

J.H. Baxter Wood Treatment Facility

Proposed Cleanup Plan and Next Steps

June 11, 2019

Lane Community College



Topics We Will Cover

- Meeting format and introductions
- History
- Current situation
- Proposed cleanup
- Next steps

Topics We Won't Cover

- Active wood treatment operations
 - EPA and DEQ Hazardous Waste Programs
- Stormwater permit
 - DEQ Water Quality
- Odor and air emissions
 - Lane Regional Air Protection Agency (LRAPA)
 - Available at open house after presentation
- Oregon Health Authority reports



Please see contact list
on the info table

Meeting Format



- Presentation 6-6:45 p.m.
- Q&A 6:45-7:15 p.m.
- Open house 7:15-8 p.m.
- Not a public hearing
- Please silence phones
- Exit and restrooms



How to Comment

- Comment box
- Send comments to DEQ, c/o Ann Farris:
 - 165 E. 7th Ave, Eugene, OR 97401
 - farris.ann@deq.state.or.us
- Deadline is 5 p.m. Friday, June 14
 - Deadline for this plan
 - Further opportunity for comments going forward

Introductions

Oregon DEQ Environmental Cleanup

- Ann Farris, Project Manager
- Susan Turnblom, Toxicologist
- Michael Kucinski, Western Region Environmental Cleanup Manager
- Katherine Benenati, Public Affairs Specialist
- Carmin Sherlock, Spanish Interpreter



State of Oregon
**Department of
Environmental
Quality**



J.H. Baxter Representatives

- Jeanne Olson, Plant Manager
- Randy Pratt, GSI Water Solutions, Inc.,
Environmental Consultant

Project Vicinity



Neighborhood and Surrounding – “Off-site”

JH Baxter Facility – “On-site”

Groundwater flow direction

Eugene Springfield
Fire Station 8

Isabel Cards

Fairfield Baptist Church

M & M

GTS Interior Supply

Trus Joist

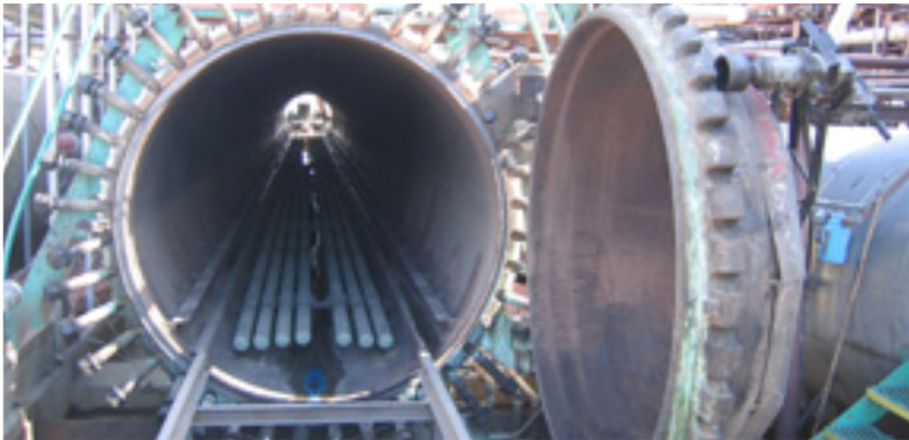
Life North American
Moving and Storage

Pacific Recycling

Wood Treatment Since 1943

Pressure treatment for wood preservation

- Telephone poles
- Railroad ties
- Construction materials



Preservatives including:

