

Northrop Grumman Begins Soil Cleanup at Bethpage Community Park

Start-up operations began August 26, 2020

This fact sheet is part of Northrop Grumman's ongoing efforts to provide clear communication about the environmental activities we are performing in your community. Our work is being conducted with approval from the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH).

From 2014 through 2018, Northrop Grumman collected over 700 soil samples from 84 locations within the Bethpage Community Park to delineate onsite soil conditions. Using a science-based approach, we selected a technologically-proven, widely-accepted thermal remedy to treat the VOCs we found in specific locations deep below the ground surface. This solution is recognized by NYSDEC as safe and effective and has been employed at many sites across New York. The State approved our conceptual remedy in April 2018.

Northrop Grumman held a public meeting in September 2018 to inform the community of our State-approved remedy and the start of our phase one construction.

What work was completed in phase one?

In February 2019, we began installation of the treatment points for the thermal remedy in two areas. This work was completed in May 2019. We then began installing the electric service and other necessary below-ground system components. This work was completed in November 2019. We also collected an additional 193 soil samples in 30 locations in 2019 and refined the treatment areas based on that new data.

What work is occurring in phase two?

Due to COVID-19 social distancing restrictions, we were not able to host an in-person community meeting to present the next phase of this project. This fact sheet provides an update on our phase two remedial activities.

This past June Northrop Grumman submitted its final work plan (design, monitoring plans, and health and safety controls) to NYSDEC and the NYSDOH for regulatory approval. While the plan was in review, the NYSDEC permitted us to begin implementing phase two construction activities and the Town of Oyster Bay continued to provide us with access to the park. Our contractors began phase two of the planned construction to install the remaining process piping, heaters, electrical connections and treatment equipment to support start-up and operation of the treatment system. We completed the installation in early August.

On August 21 we received approval from the NYSDEC to commence start-up operations. We began system start-up on August 26, 2020.

**Work Hours**

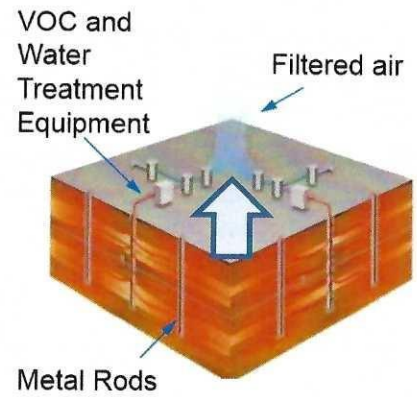
7 a.m. to 4 p.m., Monday through Friday and potentially Saturday, with Town approval (except Town holidays). Our contractors are following the U.S. Centers for Disease Control and Prevention social distancing guidelines, and we continue to follow the NYS PAUSE program as Long Island moves into phase three reopenings.



What can I expect to see during construction and operation?
Construction vehicles, trucks, piping, and processing equipment.

How does the thermal remedy work?

We are applying electrical current to metal rods inserted into the ground within the two treatment areas shown on page 1. The metal rods heat the deep soil (30 to 60 feet below the surface) and vaporize VOCs and water found in the soil. No heat is felt at, or above, the ground during treatment. We are safely removing the vapors by applying a continuous vacuum and conveying the vapors to our specialized enclosed treatment system. The system is treating the recovered vapors and removing contaminants before the treated air is discharged to the atmosphere in compliance with NYSDEC requirements (as noted in the large light blue arrow on the illustration). An engineered cover with a dedicated vapor recovery system was installed over the treatment areas to ensure vapors do not escape to the atmosphere from the soil surface.



Our Safety and Security Plan:

- Experienced, specially trained, qualified personnel are conducting the work in accordance with our Health and Safety Plan that meets or exceeds requirements of the Occupational Safety and Health Administration (OSHA)
- Air quality is being monitored continuously during drilling and other remedial activities to ensure that it remains within acceptable guidelines in accordance with the NYSDEC-approved Community Air Monitoring Plan
- Waste and debris created from construction and drilling activities are being put into containers and properly handled and disposed of off-site

What happens now that the treatment system is operational?

The treatment process is expected to take about six months (~February 2021).

Confirmation of Remedy Effectiveness:

Once treatment is complete, we will re-sample the treated soil to confirm the remedy is effective. The samples will be sent to a NYSDOH-accredited laboratory for analysis. Those results will be furnished to NYSDEC for their final review. Following confirmation from NYSDEC that the soil cleanup objectives have been achieved, Northrop Grumman will remove the treatment equipment.

What is the projected phase two completion date?

We anticipate completing phase two in mid-2021.

What will occur after phase two?

Phase three of the NYSDEC-approved park soil remedy will include the removal of specific soils identified as containing polychlorinated biphenyls (PCBs) and metals. The soil removal process will take about six to nine months for completion. Similar to the thermal remedy to address the VOC soil contamination, Northrop Grumman will continue to communicate with the community as we prepare to implement phase three.

When will the ballfield be ready for community use?

We will provide an update on the timing when phase three of our remedy is underway.

Questions?

For additional information, please contact Dianne Baumert-Moyik at Northrop Grumman, (516) 754-2645 or via email at dianne.baumert-moyik@ngc.com.

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Northrop Grumman continues to work closely with the NYSDEC, NYSDOH, U.S. Navy and other federal, state, and local government regulatory authorities, to address environmental conditions in the area. We remain committed to pursuing scientifically sound, targeted and effective remedial approaches that protect the health and well-being of the community and avoid unnecessary disruption.

For project information, visit www.northropgrumman.com/bethpage