Treoil Industries Site Overview

August 1, 2018

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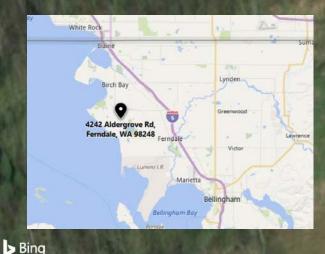


Treoil Industries Site Overview Location Management History **EPA** Removal What's Next? Concerns



Treoil Industries 4242 Aldergrove Rd Ferndale, WA

- 34 acres of industrial property
- 1.8 miles from Strait of Georgia





March 2017

100 feet 25 m © 2018 DigitalGlobe,© 2018 HERE



Treoil: Site Management

DEPARTMENT OF ECOLOGY State of Washington	Management Areas
Hazardous Waste and Toxics Reduction (HWTR)	Hazardous Waste Enforcement
Water Quality (WQ)	Industrial Stormwater General Permit
Toxics Cleanup Program (TCP)	Site Investigations, Hazardous Sites List

United States Environmental Protection Agency	Management Areas
EPA Region 10 – Emergency Management Program	Emergency Waste Removal

Whatcom County	Management Areas
Planning & Development Department	Business Permits, Fire Marshal
Health Department	Site Investigations



Treoil: History & Environmental Investigations



Ecology issued a **Notice of Violation** for the **discharge of spilled material** to a drainage ditch that eventually leads to the Strait of Georgia.

1994

Site placed on Ecology's Confirmed and Suspected Contaminated Sites List.

Ecology and **Whatcom County** conducted a **Site Hazard Assessment** under the Model Toxics Control Act (MTCA). The site was listed on the Hazardous Sites List for confirmed contamination of **soils with metals**, **petroleum hydrocarbon**, **and polycyclic aromatic hydrocarbons (PAHs).** The site was ranked through the **Washington Ranking Method** (WARM) with a score of **"2."** (Sites are ranked between 1 and 5, where **"1"** represents the highest level of risk to human and environmental health and a **"5"** the lowest.)

The **EPA** also conducted a **Removal Site Evaluation** to determine potential threats of discharge to waters of the United States and did not find a threat at that time but made recommendations for cleanup.

2006 [Multi-agency]

2000-2001

€EPA

A **multi-agency advisory visit** provided technical assistance and identified numerous site concerns.



Treoil: History & Environmental Investigations

• 2014 过 💿	Ecology received an additional formal complaint regarding the site. Ecology's HWTR and Whatcom County conducted an initial investigation and a dangerous waste compliance inspection identifying poor containment practices with waste and oily substances on the ground .
• 2015-2016	Ecology's HWTR Program initiated enforcement action in the form of an Administrative Order and an Amended Administrative Order to the property owners as a result of non-compliance with Dangerous Waste Regulations. Inspectors visited the site several times to note progress toward compliance. During one of these visits, conducted jointly with Ecology's WQ Program , it was determined that the site met qualifications for an Industrial Stormwater General Permit
● 2017 ₩ ≎EPA	Ecology monitored site progress and found conditions were not in compliance with the enforcement order . Due to concerns with imminent threats to human health and the environment, Ecology contacted the EPA for assistance. EPA removal began March 2017 and completed by August 2017.
Present	Ecology programs continue to monitor site progress and compliance.

Concerns



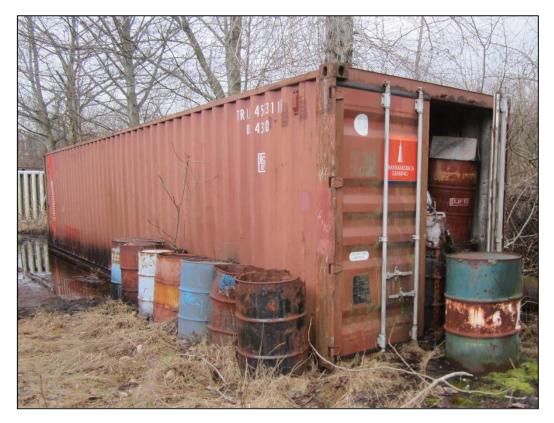
Overflowing containers and leaking tanks



