Media Release



VALE LAUNCHES PORT COLBORNE COMMUNITY BASED ACTION PLAN

For Immediate Release

PORT COLBORNE, June 10, 2019 – Vale today shared details of a Community-Based Action Plan for Port Colborne that addresses the findings of a multi-year Community-Based Risk Assessment (CBRA) examining the impact of 100 years of refining operations in the community, and specifically historical metal deposition in soil.

The comprehensive Action Plan was developed with the input of the City of Port Colborne, the Ontario Ministry of the Environment, Conservation and Parks (MECP), and Niagara Region Public Health.

"Vale respects the findings of the risk assessment, which took nearly two decades to complete. It is one of the most rigorous scientific assessments of its kind in Ontario," said Cory McPhee, Vice President of Corporate Affairs and Sustainability for Vale's Base Metals Operations. "We have developed a comprehensive Action Plan that responsibly addresses the findings of the CBRA, and we are moving quickly to implement it."

Summary of Results of the Port Colborne Community-Based Risk Assessment

The complete CBRA consists of three individual component risk assessments: a Human Health Risk Assessment (HHRA); an Ecological Risk Assessment (ERA) of the Natural Environment; and an Ecological Risk Assessment (ERA) of Agricultural Crops. Supplementary to the three reports, Vale commissioned a Community Health Assessment Project (CHAP) to address community concerns regarding potential human health effects from exposure to metals.

The findings of the CBRA can be summarized as follows:

- Human Health Risk Assessment: Metals in the soil from historical refinery activities do not result
 in unacceptable risks to health. Further, the CHAP study provides evidence that health
 outcomes in Port Colborne are no different than other Ontario communities;
- Ecological Risk Assessment (ERA) of the Natural Environment: Port Colborne's ecosystem is largely like any other community in Ontario, with the exception of some unused woodlots owned by Vale beside the refinery. Metals in the soil of these unused woodlots may have an effect on some plants and invertebrates (i.e. earthworms);
- Ecological Risk Assessment (ERA) of Agricultural Crops: Nickel in soil may result in increased risk of lower crop yields, however, there is no impact on human health from these crops. This can be remedied with certain agricultural practices and will be implemented on a one-on-one basis with farmers.

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Community-Based Action Plan

Vale is committed to addressing the results of the CBRA and will now begin implementing its Community-Based Action Plan. Key actions include:

- Remediation activities at a handful of residential properties in close proximity to Vale's Port
 Colborne Refinery, such as sodding, ground cover and/or soil replacement. There are no
 unacceptable health risks to these residents and these actions are being taken on a
 precautionary basis. All residential property owners have already been contacted by Vale;
- Scoping studies to be conducted on the woodlot and municipal drains just east of the refinery to assess potential remediation activities. Results will be shared with the community when the studies are complete;
- Work with a small number of local farmers to address crop yields;
- Creation of a Community Improvement Fund to deliver both environmental and social benefit to Port Colborne, and to recognize more than 100 years of operations in the community. The Fund, still in development, is envisioned to be in place for the next four years providing support for priority improvement or development projects in the community. Vale will work collaboratively with the City of Port Colborne to prioritize and select local projects and initiatives.

Study results and Action Plan details are also available on the internet at www.vale.com/cbra. This site hosts all relevant documentation related to the study, including full risk assessment documents, the CHAP, Action Plan and other resources. Vale officials will also be appearing before Port Colborne City Council this evening to present the Action Plan and respond to guestions.

Members of the public who have questions can also contact the Port Colborne Community Concerns Line at 289-478-VALE (8253) or send an email to PortColborne.Questions@vale.com.

About Vale's Port Colborne Refinery

The Port Colborne Refinery began operations in 1918, producing its first 1,565 tonnes of nickel. That same year, the village of Port Colborne was incorporated as a town thanks to the resulting spike in local population reaching 5,000 people. Over the years, the plant has provided thousands of jobs for the local community, with many current and retired employees still living in the area. Today, with 190 employees, the Port Colborne Refinery packages and ships more than 45,000 tonnes of nickel annually – in addition to refining 1,675 tonnes of cobalt and 645,000 troy ounces of platinum group metals (PGMs). The plant continues to be an important part of Vale's flowsheet in Canada, especially as the cobalt market continues to grow with projected growth in the battery market and demand for electric vehicles.

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