- Creosote
- Pentachlorophenol mixtures
- Metallic mixes

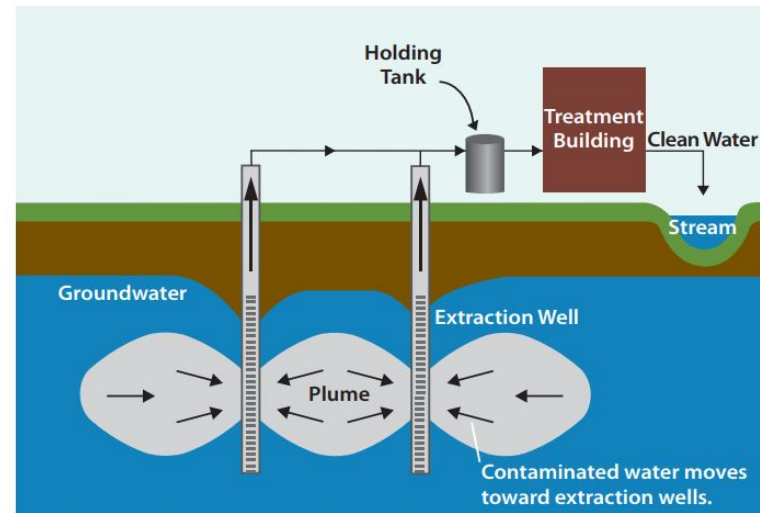
Aerial Photo of the Facility



Investigation and Cleanup Since 1980's

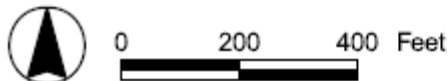
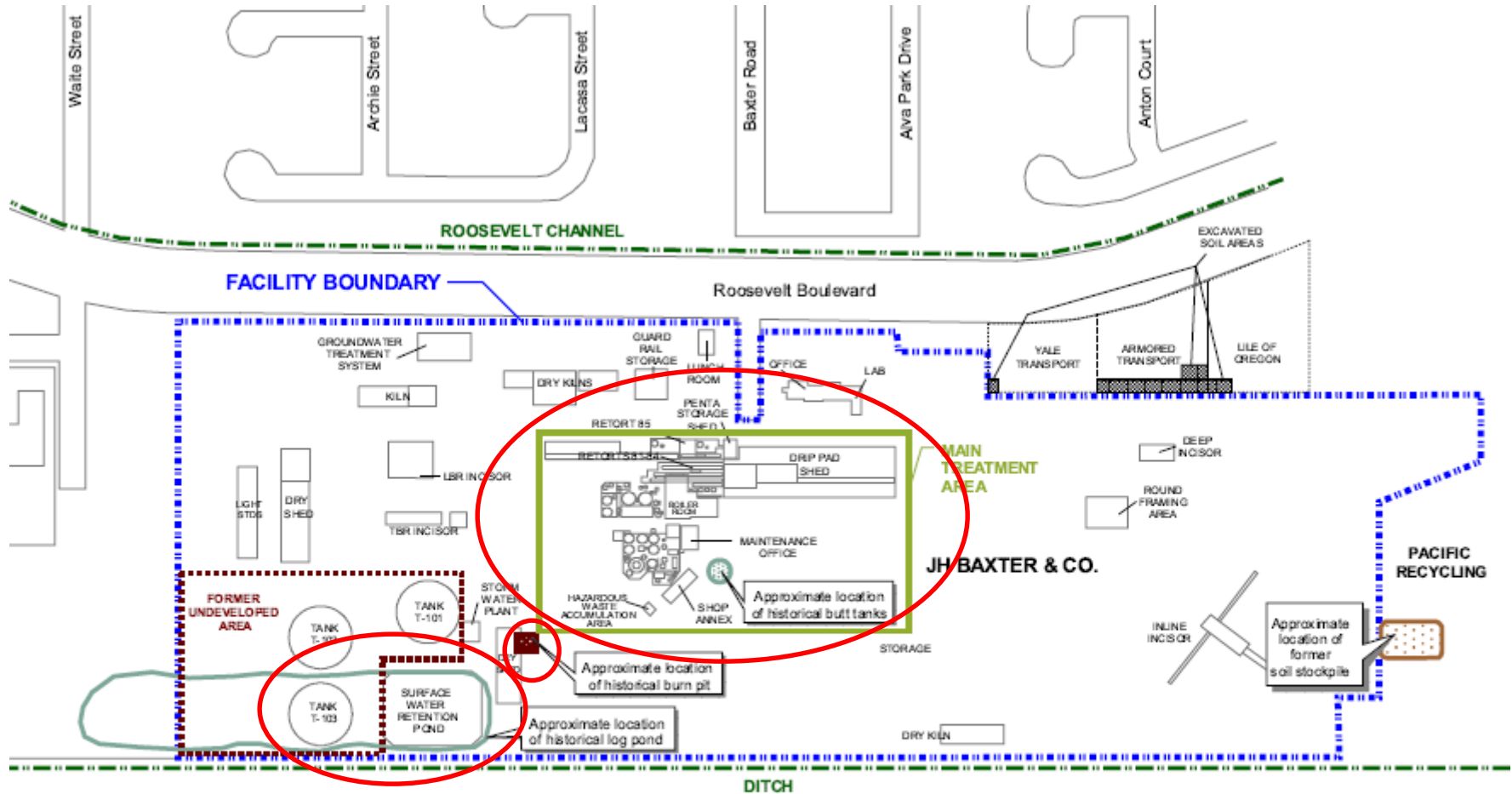


- 1985: Eight monitoring wells installed
- 1989: Consent Order signed requiring investigations
- 1990: 1st of numerous domestic well surveys
- 1989-2007: Extensive investigation, operational upgrades, and interim cleanup measures
- 2007-2018: Updated risk evaluation and cleanup options developed

