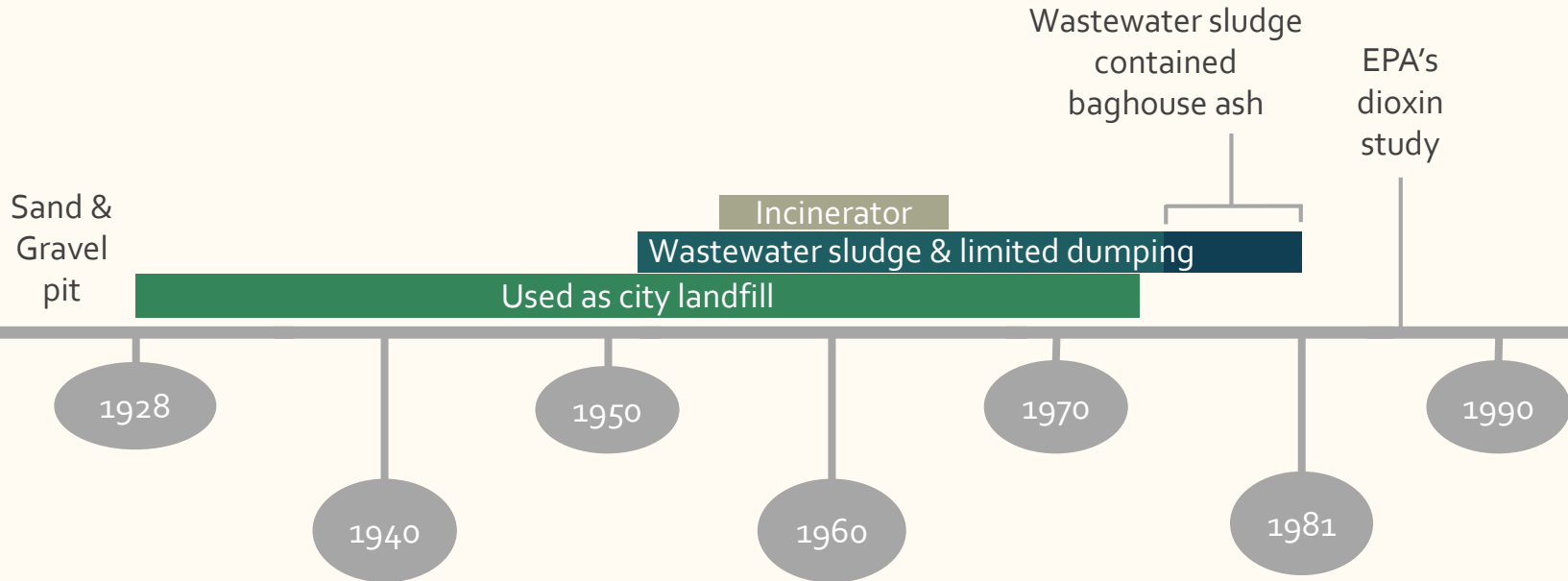
Snapshot: October, 2015



Area Map

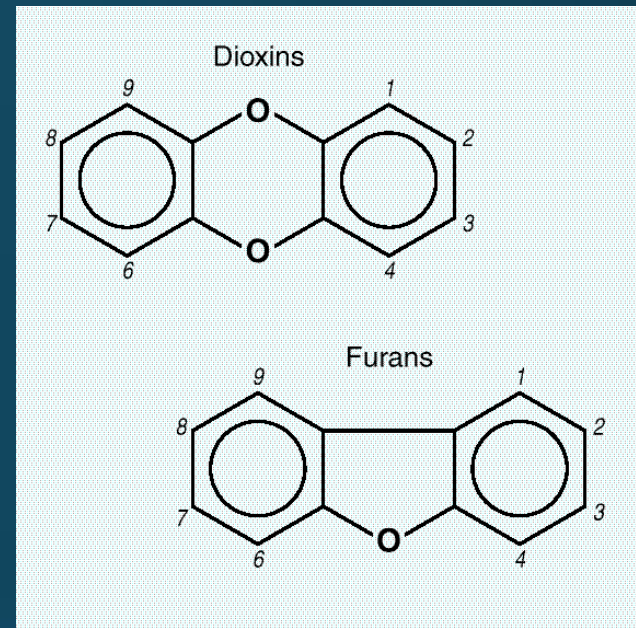


Site History



Dioxins

- There are 75 dioxin compounds and 135 furan compounds
 - 2,3,7,8-TCDD is the most toxic
 - Toxic Equivalent Quotient (TEQ)
- No commercial/industrial use
 - Created as a byproduct or naturally generated
 - Created by incomplete combustion in the presence of chlorine
 - Incineration, power plants, pulp and paper mills
- Primary pathway for getting dioxin into your body is ingestion
 - Dioxin bonds strongly to soil



