

ENVIRONMENTAL EMERGENCY PROGRAM

April 1, 2023, to March 31, 2024

Report to Legislature



Ministry of
Environment and
Climate Change Strategy

The Environmental Emergency Program team members acknowledge with respect and gratitude the First Nations on whose territories we conduct our work.

Acronyms used in this report

BCER	British Columbia Energy Regulator
CCG	Canadian Coast Guard
CCME	Canadian Council of Ministers of the Environment
DGIR	Dangerous Goods Incident Report
DOC	Department Operations Centre
ECC	Emergency Coordination Centre
EEP	Environmental Emergency Program
EERO	Environmental Emergency Response Officer
EMA	<i>Environmental Management Act</i>
EMCR	B.C. Ministry of Emergency Management and Climate Readiness
ENV	B.C. Ministry of Environment and Climate Change Strategy
GVIRP	Greater Vancouver Integrated Response Plan
JCP	National Joint Contingency Plan
MOU	Memorandum of Understanding
NSB	Northern Shelf Bioregion
OG	Oil and Gas
SCAT	Shoreline Clean-up Assessment Technique
WCMRC	Western Canada Marine Response Corporation

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Message from the Acting Assistant Deputy Minister

Amy Avila is acting as the Assistant Deputy Minister of the Environmental Protection Division and has 16 years experience in the natural resource sector. Amy was the Lead for the Strategic Services Division, the Executive Director of Regulatory Negotiations at the Environmental Assessment Office, and the Executive Director of the Major Mines Permitting Office at the Ministry of Energy, Mines and Low Carbon Innovation.

British Columbia's Environmental Emergency Program (EEP) leads in preparing for, responding to, and recovering from hazardous materials spills in British Columbia. With 5,079 reports of spills during the reporting period of April 1, 2023, to March 31, 2024, our team has continued to protect the environment of British Columbia and the health and safety of all British Columbians.

The Office of Auditor General (OAG) of British Columbia released an audit of our program in February 2024. The audit assessment timeframe was from November 23, 2020, to June 13, 2023. From their audit findings, the OAG made nine recommendations and the ministry has accepted all nine recommendations.

The program's Audit Action Plan incorporates the recommendations to ensure that hazardous material spills are communicated, prevented, contained, and the environment is restored. The program has already begun work on the OAG's recommendations. Some of the actions already taken are highlighted in this report, such as First Nations spill notifications and updates to cost recovery processes.

The ministry takes the OAG's findings very seriously, we thank them for their work and are fully committed to implementing all the recommendations. The safety of British Columbians and the protection of public health and our environment are paramount.

I am proud of the critical work led by this program and am pleased to share EEP's sixth Report to Legislature.



A handwritten signature in black ink that reads "Amy Avila".

AMY AVILA, *Acting Assistant Deputy Minister*
Environmental Protection Division
B.C. Ministry of Environment & Climate Change Strategy



Message from the Director, Environmental Emergency Program

Rod Allen's career spans three decades with the B.C. provincial government, including Manager of Response and then Director of the Environmental Emergency Program. Prior to his roles with the program, Rod worked at Emergency Management and Climate Readiness and the B.C. Wildfire Service.

EPP is focused on enhancing its readiness for spills, response capabilities, and recovery strategies to fulfill its mission. Major accomplishments and activities for the reporting period include:

- Finalized the Northern Shelf Bio-region Marine Incident Preparedness, Response, and Recovery Framework
- Responded to the OAG audit, accepted all recommendations and developed an Audit Action Plan
- Developed a draft update of the B.C. Hazardous Materials Incident Management Plan
- Completed service enhancements to EEP's incident information management system
- Received, triaged and took necessary actions on 5,079 spill reports
- Two of the incidents responded to are highlighted in this report, a motor vehicle incident near Valemount and a heavy fuel incident in Nanaimo Harbour
- Participated in spill response exercises with industry, First Nations and partner agencies
- Provided \$415,000 in funding to multiple First Nations, Indigenous organizations, and Indigenous owned businesses for projects, activities and services related to spill management
- Initiated a pilot project to enhanced First Nations spill notification
- Dedicated considerable effort to enhance internal recovery guidance documents to improve coordination, add structure to current procedures, and develop new processes

I would like to thank our team members across the province for their commitment and readiness to protect the environment from environmental emergencies. I would also like to acknowledge our provincial government colleagues, Indigenous, federal, and municipal partners, members of the public, and other partners who have provided invaluable knowledge on various initiatives and spills across the province.

Our team remains prepared to plan for, coordinate, and manage incidents to protect the welfare of the public and our environment.



A handwritten signature in blue ink that reads "Rod Allen". The signature is fluid and cursive.

ROD ALLEN, *Director*
Environmental Emergency Program
B.C. Ministry of Environment & Climate Change Strategy



Executive Summary

As a requirement of Division 2.1 of the *Environmental Management Act* (EMA), the Ministry of Environment and Climate Change Strategy (ENV) must provide a Report to the Legislative Assembly that outlines the administration, operation and effectiveness of the Province's spill response regime. ENV's EEP leads the Province's response to hazardous material spills and other environmental emergencies.

This report satisfies the Ministry's legislative responsibility by describing the program's activities and highlighting specific achievements from the reporting period of April 1, 2023, to March 31, 2024.

EEP received 5,079 reports of spills and other environmental emergencies in the reporting period.

- There were 14 high-risk spills that either caused, or had the potential to cause, significant damage to human health or the environment
- 1,783 spills were reported in the Lower Mainland, the most of any region
- The most frequently spilled materials were flammable liquids and non-hazardous pollutants, which were present in 31% and 28% of spills, respectively
- Over 45% of spills resulted from equipment failure

On April 1, 2024, EEP became the Environmental Emergency Branch (EEB) to acknowledge the broader role EEB plays within the provincial emergency management family. However, this change occurred outside of the reporting period so EEP will be used in this document and EEB will be reflected in the April 1, 2024, to March 31, 2025 report.

Mandate and Overview

Quick, effective action helps to prevent harm and protect the environment when an emergency occurs. The *Ministry of Environment Act* delegates authority to ENV to act as the provincial lead in planning, coordinating, implementing, and managing a program to protect the welfare of the public and environment in the event of an environmental emergency or disaster.

To deliver on ENV's mandate, EEP carries out a wide range of activities:

- Prepare for and respond to spills of any substance that could affect or harm the natural environment
- Develop regulations, policies, procedures, plans, operational guidelines, cooperative agreements, and technical documents to ensure effective, coordinated action during an environmental emergency
- Provide environmental emergency response officers (EEROs) to assess conditions and oversee the response when an incident occurs
- Work with partner agencies to effectively coordinate the roles and responsibilities of all responders during an incident
- Provide scientific advice and site support during an incident
- Support the response to and recovery from impacts caused by flood disaster debris
- Lead the Environment Sector for provincial disaster recovery under the Emergency Management and Climate Readiness (EMCR) Disaster Recovery Framework
- Oversee and regulate environmental recovery following a spill
- Seek cost recovery for government expenditures related to spill response actions

EEP is the lead provincial regulator for spills; however, it is up to the responsible person to take reasonable steps to contain the spill and to address damage done to the environment.

The Legislation

EEP's mandate, responsibilities and powers are outlined in three pieces of legislation:

The Ministry of Environment Act

4. (2) ... the purposes and functions of the ministry include the following:

- (i) to plan for, coordinate, implement and manage **a program to protect the welfare of the public in the event of an environmental emergency or disaster.**

Environmental Management Act

EMA sets out requirements for spill preparedness, response and recovery in the:

- Spill Preparedness, Response and Recovery Regulation
- Spill Contingency Planning Regulation
- Spill Reporting Regulation