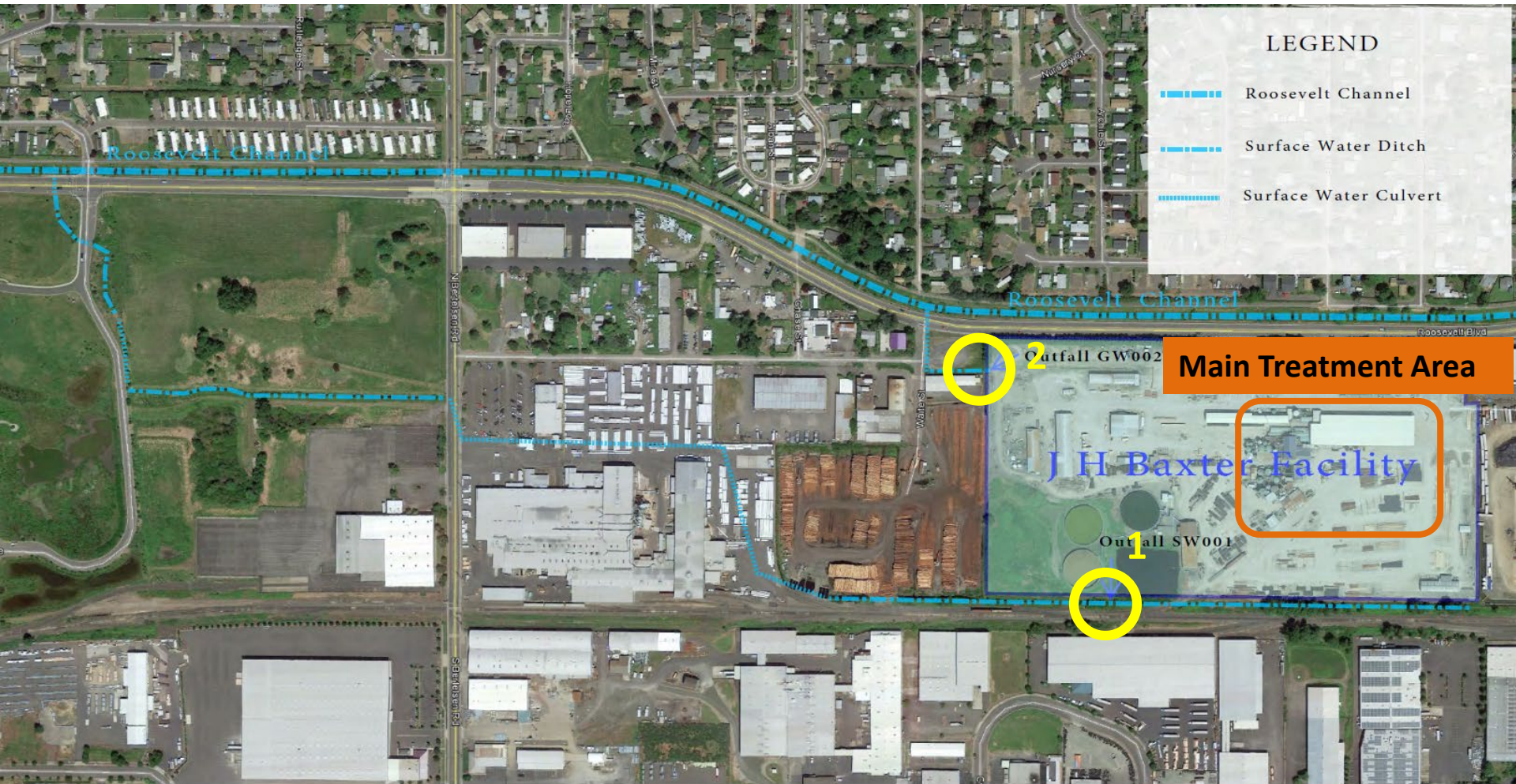


1994 Pump and Treat System Installed

Historical Sources of Contamination



Stormwater Discharge Points

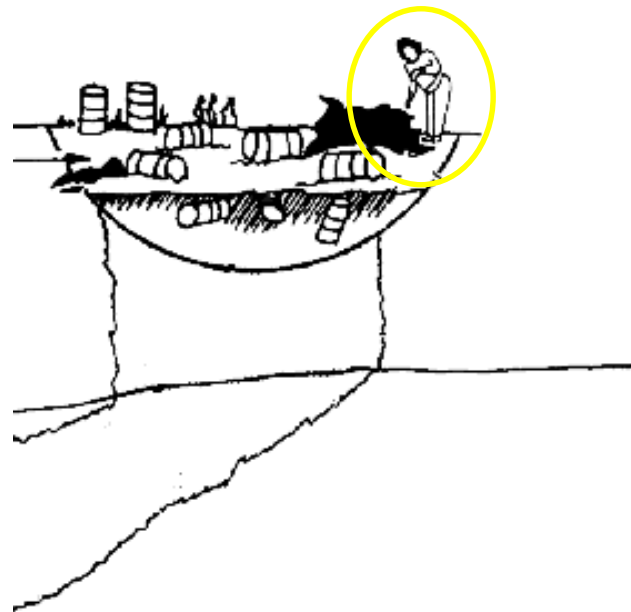


Primary Contaminants of Interest

- Metals - Arsenic, Chromium, Copper, Zinc
- Dioxins and Furans
- Creosote components
- Pentachlorophenol

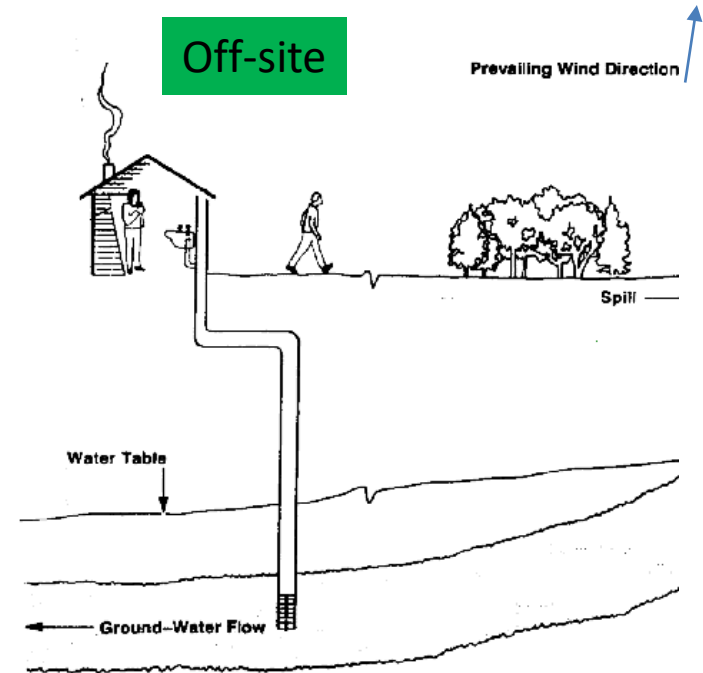
Potential Contact Onsite

- Workers on site
 - Accidentally swallowing or inhaling surface dirt
 - Digging into deeper soil
 - Coming into contact with groundwater