1986 EPA Study

Assessed risk of dioxin exposure from the Simpson Timber Company boiler to the surrounding community

- Simpson baghouse ash contained 4.2 parts per billion (ppb) of 2,3,7,8-TCDD
- C Street soil contained 0.17 ppb of 2,3,7,8-TCDD
 - TEQ concentration of 3.1 ppb
- Residential soils were tested throughout Shelton and found to contain extremely low or non-detectable levels of dioxin

EPA concluded the dioxins at C Street remained a concern but the risk to the city residents was low

Ecology then listed the C Street Landfill as a Site to be further investigated.

Possible Contamination Sources

- Municipal Landfill
 - Metals, Petroleum, Methane



- Industrial Waste
 - Dioxins/Furans, PCB's, Solvents



- Demolition Debris



What is in this Agreed Order?



Requirements of the Agreed Order

1. Chemicals of Potential Concern and Screening Levels Technical Memorandum
2. Remedial Investigation Work Plan
3. Remedial Investigation Field Work
4. Draft Remedial Investigation Report
5. Draft Feasibility Study
6. Draft Cleanup Action Plan

Work schedule

- Follow schedule of when documents are due

Deliverable	Schedule
Draft Chemicals of Concern Technical Memo	45 days from the effect date of Agreed Order
Final Chemicals of Concern Technical Memo	30 days from receiving Ecology comments on the draft

- Monthly Progress Reports
- How long will this take?

How to Comment on the Agreed Order

- Comment period February 8 thru March 9, 2016
- Fill out a comment form tonight
- Send comments to:
 - Jason.Landskron@ecy.wa.gov
 - Jason Landskron
Dept. of Ecology
Toxics Cleanup Program-SWRO
P.O. Box 47775
Olympia, WA 98504-7775

Ecology's website:

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=2295>

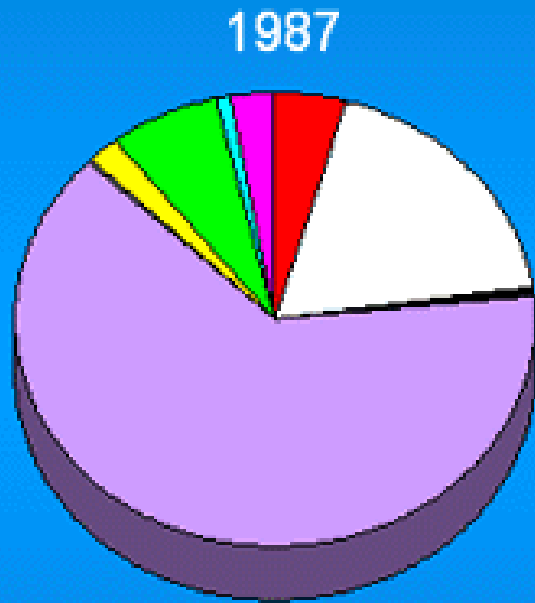
What happens next?

- Ecology will:
 - Review and consider comments
 - Respond to comments in a responsiveness summary
 - Send responsiveness summary to those who commented and post it on our website
 - Make changes to the agreed order if needed based on public comments
 - Sign the Agreed Order
- The City of Shelton will:
 - Do the items listed in the agreed order

Questions?



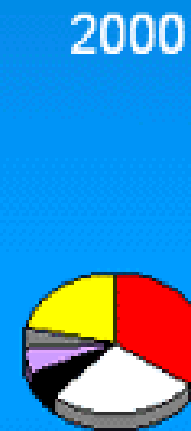
Dioxin Source Contributions 1987, 1995 and 2000



13,965 g TEQ



3,444 g TEQ



1,422 g TEQ

- Backyard Barrel Burning
- Municipal Wastewater Treatment Sludge
- Medical Waste Incineration

- Municipal Waste Combustion
- Coal-fired Utility Boilers
- Secondary Copper Smelting

- Cement Kilns
- Bleached Wood Paper and Pulp
- OTHER*