PCC Structurals, Inc.
Large Parts Campus
Soil and Groundwater Cleanup Project Update

Wednesday, Sept. 18, 2019

Agenda

- Introductions and Meeting Goals: 6:30-6:45pm
- Site Background: 6:45-7:00pm
- Soil Update: 7:00–7:20pm and 10 minute Q&A
- Stormwater Update: 7:30-7:45pm and 10 minute Q&A
- Groundwater Update: 7:55 – 8:05pm and 10 minute Q&A
- Sediment and Johnson Creek Update: 8:15-8:35pm and 10 minute Q&A
- Wrap-up: 15 minute Q&A

Presenter: Nina DiConcini, DEQ Northwest Region Administrator

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Introductions

- DEQ Project Team Clean-up Program –
  - Nina DeConcini, NW Region Administrator
  - Paul Seidel, NW Region Section Manager
  - Heidi Nelson, Project Manager
  - Dan Hafley, Project Peer

- Other Project Colleagues Present at Meeting –
  - Dave Bartus, EPA TSCA Clean-up Project Manager
  - Joshua Ernst, City of Portland, NPDES Project Manager
  - Ali Young, City of Portland, Johnson Creek Oxbow Project

Meeting Goals

- Provide a brief Site introduction
- Provide updates for clean-up work and on-going investigations
  - Soil
  - Stormwater
  - Groundwater
  - Sediment
- Answer questions about the work happening at the Site in these areas

Site Introduction
Precision Castparts
Large Parts Campus

Presenter: Heidi Nelson, DEQ Northwest Region Project Manager

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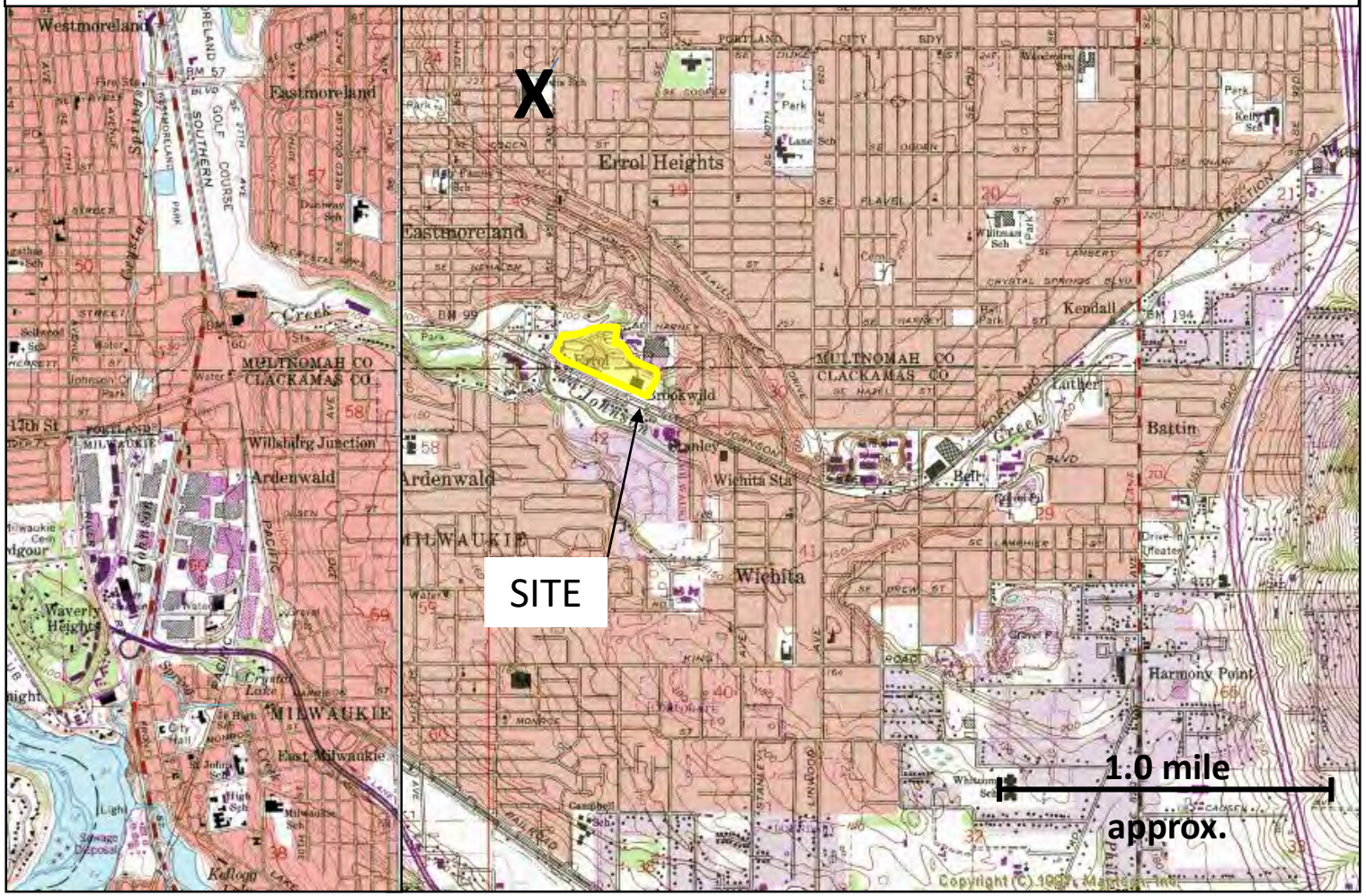
Site Introduction

PCC Structurals, Inc. – Large Parts Campus and surrounding area in southeast Portland and north Milwaukie.



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Site Introduction

2008 – DEQ Voluntary Cleanup Program Agreement

No. LQVC-NWR-08-05 for

- Investigate
- Evaluate risk
- Determine cleanup actions

More Info at Environmental Cleanup Site Information #274

at go.usa.gov/xVDQ5

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Site introduction

- PCC manufacturers metal components
- Zoned as a mixed industrial/residential area
- Campus straddles two counties

