Regulators' Capacity Fund

## *Modernize and improve the National Pollutant Release Inventory (NPRI) Reporting System*

Environment and Climate Change Canada (ECCC)

6 August 2020 – 31 March 2022

$120,000

ECCC administers the National Pollutant Release Inventory (NPRI), which collects and publishes information on releases, disposals and transfers of over 320 pollutants from over 7,500 facilities across Canada. Facilities required to report to the NPRI include factories that manufacture a variety of goods, mines, oil and gas operations, power plants, and sewage treatment plants. The NPRI was established in 1993 based on authority under the *Canadian Environmental Protection Act, 1999*, which requires the annual publication of a national inventory of releases of pollutants.

The previous electronic reporting application for the NPRI was first implemented in 2011 and updated annually for improvements and every two years for changes to the reporting requirements. These compounding changes to the code are complex and the application became difficult to manage with outdated technologies. As a result, very few improvements to the application were possible and the number of issues and bugs continued to increase. This impacted the time and resources for owners and operators of facilities to report, the user experience, and data quality.

ECCC provided an alternative to the current manual data entry system by enhancing the previous bulk upload tool to enable the submission of all data points in one uploadable file and to provide quality control verification. ECCC determined the type of files partners would be uploading using the new tool, documented all necessary validation and data analysis rules, and developed the appropriate coding schema. Once the data was integrated into the web interface, the tool was tested and modified multiple times. A bilingual user guide was then developed and published to prepare reporting stakeholders for the use of the tool.

Since implementation the tool has been used to submit 33% of the total reports, indicating that the accessibility/utilization of the tool has been a success. ECCC intends to promote the tool in upcoming reporting periods and expects more users to adopt this time-saving feature over time. This tool supports regulatory capacity by providing a flexible data collection system, which directly imparts greater regulatory flexibility to fit data needs and the data available from industry. Functions such as the 'bulk upload' also reduce regulatory burden, as users do not need to individually submit every piece of data.