Evidence of spills to unmapped drainage



Conditions Outside







Conditions Outside



Tanks actively leaking

Dead vegetation – Southwest corner - property low point



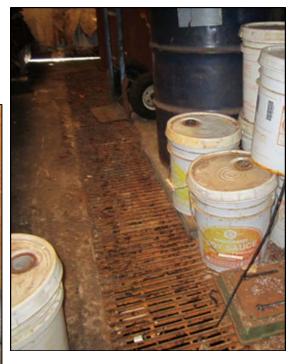


Warehouses



Drums of unknowns





Floor trench drain

Old chemicals



Warehouses



Containers with unknown contents, lab chemicals, tall oil or biodiesel related oils and reagents







EPA 2017 Emergency Removal

- Began March 13, 2017
- Completion August, 2017
- Remove CERCLA chemicals
- Remove pumpable tall oil
- Provide final recommendation for next steps (assessment, etc.)

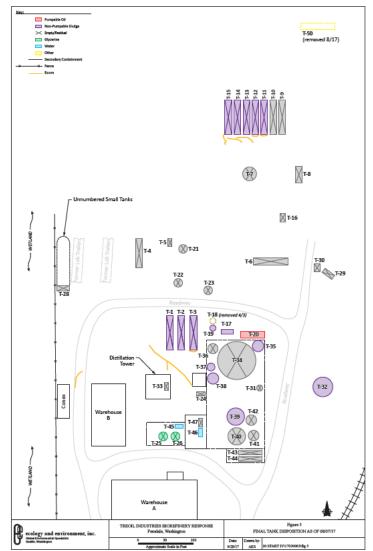


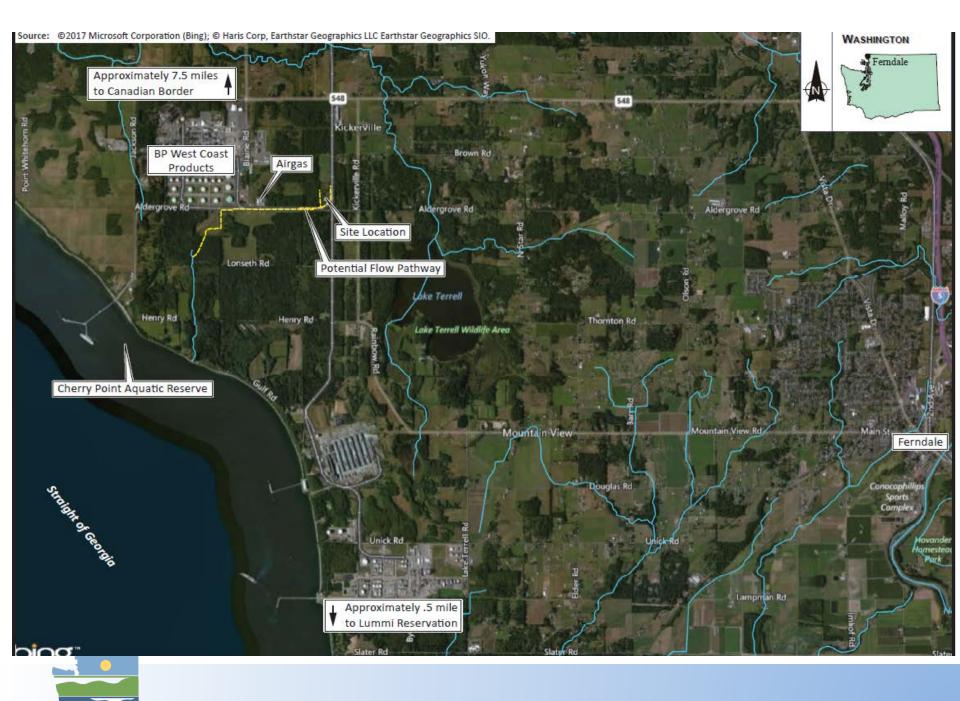
EPA 2017 Emergency Removal

6,750 gallons of crude glycerin 93,000 gallons of liquid tall oil and tall oil derivative wastes 275 tons of contaminated soil, sludge and debris 430 containers, 35 drums and 9 cylinders of hazardous chemicals 8 cubic yards of asbestos containing material