Emergency and Disaster Management Act

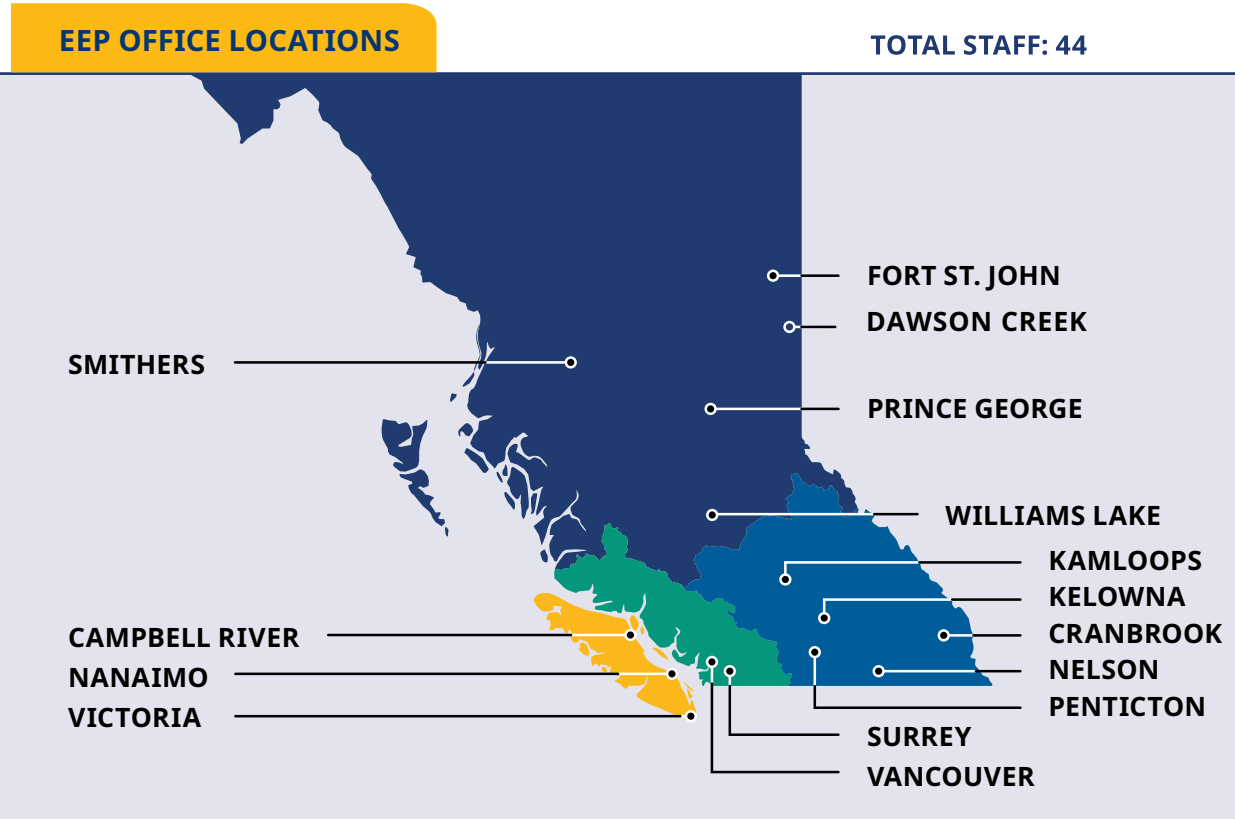
ENV is delegated under the **Emergency and Disaster Management Regulation** as the lead provincial agency for hazardous material spills.

A key tenet of the regulatory regime in B.C. is the **polluter-pay principle**. As described in EMA sections 91.2 and 91.4, the person deemed responsible for a spill is the responsible person, and as such, must ensure all actions to address a threat or hazard caused by the spill are taken. If the responsible person does not address their legislative responsibilities, government can recover expenses for spill response actions taken.

POLLUTER-PAY PRINCIPLE ensures those who are responsible for spills are also responsible for cleaning them up and is designed to keep the cost of response off of taxpayers.

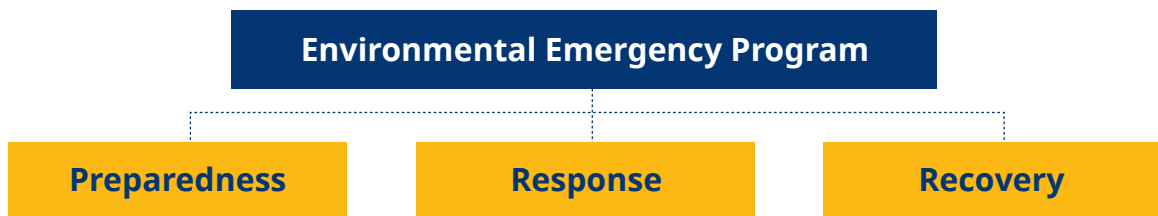
The EEP Team

As of the end of the reporting period, EEP consisted of 44 staff who carry out activities to protect the environment. Team members are strategically located in 15 communities throughout B.C.



EEP Activities

Program activities are grouped into functional business areas that focus on distinct phases of emergency management: Preparedness, Response and Recovery.



Preparedness

Preparedness is the process of developing the capacity and capability to effectively respond and recover when an emergency occurs. The key to preparedness is building on best practices and lessons learned from previous incidents, in B.C. and other areas of the world.

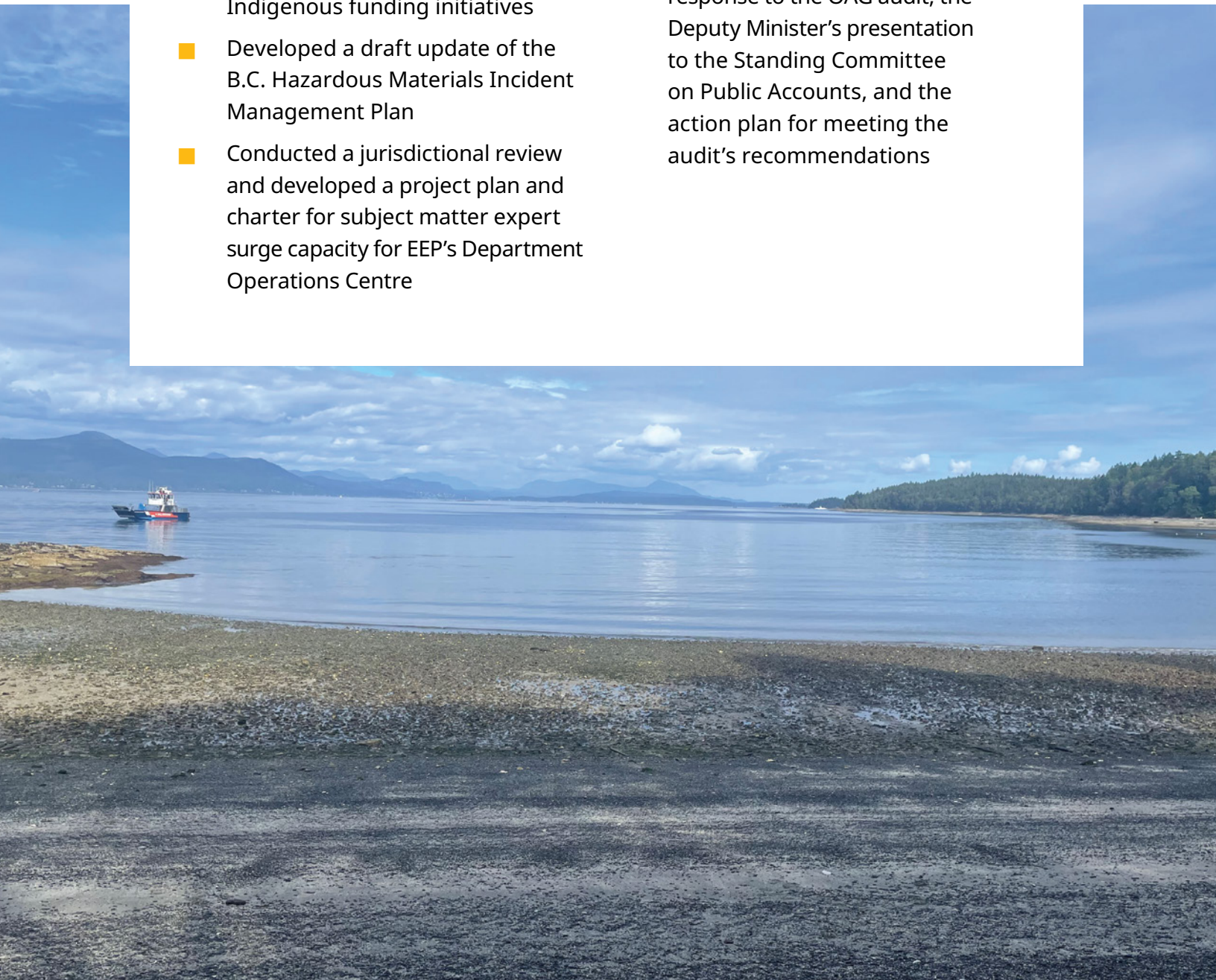
The Preparedness Section encompasses a range of high-level and on-the-ground activities:

- Plans for catastrophic events to ensure that essential services continue
- Advises other agencies about EEP's mandate, and existing or anticipated legislation
- Collaborates on external, intergovernmental, and Indigenous initiatives
- Develops systems to manage information effectively and sharing information with other emergency responders in critical situations
- Develops internal policy to direct our actions
- Prepares guidance materials for spillers and regulated persons
- Conducts internal training
- Develops and participates in exercises, internally and externally
- Develops legislation and regulations to ensure those transporting hazardous materials are better prepared to respond to a spill and to hold responsible persons accountable when spills occur

The Preparedness Section is often the ENV or provincial lead for internal and external emergency preparedness workgroups. For example, Preparedness is designated as the Ministry lead on the Ministry of Emergency Management and Climate Readiness' (EMCR) Emergency Planning Cross-Ministry working group, which is focused on developing the Provincial Comprehensive Emergency Management Plan. Other examples, discussed in the Key Initiatives section, include collaborative marine incident planning, Pacific States and British Columbia Oil Spill Task Force, and Canadian Council of Ministers of the Environment (CCME) Environmental Emergencies Network.