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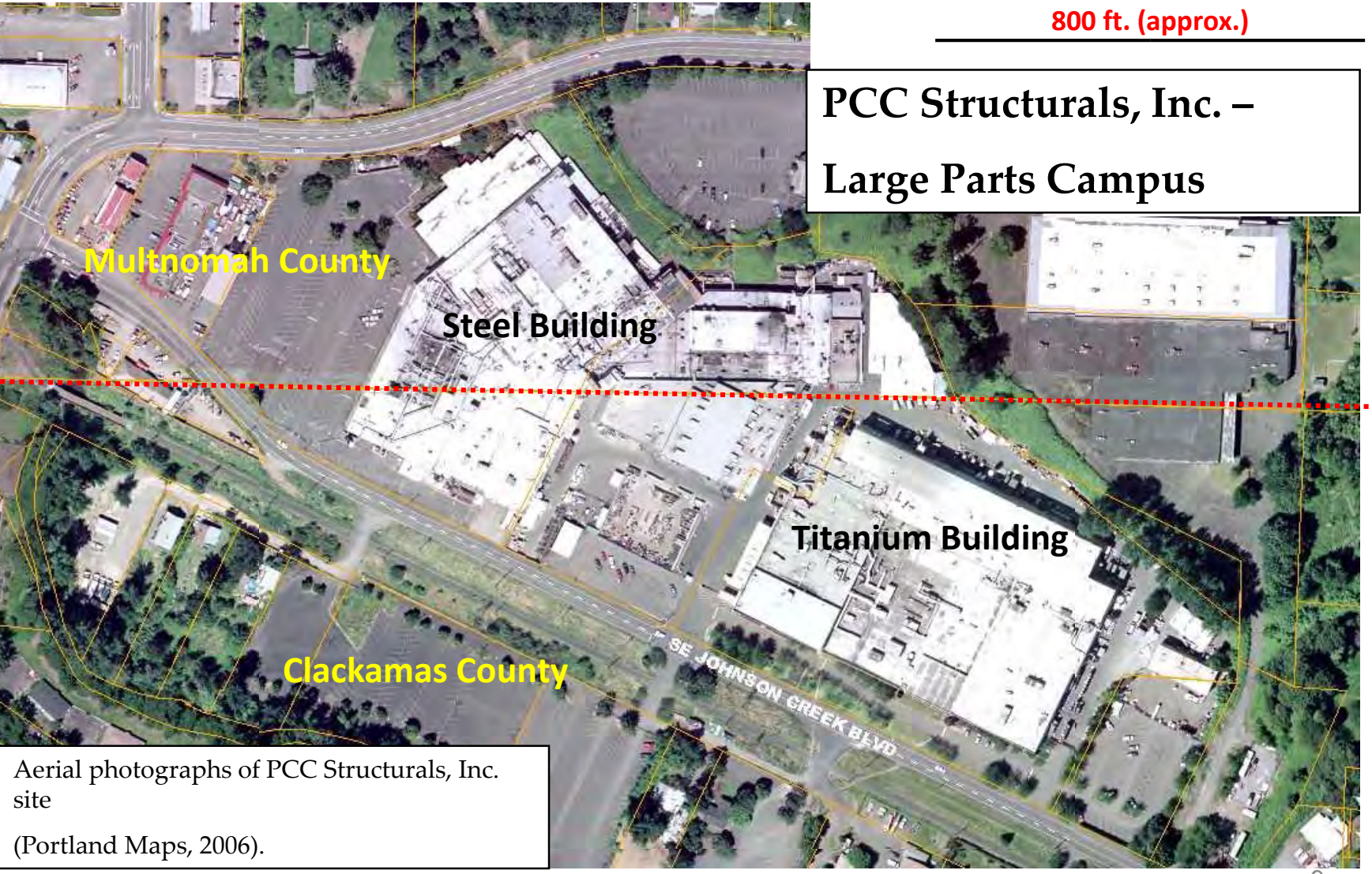
Site Introduction



Aerial photographs of PCC Structurals, Inc. site

(Portland Maps, 2006).

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Site Introduction

- 2008 until present
  - Soil
  - Stormwater/Surface water
  - Groundwater
  - Indoor air
  - Sediment
- Variety of Pollutants

Site Introduction

- 2013 Precision submitted a Draft Remedial Investigation Report
  - What is a Remedial Investigation?
    - » In-depth study to gather data to determine the area of pollution
  - What does it consider?
    - » Considers exposure scenarios
      - Human health receptors (people)
      - Ecological receptors (plants and animals)

.

  - Why is this report important?
    - » The data is used from this report to identify risks
    - » Once we know the risks, and that is used to identify where clean up needs to happen.

Site Introduction

- Where are we at in the process?
  - DEQ asked for some additional data to be collected before PCC finalizes the Remedial Investigation Report
- Why?
  - Interim soil cleanup work is happening
  - Some additional soil data is needed

- What's next?
  - Finalize Remedial Investigation Report
  - Use the Remedial Investigation data to evaluate risk at the site and identify areas where final cleaned up needs to happen

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Soil Update

- Soil characterization is almost complete
- PCBs were identified at the Site during sampling
- Soil cleanup for PCBs is currently being done under EPA oversight
- Some additional soil sampling is required by DEQ

Presenter: Heidi Nelson, DEQ Northwest Region Project Manager
Dave Bartus, US Environmental Protection Agency, Project Manager

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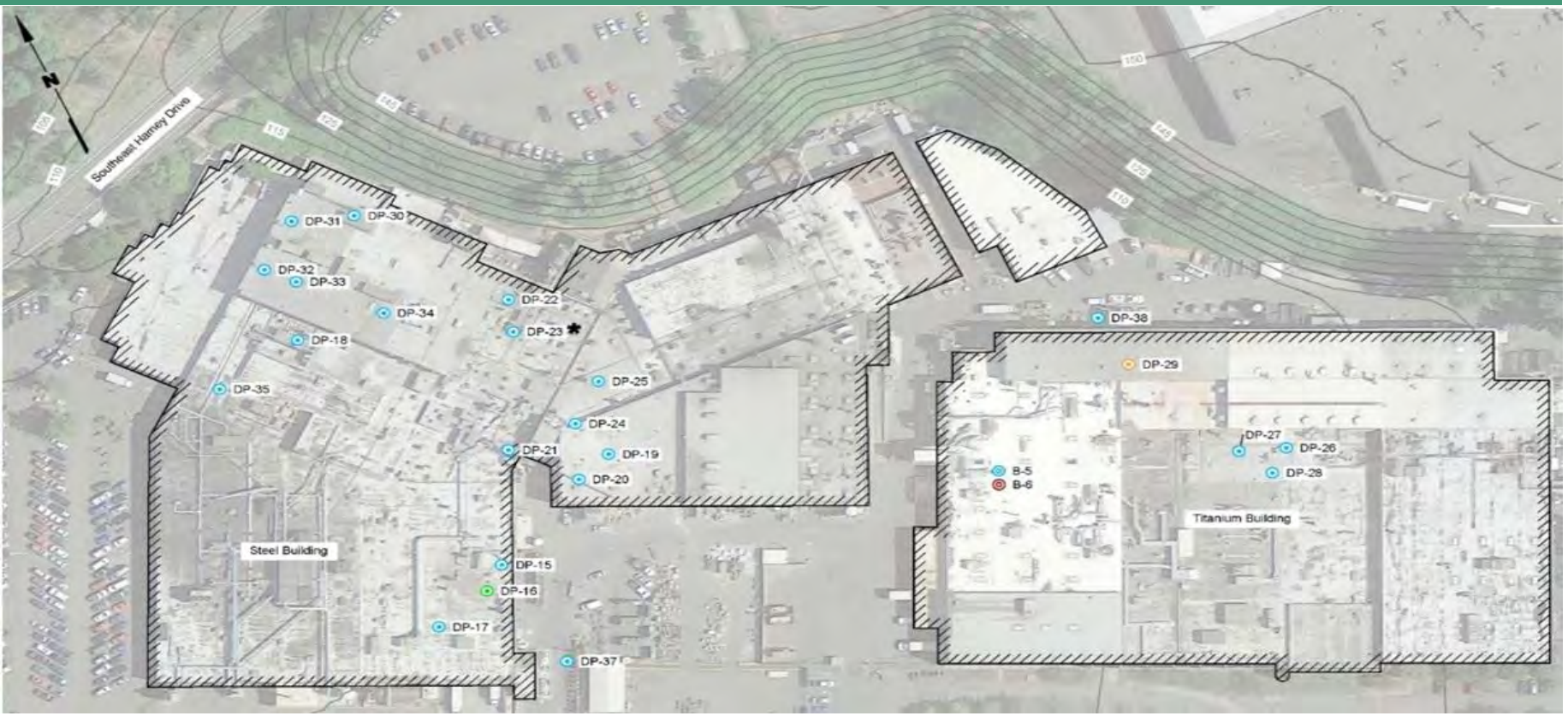
Soil Update

