Submitted to: Governor Tina Kotek Oregon Legislative Assembly Oregon Environmental Commission January 2023





This report prepared by:

Oregon Department of Environmental Quality 700 NE Multnomah Street, Suite 600 Portland, OR 97232 1-800-452-4011 www.oregon.gov/deq

> Contact: Ned Fairchild, Manager Environmental Cleanup Section 971-284-6918

#### Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email <u>deqinfo@deq.state.or.us</u>.

## **Table of Contents**

| Executive Summary 1   |
|---|
| 1. About the Environmental Cleanup Program  |
| Oregon's Cleanup Process  |
| Routes to Cleanup in Oregon   |
| Cleanup Site Prioritization   |
| 2. Program Highlights, Fiscal Year 2022   |
| Policy and Program Development  |
| Statewide Priority Cleanup Sites  |
| Voluntary Cleanups  |
| Brownfield Redevelopment  |
| Prospective Purchaser Agreements  |
| Industrial Orphan Sites   |
| Solid Waste Orphan Site Account Program   |
| 3. Cleanup Milestones and Projections15   |
| Accomplishments – Fiscal Year 2022  |
| Cleanup Actions Initiated and Completed for Fiscal Year 2022; Forecast for Fiscal Year 202316 |
| 4. Cleanup Program Modernization17  |
| Funding Modernization   |
| Strategic Planning  |

## **Executive Summary**

The Oregon Department of Environmental Quality's Environmental Cleanup program protects human health and the environment by identifying, investigating and remediating sites contaminated with hazardous substances. The program's objective is to improve sites to the point where no further cleanup action is necessary and site conditions are protective for current and future use - as inexpensively and quickly as possible.

This annual report to the Legislature describes the Environmental Cleanup program's efforts to assess, investigate and clean up contaminated lands and help return them to productive use. Oregon Revised Statute 465.235 mandates this annual report to the Oregon Legislature, the Governor, and Oregon's Environmental Quality Commission. This report includes:

- A description of fiscal year 2022 (ends June 30, 2022) statewide cleanup program activities and key statistics.
- A summary of Cleanup program highlights including targeted policy and program development; cleanup action summaries for sites throughout Oregon; voluntary cleanup progress; brownfields work and milestones; Prospective Purchaser Agreements; Industrial Orphan funding needs; and the Solid Waste Orphan Site Account.
- Cleanup program milestones and projections.
- A description of the program's plans to modernize.

DEQ's Cleanup program had many successes in fiscal year 2022, including targeted policy and program development, completion of numerous projects statewide, and oversight of voluntary cleanups and brownfield redevelopments. DEQ also continues to return contaminated and unusable lands to productive use by helping organizations purchase contaminated land through Prospective Purchaser Agreements when there is a substantial public benefit.

To complement these successes, DEQ has been working hard to modernize the Environmental Cleanup program to adapt to changing circumstances. Originally modeled after the US Environmental Protection Agency (EPA)'s Superfund Program, DEQ's Cleanup program once focused its efforts on site discovery and issuing orders to compel responsible parties to complete cleanups through a formal process. Today, much of the program's work involves parties who voluntarily seek DEQ's oversight and associated liability protection as they clean sites for redevelopment. As Oregon's population grows and its industries evolve, DEQ's Environmental Cleanup program faces new opportunities and new challenges. Former industrial sites statewide are being redeveloped for new purposes, and DEQ often works on smaller sites that require quick turnaround due to real estate transaction needs. Contaminants of emerging concern may require DEQ to change policies and evaluate new technologies in the years ahead. Meanwhile, DEQ is working hard to center environmental justice principles and engage more meaningfully with communities while conducting cleanups.

Over the past two decades, revenue sources have declined while DEQ adjusted programs and responsibilities to meet changing needs and expectations. The program relies on a complex variety of revenue sources, including cost recovery, fees, federal grants, and bond sales. The program's internal systems and funding structure have remained largely the same since its inception over 30 years ago. The program had several key headquarters and regional positions that were not permanently filled during fiscal year 2022 leading to greater pressures on staff and management.

## **1. About the Environmental Cleanup Program**

Oregon's Environmental Cleanup program:

- Discovers, evaluates and prioritizes sites contaminated with hazardous substances for further action.
- Oversees the investigation and cleanup of sites presenting significant risks to human health or the environment through voluntary cleanup, or through enforceable agreements for high priority sites.

- Assists property owners and communities in restoring productive use of contaminated sites using brownfield technical assistance and prospective purchaser agreements.
- Leads the investigations and cleanups of orphan sites in cases where the responsible party is unknown, unwilling, or unable to complete necessary cleanup actions.

## **Oregon's Cleanup Process**

DEQ screens sites where hazardous substances may have been released to determine the need and priority for further action. A preliminary assessment may be conducted to investigate the presence and extent of contamination, which may involve collection of samples for laboratory testing. In the event of an emergency, a removal action may be needed to immediately stabilize the site and prevent contamination.

To determine if and how a contaminated site should be cleaned up, the program conducts a two-step investigation. The first step is a remedial investigation to determine the full nature and extent of the contamination; to evaluate risks to human health and the environment from exposure; and, to determine a need for a cleanup. The second step is a feasibility study to evaluate various cleanup options for sites posing unacceptable risk. Based on this information, DEQ determines what needs to be cleaned up and how it should be done.

When the necessary cleanup is relatively straightforward, an initial removal action may be all that is required. However, if the cleanup is more difficult and complex, DEQ may issue a formal cleanup decision called a record of decision (ROD) after a public comment period. The resulting cleanup is called a remedial action. In addition to (or instead of) removing or treating the contamination, DEQ may install an engineering control (such as capping or fencing) to isolate the contamination or pursue an institutional control (such as administrative or legal limitation). These protective controls work to limit future activities at the site so that people and animals are not exposed to contamination.

A site receives a No Further Action (NFA) designation when DEQ determines that the site poses no significant threat to human health or the environment. This may occur at any point during the investigation and cleanup process.

## **Routes to Cleanup in Oregon**

DEQ has several options for owners and operators of contaminated property to move through the investigation and cleanup process. The most common option is voluntary cleanup. Property owners seeking a signoff from DEQ agree to have DEQ oversee their projects to ensure that their work meets regulatory requirements. Parties can choose the standard voluntary cleanup approach or independent cleanup, depending on the project's complexity and amount of oversight needed. Parties intending to purchase property with existing contamination may enter into a Prospective Purchaser Agreement with DEQ prior to purchase that describes the cleanup actions they will perform at the property in exchange for protections from liability from DEQ and third parties for any remaining contamination.

DEQ also discovers contaminated properties through site assessment. DEQ learns about potential contamination from complaints, unsolicited reports and other DEQ programs or government agencies, in addition to conducting its own inquiries. DEQ evaluates and ranks sites based on their known or potential threats. Responsible parties are encouraged to address site contamination through voluntary cleanup.

DEQ will require parties with high priority sites to conduct investigation and cleanup under the terms of a legally enforceable order.

DEQ may designate the site an orphan and conduct the cleanup of high priority sites using limited, dedicated orphan funds where responsible parties are unknown, unable or unwilling to perform a cleanup.

DEQ may also address qualifying contaminated dry cleaner sites through a separate account funded by fees paid by eligible dry cleaning facility owner/operators. However, DEQ's Dry Cleaner Program is no longer financially viable. The dry-cleaning industry has declined over time and fee revenue has declined with it. Fees no longer provide sufficient revenue to clean up additional contaminated properties. Because of the decline, DEQ is proposing legislation for the 2023 Oregon Legislative Session to end the existing program, among other changes, and this is described further in Section 4 below.