Reporting period highlights:

- Completed the Northern Shelf Bioregion (NSB) Marine Incident Preparedness, Response and Recovery Framework with coastal First Nations and federal partners
- Conducted engagement with First Nations on spill management for updating EEP's Reconciliation Strategy
- Developed a draft update of EEP's Reconciliation Strategy
- Managed and coordinated EEP's Indigenous funding initiatives
- Developed a draft update of the B.C. Hazardous Materials Incident Management Plan
- Conducted a jurisdictional review and developed a project plan and charter for subject matter expert surge capacity for EEP's Department Operations Centre
- Completed service enhancements to EEP's incident information management system (WebEOC), including developing a governance model with EMCR
- Supported the information technology and data management of the First Nations Spill Notification system, Alertable, that successfully onboarded 19 First Nations
- Coordinated the ministry's response to the OAG audit, the Deputy Minister's presentation to the Standing Committee on Public Accounts, and the action plan for meeting the audit's recommendations



Response

EEP's Response Section is made up of EEROs, senior EEROs, section heads, a training officer, and a logistics officer. The section's focus is to protect the environment and the public by effectively managing hazardous material spills and environmental emergency responses. This is achieved through ensuring the administration and compliance with EMA and supporting regulations, including the Spill Preparedness, Response and Recovery Regulation, the Spill Contingency Planning Regulation, and the Spill Reporting Regulation.

The Response Section encompasses a range of additional activities and actions:

- Ensures response readiness, conducting day-to-day response operations and spill response
- Develops provincial response policy and procedures
- Conducts community outreach and public information related to spills
- Leads spill response training and participating in spill exercises
- Manages EEP logistics and operational training
- Supports the Department Operations Centre and EMCR's Emergency Operations Centers

The provincial government may take over an incident should the responsible person (the spiller) be unknown or unable to fulfill the response obligations set out in section 91.2 of EMA.



Recovery

Spillers are required to carry out response actions as specified in EMA. EMA requires the responsible person to evaluate immediate risks and impacts on the environment, human health, and infrastructure. In addition to immediate spill response actions, the spiller is also required to undertake recovery actions to protect the environment from further harm, remove contaminants, and restore the environment. Environmental recovery often begins at the same time as the response but can extend from a few days to several years past the conclusion of the response. Recovery actions depend on the situation but commonly include the recovery of residual spilled product, treatment of contaminants, as well as monitoring the receiving environment. The goal of the recovery phase is to restore the environment to as close to pre-spill conditions as practicable.

The Recovery Section encompasses a range of high-level and on-the-ground activities:

- Oversees and regulates spill recovery
- Provides scientific advice and support to incident response
- Orders spillers to develop and submit Recovery Plans, if warranted
- Engages with Indigenous communities involved in or impacted by spill recovery activities
- Develops policies and procedures for spill recovery
- Conducts cost recovery
- Represents EEP on scientific research and multi-agency collaboration regarding spill response, mitigation, and recovery techniques

A key function of the Recovery Section is to ensure the scientific integrity of sampling and monitoring of spill-impacted water, sediment, soil, habitat, and wildlife. The team members are scientists trained in environmental impact assessments, wildlife and aquatic biology, toxicology, and environmental restoration. The recovery team engages with other specialists within and outside of government when specific expertise and local knowledge are needed. Recovery team members deploy into the field to lead or participate in the Environmental Unit at Incident Command Posts.

Recovery actions ensure that spillers address their legislative and regulatory responsibilities. If a spiller's actions are insufficient to comply with the regulation, EEP can order those responsible to take further steps. In addition, the spiller may be required to submit a Recovery Plan in accordance with the Spill Preparedness, Response and Recovery Regulation.

Reporting period highlights:

- Initiated review of cost recovery procedures and implemented a dispute resolution process for responsible persons regarding debt owed to Government
- Completed internal guidance for coordination between response and recovery teams
- Completed internal guidance for the development of environmental recovery endpoints
- Completed internal guidance for the management of oiled wildlife
- Secured shared services of hydrogeological expert advice with the ENV's Authorizations and Remediation Branch, Mining Team

During the reporting period, the Recovery Section received 233 file referrals. At the end of the reporting period, Recovery had closed 232 files and had 112 active files going into the next fiscal year. These open files involve multi-year monitoring programs, with 33 files carried over from previous fiscal years and 79 file referrals from 2023/24.

Expanded Role

Climate change is reshaping the emergency management landscape in British Columbia as disasters become more frequent and severe. This is uniquely true during recovery from a disaster, as lives, homes, businesses, the environment and communities are rebuilt. The province has adopted the Provincial Disaster Recovery Framework that outlines a consistent provincial approach to disaster recovery, setting the conditions for specific recovery operations where ministries take a direct leadership or regulatory role due to the type of impact or the scope, scale or location of an event.

Recent wildfire seasons have highlighted the need for a provincial coordinated approach to support impacted communities from initial planning to long-term implementation of environmental recovery actions. As such, the Recovery Manager led the Environment Sector and participated in the Standing Committee for Community Recovery chaired by EMCR. The committee provided coordination, and executive and Cabinet updates at a senior level. The EEP Recovery Section provided environmental technical support and guidance to communities in collaboration with several ministries and branches in response to concerns that were raised and continues to identify resources to address outstanding gaps.



Responding to Diverse Environmental Emergencies



Every year, EEP receives thousands of calls about environmental emergencies in B.C., and every incident is unique. The type of material spilled, the receiving environment, and the communities impacted all influence the way EEP responds to an incident. The selected incidents on the following pages illustrate the diversity and complexity of environmental emergencies across B.C.





EMERGENCY INCIDENT #1

Motor Vehicle Incident Valemount

DGIR: 241085**Source:**
Transport Truck**Spilled Content:**
Diesel, Class 8 Corrosives

SUMMARY OF INCIDENT:

On March 9th, 2024, a transport truck and trailer was involved in a motor vehicle incident on Highway 5 south of Valemount, B.C.

The trailer was carrying a mixed load of chemicals and during the incident multiple chemical containers were damaged. It was determined that approximately 6500 L of phosphoric acid, 1000 L of diethanolamine, along with other chemicals (glycol and borax), had spilled.

EEP EEROs were dispatched to the scene to oversee response actions and ensure potential impacts to adjacent water bodies (Albreda River and groundwater) were satisfactorily mitigated. Recovery staff provided support by coordinating an environmental technical group to share information about local sensitivities and potential interactions between spilled materials, the environment, and mitigation materials.

The Responsible Person, Ministry of Transportation and Infrastructure, Transport Canada, BC Hydro and the Simpcw and Lheidli T'enneh Nations all contributed to the response and cleanup operations. Recovery staff continue to oversee remedial works, ensuring that the full scope of impacts is identified and addressed through restorative work.





EMERGENCY INCIDENT #2

DGIR: 232784**Source:**
Cargo Ship**Spilled Content:**
Heavy fuel

Heavy Fuel Spill Nanaimo Harbour



SUMMARY OF INCIDENT:

On July 26th, 2023, EEP was informed by the Canadian Coast Guard that an estimated 7000 L of heavy fuel had been spilled from a cargo ship docked in the Nanaimo Harbour.

The Canadian Coast Guard called for a unified command to be established at the Western Canada Marine Response Corporation's (WCMRC) Nanaimo base which is located a short distance and within view of the incident site. The Unified Command consisted of:

- Canadian Coast Guard
- ENV EEP
- Snuneymuxw First Nation
- Nanaimo Harbour Authority
- The responsible person

The majority of the spilled product was rapidly contained with booms deployed by WCMRC. However, an unknown volume of product had migrated from the area and sheens were being reported throughout the Nanaimo Harbour and Nanaimo River Estuary areas.

An Environmental Unit was stood up to oversee the assessment of impacts and recommend both protective and restorative actions. Throughout the incident Response and Recovery staff worked within the incident command





post and in the field conducting shoreline surveys. The field staff were remotely supported by their co-workers and program leadership staff.