Possibilities Off-Site

- Breathing windblown dust
- Accidentally swallowing surface dirt
- Drinking or irrigating with groundwater



- Playing in the ditch
 - i. Swallowing sediment
 - ii. Swallowing ditch water

Also considered risk to insects, birds, plants and animals



Findings

- Soil on-site may pose a risk to workers if come into contact over many years
- Groundwater on and off-site may pose risk if used for drinking water long-term
- Sediment in on-site pond and southern ditch may pose a risk to humans if come into contact over many days

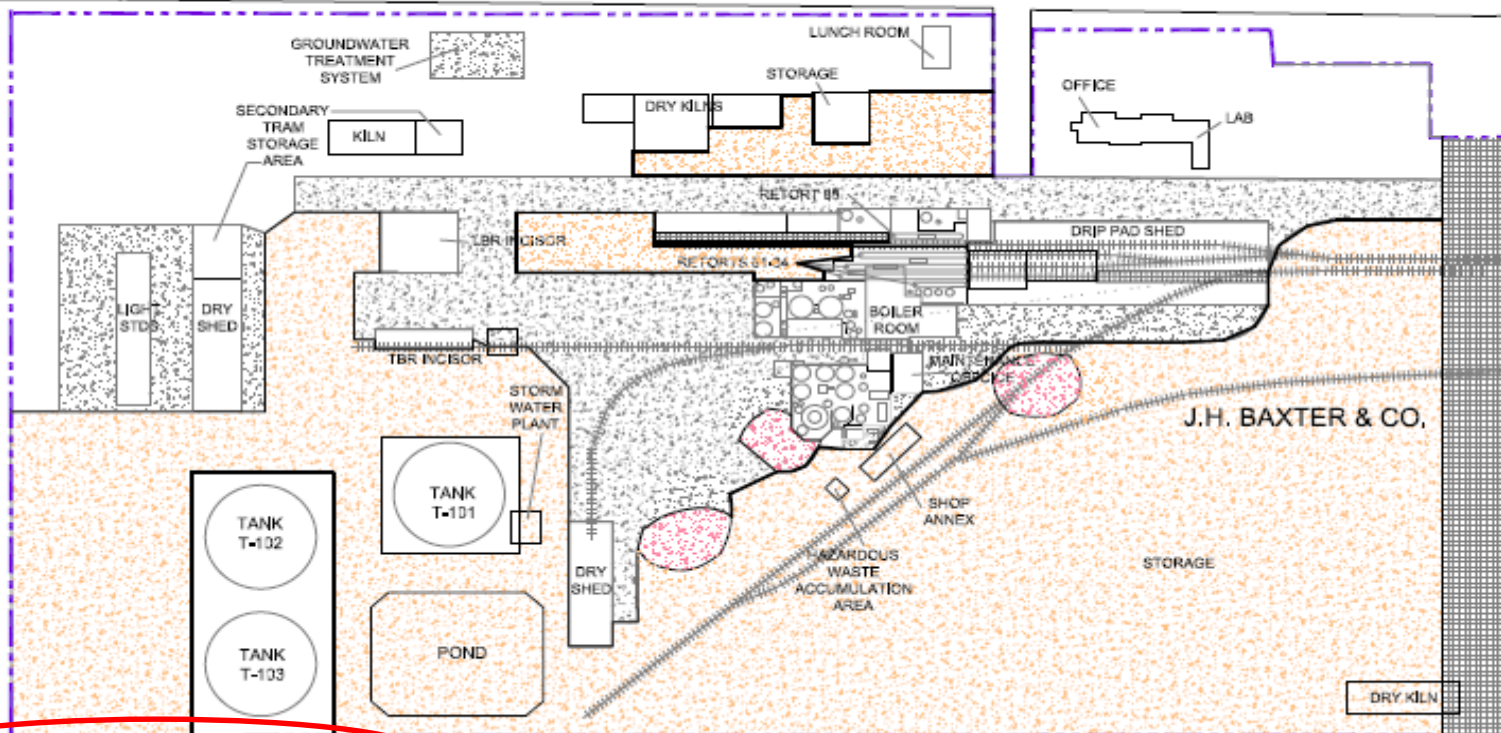
On-Site Soil

96 total soil samples tested...
arsenic, dioxins, and polycyclic
aromatic hydrocarbons

LEGEND

- FACILITY BOUNDARY
- RAILROAD
- ▨ PAVED AREAS
- ▨ AREAS WITH SOILS ABOVE HOT SPOT CLEANUP LEVELS
- ▨ AREA WITH SOILS ABOVE PROPOSED CLEANUP LEVELS

