



U.S. ARMY CHEMICAL MATERIALS AGENCY

Managing secondary wastes for the Non-Stockpile Chemical Materiel Project

The destruction of chemical warfare materiel results in the creation of secondary wastes. The U.S. Army Non-Stockpile Chemical Materiel Project (NSCMP) selected Shaw Environmental Inc. to coordinate the safe disposal of these wastes. Shaw Environmental Inc. disposes of NSCMP

secondary wastes using, whenever possible, non-incineration technologies at commercial and licensed treatment, storage and disposal facilities. In addition, Shaw, working with a commercial facility, will operate a non-incineration system called wet air oxidation to break down NSCMP binary waste.

Secondary waste	Description	Approximate quantity (in pounds)
Binary neutralents (Also called schedule waste)	Corrosive liquid with organics	2.7 million
Explosive Destruction System neutralents	Solvents and water	1.3 million
Rinsates, sump waste	Salty water	400,000
Spent carbon filters	Potentially contaminated solids	150,000
Used, decontaminated personal protective equipment	Solid wastes including gloves, protective suits	25,000
Chloroform neutralent	High chloroform waste	23,000
Miscellaneous debris	Solid wastes including lab supplies, maintenance debris and packing material	21,000
Miscellaneous solids from tanks	Solids and sludge	7,500
Spent solvents	Solvents and water	3,000
Hydraulic fluid, lube oil, paints, solvents	Flammable liquids	3,000
Lab packs	Sealed plastic containers with chloroform waste	1,200
Contaminated solid waste	Packing material that may be contaminated with binary chemicals	1,000
Batteries	Lead-acid (car) batteries and solid batteries for walkie-talkies, etc.	500
		Total 4.6 million

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For more information, contact the CMA Public Affairs Office at (410) 436-3629 (800) 488-0648



Managing secondary wastes for the Non-Stockpile Project (continued)

NSCMP secondary wastes

NSCMP estimates that from 2004 to 2007 it will generate the types and quantities of secondary wastes listed in the chart below. The chemical weapons materiel secondary wastes fall into two broad categories: non-schedule wastes and schedule wastes.

The non-schedule wastes include neutralents and remaining compounds that, although a byproduct of chemical weapons material destruction, will be free of compounds controlled by the Chemical Weapons Convention (CWC) treaty. As shown in the table, an estimated 40 percent (by weight) of the NSCMP secondary wastes will be non-schedule wastes. The handling and disposal of these wastes will be consistent with methods used for disposal of typical hazardous and non-hazardous wastes. Federal and state agencies administer regulations for the safe handling and disposal of these wastes.

The schedule wastes refer to materials containing schedule compounds identified in and controlled by the CWC treaty. Specifically, binary neutralents — generated from the destruction of the chemicals DF and QL at the Pine Bluff Binary Destruction Facility (PB BDF) — contain compounds that, according to treaty requirements, require special handling

during destruction. Because these compounds, controlled by the CWC, exist in both the DF neutralent and QL neutralent, officials refer to these neutralents as schedule wastes. The DF and QL neutralents consist of mostly water, ranging from 70 to 80 percent, with the remaining 20 to 30 percent being acids, alcohol and schedule compounds subjected to oversight by the CWC. To comply with the treaty, the NSCMP is currently neutralizing all schedule compounds at the PB BDF to remove any possibility that they could be used to produce chemical agents.

NSCMP disposes of chemical materiel in a safe, environmentally sound and cost-effective manner, ensuring compliance with the CWC. This does not include items part of the Army's chemical weapons stockpile and may include chemical ingredients and equipment used to produce some types of weapons, buried items recovered from military ranges and test kits once used to determine exposure to chemical weapons. The project emphasizes the importance of engaging a spectrum of individuals and organizations involved in or potentially affected by disposal of chemical materiel and offers opportunities for public involvement, including small-group and other public meetings and workshops.