Other types of cleanups are conducted under separate statutory authority. For example, DEQ's Cleanup program addresses petroleum releases from underground storage tanks while meeting additional federal and state requirements. Additionally, DEQ's Emergency Response program ensures new hazardous material spills are immediately cleaned up by the responsible party.

## **Cleanup Site Prioritization**

DEQ faced a staffing shortage in fiscal year 2022. This shortage was caused by multiple factors including retirement or resignation of large numbers of staff due in part to the pandemic, and difficulty recruiting and retaining staff. While these difficulties were not unique to DEQ or the Environmental Cleanup program, the similar demand for these uniquely skilled employees within sister state agencies, federal agencies like EPA, and the private sector, frequently left DEQ with failed recruitments. This staffing challenge combined with a high volume of new projects has required the program to prioritize its workload with a focus on those sites that pose a high risk to human health and the environment and sites where the customer is actively progressing through site investigation and cleanup. Cleanup's cost-recovery based funding structure is not particularly flexible in adapting to the increase and decrease in workload driven by the overall economy through the demand for cleanup oversight to facilitate property transaction and development. A more detailed examination of this structure and plans for modernization are outlined in section four (Cleanup Program Modernization) of this report. DEQ Human Resources is initiating a Recruitment and Retention Project in fiscal year 2023 to focus on reducing staff turnover and ensuring equitable and inclusive hiring. While this process cannot be expected to resolve turnover due to retirement and resignation entirely it, along with program modernization, will assist in reducing staff shortages in future years.

## 2. Program Highlights, Fiscal Year 2022

DEQ's Environmental Cleanup Program had many successes in fiscal year 2022 but was impacted along with the rest of the State by the ongoing global pandemic, substantial social changes, and staff shortages. The program has continued to make progress on targeted policy and program development, including DEQ-led cleanup actions for sites throughout Oregon; voluntary cleanup; brownfields projects and milestones; Prospective Purchaser Agreements; Industrial Orphan funding needs; and expanded use of the Solid Waste Orphan Site Account.

## **Policy and Program Development**

#### **Fiscal Framework Project**

DEQ evaluated the Cleanup program's funding structure and developed a summary of program funding areas, a timeline of significant program milestones, and initial recommendations on how to improve program financial stability in the medium and long term. This year the program continued the efforts of implementing those recommendations, including investing significant resources in developing the Cleanup module of Your DEQ Online. This agency wide project will upgrade and streamline the way we accept, process and share information within DEQ and with the public. Additionally, DEQ has moved to Workday Payroll and is developing a replacement for the Cost Recovery Invoice System. These investments, combined with simplifying various fiscal processes, are some necessary elements in stabilizing our current budget.

#### Internal Management Directives (IMDs)

DEQ completed a substantial update to the Vapor Intrusion Guidance that went through internal review in 2022. A revised draft will be ready for a 90-day public comment period in January 2023. Program staff also worked extensively on a DEQ-wide effort to develop a per- and poly-fluorinated alkyl substances (PFAS) Strategic Plan. The goal of this plan is to align with the EPA's efforts to regulate PFAS and is expected to be completed in early 2023. Finalization of the plan and implementation is expected over fiscal years 2023 and 2024.

#### DEQ and Oregon Health Authority (OHA) Workgroup

In 2022, the Cleanup program continued the DEQ-OHA Cleanup Workgroup, which provides for consistent collaboration between DEQ and OHA to address mutual interests and issues related to cleanup and disposal sites in Oregon. For the fiscal year, this workgroup primarily focused on project-specific issues and the continued coordination on PFAS chemicals.

#### Site Assessment Program Enhancement

DEQ is modernizing an element of the Site Assessment program to more effectively identify sites where contamination may be present by developing a groundwater vulnerability model. The groundwater model shows the vulnerability of specific groundwater aquifers across Oregon, allowing the program to focus assessment resources on areas that pose the most significant risk to human health and the environment. The DEQ Cleanup program is collaborating with EPA to fund and manage groundwater model development through the Preliminary Assessment/Site Investigation grant.

In 2022, DEQ entered the second phase of this project, which includes adding empirical data from site assessment projects and completing the validation of the model. Once the validation is complete, DEQ will use the refined model to predict groundwater contamination across Oregon and develop a map indicating areas that are more vulnerable to groundwater contamination. This map will be used to focus site assessment and resulting resource allocation.

### **Statewide Priority Cleanup Sites**

In fiscal year 2022, DEQ made significant progress on the following cleanup sites, organized by region:

https://www.oregon.gov/deq/FilterDocs/StatewideOfficeMapV.pdf

#### Northwest Region

- Willamette River Downtown and Upriver Reaches, Portland
- Former Time Oil Company, Portland
- Willamette Cove Uplands, Portland
- Bradford Island, Columbia River
- Scappoose Bay/Multnomah Channel, St. Helens
- Astoria Marine Construction Company, Astoria
- GASCO Manufactured Gas Plant, Portland
- Port of Astoria, Astoria

#### Western Region

- J.H. Baxter, Eugene
- Ashland Rail Yard, Ashland
- Millpond Crossing, Philomath

#### Eastern Region

- Umatilla Army depot, Umatilla
- Oregon State University Cascades Brownfield, Bend
- Department of State Lands Stevens Road Tract Brownfield, Bend

#### Willamette River Downtown and Upriver Reaches, Portland

Since 1991, DEQ has been involved in multiple investigations and cleanups along the Willamette River Downtown and Upriver Reaches. The Willamette River Downtown Reach extends from approximately the Broadway Bridge to the Sellwood Bridge and is upriver of the Portland Harbor Superfund Site. The Upriver Reach extends south from approximately the Sellwood Bridge to Willamette Falls in Oregon City.

DEQ continues to oversee several targeted sediment investigations along the Downtown Reach to determine if a cleanup is needed. DEQ is partnering with local governments and responsible parties to complete three investigations, using Industrial Orphan funds to investigate a fourth site, and to pursue potentially responsible parties to investigate a fifth site.

In addition to the direct benefits, these cleanup actions reduce the potential for recontamination of the nearby Portland Harbor Superfund Site by resuspension of contaminated sediment within these reaches. DEQ is coordinating with EPA to identify, prioritize and cleanup sites in these reaches prior to the initiation of remedial actions in the Portland Harbor Superfund Site.

During the reporting period DEQ completed an investigation in the Upriver Reach, funded through a grant from EPA. The scope of the study included collection of 44 sediment samples for analysis to determine ambient dioxin/furan concentrations in sediment. Fieldwork was completed in August 2021 and the final report was issued in June 2022. DEQ also completed a three-phase investigation of sediments between the Selwood Bridge and Oaks Park. This investigation did not identify significant levels of contamination.

#### Former Time Oil Company, Portland

The former Time Oil site, now known as TOC Holdings, declared bankruptcy in early 2017 with property responsibility assigned to a Chapter 7 Trustee by the U.S. Bankruptcy Court, Western District of Washington. In 2021, DEQ successfully negotiated a Prospective Purchaser Agreement with a new buyer after previous purchase attempts and inquiries had been unsuccessful. The scope of work included significant remedial action to address legacy contaminants and upgrades to the stormwater system. DEQ responded to public comments, including those submitted by EPA, and determined no significant changes to the scope of work were warranted. The scope of work included construction of an on-site containment cell, excavation of contaminated soil and decommissioning of an old storm drain system. This work was substantially competed in 2022.

