



October 2020

## Roche Environmental Remediation

### FACTSHEET:

## Proposed Groundwater Cleanup Plan for Windsor Sewer Plume

*Roche is deeply gratified that our innovative divestment and remediation approaches have helped propel the rapid growth and development of the former Roche Nutley Site. We congratulate the organizations making their home on the ON3 campus and wish much success to them and their employees whose presence are significantly contributing to the region in many ways – from advancing health care and science in New Jersey to economically supporting the local communities.*

### Committed to an Ongoing and Comprehensive Cleanup

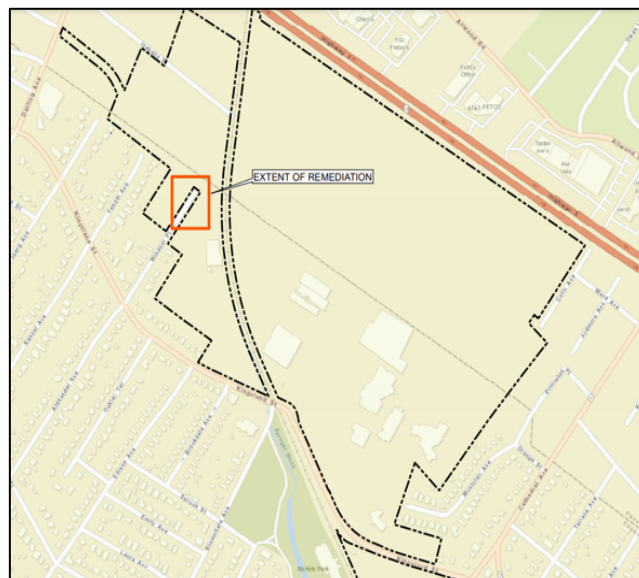
Four years ago, Hoffmann-La Roche Inc. (Roche) completed the remediation of soil at its former pharmaceutical headquarters at 340 Kingsland St., Nutley, Essex County, New Jersey (Roche Site or Site) under the oversight of the New Jersey Department of Environmental Protection (NJDEP). Since that time, Roche has focused on the remediation of groundwater beneath the Site. As required by NJDEP regulation, Roche is working under the supervision of a Licensed Site Remediation Professional (LSRP) hired by Roche but licensed by the NJDEP. This highly experienced LSRP submits all findings and remediation plans for approval to the NJDEP, which maintains final authority over the cleanup.

As part of the ongoing groundwater remediation program, Roche is proposing to conduct a remedial action to address groundwater impacted from the public sewer beneath the northern end of Windsor Place in Nutley. Roche's identification and evaluation of various cleanup alternatives and its selection and proposal of the best alternative for this source area are described in detail in Roche's *October 2020 Windsor Sewer Plume Focused Feasibility Study*, available at [www.roche-nutley.com](http://www.roche-nutley.com). The proposed remedial alternative is also summarized below.

### Proposed Remedial Alternative for the Windsor Sewer Plume Groundwater

Roche proposes a remedial action for groundwater to reduce the concentrations of contaminants in an area referenced as the Windsor Sewer Plume (see map to right). Groundwater contamination in this area consists primarily of trichloroethene (commonly known as "TCE"). TCE is a common solvent widely used in industrial operations. Previous investigations in and near Windsor Place have determined that the TCE was discharged to the shallow groundwater through a breach in the municipal sewer that runs along Windsor Place. The proposed measures to clean up groundwater in the Windsor Sewer Plume consist of a proven technology known as **Enhanced *In-Situ* Bioremediation (EISB)**.

*Location of Proposed Groundwater Cleanup in the Windsor Sewer Plume*





**EISB** — “Bioremediation” harnesses microbes that live naturally in soil and groundwater. These microbes can “digest” fuels or solvents, turning them into salts and harmless gases. “*In-Situ*” means the contamination is treated in the ground rather than above ground. In the EISB remedy proposed for this area, enhanced vegetable oil and bacterial cultures will be injected into the groundwater. Neither the amendments nor the microbes pose a threat to people at the Site or in the community, but they can break down chlorinated volatile organic compounds, including TCE. The EISB process will include a groundwater recirculation component to optimize the rate and efficiency of the treatment. The EISB will be followed by **Monitored Natural Attenuation (MNA)**, which includes a variety of natural processes that further reduce or “attenuate” low levels of residual contamination over time. To determine its effectiveness, Roche will conduct groundwater monitoring using a network of wells on and off the Site.

### Technology Alternatives Analyzed

Roche conducted a detailed evaluation of technology alternatives to treat groundwater in the Windsor Sewer Plume Area. The alternatives considered included:

**Alternative 1:** No Action

**Alternative 2:** MNA

**Alternative 3:** *In-Situ* Chemical Oxidation with MNA

**Alternative 4:** EISB with MNA

After considering a number of criteria, including the protection of human health and the environment, Roche selected Alternative 4 as the preferred groundwater treatment technology. It is effective for treating TCE and its degradation compounds, and can be applied readily at the Windsor Sewer Plume under existing state permit programs. The equipment for implementation can all be housed in low-profile, trailer-sized units. This alternative also has minimal construction or truck traffic associated with it.

### Timeline for the Cleanup

In implementing Alternative 4, Roche anticipates that the injections can begin in Spring 2021. EISB treatment and groundwater monitoring will be conducted over a period of approximately one to three years. This is a safe and effective approach that has been used at many other sites undergoing groundwater cleanup.

### Public Comment for the Proposed Groundwater Remediation for Windsor Sewer Plume

This fact sheet is intended to provide the community with information regarding the remedy selection process and the proposed plan for groundwater cleanup in Windsor Sewer Plume. More details can be found in Roche’s *October 2020 Windsor Sewer Plume Focused Feasibility Study*, available at [www.roche-nutley.com](http://www.roche-nutley.com).

**Roche invites the public to attend an online technical presentation by experts from TRC Environmental Corporation and Ramboll US Consulting, Inc.** to discuss the alternative remedies considered and the proposed groundwater remedy for the Windsor Sewer Plume. This event will take place on-line and via telephone call-in and can be accessed using the following login information:

**Monday, October 26 from 7:00 p.m. to 9:00 p.m.,**  
**Zoom meeting link:** <https://roche.zoom.us/j/95744450993>

Meeting ID: 957 4445 0993 Passcode: 155532

**To call in via phone:**

1 646 876 9923 (North Jersey metropolitan area)

Find phone numbers for other locations at:

<https://roche.zoom.us/u/ab2Dcziq8c>

**Before the remedial action is implemented, residents have 30 days from Oct. 14, 2020 – Nov. 12, 2020 to submit questions or concerns to:**

**[RocheWINDSORComments@trccompanies.com](mailto:RocheWINDSORComments@trccompanies.com)**

or via mail to:

Roche WINDSOR Comments

TRC Environmental Corporation

41 Spring Street, Suite 102

New Providence, NJ 0797

For more information about the former Roche Nutley Site remediation, and the *October 2020 Windsor Sewer Plume Focused Feasibility Study* visit [www.roche-nutley.com](http://www.roche-nutley.com)

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