Response efforts continued until mid-August when activity began to wind down. EEP Response and Recovery staff oversaw the successful treatment of shoreline impacts during the initial response phase and concluded that long term monitoring would not be required for this incident.

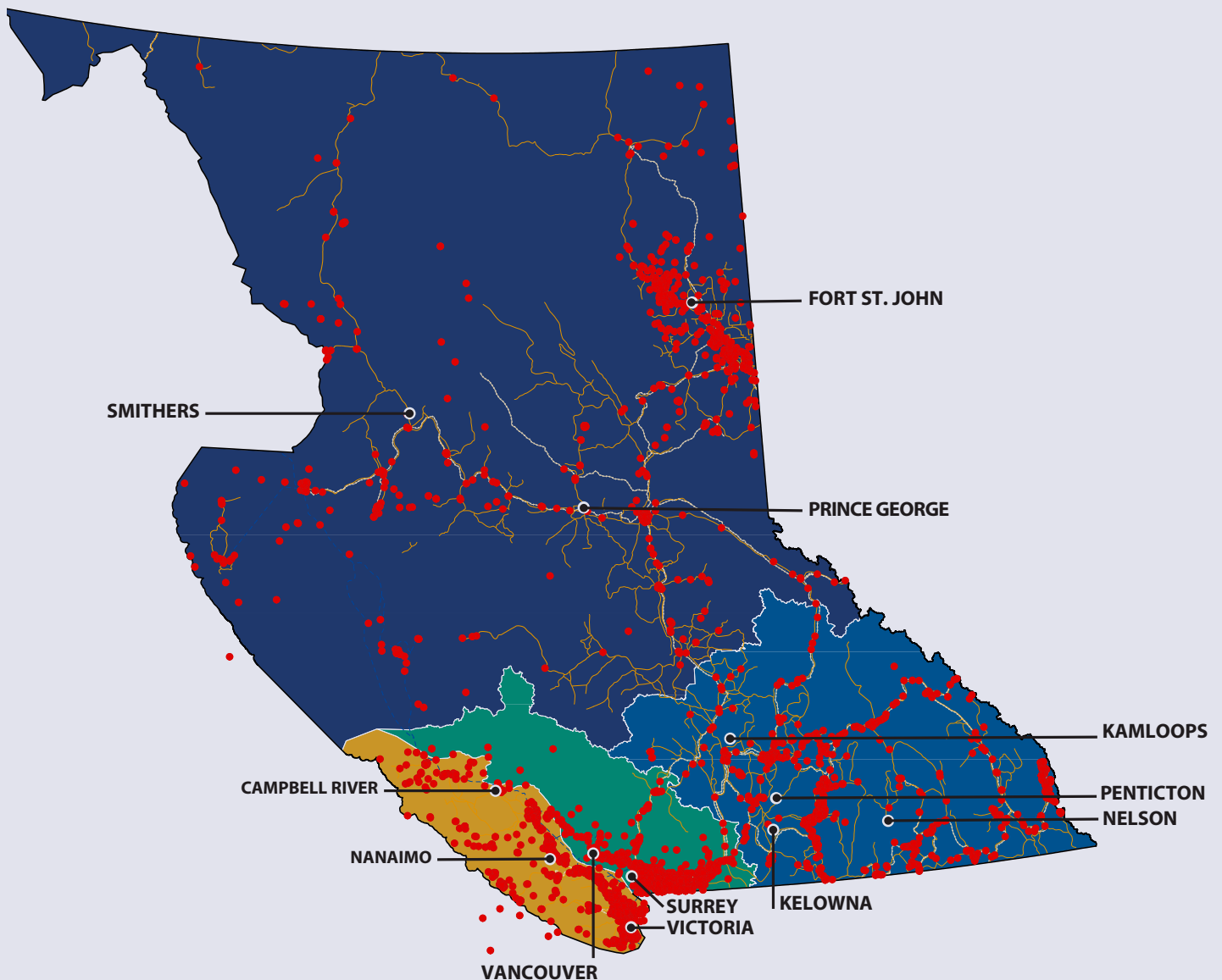


Spill Reports and Data

Overview: Spill Reports Across B.C.

EEP received 5,079 dangerous goods incident reports (DGIR) in the April 1, 2023, to March 31, 2024, reporting period (Figures 1 and 2). After receiving a report, an EERO conducts an initial risk assessment to determine whether a field response is required. Deployment is confirmed by using professional judgment, conversations with the EEP Duty Manager, and other information obtained in the early hours of a spill. The program responded to nearly half of these reports, either with site visits or follow-up communications.

Figure 1: Distribution of DGIR Locations and Transportation Lines



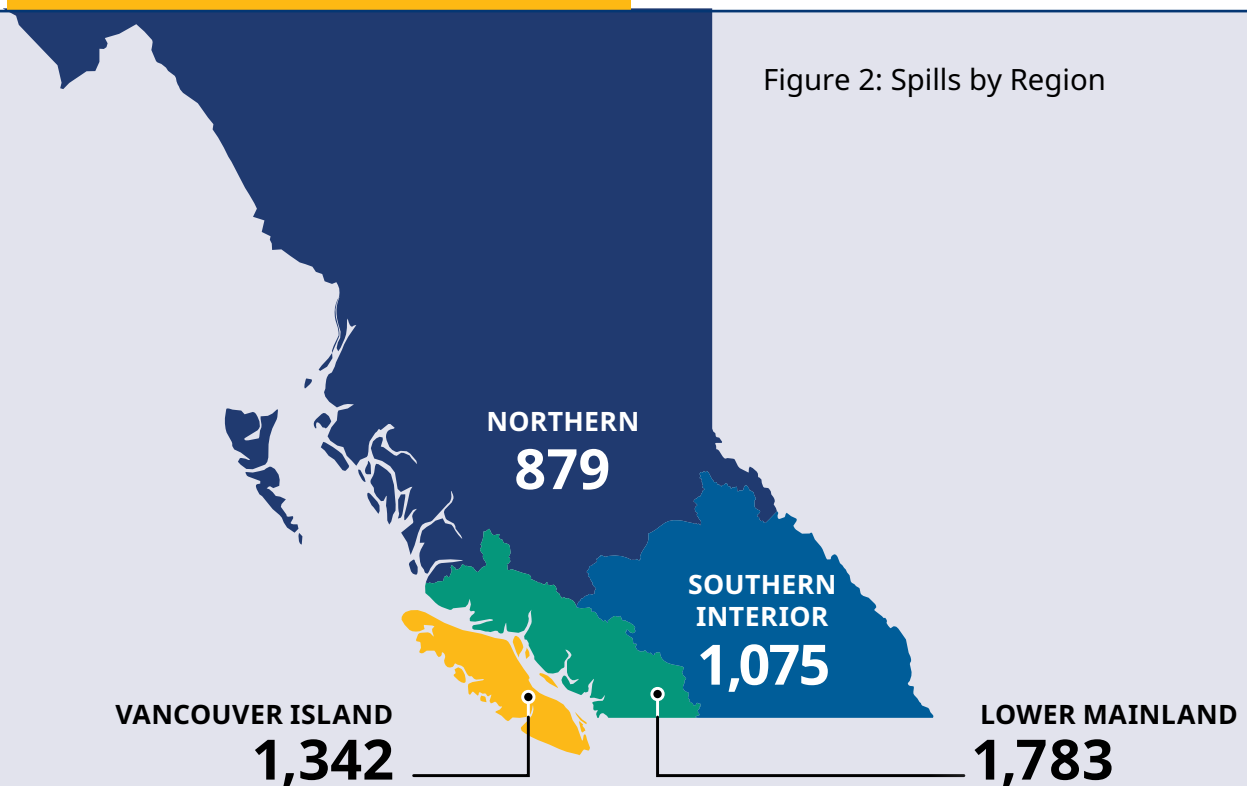
Risk Ranking

Each reported spill is assessed for public threats, environmental sensitivities, incident status, estimated response times, and response capability of the responsible person. Based on these factors, a reported spill is given one of the following risk rankings:

- **Low Risk** – generally no field response is required but can be considered
- **Intermediate Risk** – field response is considered
- **High Risk** – field response is generally undertaken
- **Unknown Risk** – DGIRs with an unknown risk were not closed out during the reporting period and are pending completion to ensure all information collected from the responsible person has been received to finalize and close the file