#### Willamette Cove Uplands, Portland

DEQ issued a Record of Decision in March 2021 for the Willamette Cove property where a nature park will be developed by Metro. The riverfront property stretching 3,000 feet on the northeast bank of the Willamette River in the St. Johns area has a history of development and use spanning over 100 years. Soil contamination throughout the approximately 20-acre upland area exceeds acceptable levels for both human health and the environment, including elevated levels of dioxins and furans, metals, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs).

During the reporting period Metro and the Port of Portland, which formerly owned the property, completed preliminary remedial design sampling. Also, in response to public comment, Metro Council voted to invoke the contingency remedy specified in the Record of Decision, which will substantially increase the amount of soil removed from the site and disposed of in a landfill. There is a detailed story map on this site at <a href="https://www.oregon.gov/deq/Programs/Pages/WillametteCove.aspx">https://www.oregon.gov/deq/Programs/Pages/WillametteCove.aspx</a>

#### Bradford Island, Columbia River

In April 2022, EPA added Bradford Island to the National Priorities List (NPL) with a goal of more effective and rapid progress. This significant site on the Columbia River is contaminated with PCBs, and despite past efforts to remove known sources of contamination, PCBs continue to be present at high concentrations in fish.

DEQ Interim Director Leah Feldon travelled to Washington D.C., along with the Yakama Nation, and the Washington Department of Ecology to meet with an Assistant Secretary of the U.S. Army to develop

relationships between our respective agencies, and support progress at the site. Currently, a Federal Facilities Agreement is under development. A site management plan is needed and required. However, U.S. Army Corps of Engineers concerns about Freedom of Information Act requests has resulted in little progress on the ground over the last year as the agencies continue to try to coordinate. Site investigation activities in 2021 included additional soil characterization of the sandblast area, and additional PCB congener analysis of passive samples and fish, clam and crayfish samples.

#### Scappoose Bay/Multnomah Channel, St. Helens

Scappoose Bay enters the Multnomah Channel by the town of St. Helens in Columbia County. Industrial use of this area was primarily manufacturing wood products including paper, plywood, fiberboard and treated lumber. Significant levels of hazardous substances have been identified at three former industrial sites in Scappoose Bay: the Armstrong World Industries fiberboard plant, Pope & Talbot creosote treating facility, and Boise Cascade paper mill. DEQ initiated feasibility studies in 2020 for the contaminated sediments at all three sites.

During the reporting period DEQ approved the final feasibility study for the Pope & Talbot site and sought public comments on the staff report identifying DEQ's selected cleanup remedy for the Boise site. Comprehensive sampling was also completed at the Armstrong site. These data will be used in developing cleanup alternatives as part of the feasibility study.

#### Astoria Marine Construction Company, Astoria

The Astoria Marine Construction Company (AMCCO) manufactured and repaired wooden-hulled fishing and ferryboats, tugboats, and yachts beginning in 1924. During World War II, the shipyard expanded operations for construction of military vessels which continued through the Korean War. During the peak production period from 1940 to 1960, the facility employed more than 400 full-time workers. In the 1960s, work for the U.S. Navy decreased and operations transitioned to fishing and tugboat repair. After 1985, business primarily involved repairs of fishing boats.

EPA conducted environmental investigations in the early 2000s on and around the AMCCO site. Investigations found contamination in soil and nearby riverbed sediment in the Lewis and Clark River near the mouth of the Columbia River. Based on those findings, EPA initiated efforts to place the facility on the NPL to guide cleanup under EPA's Superfund program. In 2012, an agreement deferred the site listing and EPA transferred site management to DEQ.

In coordination with AMCCO, tribal governments, and a community advisory group, DEQ selected the cleanup remedy and issued the ROD in 2017, and entered into a settlement agreement with AMCCO in 2018. A natural resource restoration plan was agreed upon to satisfy conditions of EPA's deferral agreement. The cleanup remedy was constructed over the past three years and AMCCO achieved construction completion in October 2022.

#### Gasco Manufactured Gas Plant, Portland

From 1913 until 1956, the Portland Gas & Coke Company (Gasco) owned and operated a Manufactured Gas Plant (MGP) processing facility on its 80-acre property. One half of that property is currently owned by NW Natural (the Gasco Site) and the other half, known as the Allen Tract, is now owned by Siltronic Corporation (Siltronic Property). Leaseholds on the Gasco site have historically been used by companies involved in coal tar, creosote, and pitch operations, and for storage and distribution of marine fuel. NW Natural now uses the Gasco Site for a Liquified Natural Gas (LNG) operation and a marine fuel storage/distribution terminal.

Historic MGP production generated large quantities of byproducts and wastes, which were used as fill across the Gasco Site and Siltronic Property and discharged into unlined ponds and the Willamette River. After the end of MGP operations, coal tar, creosote, and pitch waste were released into soil and groundwater in the southern portion of the Gasco site. Wafer manufacturing on the Siltronic Property involved the use of solvents, which caused soil and groundwater contamination across that portion of the site.

NW Natural entered a voluntary cleanup agreement with DEQ in 1994 to complete the Remedial Investigation (RI) and Feasibility Study process. Between 1994 and 2022, remedial investigation and risk assessment work was finalized, and feasibility study work has commenced. Completion of investigation and risk assessment work represents the culmination of a substantial amount of work and a significant milestone for the project. In November 2022, NW Natural and DEQ initiated feasibility study planning, with the objective of completing the draft report in late 2023 or early 2024.

#### Port of Astoria, Astoria

DEQ has completed multiple petroleum-hydrocarbon investigations and cleanups at the Astoria "Area-Wide" Site beginning in the 1990s. The Site includes the facility at the Port of Astoria, five former bulk-fuel facilities, six former service stations, and one utility-fleet garage located between Highway 101 and the Columbia River. A remedial investigation was launched in 2001 by DEQ after the discovery of light petroleum sheen on the Columbia River was attributed to failure of a diesel-fuel pipeline. The site was divided into five operable units based on historic use and nature of contamination to facilitate the cleanup. Feasibility studies and cleanup were conducted after a site-wide investigation.

Since 2001, the site facilities in Areas of Concern (AOCs) 1, 2, 3, and 5 have completed their investigations and cleanups; and most have been returned to productive use. DEQ has issued six NFA determinations and two more NFAs' are nearing completion. Port of Astoria, Area of Concern 4, completed a remedial investigation and feasibility study and DEQ issued a ROD in June 2019. The Port finalized negotiations with other responsible parties in a consent judgment and began their remedial design work in May 2022. DEQ approved the remedial design work plan for construction of a groundwater-permeable reactive barrier, a sediment cap, and soil vapor controls in December 2022. Remedy construction is scheduled to begin in 2023.

#### J.H. Baxter, Eugene

The 31-acre site in Eugene was an active wood treatment facility since the early 1940s until J.H. Baxter & Co. ceased operations on Jan. 31, 2022. Spills and operational practices resulted in soil and groundwater contamination and air emissions concerns. Over the years, DEQ and the Lane Regional Air Protection Agency (LRAPA) have investigated the facility – which produced treated wood products such as utility poles and railroad ties – and issued numerous enforcement actions and required cleanup measures. In October 2019, DEQ completed a cleanup plan and issued the formal ROD which required offsite sampling and other remedial actions on the property.

