

N. Larsen TASS: Risk Assessment and Contaminated Media Management Plan

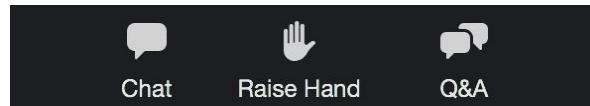
Northwest Region Cleanup Program

April 30, 2024

Virtual Public Information Meeting

Asking a Question

- You should see the following along the bottom of your screen.



- To ask a question: type it into the Q&A or raise your hand and the host will un-mute you. (*9 if you're on the phone)
- Use chat if you're having technical difficulties.



Michael:

We'll be answering questions at the end of the presentation but feel free to submit them at any time. You can do that using the toolbar at the bottom of your screen.

You can type a question into the Chat or Q&A. If you'd like to say your question aloud, please raise your hand and I will un-mute you. If you're on your phone, press *9 to raise your hand and I will un-mute you.

Meeting purpose

- Discuss DEQ review of the N. Larsen site:
 - Draft Risk Assessment
 - Draft Contaminated Media Management Plan
 - Soil vapor sampling
 - Forthcoming Remedial Action Plan
- Share next steps.
- Answer community questions.



Sarah Greenfield, engineer in DEQ's cleanup program and project manager for this site

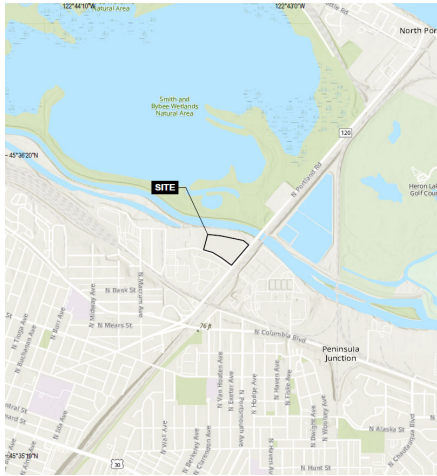
Here to provide an update on DEQ's protectiveness evaluation for the North Larsen property which the City plans to develop into a future Temporary Alternative Shelter Site (TASS 2)

Specifically, the purpose of today's meeting is to discuss the two draft documents that DEQ currently has under review, the draft Risk Assessment and Contaminated Media Management Plan

And to provide an update on some additional sampling at the site and last and final document that DEQ will be reviewing called the Remedial Action Plan

We will walk through each of these documents including their purpose and schedule for review, discuss next steps, then open up the floor at the end for any questions.

Background



Approx. 22.5-acre property located at 10505 N Portland Rd, between St. Johns and Columbia Slough



TASS 2 – Approx. 6-acre second Temporary Alternative Shelter Site planned by City of Portland



City bought site in 2001 for future expansion of Columbia Blvd Wastewater Treatment Plant



The site is located on N Portland road between St. Johns and the Columbia Slough

The entire property is approximately 22.5 acres in size and was originally purchased by the City of Portland in 2001 for use in expansion of the Columbia Blvd WWTP which is located just across the street from the site to the east

The City has proposed to site their second Temporary Alternative Shelter Site (or TASS 2) on a portion of that property and the proposed development is expected to cover approx. 6 acres

Historical uses of N. Larsen TASS



- Shingle mill
- Boat manufacture and repair facility
- Materials storage
- Diesel engine repair and rebuilding shop
- Truck washing facility



The site has been used for a variety of activities dating back to the 1940s including:

The proposed TASS 2 facility would be located within the eastern half of the property – shown by the black line

The meeting today is focused on the risks posed by contamination within just this area

A site-wide evaluation of risks across the entire property is being performed separately and will look at the entire 22.5 acres

Environmental investigations

- Soil and groundwater sampling
- Onsite and offsite sources
- Contaminants include:
 - Petroleum products
 - Volatile compounds
 - Pesticides
 - Metals



Several environmental investigations have been conducted at the site over the years.

These investigations largely included collection of soil and groundwater data to determine if contamination exists and if so, to what extent. Soil and groundwater impacts are the result of both onsite historical site operations, but offsite sources as well. Most notably, groundwater contaminated with solvents had made its way onto the site from the adjacent property to the south (called the South Larsen site). This groundwater plume has since been cleaned up under DEQ oversight through bioremediation back in 2008.