SPILLS BY REGION AND RISK RANKING	HIGH RISK	INTERMEDIATE RISK	LOW RISK	UNKNOWN	GRAND TOTAL
Lower Mainland	0	9	1707	67	1783
Vancouver Island	0	5	1336	1	1342
Southern Interior	9	30	1031	5	1075
Northern	5	15	859	0	879
Grand Total	14	59	4933	73	5079

TOTAL SPILL REPORTS BY REGION



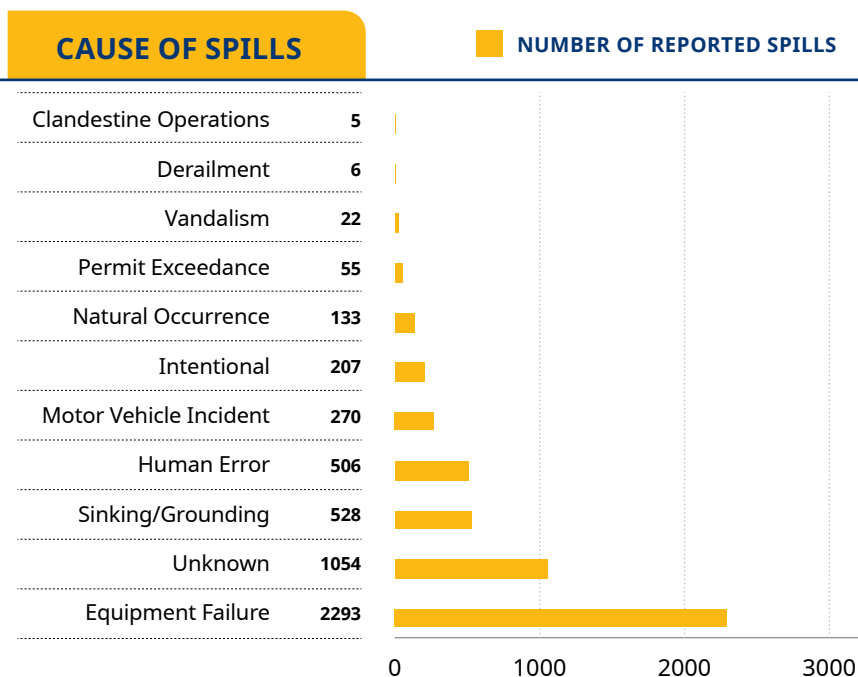
Analysis of Spill Reports

Spills are reported to EMCR's Emergency Coordination Centre (ECC) via a 24-hour spill reporting number. The ECC generates a Dangerous Goods Incident Report (DGIR) and passes the information on to an EERO.

The following sections summarize data from the reporting period of April 1, 2023, to March 31, 2024.

Cause Of Spills

Equipment failure caused the most spills at 45% of the total. An example of equipment failure is the rupturing of lines or radiators on the property of the responsible person. Spills are listed as unknown when it is not possible to identify the source of the spill or the responsible person. Examples of unknown spills may include petrochemical and organic sheens, illegal dumping sites or releases of substances that cannot be identified. Unknown sources represent 21% of reported spills. Spills are commonly categorized as a natural occurrence when organisms in the environment produce substances that have a similar appearance to chemical spills (e.g. algae blooms) or high streamflow events that mobilize hazardous materials from riverbanks. Spills reported as natural occurrences represent 3% of reported spills.



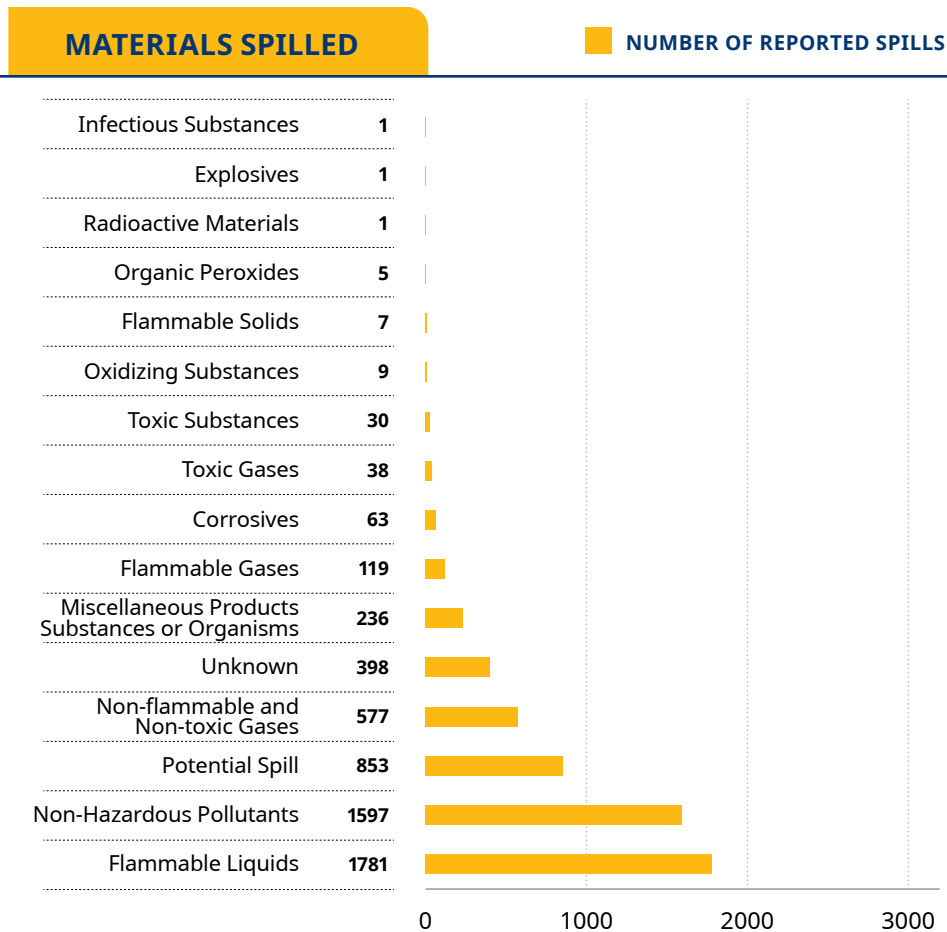
Materials Spilled

Flammable liquids, such as gasoline, diesel and heating fuel, represent 31% of materials spilled. They are the most common substances spilled, as they are widely used for transportation, heating, industrial processes and other purposes. Flammable liquids can cause fires, explosions, and contamination of soil and water.

Non-hazardous pollutants, which represent 28% of materials spilled, are materials that are not immediately dangerous to health or life but can still have an impact on the public and environment. For example, a large release of chlorinated drinking water to a stream can cause harm to sensitive aquatic invertebrates and fish species.

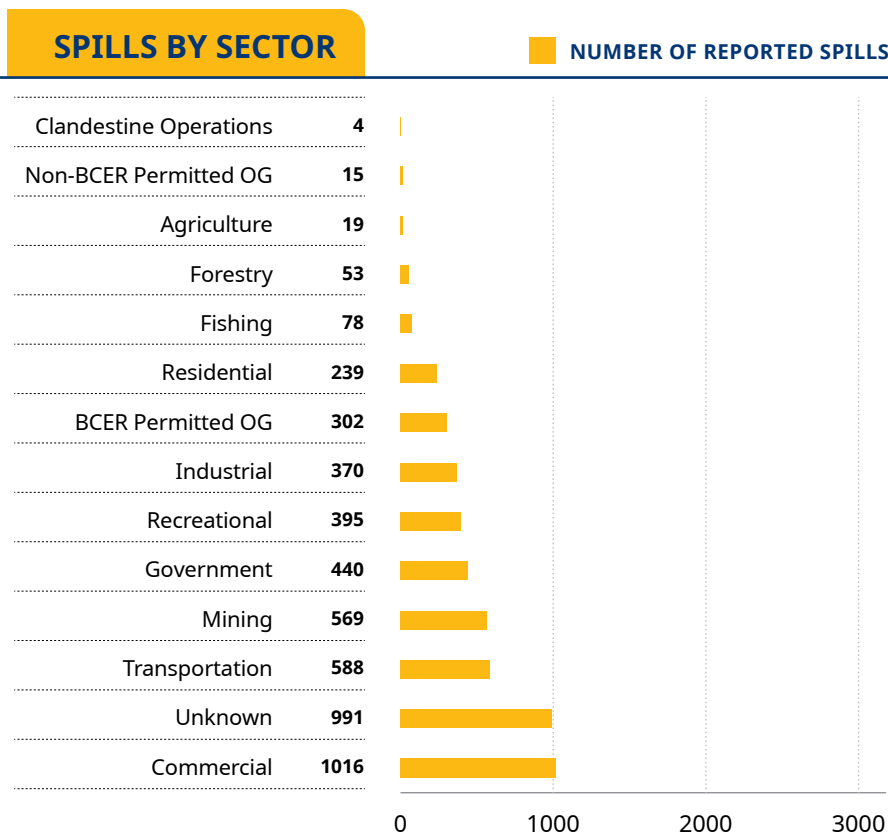
Potential spills, which represent 15% of materials spilled, represent situations where there is a known pollution threat, such as a vehicle rollover, and it was reported via a DGIR. However, once the site was assessed, it was determined no substances were spilled.