Between 2020-2022, DEQ and EPA sampled thirty-two residential yards for dioxins, a group of toxic chemicals that can be associated with wood-treating chemicals. This soil sampling identified seven yards requiring cleanup as they are above DEQ's residential cleanup levels and above an OHA shorter-term cleanup level to protect children under six years old. This will occur in 2023 after additional sampling to fully define the extent of the contamination and understand how much soil must be replaced. Additional soil sampling in residential yards near the Baxter facility is planned to better understand the extent of the contamination and if cleanup is necessary. A final report will be issued detailing the sampling results.

DEQ formed a collaborative governance team including Lane Regional Air Protection Agency, Oregon Health Authority and several local agencies and organizations to investigate the sources and extent of the contamination. Additionally, a community engagement group comprised of community members interested in the Baxter facility has been meeting for the past two years. This group is working closely with the collaborative governance team to inform the investigation and share information with the wider community. The governance and community engagement groups used EPA grant funds to develop a story map with the Pacific Northwest Center for Translational Environmental Health Research at Oregon State University. The story map provides an overview of the site history, investigations, and public health consultations associated with the site and can be seen here: <a href="https://storymaps.arcgis.com/stories/61e11e3a99a54ff784a68ffacaccffcc">https://storymaps.arcgis.com/stories/61e11e3a99a54ff784a68ffacaccffcc</a>

#### Ashland Rail Yard, Ashland

The 21-acre rail yard was operated by the Southern Pacific Railroad Company for nearly 100 years as a locomotive fueling, maintenance, and railcar repair facility near downtown Ashland until 1986. Over the past 30 years, environmental investigations of the rail yard have shown that soil and groundwater in portions of the property are contaminated with several heavy metals and petroleum products and byproducts. The contamination is at levels that may pose a health risk to people working or living on the rail yard.

Union Pacific merged with Southern Pacific in 1996 and joined DEQ's Voluntary Cleanup Program. DEQ has worked closely with Union Pacific and City of Ashland representatives to develop an appropriate cleanup plan. There have been significant community concerns to address and, in 2017, there was a change to the environmental cleanup levels that reduced the area subject to cleanup. This required a new risk assessment, feasibility study, and cleanup plan.

In 2022, Union Pacific proposed a new cleanup plan for the rail yard that DEQ has tentatively agreed with, pending public comment. The new cleanup plan is out for public comment and DEQ expects to be able to approve the plan in 2023. The site covered under this cleanup plan is a 11.7-acre area located on the central portion of the former rail yard property. The proposed cleanup plan includes excavation of contaminated soil from the western 8.7-acre area of the site, consolidation on the eastern three-acre area of the site, covering contaminated soil with a protective vegetated cap, and site use restrictions. The new cleanup plan will allow the rail yard to be safely developed for industrial, commercial, or urban residential use.

#### Millpond Crossing, Philomath

The 30-acre former mill included two large log ponds, two wigwam burners and a fueling area. The Millpond Crossing Subdivision is being developed in Philomath by MPC Builders LLC (MPC) on top of a former sawmill, which operated from 1955 to 1998. The log ponds were reportedly filled with wood waste and rock during the 1980s. The site remained unused until 2018, when it was entered into the DEQ's voluntary cleanup program to assist with anticipated contamination issues during redevelopment. During preliminary investigative work in June 2020, methane gas was discovered above its lower explosive limit of 5% in soil at several locations across the property. Hydrogen sulfide has also been identified in soil around the homes above its lower explosive limit. Despite these findings and DEQ's recommendation to remediate the site, MPC began development in 2020 of the subdivision along the western edge of the property. To date, approximately 62 homes have been constructed, with 150 more expected. The existing homes have been equipped with vents, crawlspace fans, and methane alarms to help remove accumulation of gas and alert residents if methane reaches dangerous levels underneath their home. Since these mitigation efforts have been completed, neither methane nor hydrogen sulfide have not been detected within the crawlspaces of any of the existing homes.

In July 2021, DEQ and MPC entered a consent order to ensure investigation and remedial activities were not further delayed. A Preliminary Methane Remedial Investigation report was submitted to DEQ in June 2022, summarizing the investigations since 2020. During summer and fall 2022 several important work plans were submitted by MPC to DEQ for approval including: A home screening and monitoring plan, new home methane mitigation plans, utility retrofitting and methane mitigation plans, a targeted soil gas investigation of two areas with elevated methane concentrations in soil, a source removal work plan, and a contractor health and safety plan.

DEQ is working closely with MPC and their consultant to ensure continued safety of existing and future homeowners. In September 2022, a Brownfield loan from Business Oregon was approved to fund environmental monitoring. Monthly in-home screening and regular testing of the soil gas network around the homes commenced. A targeted assessment near existing homes with elevated methane in soil will occur in early 2023. In spring 2023, MPC plans to implement a pilot study to assess the effectiveness of various remedial measures in reducing the remaining risk from methane and hydrogen sulfide gas in soil.

#### Umatilla Army Depot, Umatilla

The former Umatilla Army Chemical Depot (UMCD) continues to move toward reuse and redevelopment.

Destruction of chemical agents stored at the Depot began in fall 2004 and was completed in October 2011.

The formal closing of UMCD occurred on Aug. 1, 2012, and in November 2017, the western half of the property (Camp Umatilla) was reassigned to the National Guard Bureau (NGB) and licensed to the Oregon Military Department.

In October 2022, Camp Umatilla was renamed the Raymond F. Rees Training Center. The training center is home to the 249 Regional Training Institute and will be used for inter-agency training. The remaining eastern half is anticipated to be transferred to the local Columbia Development Authority in 2023.

DEQ continues to work with the Army, EPA, and regional stakeholders on remaining cleanup work at two primary locations: the former ammunition disposal area (ADA) and the explosive washout lagoons. Cleanup to remove and remediate explosive contamination from the former operations at the facility is anticipated to be ongoing for several more years.

#### Oregon State University – Cascades Brownfield, Bend

The Bend Demolition Landfill is an inactive construction and demolition waste landfill covering about 72 acres in Bend, Oregon. It stopped receiving waste in 1986. Oregon State University (OSU) - Cascades began developing the landfill and adjacent properties in 2018 for a four-year university campus in Central Oregon.

The initial phases of work included removing organic waste such as saw dust and wood waste fines. These were blended with onsite soil to produce Processed Engineered Fill to be used in the development of the property. Prohibited waste (e.g., tires, metal, debris) was removed from the site and disposed of in accordance with applicable regulations. Some areas have not been completed because the wood waste in these areas is pyrolyzing (i.e. thermally decomposing), resulting in dangerously high temperatures and differential settlement.

Following the first two phases of work, new legislative funding was received through the university system to start the next phase of cleanup of the pyrolyzing waste; and there is a pending request to EPA for a Brownfield grant to further support the cleanup efforts. The combined funding will not only support the additional remediation, but also create the first eight acres of the Innovation District, which will be an urban mixed-use district comprised of strategic industry and research partners, middle market housing, and small-scale retail. This District will integrate University academic programs and research with industry and entrepreneurs, leveraging the fast growing and entrepreneurial economy of Central Oregon with a dynamic and innovative university.

#### Department of State Lands - Stevens Road Tract Brownfield, Bend

Located in southeast Bend, this site was used in the 1960's and early 1970's before Knott Landfill began operation to dispose of solid waste and septic sewer sludge. The Department of State Lands (DSL) took possession in the mid-1990's from the Bureau of Land Management. In June 2007, DSL completed a Stevens Road Tract Conceptual Master Plan that outlined redevelopment of the site and necessary remedial actions required from past activities.