ROOSEVELT BOULEVARD

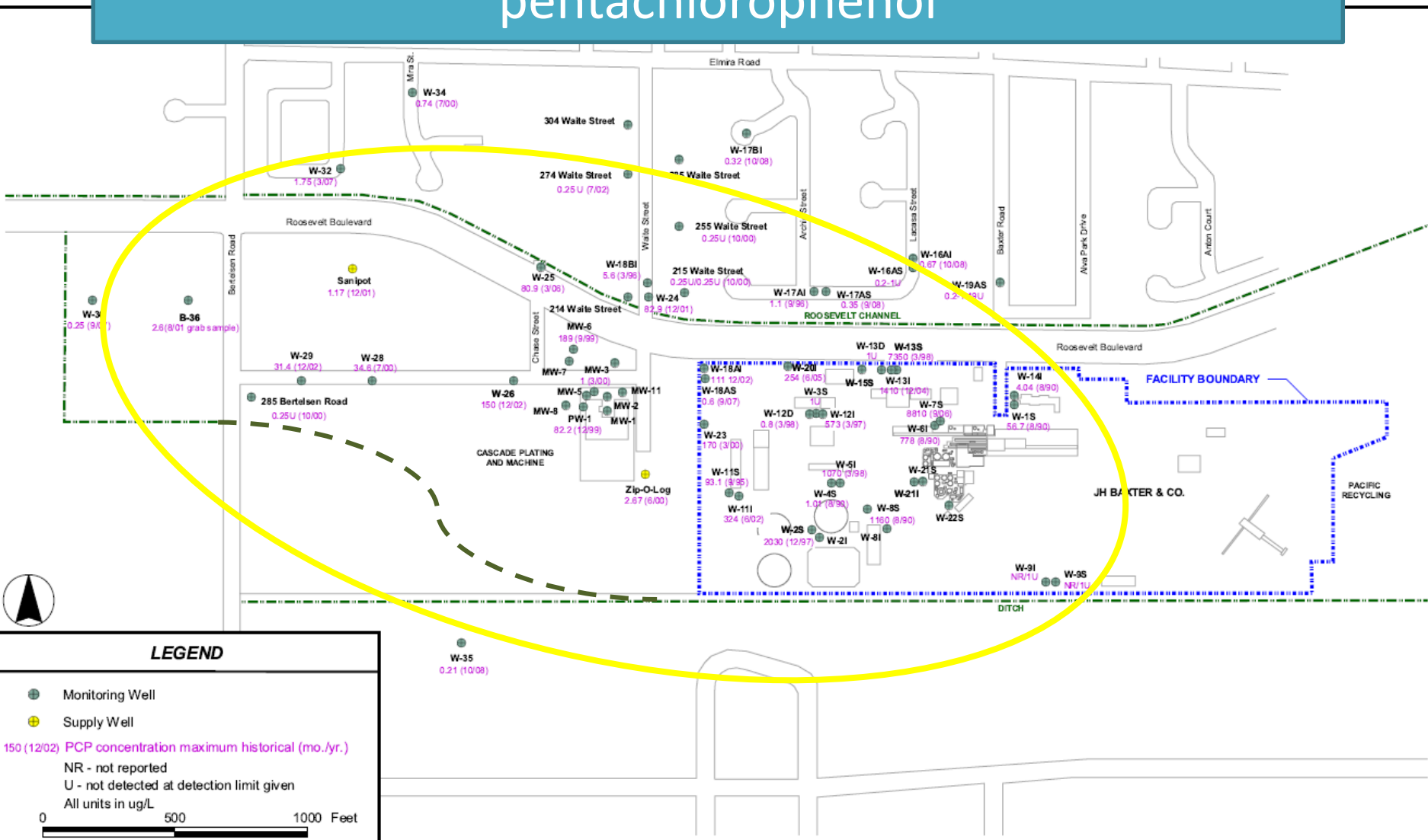


J.H. BAXTER & CO.