It has been in DEQ's voluntary cleanup program since 2013 with data dating back to the late 1990s

Phase II Environmental Site Assessment – Nov 1999

Phase II Environmental Site Assessment – May 2000

City soil sampling – Oct and Nov 2023

Potential TASS Use - 2023

- Contacted by City of Portland
- Request for expedited review:
 - Contaminated media management plan
 - Risk assessment
 - Remedial action plan



Source: <https://www.portland.gov/wheeler/shelter-sites>



In 2023, DEQ was contacted by the City with their intent to repurpose the site for use as a temporary alternative shelter site

- The shelter would include space for RV storage, car parking, housing pods, and several common areas
- The City requested DEQ's review of the proposed development to ensure that it would be safe for future TASS2 uses
- Opening the shelter is a priority for the City, and DEQ has been asked to prioritize review of site documents

Our purpose in reviewing these documents is to determine whether the planned development will be safe for future TASS2 occupants and workers consistent with DEQ's standard guidance for assessing risks to human health and the environment

Land Use

- DEQ considers all current and future land uses when evaluating protectiveness, regardless of zoning

Decisions on how the property is used are the responsibility of the City of Portland.



In reviewing the documents and evaluating risks, DEQ considers all current and future land uses.

This is true of any site, regardless of zoning

DEQ does not have authority to dictate how a property is used. In this case, that decision is up to the City of Portland

Contaminated Media Management Plan

- Describes how the city and its contractors will identify and manage potentially contaminated soil encountered during site development to protect site workers.
- Requires:
 - Health & Safety Plan (HASP) outlining PPE and training requirements for site workers.
 - All material treated as contaminated unless sampled and determined otherwise.
 - Excavated soils disposed of at Solid Waste landfill.
 - Notifications if unanticipated contamination found.
- DEQ approval allows work to begin.



The first document prepared for the site is what's called a Contaminated Media Management Plan (or CMMP) – this is a very standard document routinely required on sites where contamination may be present.

This outlines the procedures for how the City and its contractors will identify and manage site soils in a manner that ensures site workers are safe

It includes worker safety requirements such as compliance with a Health & Safety plan that outlines the proper PPE and training requirements for site workers

It also requires that all soils be treated as if they are contaminated and handled accordingly unless sampled and determined otherwise

The plan requires that all excavated soils be disposed of at a Solid Waste landfill and that DEQ and the City be notified if any unanticipated contamination is found. If any unanticipated contamination is found such as stained soils or odors, work stops until the protocols can be reassessed to make sure the material is handled properly.

A draft of this document is available online at DEQ's project web page. DEQ has already done a preliminary review of the document and while some additional changes are

needed, we anticipate being able to approve the CMMP as soon as this week.

Approval means that ground disturbing activities at the site can begin such as site preparation, grading, trenching, utilities, etc. – basically the initial work needed to get the property ready for development.

TASS - risk assessment

- Evaluates risks to TASS occupants/workers. Considers:
 - People, plants and animals.
 - Length of exposure.
 - Ways of being exposed.
- Informs need for cleanup actions.



The next document is the risk assessment. A draft copy of this document is also available online on DEQ's project page.

The risk assessment evaluates the data collected from within the TASS 2 portion of the site to determine whether contamination poses risks to people, plants, and animals within the TASS 2 footprint. Recall that the TASS 2 footprint is only 6 acres of the total 22.5-acre site and a site-wide risk assessment will be prepared separately to evaluate risks across the entire site to support site closure.

The risk evaluation considers the length of time and different ways people could be exposed to contamination such as coming into contact with site soils or groundwater, or breathing in chemicals

The results of the risk assessment inform whether there are any cleanup actions needed to keep people, plants, and animals safe. In this case, the question is really, will the TASS 2 development be safe as currently designed by the City, or are there additional elements that should be incorporated to make sure that it is protective.

While the City does not plan for the site to be used as a shelter indefinitely, DEQ required use of our most stringent cleanup levels which are based on residential use of the property

to ensure that it remains protective for as long as it is needed.

TASS - risk evaluation



Human health pathways

- Contact with surface and subsurface soil
- Groundwater in excavations
- Volatilization from soil and groundwater



Plants and animals

- Evaluated in future site-wide risk assessment



The risk assessment considers all the different ways that people, plants, and animals could be exposed to contamination at the site – then determines whether those pathways are something that needs to be addressed – generally when contaminant levels exceed DEQ’s risk-based screening criteria.