- What are PCBs?
  - PCBs are a man-made group of chemicals manufactured from 1929 to 1979
  - PCBs were historically used in hydraulic pumps (oil), and commonly found in the fluid in the electrical transformers and capacitors – and other uses
  - PCBs were banned in 1979
  - PCBs do not breakdown very quickly so they are still found in the environment today
  - PCBs stick really strongly to soil

Soil Update



2011 sampled soil below the Steel and Titanium Buildings

2011 to 2013 during storm drain replacement work found PCBs in the soil

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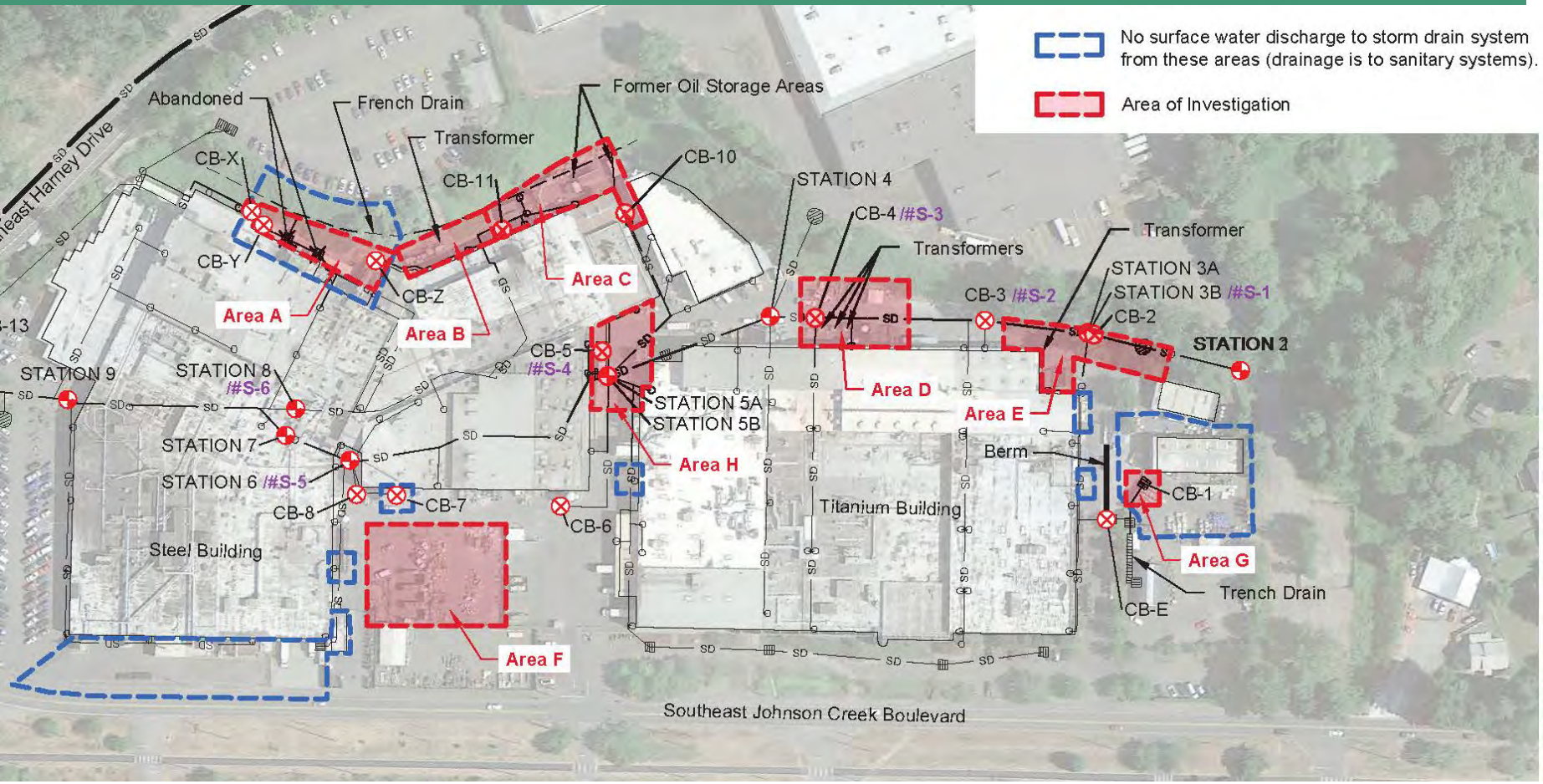
Soil Update



2014 and 2015 PCC took more soil samples focusing on PCBs in storm water and catch basin solid in Areas A through H. **Samples were taken in the red areas.**

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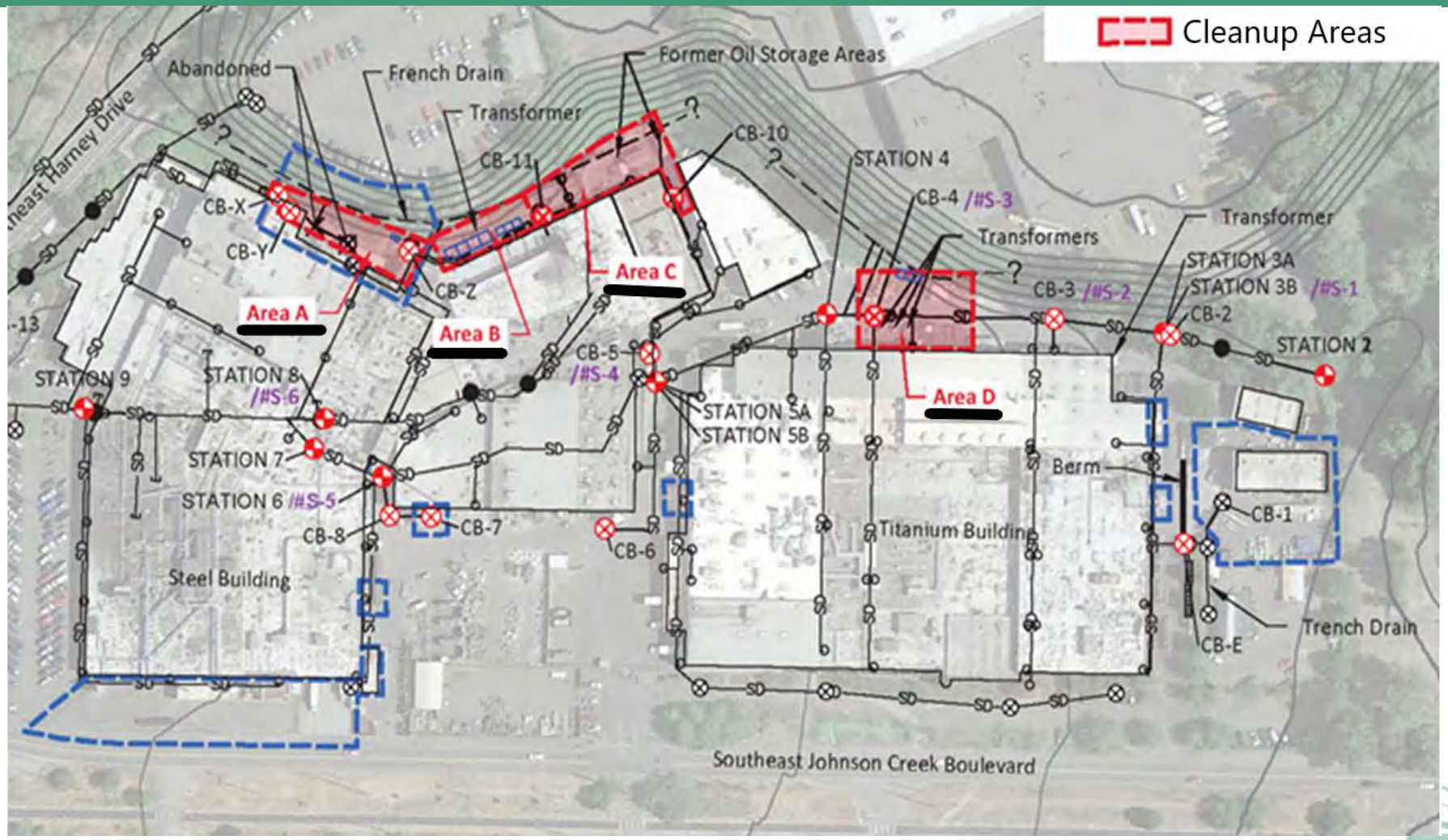
Soil Update