DITCH

Groundwater

32 Monitoring Wells... pentachlorophenol



LEGEND

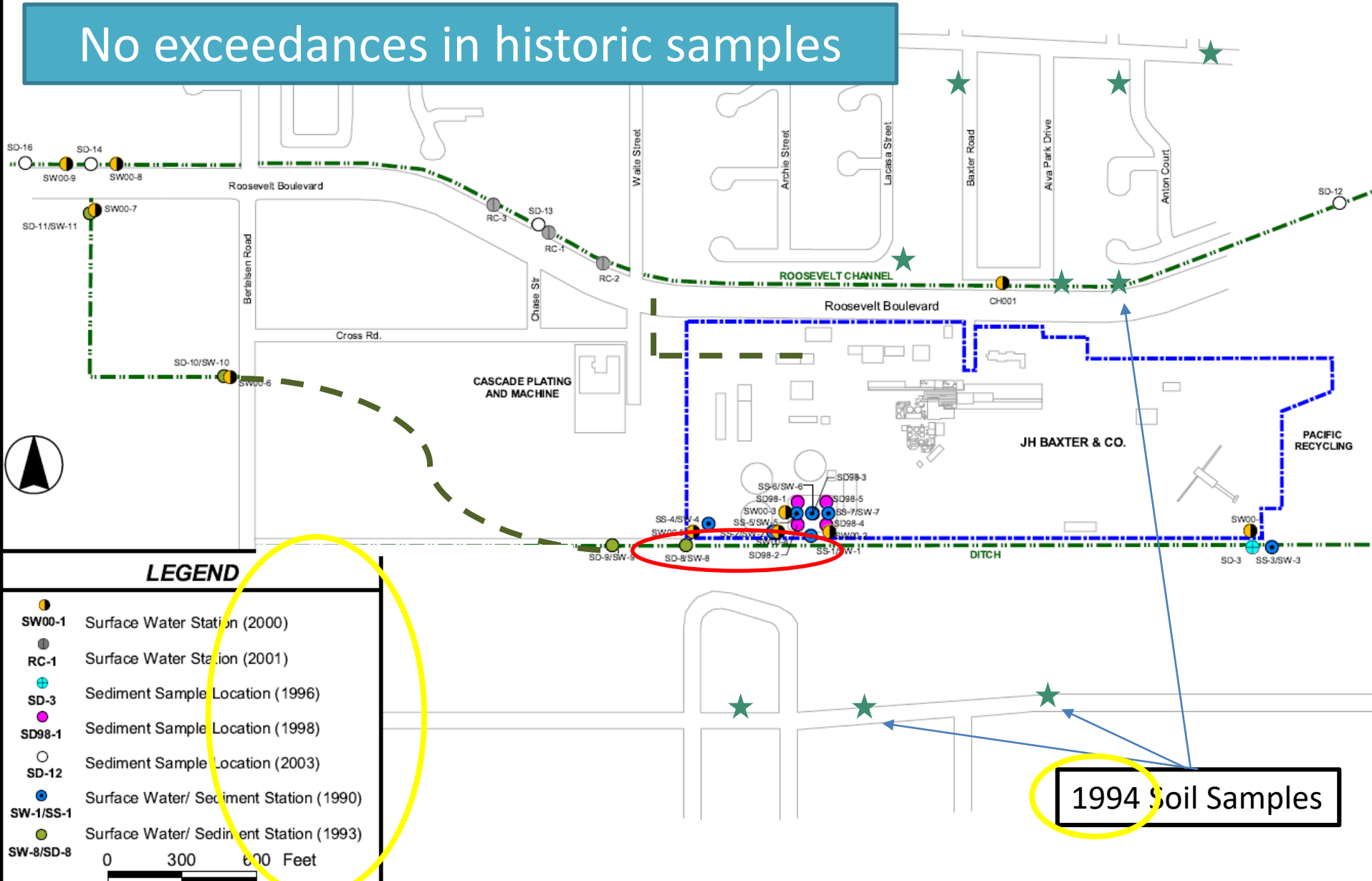
- Monitoring Well
- Supply Well

150 (12/02) PCP concentration maximum historical (mo./yr.)
 NR - not reported
 U - not detected at detection limit given
 All units in ug/L

0 500 1000 Feet

Off-Site Surface Samples

No exceedances in historic samples



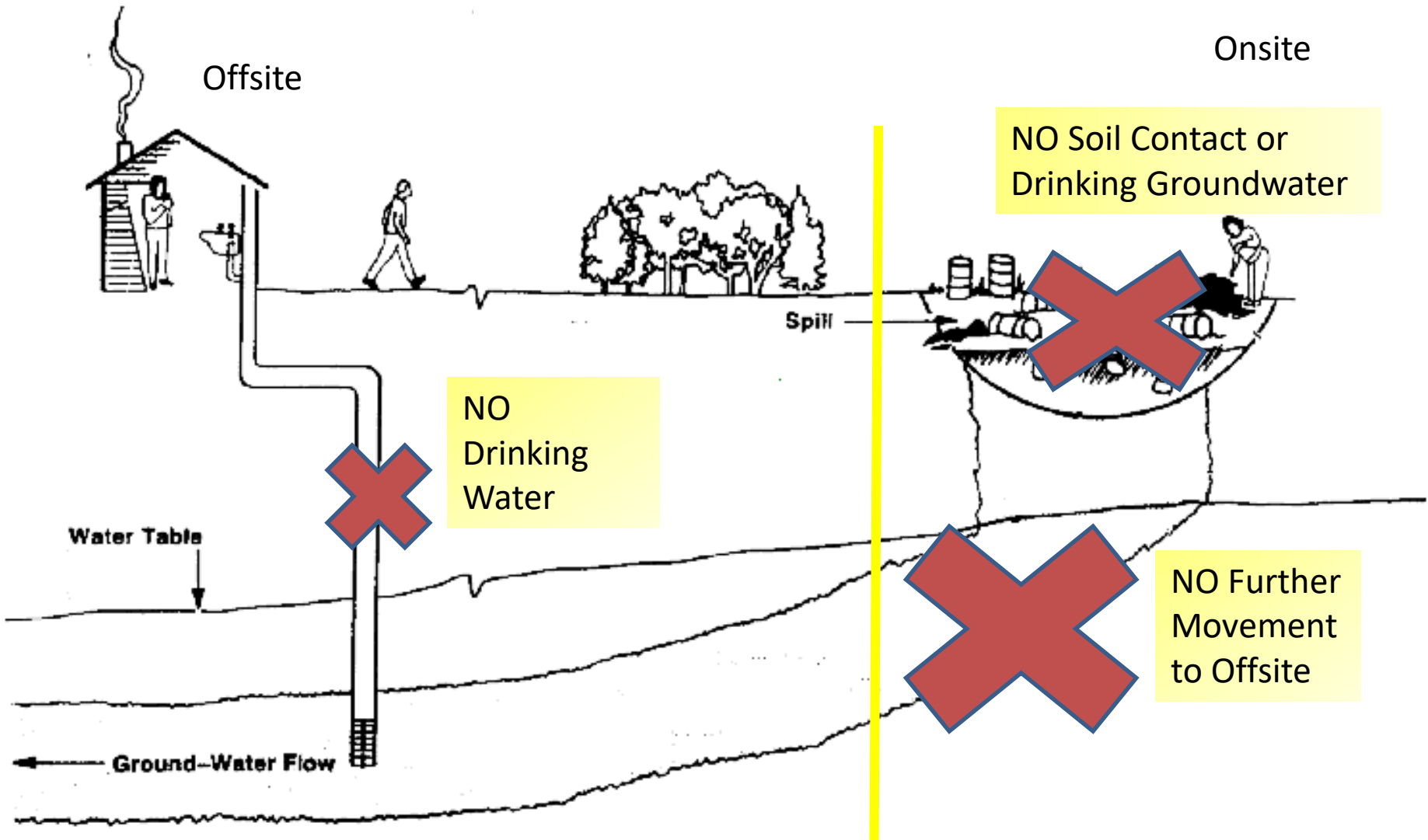
Further Findings

- Using the groundwater for irrigation off-site is ***NOT*** a risk
 - The amount of water potentially ingested is much less, length of contact shorter
 - Pentachlorophenol properties
 - Not taken up by the plants
 - Not volatile
- Off-site surface data does not indicate a risk
 - But need updated data
- No ecological risk