At this site, the risk assessment found that people may be exposed to site contamination through contact with surface and subsurface soils, contact with groundwater in deeper excavations, or potentially from contaminants volatilizing or off gassing from soil or groundwater into the air.

Impacts to plants and animals were also evaluated but are not expected to be impacted because they generally aren’t present at this portion of the site. This portion of the site is largely covered in gravel with few plants or animals present. This is not the case for the rest of the site, so plants and animals will be evaluated further in the future site-wide risk assessment.

Risk assessment conclusions



Soil – Petroleum compounds and metals exceed DEQ risk-based concentrations for occupational, construction worker, and long-term residential uses.



Groundwater – Does not pose a risk to human health.



Volatilization to Air – Data gap. Additional data being collected to confirm pathway does not pose a risk.



The risk assessment concluded that petroleum compounds and metals exceed DEQ's risk-based concentrations for a variety of different future uses including occupational use, construction worker, and long-term residential use.

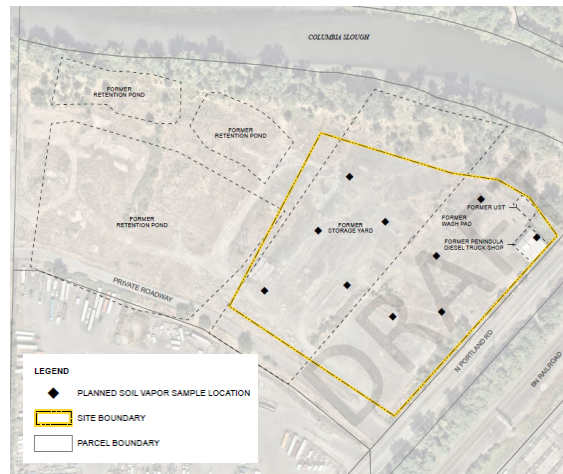
Site groundwater does not pose a risk because it is fairly deep, and people are not going to be coming into contact with or drinking groundwater at the site.

While levels of contamination at the site are relatively low overall, there was not enough data at the site to definitively conclude that there are no risks from volatilization of chemicals from site soil and groundwater. Therefore, DEQ identified this as a data gap and has requested that soil vapor samples be collected to confirm our current assumption that this is not a pathway of concern.

This data set is important so that we can say with confidence that volatilization is not a risk to human health.

Soil vapor sampling

- Sampling event April 22-24
 - 10 soil vapor samples.
 - Collected five feet below ground.
 - Analyzed for petroleum compounds and solvents.
- Results anticipated mid-May



To address this data gap, the City conducted a soil vapor sampling event just last week.

They collected 10 soil vapor samples from the locations shown on this map with black diamonds.

The samples were collected from 5 feet below ground surface as required by DEQ guidance and analyzed for petroleum compounds and solvents.

The locations were selected to reflect past onsite uses of the site that may have resulted in a release and the areas where future TASS 2 occupants will be spending most of their time.

Based on what we saw in the site groundwater dataset, we don't expect soil vapor to present a risk, but this data is necessary to be sure.

The samples have been sent to an analytical lab for testing and the results are anticipated sometime in mid-May

Once the results are received, DEQ and the City will review them to see if there are any concerns. The risk assessment will then be updated to incorporate the results.

Remedial action plan

- Identifies cleanup actions to address risks identified in the risk assessment.
- Cleanup actions identified so far:
 - Protective cap with stormwater management
 - Inspection and maintenance
- A vapor barrier or other action may be selected to address volatilization, if needed.



The Remedial Action Plan is a document that uses the conclusions from the risk assessment to identify any cleanup actions needed to address any risks identified.

For the TASS 2 site, the primary cleanup action is installation of a 1-ft thick protective cap which will consist of a geotextile demarcation layer, 8 inches of gravel, and 4 inches of pavement.

The cap will be installed across a majority of the site with the exception of the lined stormwater swales that will collect stormwater and direct it to the City's sewer system so that it doesn't flow into the adjacent Columbia Slough.

The cap is a physical barrier that will prevent people from coming into contact with the underlying contaminated soils.

Inspection and maintenance of the cap will be required to ensure that the cap remains protective for as long as the site is in use.

Although unlikely, the remedial action plan may also include measures to address volatilization if the soil vapor sample results indicate that it needs to be addressed.