Stevens Ranch LLC purchased the site in in 2020 from DSL and worked with the City of Bend to revise a new mixed-use development Master Plan for the property. The DEQ Cleanup, Solid Waste, and Asbestos programs have been involved in overseeing the cleanup and remediation of waste material.

Municipal waste materials and were found buried at the site from ground surface to 25 feet in depth. The waste material was excavated and processed to remove any prohibited materials from being directly transported to the County landfill. The prohibited materials included tires, scrap metal, suspect asbestos-containing material (ACM) and were managed separately. Reclaimed soil material was reused as backfill within excavations as structural fill. Approximately 203,180 cubic yards (cy) of material was excavated during the remedial activities

over two years resulting in approximately 99,111 cy of reclaimed soil, 17,084 tons of waste material to the landfill, 534 tons of scrap metal, 339 tons of tires, and 62.45 tons of ACM.

DEQ issued a NFA for the Site in December 2022 and redevelopment is anticipated to start in 2023.

## **Voluntary Cleanups**

The 1991 Oregon Legislature authorized a Voluntary Cleanup program (VCP) to provide DEQ oversight to willing parties for investigating and cleaning up contamination from their properties. This cooperative approach helps parties proceed efficiently and meet funding and redevelopment deadlines. In 1999, DEQ added a second VCP pathway - independent cleanup - which allows parties to complete their own remedial actions with limited or no DEQ oversight. The independent cleanup option is available for relatively simple and moderately contaminated sites that may exceed acceptable risk levels but do not pose significant threats to human health or the environment. As of June 2022, approximately 6,000 sites were active in the VCP. Since 1991, the VCP has issued No Further Action (NFA) decisions for over 2,100 sites.

## **Brownfield Redevelopment**

A brownfield is a vacant or underused property where actual or perceived contamination hinders the site's expansion or redevelopment. These are often highly visible eyesores where uncertainty about potential cleanup liability has derailed opportunities to bring new site uses and jobs that would revitalize a community's health and vitality. Nearly every community has brownfields. They are vacant lots we drive by daily, the piles of known or suspected polluted dirt behind rusting chain-link fences, and abandoned storefronts along our main streets. Community-led and agency-supported cleanup and reuse of these properties can provide community-serving spaces including affordable housing and greenspace, increase local property tax bases, provide jobs, address environmental justice issues, help meet Oregon's land use goals, and enhance public health and the environment. Currently, DEQ's sole source of funding to support brownfield redevelopment is provided by an EPA grant (128a State Response grant).

In fiscal year 2022, DEQ provided technical assistance to 16 local governments/public economic development agencies that received EPA brownfield planning, site assessment, or cleanup grants. DEQ used over \$400,000 in EPA grant funds at twelve brownfields to conduct site investigations, cleanup planning and limited cleanups, and explain further-action recommendations (or make NFA decisions). Three of the brownfields (King Salvage, Carol Glover BP, and Sammy's Place) are properties that were foreclosed by Lincoln, Yamhill, and Tillamook counties and used multiple brownfield funding sources. King Salvage and Sammy's Place leveraged DEQ Solid Waste Orphan Account funding to remove hazardous substances associated with solid waste prior to conducting the brownfield site investigation.

At Sammy's Place, the brownfield investigation identified contamination in soil that required cleanup prior to site development. In spring 2022, DEQ used a combination solid waste and brownfield funding to conduct a cleanup that removed and disposed of over 174 tons of soil. DEQ expects to issue a NFA in early 2023 and will continue to provide technical assistance during the site development that will include affordable housing and resources for people experiencing disabilities.

DEQ will continue to use federal brownfield funding to support community-engagement, remove barriers to redevelopment at public and privately-owned properties, and work with project partners to leverage resources to return sites to protective and productive use to provide community benefits. DEQ will prioritize work in and with disadvantaged communities, including those that are experiencing disproportionate impacts of climate change.

While DEQ uses funding received from EPA (via the State Response Grant) to support brownfield site investigations and cleanup planning, EPA also offers grant funding directly to successful applicants to support planning, assessment, and cleanup. DEQ supports these grant recipients with technical and regulatory assistance to help them meet the State's requirements and complete their project. Fiscal year 2022 EPA grant recipients and ongoing brownfield projects are described below.

#### ColPac Economic Development District (Multi-purpose)

EPA awarded \$1,000,000 to the Columbia Pacific Economic Development District of Oregon for a Brownfields Revolving Loan Fund (RLF) Grant. The grant will be used to capitalize a revolving loan fund from which the Columbia Pacific Economic Development District will provide loans and subgrants to support cleanup activities. Grant funds will be used to market the fund and support community outreach activities. RLF activities will focus on the Cities of St. Helens, Garibaldi, Cornelius, and Tongue Point, all located within the Columbia Pacific service region. Priority sites include a 60-acre area dotted with blighted vacant structures that is adjacent to a former military base, an 81-acre former wood veneer processing plant and lumber mill, a former dry dock, and a vacant gas station.

#### Tillamook County (Assessment)

EPA awarded \$500,000 in assessment grant funds to Tillamook County. The grant will be used to complete 12 Phase I and five Phase II environmental site assessments. Grant funds also will be used to develop cleanup plans for specific sites and support community outreach activities. The target areas for the grant are the Cities of Garibaldi and Tillamook. Priority sites include a former sawmill adjacent to a hospital and an automobile wrecking facility.

#### Clatsop County (Assessment)

EPA awarded \$500,000 in assessment grant funds to Clatsop County. Funding will be used to complete 12 Phase I and five Phase II environmental site assessments. Grant funds will also be used to develop cleanup and reuse plans and support community outreach activities. The target area for the grant is the Cities of Astoria and Seaside. Priority sites include a 1.65 former gas station in Surfside and the former Blue Ridge Assemblage site in Astoria (20-acre abandoned collection of buildings adjacent to a decommissioned military base).

#### City of Portland (Assessment)

EPA awarded \$500,000 to the City of Portland to conduct 10 Phase I and eight Phase II environmental assessments. Grant funds will also support the development of four cleanup plans and provide resources for community engagement. The target areas for the grant are the East Portland neighborhood and historic African-American neighborhoods in North and Northeast Portland. Priority sites include a former automotive repair shop and junkyard that is located within walking distance of public transit and is considered ready for redevelopment.

#### City of Hillsboro (Assessment)

EPA awarded \$500,000 to the City of Hillsboro to develop a brownfield site inventory and conduct 15 Phase I and 10 Phase II environmental site assessments. Grant funds will also support the development of five cleanup plans and support community outreach activities. The target area is the southern portion of Hillsboro's Downtown Urban Renewal Area, which includes the southwest industrial area, the city's traditional Main Street, light rail corridors, and historic residential neighborhoods. Priority sites include a 1.6-acre former rail depot and silo site, a former gas station and carwash site, and a former dry cleaner and auto repair facility.

#### Lincoln City (Assessment)

EPA awarded \$500,000 to Lincoln City to develop, inventory and prioritize brownfield sites, conduct eight Phase I and six Phase II environmental site assessments. Grant funds will also support the development of six cleanup plans, hold visioning sessions, and conduct community outreach activities. The target area is the entire city of Lincoln City, with an emphasis on the future Nelscott Urban Renewal Area and the Wecoma District. Priority sites include a former auto shop, a former dry cleaner, and a rock quarry.

