NEW YORK STATE DEPARTMENT OF



Commissioner

ENVIRONMENTAL CONSERVATION Dear Interested Citizen:

This Fact Sheet is to tell you about the upcoming Remedial Action below the Whirlpool Rapids Bridge in the City of Niagara Falls. If you have any questions or would like more information, please do not hesitate to contact:

> Mr. Michael Hinton Project Manager NYSDEC 270 Michigan Avenue Buffalo, NY 14203 (716) 851-7220 or Mr. Michael Podd Public Affairs NYSDEC 270 Michigan Avenue Buffalo, NY 14203 (716) 851-7220

For site related health questions, please contact the following New York State Department of H e a I t h (NYSDOH) representatives at:

Mr. Matthew Forcucci NYSDOH 584 Delaware Ave Buffalo, NY 14202 (716) 847-4385 or Mr. Mark VanValkenburg NYSDOH 547 River Street Troy, New York 12180 1 (800) 458-1158, Ext. 27860 FACT SHEET

Whirlpool - Rapids Bridge Niagara Falls Bridge Commission Voluntary Cleanup Program

> (Site V-00655-9) City of Niagara Falls September 2003

INTRODUCTION

The Whirlpool Rapids Bridge, constructed in 1897, is one of three bridges connecting the United States and Canada in the Niagara Falls NY area. The Bridge structure and property have been owned and operated by the Niagara Falls Bridge Commission (NFBC) since 1937. Recent investigations of the Niagara Gorge below the bridge has revealed the presence sand blasting grit and paint chip material associated with past maintenance operations on the bridge structure.

BACKGROUND

Available information suggests that the Whirlpool Rapids Bridge has been abrasively blast cleaned and painted approximately five times in its 100+ years of existence. Bridge painting operations in the past involved uncontrolled blast cleaning using expendable abrasives without containment of the spent abrasives and paint waste.

In a typical blast cleaning operation, the abrasive material (coal slag) is carried by high-pressure air to remove deteriorated coatings by mechanical abrasion. The expendable abrasives fracture on impact and the resulting waste consists of the spent abrasive material and finely divided paint chip particles. If not contained, the finely divided paint waste and spent abrasive materials fall to the ground beneath the structure.

There are scattered depositions of these spent abrasives from previous abrasive blast cleaning on several sections of the slope beneath the Bridge. The depositions are mainly discrete piles of material beneath the Bridge arch supports and along the hiking trail that runs below the bridge.



ENVIRONMENTAL INVESTIGATIONS

Several investigations were performed by the NFBC to characterize the contamination present below the bridge. A total of 383 soil samples were collected and analyzed for Arsenic, Cadmium, Chromium, Lead and Zinc. The major contaminate identified is lead, which is a corrosion control additive in many paint systems. Lead concentrations ranged from 16 to 11,640 ppm. A secondary contaminate, attributed to the coal-slag abrasive, is arsenic. Arsenic concentrations ranged from 2 to 216 ppm.

Twelve (12) soil samples were also collected in obviously affected areas (visible spent abrasive depositions) and were analyzed for RCRA Arsenic, Cadmium, Chromium, and Lead toxicity. Four (4) of these samples exceeded the 5.0 mg/L criterion for lead.

REMEDIAL ACTION

The NFBC has entered into a Voluntary Cleanup Agreement to conduct remedial action of the contamination below the Whirlpool Rapids Bridge. The NFBC has prepared a Remedial Action Work Plan to remove the spent abrasive waste materials on the Niagara Gorge slope, remove the spent abrasive waste materials along the hiking trail and restore the hiking trail. The NFBC is working with the New York State Department of Parks and Historical Preservation to maintain the natural character of the hiking trail And to ensure an appropriate restoration program is followed. As part of the remedial action a long term monitoring and maintenance program will be implemented to ensure the remediation is effective.

DOCUMENT REPOSITORIES

The NYSDEC will distribute fact sheets, like this one, to keep you informed about activities at the site. We will place site documents, when available, in a repository so you can read them. The NYSDEC will establish a document repository for future reports and documents for the Niacet Corporation facility at:

Niagara Falls Public Library 1425 Main Street Niagara Falls, NY Reference Department (716) 286-4881 NYSDEC's Buffalo Office 270 Michigan Avenue Buffalo, N.Y. (716) 851-7220

Any **site related questions or concerns** can be addressed by contacting Mr. Michael Hinton, at (716) 851-7220; or by calling, toll free, 1-800-342-9296 and leaving your name, address and request.

For health related concerns regarding this site feel free to contact the New York State Department of Health's Mr. Matthew Forcucci, Assistant Environmental Engineer, at (716) 847-4385; or by calling Mr. Mark VanValkenburg, at 1 (800) 458-1158, Ext. 27860.

ABOUT THE VOLUNTARY CLEANUP PROGRAM

The Voluntary Cleanup Program was developed to enhance private sector cleanup of properties by enabling businesses to remediate sites using private rather than public funds, and to reduce the development pressures on "greenfield" sites. Under the Program, a volunteer agrees to investigate and remediate a site to a level which is protective of public health and the environment for the present or intended use of the property. Investigation and remediation is carried out under the oversight of NYSDEC and NYSDOH. When the volunteer completes the work, the State provides a release from State liability for the work done, returning the site to productive use. For more information regarding New York State's Voluntary Cleanup Program, please visit the Department's web site at:

http://www.dec.state.ny.us/website/der/vcp/index.html.