Proposed Plan

- Onsite soil and groundwater cleanup
- Prevent further groundwater movement
- Update sampling off-site
- Annual well surveys

Cleanup Goals



Eliminating Risk from On-Site Soil and Sediment

J.H. Baxter Site
Phased Remedial Action Plan

Excavate ditch and cap
Soil

Legend

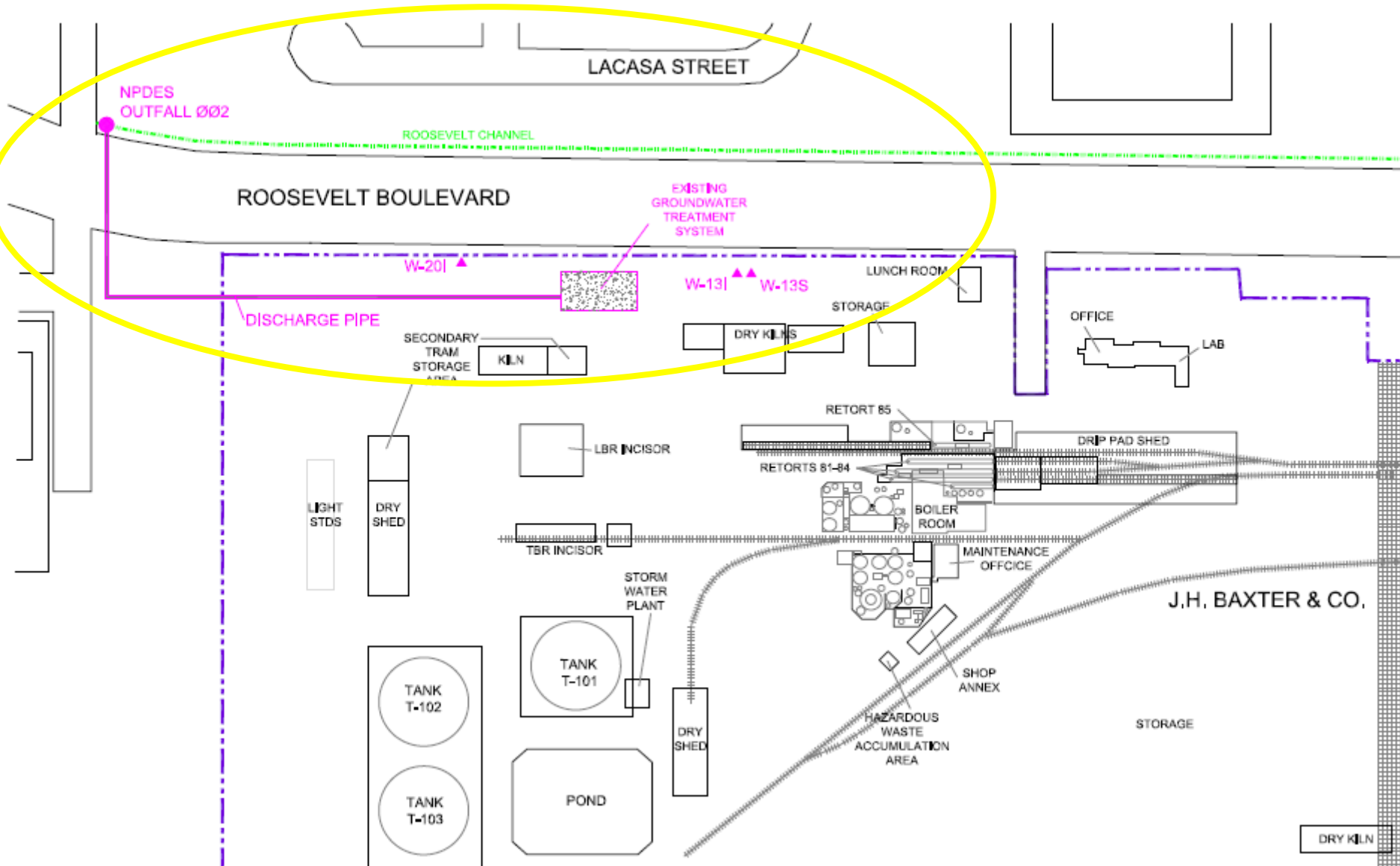
- Phase 1
- Phase 2 AC
- Phase 3 AC
- Phase 4 HighT Gravel
- Phase 4 AC
- Phase 5 AC
- Phase 6 AC
- Phase 6 LowT Gravel



