Overview

What measures are in place to protect people from contact with contamination at Glen Cove Day Care Center (GCDCC)?

New York State remains committed to overseeing a careful and thorough cleanup of the Pall Corporation property, and our top priority is always ensuring that the public is not coming in contact with any of the contamination found below ground on the site. Currently, while subsurface soil, groundwater and soil vapor contamination exist at the property, any potential exposure pathways where someone could encounter the contamination have been appropriately addressed:

- contaminated soil is below the ground's surface and cover systems (vegetated soil, paving and building foundations);
- groundwater is not used for drinking water or other purposes at the GCDCC;
- the building's ventilation system effectively operates in a manner intended to ensure that contaminants beneath the building are not drawn into the day care and affecting the indoor air quality; and
- air quality at the day care has been previously tested and is shown to be below NYS Department of Health air guideline values.

Site Remediation

What is the schedule for completing the clean up on the Pall Corp. property?

The in-situ chemical oxidation (ISCO) work plan identifies soil and groundwater cleanup activities to be completed and is scheduled to start in 2019. The timing and success of its completion will determine the future work schedule. However, groundwater and indoor air will be continually monitored to ensure that concentrations are below acceptable levels outlined by compound-specific standards, criteria and guidance values.
What measures are in place to protect the surrounding community during the ISCO work?

The New York State Department of Environmental Conservation (DEC) will ensure the implementation of the in-situ chemical oxidation is done in a manner that protects the community. Work will be done under an approved Community Air Monitoring Plan (CAMP) that requires continuous air monitoring during all well drilling, excavation and backfilling activities to ensure that no additional contamination is released to the environment or adjacent properties during cleanup. Dust control measures (e.g., watering) will be taken to reduce dust on temporary dirt roadways and open excavations. Trucks and equipment will be decontaminated prior to leaving the site. Truck traffic patterns have been designed to maintain safety on local roadways. No visible dust should leave the work areas and if air monitors detect dust above action levels, work is stopped until corrective measures are in place.

How will traffic be routed and controlled?

Traffic will enter and exit through the Pall Corporation site via Sea Cliff Avenue. Flagmen will be used as needed. Additional truck traffic in the area should be minimal due to the absence of transportation and disposal of on-site soils.

What are the anticipated work hours for the contractor?

Work at the site will occur between 8 a.m. and 5 p.m. However, to expedite certain cleanup actions, the contractor may need to work past these regular hours.

Will DEC provide full-time oversight?

DEC will provide full time oversight at Pall Corporation. However, if DEC personnel is unable to report directly on-site, the design contractor will act on DEC's behalf.

Can this work be performed safely when the day care is in use?

Yes, the planned work at Pall Corporation allows for the normal operation of both the GCDCC and Glen Cove Boxing Club during construction activities.

Will there be additional investigation below the GCDCC?

There will not be any additional investigations below the GCDCC. To date, there is no indication that volatile organic compounds (VOCs) are present levels of concern within the building. The ventilation system in the crawlspace works to mitigate potential soil vapor from breaching into the day care. DEC will replace the current ventilation system with a newer version for added protection and are in the process of analyzing air samples taken in August 2018. Additionally, monitoring of groundwater and indoor air around the GCDCC will continue.

What are VOCs?

Volatile organic compounds (VOCs) are organic chemicals that have a high vapor pressure at ordinary room temperature. Their high vapor pressure results from a low boiling point, which causes it to evaporate from the liquid or solid form of the compound and enter the surrounding air, a trait known as volatility.

More information can be found on the DOH webpage: https://www.health.ny.gov/publications/6513/.

What health effects can be caused by exposure to VOCs?

All chemicals can cause health effects. However, the risk for adverse health effects from exposure to any chemical depends on the chemical's toxicity, the amount of the chemical to which a person is exposed, and how long and how often the exposure occurs. Without an exposure, there can be no health effect.
What is meant by hazardous waste?

The term hazardous waste is a regulatory designation. In New York State, hazardous wastes are defined by U.S. Environmental Protection Agency and DEC regulations (see http://www.dec.ny.gov/chemical/100401.html), based on whether the materials have certain traits or concentrations of contaminants.

Indoor Air Quality

What controls are in place to protect the indoor air quality at GCDCC?

The current ventilation system is comprised of several exhaust fans mounted directly on the exterior walls. Additional passive vents are available to supply air to the crawl space. The explosion proof ventilation fans create a draft in the crawl space and enhance flow pathways across the floor, which work to dilute air from the outside via the passive vents. It also creates a vacuum within the crawl space so that vapors cannot accumulate and enter the above DCC classrooms and play areas. The exhaust from the ventilation fans is ducted to the roof where it is discharged via an emissions stack. Subsequent indoor air testing has shown the mitigation system to be effective.

When were the controls related to the indoor air at the day care installed?