#### City of Chiloquin (Cleanup)

EPA awarded \$402,500 in cleanup funding to the City of Chiloquin to support community engagement activities and to conduct a cleanup of the Former Markwardt Brothers Garage Assemblage site. The site is

comprised of two commercial parcels, one is vacant and undeveloped, and the other has operated as an automotive repair garage and gasoline filling station.

#### Rogue Valley Council of Governments (Assessment)

EPA awarded \$500,000 in assessment funding to the Rogue Valley Council of Governments to conduct 12 Phase I and ten Phase II environmental site assessments. The grant will also be used to inventory and prioritize brownfields, develop two cleanup plans and two area-wide plans, as well as support community engagement activities. The target areas are the Cities of Talent, Phoenix, and Medford, as well as unincorporated portions of Jackson County. These areas were significantly impacted by the 2020 wildfires. Priority sites include a former log truck service and repair station, three former gas stations, and a former fruit orchard.

#### **On-Going EPA Assessment & Cleanup Grants**

DEQ continues to provide technical assistance and oversight on previously awarded EPA cleanup and assessment grants. These grant winners include the following programs:

- Confederated Tribes of the Grand Ronde (Willamette Falls): \$800,000 (multi-purpose)
- City of Chiloquin: \$300,000 (assessment)
- The Dalles, Wasco County, Port of The Dalles: \$600,000 (assessment)
- Harney County, Cities of Burns and Hines: \$600,000 (assessment)
- Coquille Indian Tribe/Mithihkwuh Economic Development Corporation: \$350,000 (assessment)
- Baker Technical Institute: \$500,000 (cleanup)
- Baker Technical Institute Coalition (Baker City, La Grande, Eastern Oregon University): \$600,000 (assessment)
- South Central Oregon Economic Development District (SCEODD)- Lake County and Cities of Lakeview and Paisley: \$600,000 (assessment) City of Ontario, Malheur County and partner cities Nyssa and Vale: \$600,000 (assessment). Oregon Cascades West Council of Governments, and coalition partners (the cities of Newport and Toledo, the Confederated Tribes of the Siletz Indians, and Lincoln County): \$600,000 (assessment).
- Rogue Valley Council of Governments and coalition partners Jackson County and the cities of Medford, Central Point and Grants Pass: \$600,000 (assessment).
- City of Eugene, City of Springfield and Lane County: \$500,000 (assessment).
- Cities of Corvallis, Albany, Monroe, and Philomath, and Benton: \$600,000 (assessment).
- Cities of Lakeview and Paisley, and Lake County: \$600,000 (assessment).
- City of Beaverton Public Safety Center: \$400,000 (cleanup).
- City of Beaverton Creekside District: \$300,000 (assessment).
- Prosper Portland, Former USPS Facility: \$500,000 (cleanup).
- Metro Coalition: \$600,000 (assessment).
- City of St. Helens: \$400,000 (assessment).

## **Prospective Purchaser Agreements**

Prospective Purchaser Agreements (PPAs) facilitate the cleanup and return to productive use of properties contaminated with hazardous substances. The agreements provide developers and others with the means to manage risk and liability before acquiring contaminated property, and to make financial investments and move forward with redevelopment following acquisition. A PPA is a legally binding agreement between DEQ and a prospective purchaser that limits the purchaser's liability for environmental cleanup at the property, in exchange for the purchaser providing a "substantial public benefit" such as cleanup, funding for cleanup, redevelopment of a vacant or underused property, or any other important public purpose. For each project, DEQ determines what constitutes a substantial public benefit, believing that flexibility is key to providing the best community outcomes from new site uses.

During fiscal year 2022, DEQ entered 14 new PPAs--11 in DEQ's Northwest Region and four in DEQ's Western Region. In the Northwest Region, PPAs supported the transfer and productive use of two sites with an

EPA nexus. The first was in the Portland Harbor, where Restorcap completed acquisition of the Time Oil Company property from the bankruptcy court, agreeing to a Scope of Work with significant cleanup of upland portions of the site. No viable responsible parties existed to pursue for remediation costs, so the PPA allowed the purchaser to bring resources for the cleanup while also limiting their liability exposure. The second, was a PPA with Wilshire Clackamas Commerce Center for a portion of the NW Pipe and Casing site. This is a federal Superfund site in which the County had previously entered into a PPA to support public works projects. This new PPA will further private redevelopment of the second portion of the site.

Several other PPAs in Northwest Region supported cleanup and reuse of parcels located in highly sought urban locations, including properties with legacy contamination from dry cleaning operations, automobile service stations, paint manufacturers, heavy industrial and other problematic historic uses. Additionally, there were several PPAs that supported projects in rural areas, including expansion of a local family-owned recycling business and development of a rural residential subdivision.

In DEQ's Western Region, two PPAs were completed to support the City of Eugene's downtown riverfront revitalization efforts. The first was with Eugene Riverfront District, which is the private entity selected by the City to carry out plans for mixed use development. The second was with the City of Eugene, which is taking title to another parcel along the riverfront to provide access and parking to the redeveloped area.

Another PPA supported the City of Salem in the continued conversion of a legacy pulp and paper mill site into public recreational uses via a new PPA covering the Pringle Creek parcels. This was the third PPA entered into with the city to support this redevelopment. An additional PPA was entered into with a private developer in support of related commercial uses. Overall, this multifaceted reuse project has been immensely successful in revitalizing the downtown core and supporting community economic development and environmental quality goals.

Finally, DEQ entered a PPA with Sierra Cascade before their acquisition of the former Shaniko Mill property in the City of Lyons. This PPA is a good example of how the program supports repurposing a site with legacy lumber use and related contamination, to new manufacturing and production of pressed wood products which uses discarded material from nearby businesses. This will provide local employment opportunities that are especially needed in this area of the state that was heavily impacted by wildfires in 2021.

The PPA program portfolio now includes over 225 PPAs around the state. The program continues to be effective in helping local governments, sites nonprofit organizations and private entities acquire properties that provide a variety of public benefits in exchange for protection from liability for legacy contamination. More information on the PPA program can be found here: <u>https://www.oregon.gov/deq/Hazards-and-Cleanup/env-cleanup/Pages/Prospective-Purchaser-Agreements.aspx</u>

### **Industrial Orphan Sites**

Industrial Orphan sites<sup>1</sup> are contaminated properties where DEQ has determined the responsible parties are unknown, unwilling, or unable to undertake all required removal or remedial action. These sites include individual contaminated properties as well as area-wide where hazardous substances have affected sources of drinking water and other waterbodies.

DEQ generally designates a site an orphan when contamination at the site poses serious threats to human health or the environment. DEQ may also designate contaminated sites with significant but unrealized reuse potential (e.g., brownfields) as orphans. DEQ may also refer large and complex orphan sites to EPA for listing on the National Priorities List (NPL) and use the Industrial Orphan Site Account to pay the state's required 10 percent

share of remedial action costs. Since 1992, DEQ has declared 120 sites Industrial Orphans. Fifty-two of these sites have been cleaned up to No Further Action status, with many now supporting enhanced uses through redevelopment. The remaining orphans are in various stages of investigation and cleanup, including long-term monitoring and/or operation and maintenance (such as ongoing treatment systems to protect drinking water resources). During fiscal year 2022, DEQ worked actively on 13 Industrial Orphan sites.

