



TONI N. HARP  
MAYOR

CITY OF NEW HAVEN  
COMMUNITY SERVICE ADMINISTRATION  
DEPARTMENT OF HEALTH  
BUREAU OF ENVIRONMENTAL HEALTH



BYRON KENNEDY, MD, PhD, MPH

October 2016

**QUESTIONS & ANSWERS ABOUT THE  
FORMER UNITED NUCLEAR CORPORATION SITE**

The United Nuclear Corporation (UNC) Site at 71 Shelton Avenue in New Haven is where the US Department of Energy conducted research and made nuclear fuel components for the US Navy from the mid-1950s until 1974. Environmental cleanup at the facility was done at the time the facility was closed in the mid-1970s. The US Nuclear Regulatory Commission recently reviewed the cleanup and decided that additional cleanup is needed. This fact sheet has been prepared by the New Haven Health Department, in consultation with the CT Department of Public Health to provide you with information about the former UNC facility and the cleanup activities that will occur there.



**BACKGROUND**

The United Nuclear Corporation (UNC) Naval Products facility located at 71 Shelton Avenue in New Haven was used for research and production of nuclear fuel components for the US Navy from the mid-1950s until 1974. The radioactive material used at the site was primarily enriched uranium with smaller amounts of natural uranium, depleted uranium, and thorium. The work was done in a large building on the property containing chemistry laboratories and an assembly area. When the facility was closed, the radioactive contamination at the site was cleaned up under the regulatory supervision of the US Nuclear Regulatory Commission (NRC) and the property was approved for unrestricted use in 1976. Since that time, portions of the property have been used by various commercial businesses. The portions of the building needing additional assessment and cleanup are currently unoccupied.

**WHY IS CLEANUP OF THE  
UNC FACILITY HAPPENING  
NOW?**

In the 1990's, NRC evaluated facilities like UNC all across the US to determine if historic cleanups met current standards. This review found that additional cleanup is needed at the New Haven site. During prior cleanup at the UNC site, uranium contaminated concrete, soil and a sewer line were removed. There remains some contamination below utility trenches on the site, but these are not connected to the sewer system. There is also some uranium contamination embedded in the concrete floor, fixed inside abandoned ventilation ducting, and in small chips on the building floor. The levels of contamination in these locations do not meet current standards.

**WHAT IS...?**

*Natural Uranium.* A naturally occurring, mildly radioactive metal that is almost as hard as steel and is present in nearly all rock and soil. Natural uranium is a mixture of three different forms (isotopes) of uranium.

*Enriched Uranium.* Used to make fuel for nuclear power plants and nuclear powered equipment like submarines. Enriched uranium is made by processing natural uranium to increase ("enrich") the isotope that is more radioactive. Enriched uranium is more radioactive than natural uranium.

*Depleted uranium.* Used in making military weapons and vehicles. It is what's left over after natural uranium has been processed to make enriched uranium. Depleted uranium is only mildly radioactive.

*Thorium.* A naturally occurring, mildly radioactive metal that is present in rock and soil. It is used to make nuclear fuel and some consumer products such as high temperature ceramics and lantern mantles.



## ARE THERE HEALTH RISKS TO THE COMMUNITY FROM THE UNC SITE?

Health risks are very unlikely. In order for uranium contamination at the UNC property to pose a health risk, people would need to be in the building (s) on the property and be very close to the contamination for a long period of time or would need to

breathe in or ingest (by eating or drinking) the uranium contamination. The uranium at the UNC property is mostly stuck or embedded in flooring and other components in the buildings. Therefore, it is very difficult for the uranium to get into the air. Also, the property is fenced and secured so community members are not entering the buildings and getting close to the uranium contamination or touching it.

Radiation measurements have been taken along the property boundary to verify there is no contamination beyond the property boundary. There is no contamination of the public drinking water from uranium contamination at the UNC Site. However, community members should know that the affected portions of the building on the UNC property are very unstable and present serious safety risks to trespassers who could be injured by falling building materials and debris.



**Observe the signs and fencing and Do Not Trespass!**

## WHAT ABOUT HEALTH RISKS FROM TRESPASSING ON THE UNC PROPERTY BEFORE IT WAS FENCED?

It is possible that trespassers on the UNC property (before it was fenced) could have received some exposure to the enriched uranium contamination. However, it is extremely unlikely that such possible exposure would have been large enough to cause any harmful health effects. In order for a trespasser to have received a harmful dose of radiation, they would need to be very near the uranium contamination in the building for a long period of time. A trespasser would need to have been present on the spot of highest uranium contamination for 24 hours a day for over two months to exceed federal limits for radiation exposure. As stated above, the uranium contamination is fixed to building materials so it is not a breathing or ingestion concern.

## WHAT CLEAN UP ACTIVITIES MIGHT I SEE AT THE UNC PROPERTY?

Before cleanup of uranium inside the affected portion of the building can begin, asbestos that is present in building materials and loose debris must be removed. Asbestos cleanup (abatement) will be performed by a contractor licensed by the CT Department of Public Health (CTDPH) to perform asbestos abatement. The abatement work will be monitored by a consultant (also licensed by CTDPH) trained to oversee asbestos abatement work. Asbestos abatement is expected to begin in mid-October and may last two weeks or more. As required by state law, asbestos abatement workers wear protective clothing and equipment such as respirators when working with asbestos. Trained radiation specialists will complete the remediation work. The radiation specialists will conduct detailed measurements to pinpoint the remaining uranium contamination and ensure that it is properly cleaned up and that cleanup meets current regulatory requirements. The NRC, DOE and the CT Department of Energy and Environmental Protection will oversee the radiation cleanup work at the UNC Site. The clean-up is expected to last several months. During that time community members might see containment tents to protect the public during asbestos removal, workers wearing protective clothing and using radiation measuring meters, and trucks removing material. The DOE is still evaluating whether the building can be properly cleaned up or if it will require demolition.



## WHO DO I CONTACT IF I HAVE QUESTIONS?

Radiation Cleanup Work or Schedule	Asbestos Cleanup	Health
<p>Diane Screnci, US Nuclear Regulatory Commission 610-337-5330</p> <p>Michael Firsick, CT Dept. of Energy and Environmental Protection 860-424-3029, <a href="mailto:Michael.firsick@ct.gov">Michael.firsick@ct.gov</a></p>	<p>Joanna Golos, CT Dept. of Public Health, 860-509-8004, <a href="mailto:Joanna.golos@ct.gov">Joanna.golos@ct.gov</a></p> <p>Paul Kowalski, New Haven Health Department, 203-946-8173 <a href="mailto:pkowalsk@newhavenct.gov">pkowalsk@newhavenct.gov</a></p>	<p>Meg Harvey, CT Dept. of Public Health, 860-509-7748, <a href="mailto:Margaret.harvey@ct.gov">Margaret.harvey@ct.gov</a></p>