Example of Engineered Soil Cap



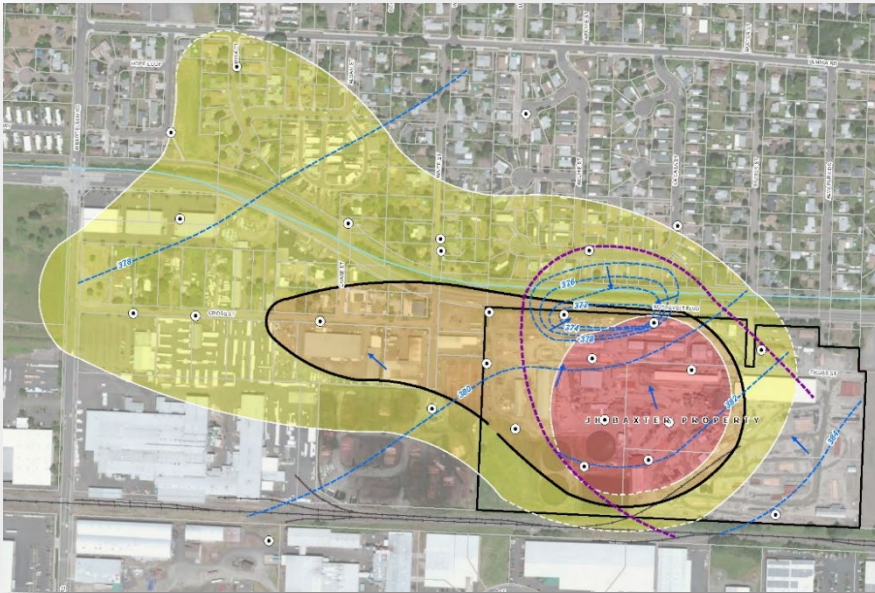
Groundwater Treatment



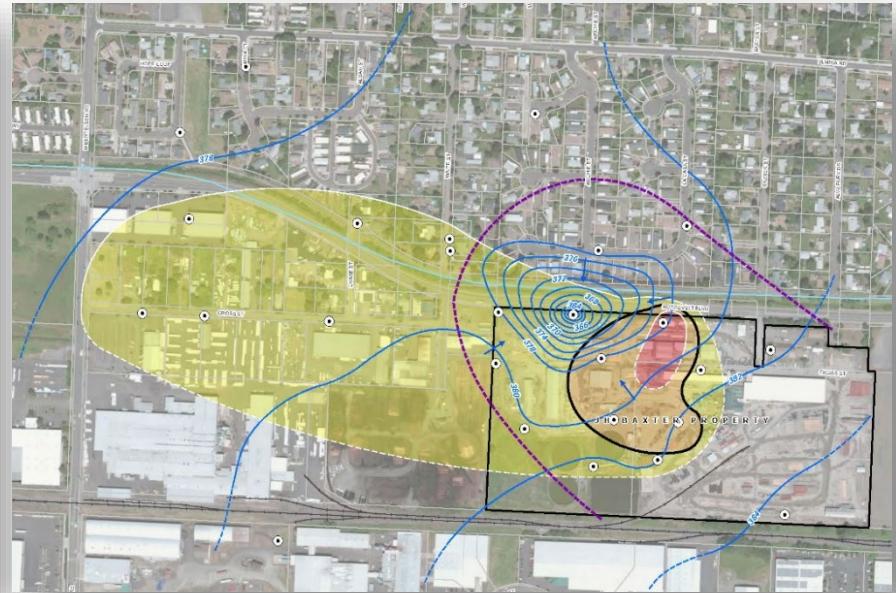


Effects of Historic Groundwater Treatment

2001



2014



Long Term Operation and Monitoring



Annual Check For New Domestic Wells

- Check for any new permits issued
- If found, contact owner
- Test if appropriate
- Discuss options as needed



Off-Site Sampling and Analysis Plan



Next Steps for On-Site Cleanup Plan

- Collect comments until Friday at 5 p.m.
- Consider and respond to comments – June 30
- Finalize cleanup plan – July
- DEQ and Baxter sign a new consent order for cleanup implementation - July
- Implementation, monitoring and reporting
- Five-year comprehensive reviews

Off-Site Steps

- Draft sampling and analysis plan for additional off-site sampling – July-August
- Develop options for off-site as needed
- Conduct another public comment period
- Finalize off-site plan

Questions/Comments?



- Comment box in back of room
- Send comments to Ann Farris:
 - 165 E. 7th Ave, Eugene, OR 97401
 - farris.ann@deq.state.or.us
- Call Ann, 541-687-7361
- Deadline is 5 p.m. Friday, June 14

COC	Cleanup Level (µg/L)		Cleanup Level (mg/kg)	
	Groundwater		Soil	
Arsenic	N/A	a	18	c
Pentachlorophenol	1.5 (industrial), 0.65 (residential)	b	N/A	a
Benzo(a)pyrene	N/A	a	0.27	d
Dibenzo(a,h)anthracene	N/A	a	0.27	d
Dioxins/furans*	N/A	a	2×10^{-5}	d

^a N/A = Not applicable because chemical is not a COC for given medium.

^b Risk-based concentrations protective of industrial (non-drinking) groundwater use and offsite residential irrigation, respectively.

^c DEQ South Willamette Valley regional background, DEQ (2013).

^d Risk-based concentration protective of direct contact with soil by onsite workers.

COC = chemicals of concern, µg/L = microgram per liter, µg/kg = microgram per kilogram

*Dioxin/furan cleanup level is the TEQ value.

All cleanup levels developed from exposure factors from 2018. These will be reevaluated at five-year reviews and updated as appropriate to ensure protectiveness.