The soil investigations led to the creation of four cleanup areas, A through D.

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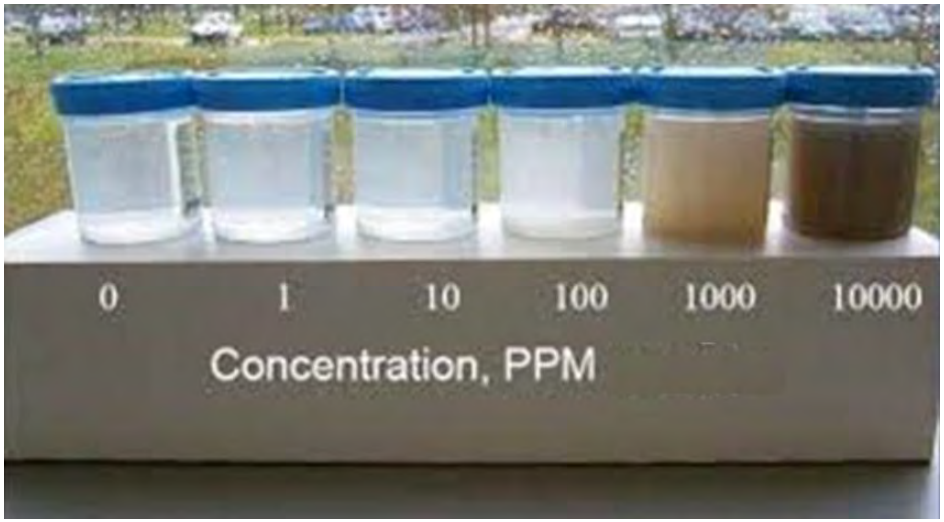
Soil Update

- PCBs were detected at varying concentrations in Areas A through D, some soil above 50 ppm.

- How Much is 50 PPM?
  - To help visualize this amount 1 ppm is equal to 1-inch in every 16-miles



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Soil Update

- PCB Cleanup Goals:
  - Protect on-site workers from direct exposure
  - Prevent release of PCBs to surface water

Soil Update

- Regulates PCBs at the concentrations found in soil and concentrations cleanup levels
- Oversight of the soil cleanup and final approval to Precision Castparts.

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- Provide input to EPA, based on Site knowledge
- Collect the data used for future decisions (e.g., where to sample, what to look for)

Soil Update

- Low occupancy site use = Unoccupied areas outside of facility buildings, are on slopes, behind retaining walls, and/or covered in thick vines and brush, which limits access or below transformer platform.

- Deed restrictions are required in area with caps and areas where fencing and signs are required.

Low-Occupancy Clean-up Requirement	Low Occupancy
No Action	≤1 ppm
Institutional Control (i.e., deed restriction)	>1 ppm to ≤25 ppm
Fence and Signs (+deed restriction)	>25 ppm to ≤50 ppm
Cap (minimum 6 inches concrete or asphalt + deed restriction)	>25 ppm to ≤100 ppm
Removal	>100 ppm

Soil Update – The Cleanup

- Area A:
  - Removal soil to 1 foot below ground surface
  - Collect soil samples to make sure soil is clean
  - If not, remove more soil or install a soil cap until concentrations are <25 ppm

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Soil Update – The Cleanup

- Area B – West:
  - Inaccessible due to infrastructure
  - Removal of soil to 18-inches below ground
  - Installation of a concrete cap and/or concrete cloth cap and rip/rap

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Soil Update – The Cleanup

- Area B – East:
  - Removal of soil when installing new chiller towers.
  - Area is a low-occupancy area because people aren't working in this area.

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Soil Update – The Cleanup

- Remedy for Area C:
  - Removal of accumulated soil/debris on paved areas.

- Remedy for Area D:
  - Sampling indicated that Area D met cleanup levels. No additional cleanup action was required.

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Soil Update – Next Steps

- Construction-related activities
  - PCC has conducted various construction activities adjacent to or partially overlapping Area A
  - These activities identified additional PCB pollution, which was addressed as a modification to the existing EPA-issued written approval. These modifications addressed proper disposal of excess from these activities.

Soil Update – Next Steps

- Next Steps for Soil Cleanup
  - Approved cleanup activities are complete pending submission of project completion reports.
  - These cleanups have been determined to be protective of human health, including on-site workers and stormwater runoff from Areas A through D.
  - Additional soil investigation that will be completed may require additional cleanup activities with EPA oversight.

Questions about Soil?

