



**ANTEA GROUP
PROVIDING SUPPORT
FOR THE POLLUTION
TRACKER DATABASE
FOR EARTHISOFT
AUGUST 2024**

OCEAN WISE POLLUTION TRACKER

INTRODUCTION

Ocean Wise Conservation Association (Ocean Wise) is a not-for-profit organization based in Vancouver, British Columbia (BC), Canada, whose vision is a world in which the ocean is healthy and flourishing. Under its Ocean Pollution and Plastics initiative, monitoring and research are being conducted to investigate the presence and effects of chemical contaminants in the marine environment.

The [Pollution Tracker](#) program, established by Ocean Wise in 2015, aims to determine and monitor marine pollution along the coastal areas of BC by collecting sediment and mussel samples (Figure 1). Since its inception, Pollution Tracker has established a database containing tens of thousands of data records collected from coastal sites. The data focuses on contaminants of concern to ocean health and are grouped into fourteen general contaminant classes, including pharmaceuticals and personal care products, flame retardants, pesticides, toxic metals, and petrochemicals. The sites have been sampled through partnerships with various entities, including First Nations communities, community organizations, port authorities, industry stakeholders, and government agencies.

Phase 2 of Pollution Tracker's work, conducted between 2018 and 2020, [is now available](#), adding valuable updates to the previous Phase 1 (2015 – 2017) dataset. Phase 3 of Pollution Tracker launched in 2021, and analysis of results is still underway. Phase 4 sampling will commence in 2024. These phases will build on Phase 1 and Phase 2 results at dedicated Pollution Tracker sites, expanding the project's spatial coverage and continue to lay the foundation for coast wide temporal and spatial trend analyses.

Figure 1. Top left: Map showing the number of Pollution Tracker sites across the entire coastal region of BC. Top right: Ocean Wise staff pulling up the sediment sampler at a sampling site. Bottom left: Collected mussels. Bottom right: Petit Ponar grab.



ANTEA GROUP PROVIDING SUPPORT FOR THE POLLUTION TRACKER DATABASE

The Pollution Tracker program utilizes EarthSoft's EQuIS™ for storing and managing the growing contaminants dataset. The recent integration of EarthSoft's EQuIS REST API facilitates more interactive visual reporting and data sharing capabilities through automated Power BI dashboards (Figure 2). Every step of the integration process was supported by Antea® Group, experts in EQuIS and Power BI. Automating reporting involves blank corrections and contaminant total calculations, as well as comparing contaminant levels to Canadian Council of Ministers of the Environment (CCME) guidelines within Power BI. These improvements enable the Pollution Tracker program to efficiently analyze data and make real-time decisions by utilizing enhanced trend analysis and visualizations. These insights can be easily shared with both our partners and supporters.

Alongside integrating EarthSoft's EQuIS REST API, Antea Group assisted in creating and publishing customizable user reports and optimizing the data import process. This involved suggesting that laboratory reports present analytical results in EQuIS electronic data deliverable (EDD) format (EQEDD) and establishing a QA/QC process for EDDs through the development of a pre-processor prior to uploading to the EQuIS database. The pre-processor checks some of the key fields matching the Pollution Tracker reference values, including the CAS registry number (CAS RN) and laboratory analytical method name or description.

The Pollution Tracker team appreciates Antea Group for their expertise and support and will be reaching out to them for future collaborations.

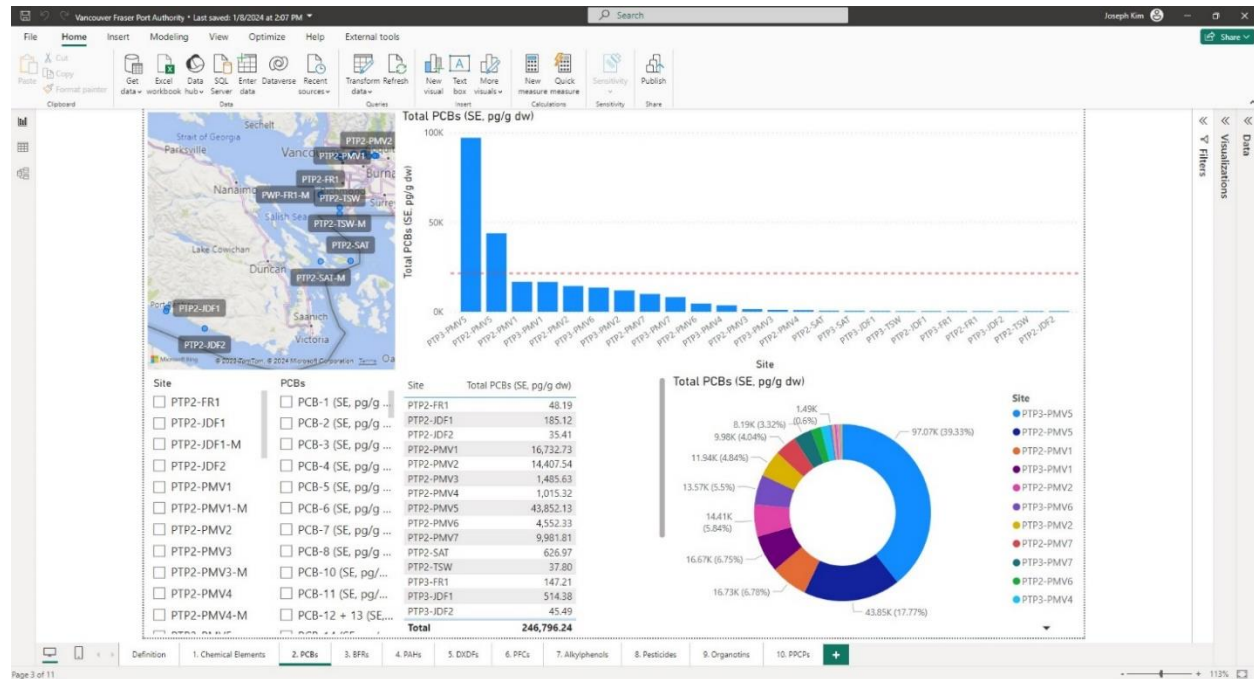


Figure 2. An example of a Power BI dashboard displaying Pollution Tracker Phase 1 and Phase 2 data.

FIGURE CREDITS

Page 2 & 3 figures courtesy of Ocean Wise

FUNDERS AND PARTNERS

Government of Canada, Vancouver Fraser Port Authority, Metro Vancouver, Victoria CRD, Port of Prince Rupert, Neptune Terminals, Tsleil-Waututh Nation, Metlakatla First Nation, Association of Denman Island Marine Stewards, and multiple coastal community organizations and First Nations communities.



EarthSoft's EQUIS™ is the world's most widely used Environmental data management software.



Antea@Group are experts in EarthSoft's EQUIS and REST API. For fourteen (14) years, EQUIS has been Antea Group's primary environmental data management platform. In this time, Antea Group has supported over 80 clients with over 1,400 projects with efficient and quality management of environmental data. Antea Group takes a critical eye to data to identify inefficiencies, sources of quality issues, and provide dynamic solutions across multiple industries and sectors. Antea Group has fully integrated the use of EarthSoft's REST API to automate interactive Power BI dashboards published within both Microsoft Teams and SharePoint.

Please write info@earthsoft.com or visit earthsoft.com and anteagroup.com for further information.