Remaining - 113,423 gallons

Approximate Removal Costs: EPA CERCLA - \$248,000 OPA Coast Guard - \$795,000





Solidification of oils for disposal



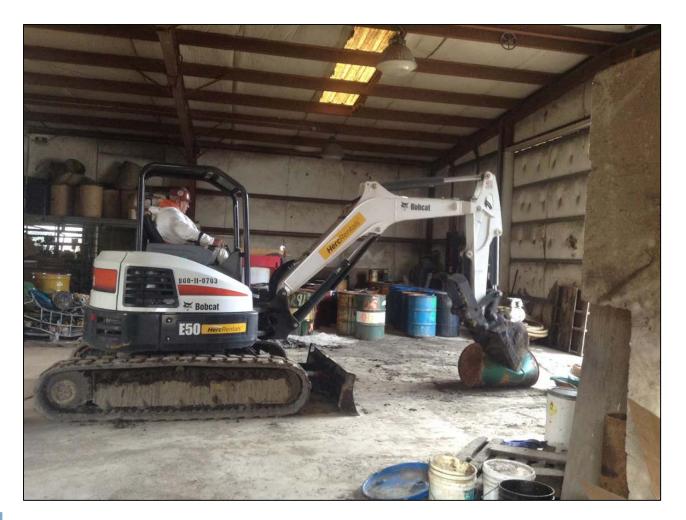


Overpacking of chemicals





Crushing drums for disposal





Buildings Following EPA Removal



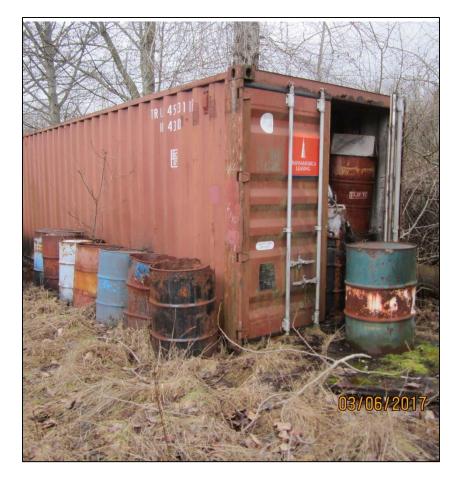


Buildings Following EPA Removal





Buildings Following EPA Removal











HWTR Sampling – Tank Contents

August 2, 2017

- Tanks 1 3
- Tank 20
- Tanks 12 & 13





HWTR Sampling – Tank Contents

Results

August 2, 2017

- Tanks 1 3, 12 & 13 (conclude that tanks 11 15 are all similar or same material)
 - Fish bioassay pass
 - Semi-volatile organics not dangerous waste

Tank 20

- Fish bioassay pass
- Inconclusive though detections of some chemicals of concern

September 28, 2017

Returned to re-sample Tank 20

• Test shows halogens > 100 ppm; therefore dangerous waste



Ongoing Ecology Actions

DEPARTMENT OF ECOLOGY State of Washington	Management Areas
Hazardous Waste and Toxics Reduction (HWTR)	Amended Order still in effect for remaining materials
Water Quality (WQ)	Compliance with Industrial Stormwater General Permit
Toxics Cleanup Program (TCP)	Site Investigations, Hazardous Sites List





United States Environmental Protection Agency



Whatcom County

Interagency Cooperation "Eyes on developments at site"



EPA Actions Following Removal

- Sampling Strategy Memorandum submitted to Ecology (E & E 2017b)
- Communication to property owner regarding the SPCC program, 40 C.F.R. Part 112, and need for formal tank integrity inspections and testing prior to operating



Thank you 🙂







SEPA https://response.epa.gov/site/site_profile.aspx?site_id=12015





Treoil Site

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