

Building 470

Update on the Building 470 Dismantlement: Safety First

In our May 2003 issue, we told you about the NCI's plans to dismantle Building 470, once a bioweapons research facility.

From the first decision that the hazardous building needed to come down, the National Institutes of Health (NIH)—which is overseeing the process—has made safety of paramount importance. “The Army took 1,300 samples during the decommissioning of the building [1970-71] and all those samples were negative [for any evidence of *Bacillus anthracis*],” said Carol Shearer, Project Manager, in a recent *Spotlight* article. “There were two rounds of gas decontamination using formaldehyde, and the closed systems [e.g., fermenters] were all steam-sterilized. Drains and other piping systems that they could not reach with steam were cut and then bleach was pumped up into them, and the bleach was then left to sit [in the pipes] to get anything that was in there. This was a very, very extensive decontamination.”

Ms. Shearer's team has also taken an additional 1,450 samples in Building 470 and plans to continue sampling throughout the project to monitor air quality.

Phase One: Asbestos Removal

The project, divided into three phases, began in February 2003 with asbestos removal. The contractor for this work, Controlled Demolition, Inc. (CDI), “is a world-class operation,” according to Ms. Shearer. “They are working in Iraq . . . doing chemical demilitarization in the former Soviet Union . . . [and] many jobs here in the United States. CDI is most well known for its implosions, but that is only about 1% of their work; they do many types of dismantlements,” she said.

Phase Two: Stripping Out the Interior

The second phase involves “stripping out” the building's interior: taking out tanks, miles of pipes, any non-load-bearing walls, and many of the steel grating floors, creating “an excellent way to lower equipment down through the middle of the building . . . where it will be [cut up], put into big cans and then rolled out . . . for transport,” she said.

“The crews will be working six-day weeks, so that on a Saturday we can make more noise,” explained Ms. Shearer. “The more noise we can make, the faster we can go . . . We would like to get it down quickly as long as we don't compromise safety,” she added.

Seismographs have been installed in those labs immediately adjoining 470 to daily monitor noise and vibration and alert workers and management when levels are too high. In such cases, the contractor may opt to use smaller, less noisy equipment or switch the noisier work to off-hours. To minimize dust, an issue common to construction projects, the contractor will frequently hose down the site with water. Workers will also wear respirators for protection against the fumes and carbon monoxide resulting from the metal cutting.

These precautions are particularly important since Building 470 adjoins Buildings 431 and 469; and Buildings 426, 427, and 428 are very near. In fact, safety is of such primary concern that if *anyone* on the project sees anything on the site that constitutes imminent danger to one of the workers, he/she can stop the work immediately.

Phase Three: The Final Stages

When you see scaffolding and green construction mesh around the building, you'll know that Phase III, which will overlap Phase II, has begun. “As workers take the roof off, they will start dismantling the building

and pulling things inward again, and what you will see is the scaffolding and green mesh coming down as the building is dismantled,” said Ms. Shearer.

Building 470 Team Experts in Biosafety

Project Manager Carol Shearer is extremely well qualified to lead this effort, which requires both diverse skills and extensive



biosafety/biosecurity experience. John Bell (SAIC-Frederick, Inc.) is the project's Construction Manager, while Theresa Duley (Southern Research Institute), qualified in both safety and construction, is the Safety Representative. Another team member is anthrax specialist George Anderson, Ph.D., an immunologist with more than “25 years of experience in the vaccine world,” Ms. Shearer said. “Dr. Anderson did a thorough review of all documentation that we have on 470,” she added. In addition, three other biosafety experts also reviewed the building's biosafety-related data.

The whole building should be dismantled by the end of December 2003.

For more information on the Building 470 Project, visit the website at <http://web.ncifcrf.gov/campus/470update/>. ♦