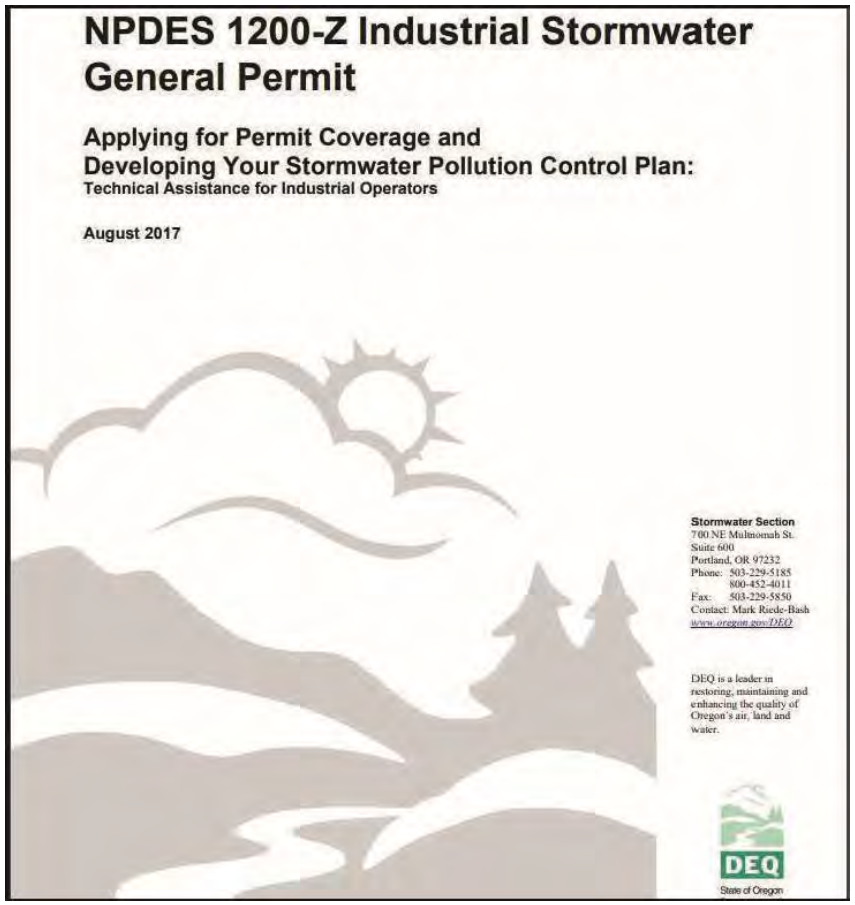
Stormwater Update

- Prioritized work to prevent pollutant discharge from Site.
- Sources are controlled using a treatment system installed in 2016.
- Ongoing monitoring through a storm water permit.
- Catch basin sampling is planned for 2019/2020.

Presenter: Heidi Nelson, DEQ Northwest Region Project Manager
Joshua Ernst, City of Portland Bureau of Environmental Services, NPDES

Stormwater Update

- DEQ has delegated authority to the City of Portland.
- Site has had a stormwater permit since 1997. The most recent permit was issued in 2017.
- Monitoring and sampling and source control requirements are part of the stormwater permit.



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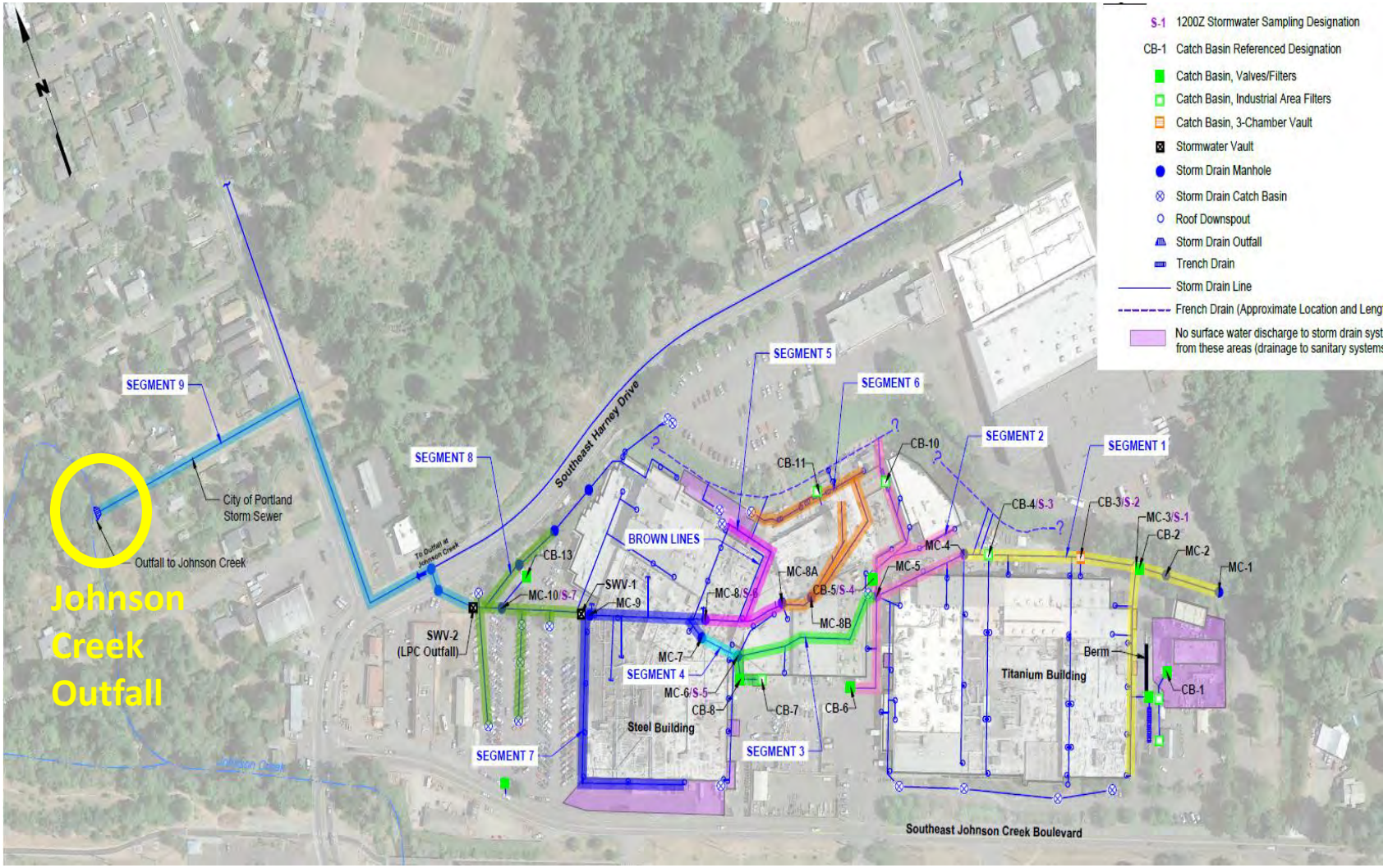
Stormwater Update



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Stormwater Update

- Solids and metals in site discharge were above permitted levels, which triggered installation of a stormwater treatment system.

- A robust treatment system was installed and started operating in 2016.

Stormwater Update

- Treatment system was designed to address several pollutants, including:
  - Solids
    - » Metals
    - » PCBs
  - Other volatile chemicals

- How does it treat these pollutants?
  - Settling tanks with a sand filtration system
  - Has an end of pipe monitoring system that will recirculate stormwater if additional treatment is needed.

Stormwater Update

- Permit monitoring requirements
  - Quarterly sampling
  - PCC demonstrated compliance
    - » Sampling results have been below compliance levels.
    - » Received a monitoring waiver
      - The City can revoke the waiver for any reason, including a change in activities on processes onsite.
  - Voluntarily sampling/reporting for PCBs twice/year
    - » PCB results have been below 0.0009 ppm
    - » Stormwater PCB benchmark levels are 0.002ppm

- Other regular source control and housekeeping actions are required as part of the stormwater permit.