Some spills involve multiple materials, for example, a truck fire in West Kelowna contained toxic substances, flammable liquids, oxidizing substances, and miscellaneous products, substances or organisms. During the reporting period there were 5,716 materials spilled from 5,079 DGIRs.



Spills By Sector

Reported spills are categorized into one of 13 sectors. The commercial (20%), transportation (12%) and mining (11%) sectors reported the highest number of incidents, generally because they are the largest users of petroleum products. The oil and gas (OG) sector only includes companies that extract raw petroleum products or transport petroleum to refineries. The government sector (9%) involves drinking water and wastewater treatment facilities, fire-fighting water runoff, and other government-controlled processes. If the cause of a spill is not known, it cannot be attributed to a specific sector. Unknown spills represent 20% of reported spills.

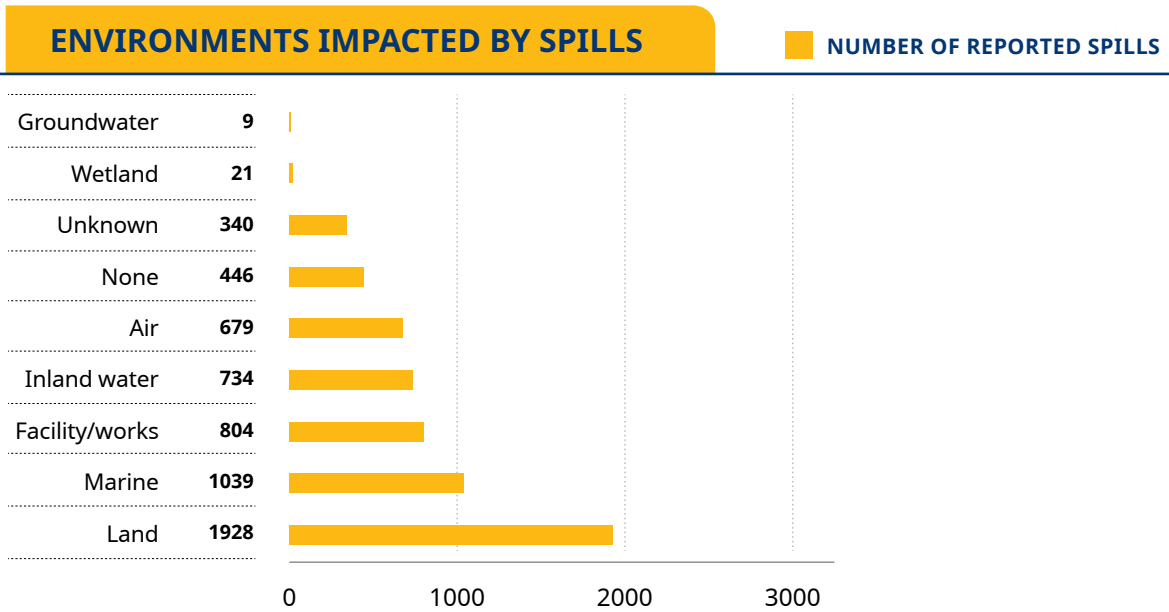


Environments Impacted By Spills

Reported spills occurred in many different environments, reflecting B.C.'s diverse geography and extensive transportation corridors. Often spills impact multiple environments, for example, a spill could impact both the land and inland water.

Most releases to the air result from equipment failure in refrigerant systems. Refrigerant gases tend to be non-toxic, non-flammable and dissipate quickly; however, many refrigerant gases are ozone-depleting substances.

Groundwater is one of B.C.'s most valuable and vulnerable resources. Spills impacting groundwater are uncommon. Spills to groundwater can have far-reaching and prolonged impacts on drinking water supplies and agricultural users.



Responding to the Office of the Auditor General's Audit

The OAG conducted the **Managing Hazardous Spills in B.C.**¹ audit to determine if EEP had effectively managed hazardous spills to protect the welfare of the public and the environment.

The OAG made nine recommendations covering five themes: preparing for spills; oversight of response and non-compliance; oversight of recovery; cost recovery; and monitoring and reporting. EEP has accepted and is acting on all the recommendations.

Audit Released:
February 27, 2024

Read the OAG's Report:

<https://www.oag.bc.ca/pubs/2004/managing-hazardous-spills-bc>

OAG Recommendations	Completed Actions
1. The Ministry of Environment and Climate Change Strategy work in partnership with First Nations to update the plans it uses to coordinate a provincial-level response to a major hazardous spill.	<ul style="list-style-type: none"> ■ Completed draft of updated EEP spill response plan ■ Finalized Coastal First Nations NSB Marine Framework
3. The Ministry of Environment and Climate Change Strategy implement a process to help ensure that First Nations are notified about hazardous spills.	<ul style="list-style-type: none"> ■ Launched spill notification pilot in 2022 ■ Signed up 19 First Nation communities
4. The Ministry of Environment and Climate Change Strategy implement procedures to help ensure recovery staff consistently review reports and verify that recovery activities are complete.	<ul style="list-style-type: none"> ■ Developed internal guidance on recovery endpoints
5. The Ministry of Environment and Climate Change Strategy develop guidance to support recovery staff to engage and partner with First Nations.	<ul style="list-style-type: none"> ■ Released Indigenous Reconciliation Strategy ■ Engaged in March 2024 with BC First Nations on updating the Indigenous Reconciliation Strategy
6. The Ministry of Environment and Climate Change Strategy implement a process to help ensure that response officers notify the Environmental Emergency Program's compliance and enforcement staff of instances of potential non-compliance.	<ul style="list-style-type: none"> ■ Updated policies and procedures in December 2023 ■ Updated compliance and enforcement training and education program
7. The Ministry of Environment and Climate Change Strategy develop solutions for improving the effectiveness of its cost recovery process to help ensure that substantive costs are recovered from those responsible for spills.	<ul style="list-style-type: none"> ■ Developed a dispute review process in September 2023

1 Managing Hazardous Spills in B.C. by the Office of the Auditor General of British Columbia

Reconciliation Activities

EEP is committed to working towards connection, reconciliation, and equity. EEP recognizes reconciliation is a continuous journey and requires constant reflection on how the program and staff can best support and involve First Nations during environmental emergencies.

During the reporting period, EEP disbursed \$415,000 to multiple First Nations, Indigenous organizations, and Indigenous owned businesses for projects, activities and services related to spill management.

Examples of projects, activities and services funded:

- Shoreline Clean-up Assessment Technique (SCAT) Training
- Incident Command System Training
- Shellfish assessment
- After Action Reviews
- Hazardous waste management
- Spill response equipment
- Expansion of the First Nations spill notification system (Alertable)
- Indigenous facilitation services

SCAT TRAINING EEP provided funds for five SCAT training sessions that were attended by 66 participants. SCAT is a systematic process for documenting and describing oiled shorelines. The purpose is to collect data relevant to the spill and the shoreline that will be evaluated by a spill management team to aid the decision on appropriate priorities, treatment techniques and endpoints.

EEP contracted an Indigenous facilitator to assist with the development and delivery of a spill management engagement session with First Nations. The March 14, 2024, engagement session was attended by 97 participants from 61 First Nations. The facilitator produced a What We Heard Report which will be used in 2024/25 to update EEP's Reconciliation Strategy.

Since January 2020, Canada, British Columbia, and Pacific North Coast First Nations (governance partners) have been collaboratively developing the NSB Marine Incident Preparedness, Response and Recovery Framework. During the reporting period the partners completed the Framework. The Framework sets out the common principles of cooperative response organization and management across the NSB and the respective roles, responsibilities and procedures that support collaborative incident

management by government agencies and response partners. Staff are currently working on the next planning phase with federal and First Nations partners on sub-regional plans with two of the four sub-regional working groups already started. This work has provided a valuable opportunity to build trust and strong relationships that are critical during environmental incidents.

First Nations Spill Notifications

During the drafting of the NSB Framework, First Nations highlighted deficiencies regarding the marine spill incident notification process. First Nations notification is also identified in the third OAG Audit recommendation.

