

**CLEANUP OF PCB CONTAMINATED SOIL
AT THE NAVY PUBLIC WORKS CENTER, BUILDING. 3009,
NAVAL STATION, GUAM, M.I.**

FACT SHEET NO. 2

MAY 1993

BACKGROUND

Building 3009 is situated within the Apra Harbor Naval Complex on the Orote Peninsula. The facility is located within the maintenance compound of the Navy Public Works Center (PWC), Naval Station, Guam and was used as an electrical transformer repair shop from 1950 to 1977 (See Figure 1). The facility is currently not in use.

The polychlorinated biphenyl (PCB) contamination was identified during a Navy environmental survey at the PWC. The contamination is located in areas adjacent to the facility and in a nearby drainage ditch. Upon receipt of the survey findings various cleanup and disposal alternatives were evaluated. Based on the results of the evaluation, on-site treatment of the PCB contaminated soil was selected for the cleanup method.

PLANNED CLEANUP PROCESS

The on-site treatment process selected is known as the Base Catalyzed Decomposition Process (BCDP). This chemical process basically involves excavating and stockpiling the contaminated soil followed by screening, crushing, and mixing with a calibrated quantity of catalyst. The resulting mixture is then heated in a rotary kiln under specified retention times to promote the chemical reaction for PCB

breakdown. The treated soil can then be returned to the site from which it was excavated.

Dust particles and volatilized PCBs from the rotary kiln are collected and removed by pollution control systems connected to the rotary kiln. Condensates and residuals from the BCDP are then collected and treated with another catalyst in a secondary treatment system for thorough removal of PCBs.

HEALTH & SAFETY

During the cleanup process, personnel working in areas considered potentially hazardous will be required to wear personal protective equipment such as white Tyvek suits. Exclusion zones will be roped off with barricade tape and entry will be restricted to authorized health and safety-trained personnel only. The area outside the exclusion zone will be free from significant risks to human health and safety. These and other precautionary measures such as air quality monitoring will ensure that public health and safety are not compromised during the cleanup activities.

PROJECT SCHEDULE

The BCDP system setup on-site was completed recently. System testing by the Department of Energy's Pacific Northwest Laboratory and the Navy Civil Engineering Laboratory, the system's designers, is scheduled to begin in June 1993. Following testing, International Technology Corporation, a Navy contractor, will take over equipment operations for the site cleanup. Cleanup of the estimated 5500 tons of contaminated soil will take approximately eighteen months.

INFORMATION CONTACT

The project is coordinated by the Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii with assistance from the Environmental Services Department, Navy Public Works Center, Guam. If you have any questions, please contact LT Dave Wray, Public Affairs Officer, U.S. Naval Forces, Marianas at (671) 349-5207.