Stormwater Update

- Catch Basin Sampling
  - **Why?** To figure out if there are any additional sources of pollutants in upland soil
  - **What will be analyzed?** Samples will be analyzed for PCBs and 13 metals
  - **Where?** Seven catch basins
  - **When?** Sampling will be started in Fall 2019 and will also be conducted in Spring 2020
  - Results will be included in Final Remedial Investigation Report

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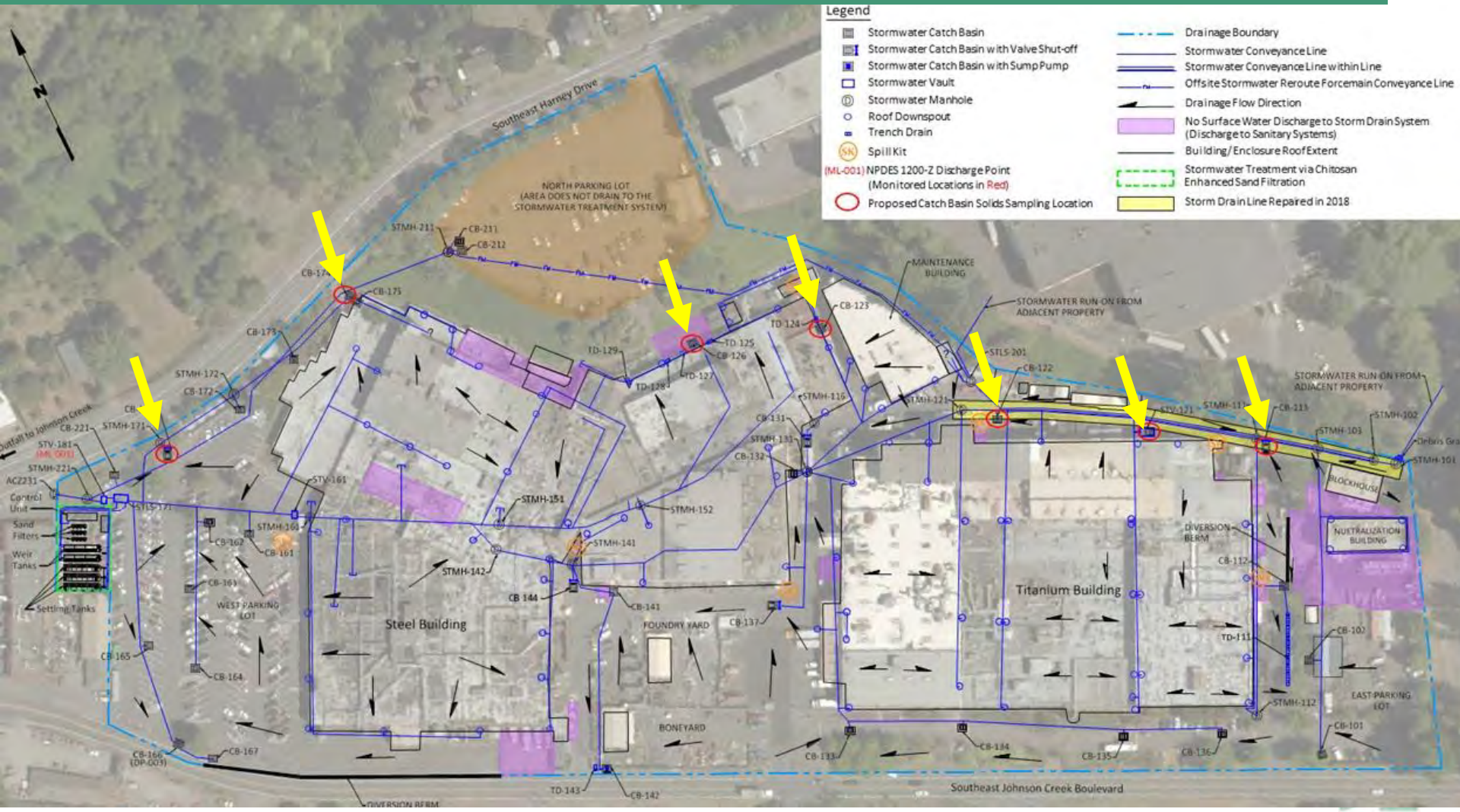
Stormwater Update



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Questions about Stormwater?

Groundwater Update

- Pollution is present in the groundwater and extends off the property.
- No known current public health impacts to people.
- Monitoring is conducted quarterly.
- We have enough data to complete the Final Remedial Investigation Report.

Presenter: Heidi Nelson, DEQ Northwest Region Project Manager

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- Groundwater sampling has been conducted since 2009 to present.
- Fourteen wells installed on and off-site for longer-term monitoring.
- Four additional wells installed SW of PCC in 2016 to find out the concentrations off-site.
- PCC is sampling the wells every three months (quarterly).

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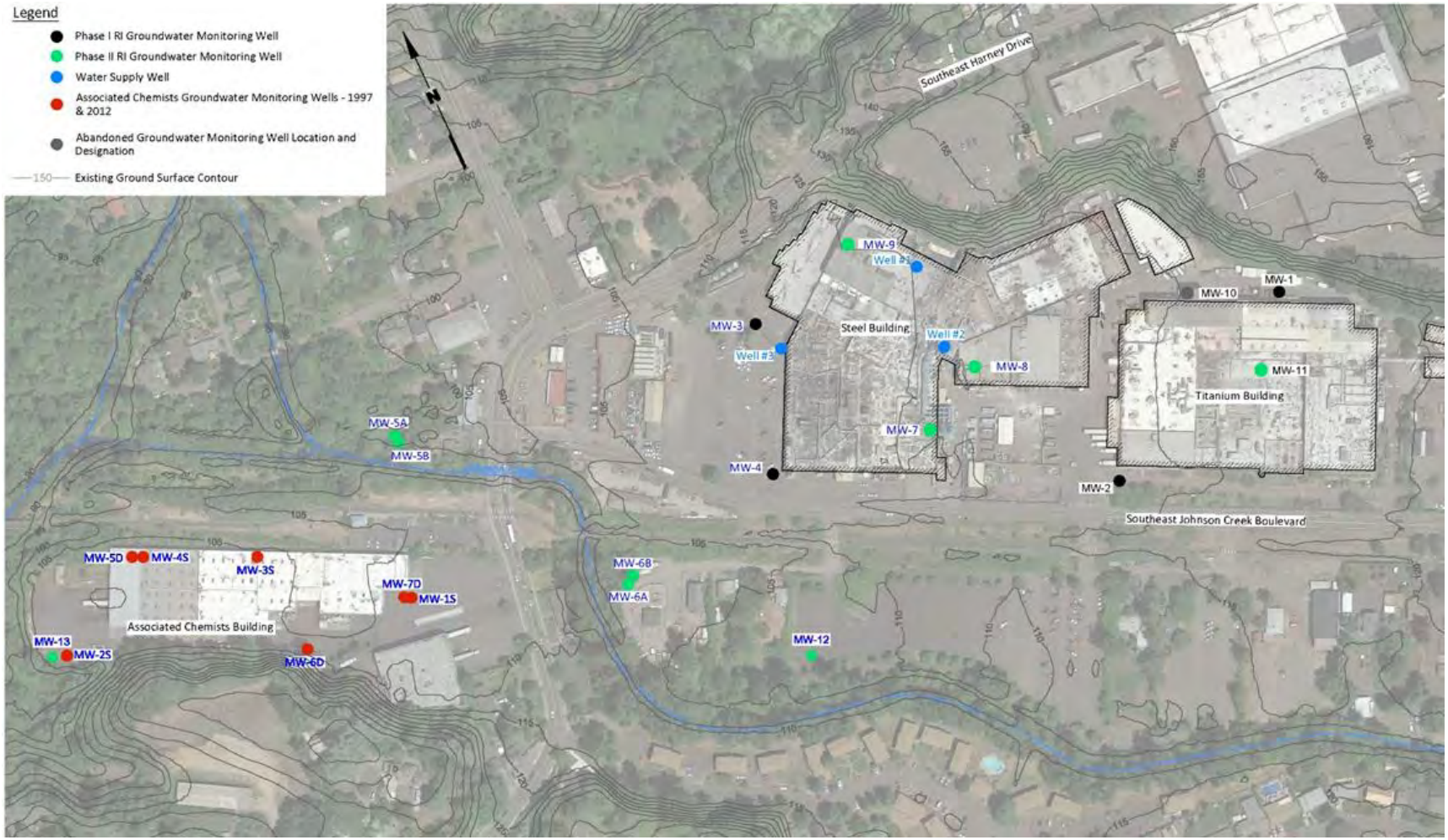
Groundwater Monitoring



- Well network consists of shallow and deep wells.

