

Northrop Grumman/Naval Weapons Industrial Reserve Plant Facilities Groundwater Impacts Health Consultation - Community Fact Sheet November 2022

A final Health Consultation report has been prepared for the Northrop Grumman/Naval Weapons Industrial Reserve Plant (NWIRP) facilities located in Bethpage, Nassau County, and Calverton, Suffolk County, Long Island, New York. A public comment draft Health Consultation was released in 2019. The New York State Department of Health (NYSDOH) received and responded to numerous public comments, and revised the document as needed based on comments received. The NYSDOH responses to public comments are included in the final Health Consultation.

This community fact sheet provides a summary of conclusions from the final Health Consultation. Copies of the full document, which includes background information, are available on-line or by calling the NYSDOH (see Agency Contact Information on last page).

A health consultation is a review of available environmental and/or health information prepared in response to a specific health or exposure issue. This health consultation was prepared in response to a petition letter sent to ATSDR by a Patchogue, Long Island resident who expressed concerns that residents could be exposed to contaminants in groundwater that originated from the Northrop Grumman/NWIRP facilities. Historical waste handling practices used by industries on Long Island included disposal of wastes into unlined surface or sub-surface impoundments such as cesspools or septic systems resulting in groundwater contamination.

This health consultation describes how the NYSDOH evaluated available historic and recent analytical data on chlorinated solvent VOC contaminants in public water supply wells and area monitoring and irrigation wells. This evaluation included ingestion (drinking), inhalation, and dermal contact exposures to contaminants in groundwater that could have occurred in the past or could currently be occurring.

The goal of the data review and evaluation is to determine if these drinking water or air exposures could pose increased risks to human health. Based on this review and evaluation of chlorinated solvent VOCs regulated at the time of the completion of the draft for public comment in 2019, the following conclusions are presented in this final response to comments version of this health consultation:

- Currently, drinking or other uses of water from the public water supplies affected by the Northrop Grumman/NWIRP facility in Bethpage, Nassau County, are unlikely to harm people's health.
- In the past, and prior to installation of treatment systems to remove volatile organic compounds, use of drinking water contaminated with trichloroethene from the Bethpage Water District Well 6-1 could have increased the risk for noncancer adverse health effects. Past long-term ingestion and inhalation exposure to tetrachloroethene and 1,1,1-trichloroethane in Bethpage Well 6-1 is unlikely to have harmed people's health.
- Past long-term ingestion and inhalation exposure to trichloroethene in the other public water supplies (other than Bethpage Well 6-1) affected by Northrop Grumman/NWIRP facility in Bethpage is unlikely to have harmed people's health.
- Exposure to facility related contaminants through the use of unpermitted private wells may have occurred, however such exposures are unlikely.
- Currently, drinking or using water from public water supplies in Calverton, Suffolk County, is unlikely to harm people's health.
- Past use of drinking water from the Peconic River Sportsman Club private well (Suffolk County) is unlikely to have harmed people's health.

The report describes the following ongoing activities: Recent data for one compound, 1,4-dioxane, show it has been detected in some public drinking water supplies, including those within the Northrup Grumman/NWIRP facility plume. In August 2020 the NYSDOH adopted a maximum contaminant level of 1 microgram per liter (mcg/L) for 1,4-dioxane, which requires corrective actions be taken to reduce 1,4-dioxane levels in public water systems found to be in violation of this standard. NYSDOH will continue to work with NYSDEC and County Health agencies, as well as with the NYS Drinking Water Quality Council to evaluate 1,4-dioxane data collected by public water supply systems to determine whether further public health actions are needed to reduce drinking water exposures to 1,4-dioxane.

Records of Decision, which present the remedial action plan for a site, were established for two distinct site areas to address the groundwater contamination associated with the Northrup Grumman/NWIRP facility in Bethpage. Both Records of Decision include a Public Water Supply Protection component that is designed to ensure that all impacted and threatened public water supply systems continue to comply with the New York State Part 5 Drinking Water Regulations (Part 5) and federal public drinking water standards. The NYSDOH continues to work with the NYSDEC and Nassau County Health Department to ensure that the requirements set forth in the Records of Decision are met.

In addition, the NYSDEC completed a study on the feasibility of implementing remedial actions to fully contain the groundwater contamination originating at the Northrup Grumman/NWIRP facility in Bethpage. The findings of the feasibility study, and remedial actions that have been identified as being cable of achieving full plume containment, were incorporated into a distinct Proposed Remedial Action issued in December 2019.

The NYSDOH will continue to work with the NYSDEC, County Health agencies, the EPA, and ATSDR to review information as it becomes available, evaluate the public health implications of any sampling results, and recommend public health actions as needed.

Response to Public Comments: NYSDOH received numerous comments on the draft public comment Health Consultation during the public comment period. The major changes made to the document based on comments are:

- Addition of a further evaluation of inhalation exposures to volatile organic chemicals from showering using ATSDR's Shower and Water Use Model. The results of the Shower and Water Use Model are compared with those of the original health consultation in which the drinking water concentration was doubled to account for inhalation exposures. Use of the Shower and Water Use Model did not result in any changes to the overall risk characterizations and conclusions.
- Addition of a more detailed discussion of the limitations and uncertainties associated with the methods used to develop the estimates of risk. This includes additional perspective on the limitations of the data, limitations of the exposure assumptions used in the risk assessment, and the limited information on use patterns for Well 6-1.
- Addition of clarifying information on the scope of the document to the Background and Statement of Issues section.

Agency Contact Information:

For copies of the full Northrup Grumman/Naval Weapons Industrial Reserve Plant Facilities final Health Consultation:

- Call the NYSDOH at 518-402-7860 or
- Visit the NYSDOH website at: http://health.ny.gov/environmental/investigations/northrop_grumman/

For questions about the Northrup Grumman/Naval Weapons Industrial Reserve Plant Facilities Health Consultation:

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