Therefore, both the risk assessment and the remedial action plan cannot be finalized or approved until the soil vapor results have been considered. Approval of these documents is needed before construction of the cleanup elements, specifically the paving, can occur.

Next Steps



CMMP is finalized and approved by DEQ. Allows city to begin site work.



Soil vapor sampling results expected mid-May. Will be evaluated in the Risk Assessment.



Remedial Action Plan likely approved in mid-May, depending on soil vapor test results.



Documents and updates posted on DEQ's TASS web page



Later this week, DEQ expects to approve the CMMP. This will allow the City to begin certain site preparation activities such as grading the site, excavation, trenching and installing utilities.

In mid-May, the soil vapor sampling results are expected to be received from the analytical laboratory. Once received, DEQ will screen the data against protective screening levels to see if volatilization is a concern.

If the results indicate a problem, a cleanup action such as a vapor barrier may be selected and incorporated into design of the cap. If not, the Remedial Action Plan which the City has already started, could be approved shortly thereafter.

In parallel with this work, the City will be conducting the site-wide risk assessment for the site to see if additional cleanup actions are needed outside of the TASS 2 footprint.

DEQ will provide copies of these documents and updates on our TASS web page and of course remain available if there are any questions or concerns.

Discussion



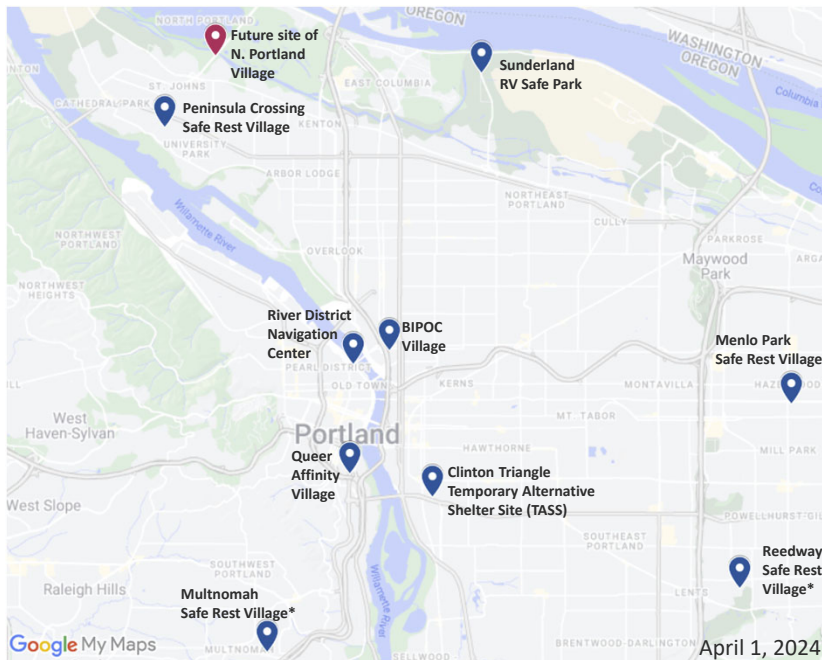
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City of Portland managed shelters

Existing Shelters

* Site expanding soon

Site in development

City of Portland Shelter Services By the Numbers

Site	Operator	Sleeping Units (current)	Sleeping Units (planned)	Status
BIPOC	All Good NW	38		Opened July 2021
Clinton Triangle	Urban Alchemy	160		Opened July 2023
Menlo Park	Cultivate Initiatives	50		Opened Dec. 2022
Multnomah	All Good NW	28	100	Opened June 2022 Expanding Spring/Summer 2024
N. Portland Road	Urban Alchemy		160 (70 RV spots, 90 pods)	Planned development Summer/Fall 2024
Peninsula Crossing	Urban Alchemy	60		Opened May 2023
Queer Affinity	All Good NW	35		Opened June 2022
Reedway	Urban Alchemy	60	120	Opened July 2023 Expanding Summer 2024
River District Navigation Center	Transition Projects	90		Opened 2019 Entered City portfolio Jan. 2024
Sunderland RV Safe Park	The Salvation Army	55		Opened July 2023
		Current Total:	Planned Total:	
		576	868	

*Note: with pod & RV capacity for couples, we've been publicly saying the City's shelters will have space to shelter **~1,000 people** on any night by end of 2024.