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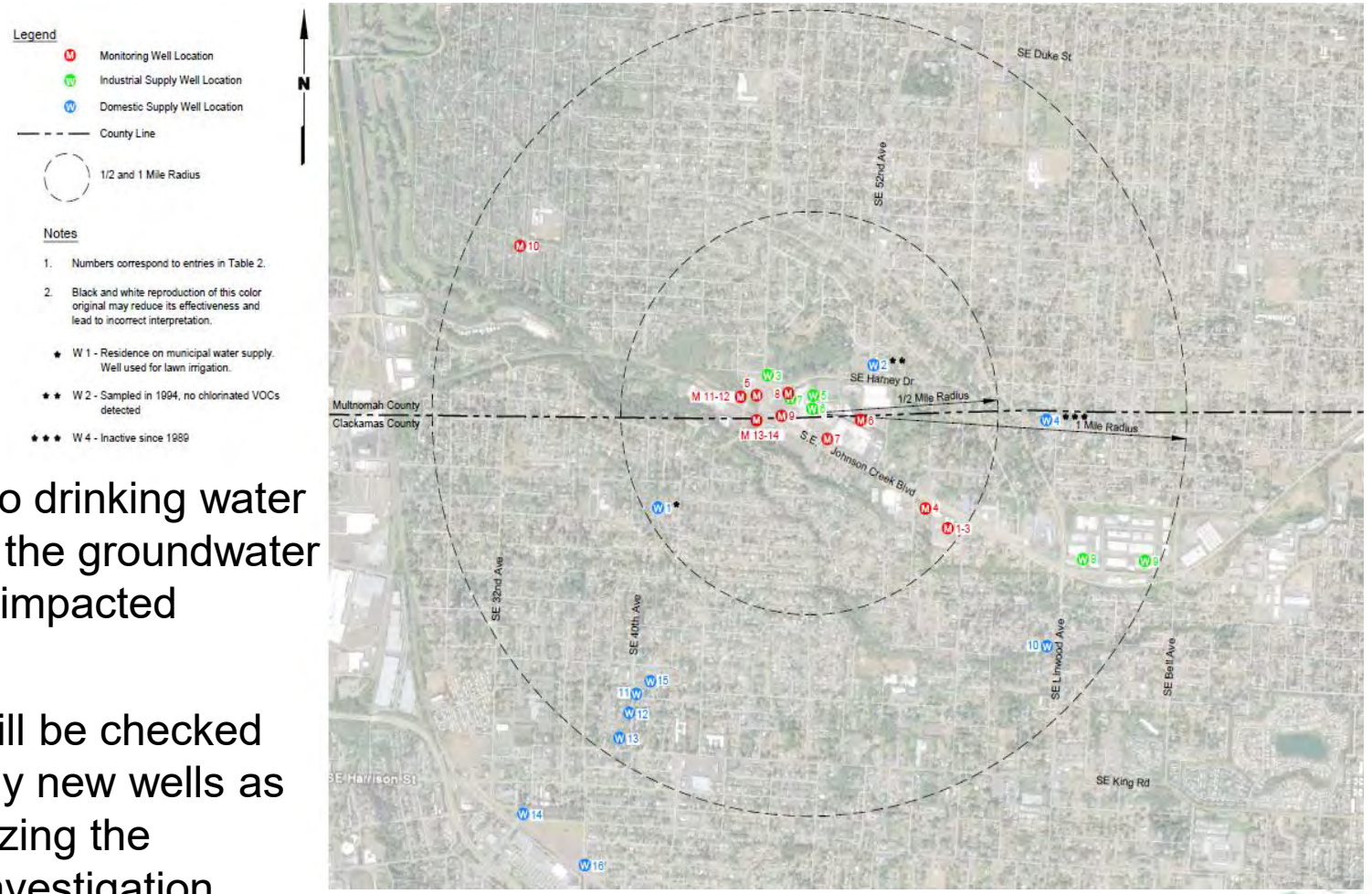
- Off-site contamination extends approximately 800 feet SW of PCC, at part per billion levels.
- Pollutants are detected in both on and off-site wells and are deeper off-site, at about 70 feet below the ground.
- Why do we care about these pollutants if they are deep?
  - Make sure people and animals are protected in the future.

Beneficial Water Use -Water Wells Within 1 mile



- There are no drinking water wells within the groundwater area that is impacted
- This area will be checked again for any new wells as part of finalizing the Remedial Investigation Report

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Questions about Groundwater?

Sediments Update

- Sediment pollution was found in about 150-foot of Johnson Creek.
- There isn't a problem for recreational use of the creek.
- The results will be included in the Final Remedial Investigation Report.

Johnson Creek Update

- City projects are ongoing and have addressed some areas of Johnson Creek.

Presenter: Paul Seidel, DEQ Northwest Region Section Manager
Ali Young, City of Portland