To address these gaps and improve the timeliness and accuracy of First Nation spill notifications, EEP initiated a pilot project with Pacific North Coast First Nations and co-developed the Enhanced Spill Notification System using Alertable, an alerting software used by many local governments.

The system is reliable and effective and has demonstrated the following benefits to First Nations:

- Delivers the right information to the right people at the right time
- Enables subscribers to receive notifications 24/7 through their channel(s) of choice – email, text, phone call and/or mobile App
- Facilitates notifications as soon as a spill is reported to the Ministry, even after-hours, so First Nations can determine their level of involvement in the response
- Facilitates timely incident updates directly to users

Alertable is supported by EEROs as an effective and efficient method to notify First Nations that a spill has occurred. EEP is advancing towards a future state where Alertable will replace the legacy process of calling First Nations and Band offices to notify about spills in or near their communities.

During the reporting period, EEP onboarded 19 First Nations and Councils across BC and current subscribers are very happy with the service.

Any First Nations and Councils interested in adopting the new system can reach out to spillresponse@gov.bc.ca to express interest.

Department Operations Centre

EEP's Department Operations Centre's (DOC) primary roles are to support site-level response actions and provide situational awareness and information to support ministry executive decision-making. EEP can activate the DOC using an in-person, virtual or hybrid model depending on the needs of the event and the location of resources.

DOC activities include:

- Liaise and coordinate information with other programs, agencies, and the media
- Assist with notifications and lead coordination calls
- Provide incident updates to program management and ministry executive
- Manage and update ENV's BC Spill Incidents webpage
- Coordinate staff deployments, including travel and accommodation
- Provide logistical support, direction and policy guidance to EEP team members at the incident site
- Provide technical advice, research, and policy guidance during a spill
- Recover costs and manage documents
- Activate and deploy natural resource sector subject matter experts

EEP reviews past incidents, after-action reports, policies, and training plans to ensure the DOC is prepared to support on-site operations effectively. To maintain operational readiness, DOC personnel participate in internal and external exercises. Training for DOC positions and site deployment is ongoing.

During this reporting period, the DOC was not activated; however, the Information Officer position was utilized to update the BC Spill Incidents webpage.



Informing the Public

EEP provides the public with information on provincially significant spill incidents through a spill incidents webpage and X (formerly Twitter) account. The spill incidents webpage and X account also inform the public on how to report a spill which leads to timely environmental response and recovery efforts. During the reporting period, EEP created web postings for 17 incidents.



Spill Incident Webpage:

<https://www2.gov.bc.ca/gov/content/environment/air-land-water/spills-environmental-emergencies/spill-incidents>

X (formerly Twitter) account: @SpillsInfoBC

Technical Training and Equipment

All EEP staff receive comprehensive training and equipment for their personal safety, to protect the public, and to assess environmental impacts. Training includes classroom, tactical, mentoring/shadowing and participation in spill simulation exercises.

Due to the potential exposure to hazardous materials associated with motor vehicle or vessel incidents, pipeline leaks, train derailments, and industrial operations, EEROs undertake extensive training – approximately 120 hours of technical training with an additional 160 hours of safety training before being deployed to incidents involving hazardous materials. This level of training prepares EEROs to respond safely in all weather conditions and geographical locations, including marine, river, lake, and mountain environments.

Preparedness Section staff are all provided introductory level emergency management training and Incident Command System certification. Further training is given to personnel that fulfill specific positions within the DOC during activations to ensure effective response to environmental emergencies. Additional training courses are available to support planning and preparedness efforts as needed, such as Hazardous Material Awareness. Staff also receive SCAT training so they can assist in the field, if required.

Recovery Section staff undertake a variety of training that covers introductory level emergency management, Incident Command System certification, SCAT, and other specialized environmental recovery training. Recovery staff also participate on scientific research committees, and multi-agency collaborations for continuous learning and participate in spill simulation exercises.



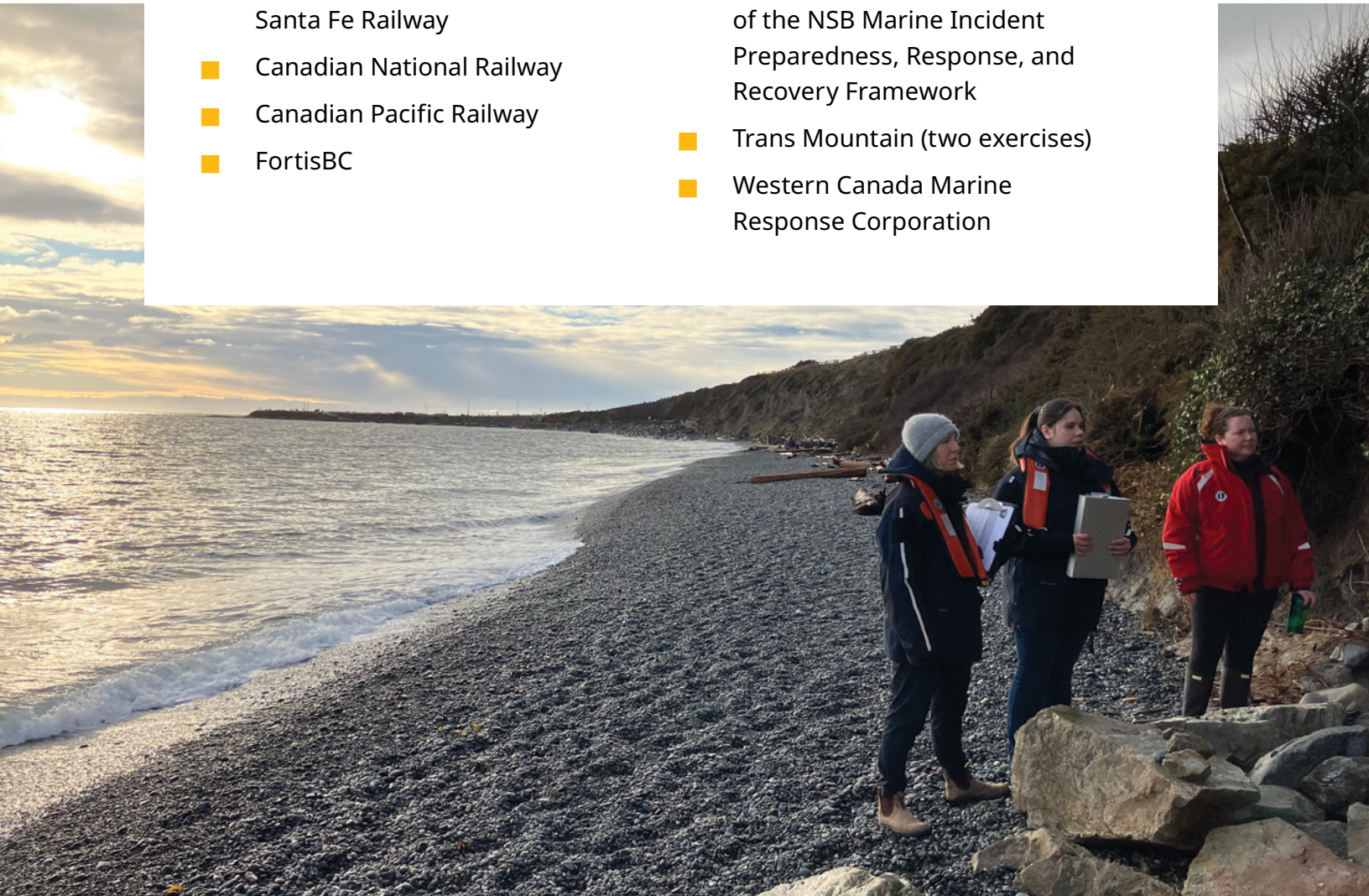
Collaborative Exercises

As a key partner in hazardous spill response and recovery, EEP staff are regularly invited to participate in a variety of spill exercises across the province and in other jurisdictions. Exercises are hosted by industry, First Nations communities, response organizations, local government and other provincial and federal agencies. Participation provides an opportunity to train with entities that commonly interact during an incident and allows for the testing of crucial response components like notification processes and the validation of response plans.

Exercises are also integral for clarifying agency roles and responsibilities, identifying gaps in resources and training, identifying areas for improvement, testing business continuity plans, and improving individual and organizational performance through practice.

During the reporting period, EEP participated in eight exercises hosted by:

- Burlington Northern Santa Fe Railway
- Canadian National Railway
- Canadian Pacific Railway
- FortisBC
- Central Coast working group of the NSB Marine Incident Preparedness, Response, and Recovery Framework
- Trans Mountain (two exercises)
- Western Canada Marine Response Corporation



Key Initiatives

EEP works with numerous external agencies in areas related to spill coordination, response, and emergency planning. Through discussions with other agencies, EEP ensures that roles and responsibilities are clearly defined.