In the 2021 legislative session DEQ sought funding for General Obligation Pollution Control bonds to replenish the Industrial Orphan Site Account for the next two biennia. DEQ received partial authorization which will be sufficient to maintain the prior maturing debt obligations coming due in fiscal year 2021-23 and provides approximately \$4.5 million in additional funding to pay for expenses associated with the bond sale and orphan remediation work.

DEQ will continue funding sites presenting significant risks to human health or the environment where responsible-party resources are unavailable. Subject to the availability of funds, DEQ will also consider using orphan funds to complete site cleanups rather than simply stabilize contamination, and to address eligible sites where development potential is significant.

Since 1991, DEQ has recovered approximately \$10.3 million of past expenditures from responsible parties and their insurance companies. While prospects for additional cost recovery are limited, DEQ will continue pursuing recovery of past orphan expenses to maximize funding available to perform cleanup activities at current and future orphan sites.

As mentioned above, states must contribute 10 percent of EPA's remedial-action costs and 100% of long-term monitoring and maintenance costs at NPL sites with no viable responsible parties. Subject in part to the cost and timing of EPA's remedial activities at NPL sites in Oregon, DEQ anticipates the need for \$5 - \$10 million of additional orphan funding to meet its estimated federal match requirements and long-term monitoring and maintenance costs over the next 10 years. In the coming years DEQ will continue to face a very significant issue in paying for orphan site cleanups, in large part due to the required state share of remedial-action costs at NPL sites.

## Solid Waste Orphan Site Account Program

The Solid Waste Orphan Site Account (SWOSA) is a fee-funded program that focuses on the cleanup of actual or potential hazardous substance releases from local government-owned solid waste disposal sites (e.g., municipal landfills) or privately-owned solid waste disposal sites (e.g., dumps, junkyards). Generally, SWOSA sites differ from Industrial Orphan sites because sites must have accepted domestic solid waste.

In fiscal year 2022, DEQ worked on numerous solid waste orphan sites, including a private landfill and waste burning site, a metal scrap yard and clandestine drug lab, an auto dismantler and crusher, a logging equipment yard, and multiple municipal landfills. These projects have taken a large amount of intra-agency coordination and interagency coordination between DEQ, OHA, Regional Solutions, and local governments. DEQ has worked on multiple SWOSA projects where local governments have contributed resources to help clean up sites. Local government contributions could include funding, labor, or reducing waste management fees. Once cleanup actions are complete and threats to human health and the environment are abated, the sale and redevelopment of these sites improves local property value and local tax revenue.

DEQ's goal is to prioritize sites that would provide equitable funding to underserved communities throughout Oregon in order to improve local conditions and build trust in the government. This will be accomplished by performing targeted cleanup while utilizing local businesses to complete cleanup actions. This approach channels SWOSA funds into the community and paves the way for redevelopment.

## 3. Cleanup Milestones and Projections

This section summarizes Cleanup program achievements in fiscal year 2022 (July 1, 2021 to June 30, 2022) and projections for the fiscal year ahead.

## Accomplishments – Fiscal Year 2022

#### Sites in DEQ's Database

Since 1988, DEQ has identified approximately 6,000 contaminated and potentially contaminated sites in Oregon and compiled information regarding these sites in the Environmental Cleanup Site Information (ECSI) database. DEQ identified 47 new sites in fiscal year 2022.

The most highly contaminated sites have been identified and the discovery of new sites should decline in the future. However, the "universe" of future cleanup sites is unknown. State law does not require reporting of contaminated sites to DEQ (except for underground storage tank releases and current spills above reportable quantities). Thus, there are "legacy" contaminated sites that DEQ may not learn about until: 1) they come into the Voluntary Cleanup program (described in Section 2); or 2) a third party reports them to DEQ; or 3) they are discovered by DEQ's Cleanup staff conducting research in various parts of the state. Additionally, new releases still occur, and people find unexpected contamination during construction or other activities – events that DEQ cannot predict.

#### **Confirmed Release List Sites**

In fiscal year 2022, DEQ removed one site from the Confirmed Release List. The list includes sites with documented contamination (rather than just being suspected). In recent years DEQ has limited its use of the Confirmed Release List, instead documenting sites in ECSI as either suspected release sites or documenting sites by activity, such as site screening or preliminary assessment. The program will not report on this list in future reports.

#### **Preliminary Assessments**

A preliminary assessment is an investigation of a site, its surroundings, and plants and animals potentially affected by pollution. DEQ reviews a site's history and conducts a walk-through to determine whether contamination is likely and what its effects could be – and may take samples. DEQ uses this information to determine the site's priority for further investigation and cleanup. In fiscal year 2022, DEQ or parties working with DEQ completed three Preliminary Assessments.

#### **Removal Actions**

A formal removal is a cleanup that occurs before, during or in lieu of, a remedial investigation, feasibility study or a final cleanup remedy. An informal removal is a cleanup that occurs to address low priority contamination and in the absence of a remedial investigation, feasibility study and ROD. Parties working within DEQ's Voluntary Cleanup program typically perform informal removals and receive No Further Action determination letters. Removals are commonly used to address "hot spots" of contamination. Removals help protect public health by preventing exposure to contaminants and the further spread of contamination. Removals are typically short-term activities over several months but on occasion may take several years to complete. In fiscal year 2022, Oregon initiated three and completed three formal removal actions.

#### **Remedial Investigations**

A remedial investigation involves the characterization of hazardous substances, characterization of the facility, performance of baseline human health and ecological risk assessments, and collection and evaluation of information relevant to the identification of hot spots of contamination. In fiscal year 2022, DEQ did not approve any as final. This does not mean no remedial investigation work was completed this

year, but only that no final report was approved. Remedial investigations often take more than a year to complete so investigations started in a given fiscal year are generally completed in a subsequent fiscal year.

#### **Feasibility Studies**

Feasibility studies provide detailed comparisons of possible cleanup methods for site contamination posing unacceptable levels of risk. Various remedial approaches or technologies are developed and evaluated for protectiveness. Options that would protect human health and the environment are then evaluated for effectiveness, ease of implementation, reliability, implementation risk and reasonableness of cost, as the law requires. DEQ recommends an option as the cleanup strategy and makes the selection after consideration of public comment. DEQ approved two Feasibility Studies as complete in fiscal year 2022.

#### **Records of Decision**

A ROD documents DEQ's decision on a site's cleanup method, based on the options evaluated in the feasibility study. DEQ finalizes the record of decision after evaluating public comments on the proposed approach and adjusting it as needed. The ROD draws upon remedial investigation and feasibility study findings to summarize the nature and extent of contamination and any risks it poses, the alternatives considered in the feasibility study, and the selected cleanup alternative to be implemented. DEQ completed one ROD in fiscal year 2022. It takes several months to write a ROD, open it for public comment, and approve it. Many simpler sites are addressed using staff memos and reports rather than a ROD.

#### **Remedial Actions**

A remedial action is the final cleanup action at a site. Remedial actions may involve eliminating contamination from a site by excavation or treatment; isolating the contamination through institutional controls, such as deed restrictions that limit certain land or water uses to prevent exposure; or using engineering controls such as caps, fencing or subsurface barriers. DEQ provided oversight for 12 remedial actions initiated in fiscal year 2022 and determined that eight were complete.