A ventilation system was installed in 2005 as an agreement between Pall Corporation and the City of Glen Cove. This system will be replaced by DEC in the near future.

Is it safe to have windows and doors open in the building?

Yes. The effectiveness of the ventilation system is not reduced by the opening and closing of doors and windows, as the system dilutes and redirects air to above the building to ensure it does not enter the building. In addition, outdoor air sampling does not indicate any issues with the quality of the outdoor air at the day care property.

Off-site Contamination

What is the extent of the off-site contamination?

VOC contaminants found at Pall Corporation tend to be more concentrated north and northwest of the northwest corner of the Pall Corporation building and have been determined to be migrating north-northwest of the site in groundwater.

Lower levels of contaminants have been found primarily along the southern boundary of the site property and there is no evidence to suggest contaminant migration or disposal east-northeast of the Glen Cove Arterial Highway (NY Rte 107).

The Pall Corporation site is currently in the State Superfund Program, where DEC is implementing the site remedy. This includes two distinct groundwater contaminant plumes of VOCs in shallow and deep groundwater to the northwest of Pall Corporation. However, the remediation of deep groundwater contamination is shared with the adjacent Photocircuits site.

How can I be exposed to contaminants in soil or groundwater?

People can be exposed to soil or groundwater contaminants if they get particles on their hands or ingest the material. Some exposure may also occur when contaminated soil is tracked inside a building and becomes part of indoor dust. Other ways people could be exposed are by breathing windblown soil and dust particles, or by eating vegetables grown in contaminated soil. Young children have the greatest potential for exposure to soil contaminants because they often come into direct contact with the soil while playing or digging in the dirt, and may swallow the soil after putting their fingers, hands, or toys in their mouths.
**Will my children get sick if they play in the GCDCC? What measures should I take to protect them?**

We do not expect there to be any health effects from exposure to in the soil through typical use of the yards as the soil is not contaminated. It’s important to note that all soils contain naturally occurring chemicals and microorganisms, and therefore it is always a good idea to minimize getting soil into the body whether it is contaminated or not. Drinking the contaminated groundwater is not expected as drinking water is supplied from a municipal source not contaminated from the site. The installation and operation of a ventilation system in the GCDCC crawlspace acts to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the building.

**Are any impacts to neighboring residential areas to the east-northeast of GCDCC?**

There’s been no indication of disposal to the northeast of Pall Corporation and remedial investigation findings do not indicate that contaminants are migrating to the east-northeast towards the neighboring residential areas. Groundwater flow in the area defines the groundwater plume and is toward the north-northwest. The area is served with public water and so no one is drinking the groundwater.

**What does it mean if VOCs were found on my property above the standards, criteria and guidance (SCGs)?**

An SCG is not a “bright line” between media concentrations that will result in health effects and those that will not. Moreover, exceedance of an SCG at your property does not represent an immediate health hazard, but indicates a need to evaluate measures to reduce the contaminant levels. The degree of public health concern when an SCG is exceeded depends on several factors, including the extent to which the SCG is exceeded, the potential for human exposure, other sources of exposure to the chemical, and the strength and quality of the available toxicological information on the chemical.

**What are standards, criteria and guidance or “SCGs”?**

Standards, Criteria and Guidance documents are simply all the documents the DEC’s Division of Environmental Remediation (DER) uses or conforms to when it performs environmental investigations and cleanup of Inactive Hazardous Waste Disposal. This includes DER’s regulations and guidance documents as well as regulations and guidance from other divisions within the New York State Department of Environmental Conservation, other State Agencies and Departments and external agencies such as the U.S. Environmental Protection Agency (USEPA) and the Occupational Safety and Health Agency (OSHA). A complete list of SCGs can be found on DEC’s website: [http://www.dec.ny.gov/regulations/61794.html](http://www.dec.ny.gov/regulations/61794.html).

**How will the Glen Cove Day Care Center and community be kept informed?**

Public meetings will be scheduled before the implementation of major remedial actions where the community will have the opportunity to discuss viable options and provide feedback. Additional information will be provided and updated on the DEC website and through notification through DEC Delivers (see *How do I stay informed?* below for more information).

**For More Information**

**Where can I find more information?**

The DEC maintains a web page with additional information:

DEC and DOH staff are always available to provide updates, or answer any questions community members or faculty have.

**For project related question, please contact:**
For health-related project questions, please contact:

Angela Martin, DOH Empire State Plaza, Corning Tower Room #1787 Albany, NY 12237
Phone: (518) 402-7860 BEEI@health.ny.gov

How do I stay informed?

DEC and DOH will continue to keep the public informed as this work progresses and as development of cleanup plans are finalized.

Sign up for the contaminated sites county email listserv to receive site-related information and announcements for all contaminated sites in the county. Sign up for the listserv is available at the following web page: http://www.dec.ny.gov/chemical/61092.html