The Northern Shelf Bioregion Marine Incident Framework (NSB Framework):

This framework was jointly developed by Pacific North Coast First Nations, Canada, and B.C. through a Government-to-Government initiative under the Reconciliation Framework Agreement. This framework sets the foundation for collaborative marine incident preparedness, response, and recovery in the NSB, which is one of four ecological regions off the coast of B.C., extending from Quadra Island to Alaska. The signatories are currently developing marine incident plans for two of the four subregions.

Pacific States — British Columbia Oil Spill Task Force (OSTF): Under the OSTF, representatives from state and provincial environmental agencies in the Pacific coastal area collect and share data on oil spills, coordinate oil spill prevention projects, and promote regulatory safeguards.

In November 2023, EEP representatives attended the 34th Annual Meeting of the Pacific States-British Columbia Oil Spill Task Force, hosted by the Government of California in Sacramento. This in-person meeting gathered key state and provincial participants, providing a valuable opportunity for Task Force members to exchange updates on spill prevention, preparedness, response, and recovery.

Presentations included jurisdictional updates from Task Force Executive Members, discussions on cost recovery best practices, and insights into community-based approaches for prevention, preparedness, response, and recovery. Additionally, case studies were presented on the environmental impacts of the Deepwater Horizon oil spill disaster in 2010 off the coast of Louisiana, and the Orange County crude oil spill in Los Angeles in 2021.

EEP's key learnings from the event included best practices for cost recovery guidelines from U.S. states, networking with Pacific state environmental emergency programs, and gaining insights into training exercises from the petroleum industry focused on catastrophic oil spills. More information on the Task Force, including video recordings of the Annual Meeting, can be viewed at oilspilltaskforce.org.

Canada — US Joint Contingency Plan (JCP): The JCP is a cooperative federally led international agreement between Canada and the United States providing for a coordinated mechanism to plan, prepare for, and respond to spills in contiguous waters. EEP acts as the provincial representative for the Juan de Fuca region (CANUSPAC), the Dixon Entrance (CANUSDIX), and the inland boundaries between B.C. and the states of Montana, Washington, and Idaho (CANUSWEST). The Canadian federal lead for CANUSPAC and CANUSDIX is the Canadian Coast Guard, supported by Environment and Climate Change Canada and Transport Canada. CANUSWEST is led by Environment and Climate Change Canada and supported by Transport Canada.

In June 2023, EEP staff traveled to Ketchikan, Alaska, to meet with CANUSDIX Canadian and US counterparts. During this meeting participants reviewed the CANUSDIX annex to the JCP, lessons learned from recent cross border incidents, and the International Coordinating Officer role. Additionally, common operating platforms, used to share information with partners and stakeholders during cross-border incidents, were reviewed and discussed in preparation for a full-scale exercise in 2025/26.

CANUSPAC members met in July 2023 at the Canadian Coast Guard Station in Kitsilano, Vancouver to debrief a recent exercise and lessons learned from an incident in the Aleutian Islands. Similar to the CANUSDIX meeting, common operating platforms and communications between partners was discussed in anticipation of a Canada led mass casualty exercise to take place in November 2024.

During the reporting period, EEP, in cooperation with Canadian federal partners, the United States Environmental Protection Agency and the Washington State Department of Ecology, completed a full review and update of the 2015 CANUSWEST annex. EEP staff played a critical role in updating mapping and clarifying provincial roles and responsibilities during a terrestrial spill incident. Discussions regarding the date and scope of a tabletop exercise of the updated plan are ongoing.

Canadian Council of Ministers of the Environment (CCME): EEP is a member of the CCME Environmental Emergencies Network, established to enhance the response to environmental emergencies, ensure that environmental factors receive consideration in response actions, build a collective understanding of roles, and share lessons learned from incidents.

CCME approved the Canada-wide Action Plan on Zero Plastic Waste (CAP-ZPW) in 2019 (Phase 1 Action Plan) and 2020 (Phase 2 Action Plan). Together the two phases contain concrete actions to implement the 2018 Strategy on Zero Plastic Waste. To support the implementation of CAP-ZPW, the Waste Reduction and Recovery Committee's Natural Disasters and Spill Events Project Team seeks to develop guidance to help reduce plastics entering the environment from natural disasters and spill events.

Greater Vancouver Integrated Response Plan (GVIRP): The GVIRP is an operational plan initiated by the Canadian Coast Guard to guide multi-agency, on-water response to serious oil pollution incidents within the waters from Howe Sound, extending south along western Metro Vancouver Regional District to the Canada-US border. EEP is a member on the Environmental Response Sub-Committee, providing subject matter expert advice relating to the province's role in spill response. In January 2024 GVIRP hosted an in-person tabletop exercise in Coal Harbour, an EERO attended.

Juan de Fuca Integrated Response Plan: As with the GVIRP, Canadian Coast Guard has developed a Juan de Fuca Integrated Response Plan for Marine Pollution Incidents to guide a multi-agency response to significant incidents within the Strait of Juan de Fuca. EEP is a member on the planning sub-committee, providing oversight and input to changes in the plan.

Oceans Protection Plan, Multi-Party Advisory Committee: This committee fosters scientific collaboration and leverages work by national and international external parties. Members provide information and advice pertaining to their research needs and priorities, review progress on initiatives, and raise awareness of research outcomes.

Fisheries and Oceans Canada Environmental Response Science Initiative: This initiative is focused on identifying knowledge gaps in Fisheries and Oceans Canada's oil spill research priorities.

BC Energy Regulator (BCER) / ENV Working Group: Both BCER and ENV have legislated responsibilities for spills in the energy sector. This initiative is focused on creating a Memorandum of understanding (MOU) that outlines organizational roles and responsibilities for spill incidents and formalizes a commitment to enhance communication between both agencies. A draft MOU has been completed and is currently undergoing a legal review. Once complete and signed off, the working group will continue to provide operational guidance to BCER and EEP staff.

Compliance and Enforcement

Implementation of compliance and enforcement for EMA Division 2.1 and associated spill regulations is aligned to [ENV's overarching Compliance & Enforcement Policy and Procedures](#) and seeks to ensure consistent assessment of non-compliances and application of suitable enforcement tools. A key objective of compliance and enforcement action is to use compliance inspections to ensure the behaviour of responsible persons complies with regulatory requirements.

Advisories and warnings are two of the enforcement outcomes of a compliance inspection. They are published on the [Natural Resource Compliance and Enforcement Database](#) within seven days of issuance. Advisories and warnings provide written notice of non-compliance with a specific regulatory requirement and often recommend a course of action that is expected to achieve compliance. Warnings also highlight the potential of an escalating enforcement response if the non-compliance continue.

During the reporting period, EEP conducted 197 office-review compliance inspections that resulted in the issuance of 112 advisories and six warnings. Compliance and Enforcement staff also finalized policy and procedures for the review of Spill Contingency Plans during the reporting period.



Expenditures

This financial overview includes work pertaining to hazardous waste spills under Division 2.1 of the EMA. Work undertaken by EEP for the Neucel Stabilization Project and the Flood Debris Management Secretariat are not included in this financial review.

GROSS EXPENDITURES (DOES NOT REFLECT RECOVERIES)	FISCAL YEAR 2021-2022 (\$)	FISCAL YEAR 2022-2023 (\$)	FISCAL YEAR 2023-2024 (\$)
Salaries and Benefits	4,281,112	4,251,341	5,186,462
Staff Training, Exercises, and Travel	143,738	130,845	136,197
Professional Services/Contracts	188,384	176,869	336,743
All Other Expenditures	847,097	1,902,706	2,137,040
Total	5,460,331	6,461,761	7,796,442

EEP receives funding from the Consolidated Review Fund of the Province of British Columbia.

Cost Recovery

In accordance with the polluter-pay principle, EEP seeks cost recovery from the responsible person for government expenditures related to spill response actions and management of spills as outlined in Section 91.4 of the EMA. Government's costs include responder time, deployment expenditures, and contracts related to the response and clean-up. In fiscal year 2023/24, EEP recovered \$31,280 from responsible persons for incidents in fiscal year 2023/24 and collected \$89,590 from incidents in prior years.



For further information, please visit our website:
www.gov.bc.ca/environmental-spill-response

Follow us on X (formerly Twitter) @SpillsInfoBC

Report all hazardous materials incidents in B.C.
1-800-663-3456 (B.C. Spill Reporting Line)

Report to Legislature Task Team:

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All photographs were taken by the
B.C. Ministry of Environment and Climate
Change Strategy, unless otherwise stated.