#### No Further Action Decisions (NFA)

DEQ makes a NFA decision after concluding that a site no longer poses risks to human health or the environment, and no additional investigation or cleanup is needed. During fiscal year 2022, DEQ issued NFA decisions for 35 sites. The number of NFA decisions exceeds the number of records of decisions and remedial actions because many simple sites are cleaned up independently and then request DEQ review that the site is now protective in order to issue a NFA decision. In other cases, DEQ determines that low levels of contamination do not threaten human health or the environment. At the end of fiscal year 2022, there were a total of 2,344 cleanup sites with DEQ NFA decisions. This amounts to approximately 40% percent of all sites in DEQ's ECSI database.

### Cleanup Actions Initiated and Completed for Fiscal Year 2022; Forecast for Fiscal Year 2023

The following table summarizes actions completed by DEQ's Environmental Cleanup program during fiscal year 2022. A forecast for fiscal year 2023 is also included.

| Site actions                                   | Fiscal Year 2022<br>(Actual) |           | Fiscal Year 2023<br>(Forecast) |           |
|--|------------------------------|-----------|--------------------------------|-----------|
|  | Initiated                    | Completed | Initiated                      | Completed |
| Suspected Release Sites Added to ECSI Database |                              | 47        |                                | 45        |
| Added to Confirmed Release List                |                              | 0         |                                |           |
| Added to Inventory                             |                              | 0         |                                |           |
| Site Screenings                                | 5                            | 5         | 5                              | 5         |
| Preliminary Assessments                        | 3                            | 3         | 3                              | 3         |

| Removal Actions (formal)   | 3  | 3  | 3 | 3  |
|--|----|----|---|----|
| Remedial Investigations  | 3  | 0  | 6 | 4  |
| Feasibility Studies  | 2  | 2  | 2 | 2  |
| Records of Decision  | 2  | 1  | 2 | 3  |
| Remedial Actions   | 12 | 8  | 6 | 9  |
| No Further Action Decisions (including informal removal actions) |    | 35 |   | 90 |

Note 1: Fiscal year 2023 forecasts are based on best professional judgement of the Cleanup program management team. One-time actions show data in the "completed" columns only.

Note 2: The COVID-19 pandemic and staff shortages continued to impact the Program in fiscal year 2022. Nevertheless, DEQ's Cleanup program is working to hire staff and in fiscal year 2023 DEQ expects to complete a more typical number of Cleanup Actions.

## 4. Cleanup Program Modernization

As Oregon's population grows and its industries evolve, DEQ's Environmental Cleanup program faces new opportunities and new challenges. Statewide, former industrial sites are being redeveloped for new purposes, and DEQ often now works on smaller sites that require quick turnaround to facilitate real estate transactions. Meanwhile, DEQ is called to engage residents in neighbouring communities while it performs essential oversight of cleanup activities.

Over the past two decades, revenue sources have declined while DEQ adjusted programs and responsibilities to meet changing needs and expectations. The program is operating with fewer filled positions, despite greater pressures on staff and management. To address this situation, DEQ plans to modernize its program by stabilizing funding and strategically planning the work ahead.

DEQ's Environmental Cleanup program relies on a complex variety of revenue sources, including cost recovery, fees, federal grants, and bond sales. The program's internal systems and funding structure have remained largely the same since its inception over 30 years ago. Both internal systems and funding structure need an update. A description of funding sources follows.

#### **Cost recovery**

Cleanup and hazardous waste laws authorize DEQ to charge all reasonable costs attributable to or associated with cleanup or hazardous waste activities at a particular site. Many of DEQ's expenses are financed through cost recovery and from the responsible parties performing cleanup activities. DEQ recovers costs for both cleanup oversight and, if necessary, the cost of contractors hired to perform the cleanup. Responsible parties are often reluctant to pay full costs.

#### Fees

Fees pay a portion of Environmental Cleanup program costs, and fee revenue has declined in recent years. Senate Bill 57, which passed the Oregon Legislature in 2021, updated the fees collected at the hazardous waste landfill near Arlington which help support the Environmental Cleanup programs. DEQ also uses a portion of this fee revenue to meet federal grant match requirements.

#### **Dry Cleaner Program**

Dry cleaning facility operators pay fees to fund site assessment and/or cleanup of qualifying dry cleaner sites and DEQ oversight of the industry via the Dry Cleaner program. Dry cleaner revenues are declining as businesses close over time or switch to using fewer toxic products. Revenues no longer provide sufficient funding to clean up any additional contaminated properties and leave DEQ unable to perform consistent inspections and provide adequate assistance for sufficiently managing perchloroethylene (PCE), a hazardous substance historically used by the dry-cleaning industry. Because of the declining amount of inspection and cleanup work being done, DEQ is proposing legislation for the 2023 Oregon Legislative Session to end the existing program, among other changes. If passed into law as proposed, this bill would:

- Sunset (end) all aspects of the DEQ Dry Cleaner Program by Jan. 1, 2024, including fees.
- Prohibit the use of perchloroethylene and n-propyl bromide as dry-cleaning solvents by Jan. 1, 2027.
- Provide limited funding to support the transition of existing dry cleaners using these solvents to safer alternatives, such as professional wet cleaning.

#### Federal funds

Grants, primarily from EPA, support cleanup work in several ways. DEQ uses grants to fund the development and administration of the statewide Environmental Cleanup program; support efforts to develop brownfield sites; pay for federal-level site assessments and brownfield assessments; and enable staff to participate in decisions related to EPA Superfund sites in Oregon. The U.S. Department of Defense also provides some funding through a cooperative agreement for DEQ's oversight of cleanups at military facilities. Generally, federal grant funds are decreasing or remain flat, which effectively erodes DEQ's "buying power" as costs increase with inflation. Going into 2023, though, DEQ was awarded a five-year grant from the Infrastructure Investment and Jobs Act (IIJA) that is anticipated to be roughly \$1M per year. The goal with this one-time funding is to support the modernization and stabilization of the program going forward.

The Leaking Underground Storage Tank (LUST) Trust fund is an additional federal fund available to address petroleum releases from federally regulated underground storage tanks (USTs). These funds are accessed to support UST cleanup and prevention through a formal assistance agreement.

#### **Bond Sales and Other Revenue Sources**

For sites where responsible parties have not been identified, or where the responsible parties are unable or unwilling to finance the cost of cleanup, DEQ uses a few different revenue streams to fund the work:

- The Solid Waste Orphan Site Account is funded by a portion of solid waste tipping fees.
- The Industrial Orphan Site Account has been funded by long-term bonds, financed primarily from General Funds, and a contribution from hazardous substance possession fees.
- DEQ has also been successful in recovering some orphan funds used to clean up sites through agreements with prospective purchasers of contaminated properties, settlements with responsible parties once liability is established, or owners' insurance claims.

## **Strategic Planning**

The turbulence of 2020 - 2022 impacted DEQ's plans to conduct strategic planning. However, the program made progress in understanding the complexity of program funding, and the changing staffing needs to effectively serve Oregon's communities. Additionally, DEQ has launched an agency-wide strategic planning process that will provide a critical North Star for the program's work. Strategic planning will allow the Cleanup program to understand partner and community expectations while also recognizing the changing tools and methodologies that have developed since the program's inception in the 1980s. The future strategic plan will allow the program to identify potential rulemaking and/or statutory changes, plan for staffing needs, and evaluate appropriate funding mechanisms. Envisioning what the program could look like over the next 50 years will allow robust conversations with the regulated community and new partners who could be impacted. DEQ will bring an environmental justice and equity lens to all these efforts, which will require different types of stakeholder engagement than the agency has historically employed.