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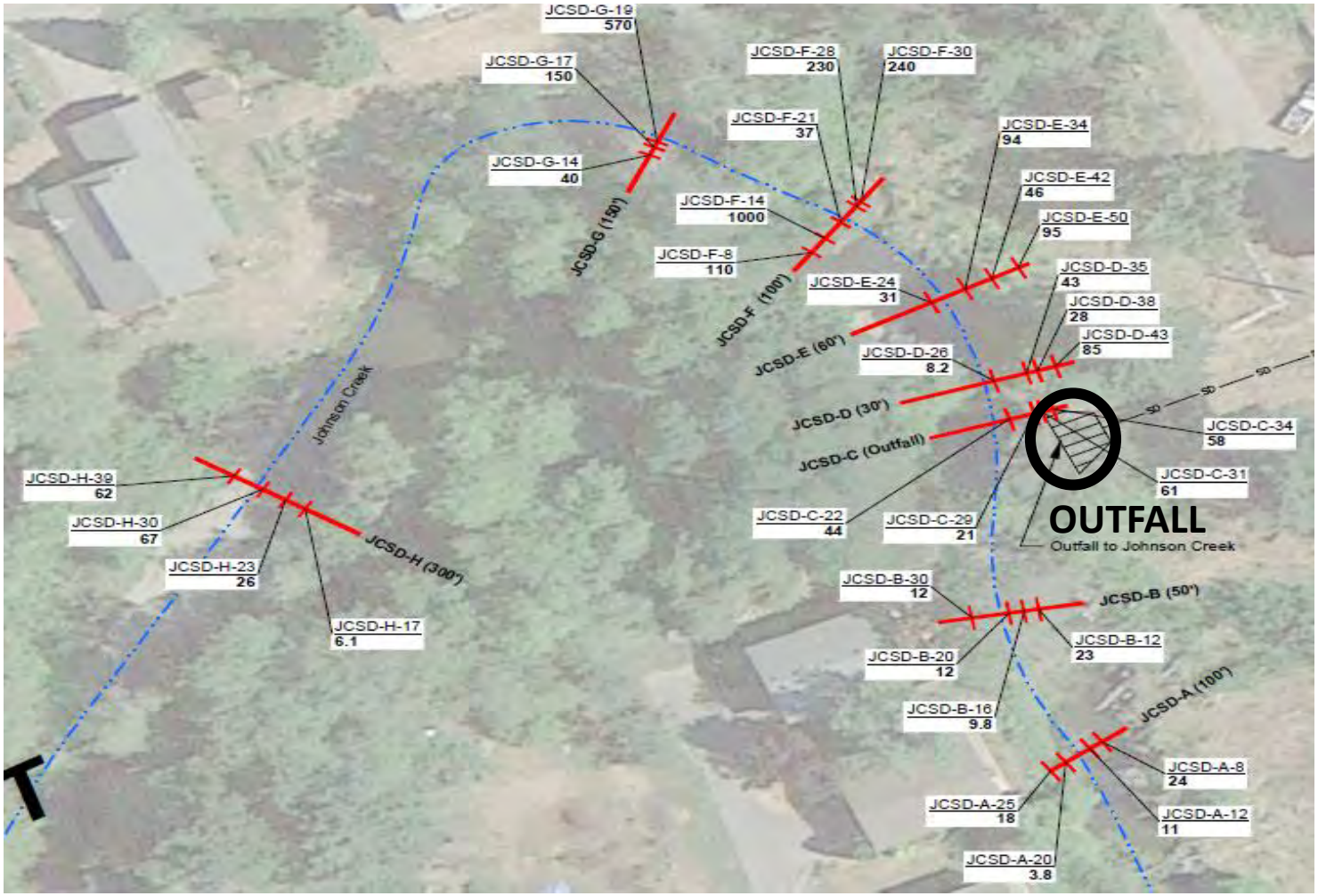
Sediment Update



2014 sampled across the creek, above and below the outfall to determine where sediment may be impacted.

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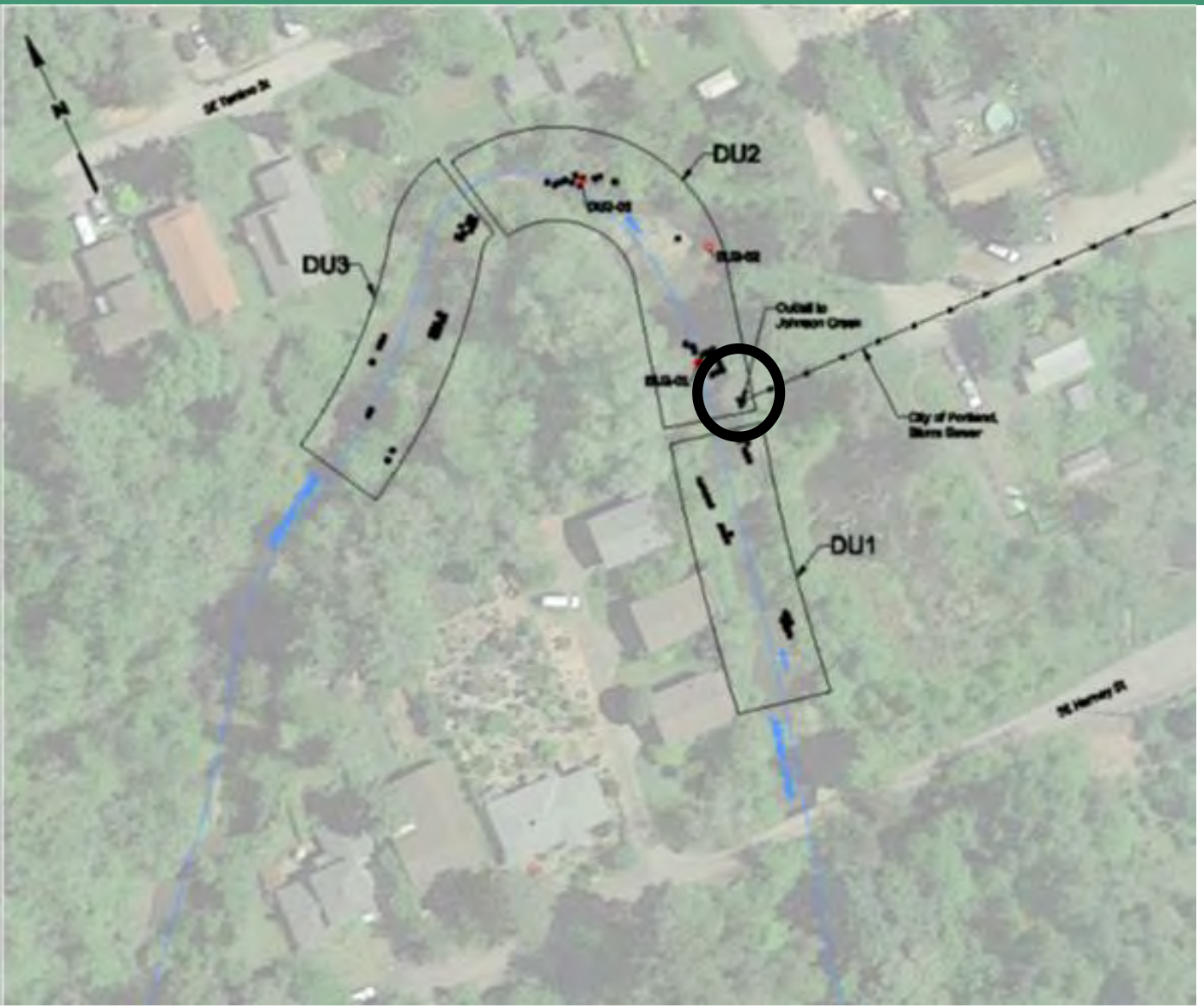
Sediment Update



2017 –
A different sampling method from 2014.

The purpose was to find out if there was any harm to humans in these individual areas.

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Sediment Update

- Decision Unit 1 – Looking Downstream toward the Outfall

- Decision Unit 2 – Near the area where the City Bank Repair was completed

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Sediment Update

- No additional sampling for Johnson Creek at this time.
- Some impacted sediment was removed during Bank Repair work conducted by the City.
- The creek will be evaluated and the results will be included in the Final Remedial Investigation Report to determine if additional cleanup actions are needed in the creek.
- City will explain the work that was completed for the bank repair.

Questions about Sediment?

Summary

- Substantial progress towards cleanup including :
  - Removal of sources of PCBs in soil.
  - Stormwater treatment preventing offsite pollution.
  - Groundwater and sediment pollution is known.
- On-track to complete the investigation.
- Data from the completed studies will be used to figure out what additional soil and water treatment are needed.

General Site Questions?

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us.