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FINDING OF NO SIGNIFICANT IMPACT (FONSI)

**Accelerated Neutralization Of Chemical
Agent And Off-Site Shipment Of liquid
Process Effluents At the Newport
Chemical Agent Disposal Facility**

Background

The Project Manager for Alternative Technologies and Approaches (PMATA), under the direction of the U.S. Army Program Manager for Chemical Demilitarization (PMCD), is responsible for destruction of the chemical agent stockpile at Newport Chemical Depot (NECD). The issuance of this FONSI signifies that the PMATA has determined that Accelerated Neutralization Of Chemical Agent and Off-Site Shipment Of Liquid Process Effluents at the Newport Chemical Agent Disposal Facility (NECDF) is the most environmentally responsible and cost-effective means of destroying the chemical agent VX stockpiled at NECD.

Consistent with the National Environmental Policy Act (NEPA), PMCD previously conducted an environmental impact analysis that documented and explained PMCD's decision to construct and operate a facility at NECD, to pilot test a neutralization disposal technology for VX agent currently stored at the site in ton containers. After the *Final Environmental Impact Statement for the Pilot Testing of Neutralization/Supercritical Water Oxidation of VX Agent At Newport Chemical Depot* Record of Decision was issued in February 1999, PMCD began detailed design of the NECDF. After receiving the necessary permits from the Indiana Department of Environmental Management and the U.S. Environmental Protection Agency, PMATA began construction of the NECDF.

While the construction of the NECDF was underway, terrorists attacked the World Trade Center and the Pentagon on 11 September 2001. Because of these attacks and the continuing and immediate threat of further terrorist attacks on the United States, President Bush declared a national emergency by Proclamation 7463 of 14 September 2001. In light of the national emergency, the Army determined that it is necessary for the stockpile of VX at NECD to be destroyed expeditiously and in a manner that does not pose a threat to public health and the environment.

Description of Action

The proposed action evaluated in this Environmental Assessment (EA) is to destroy the entire NECD stockpile of chemical agent by an accelerated neutralization process and to dispose of the liquid effluent produced by the neutralization process at an off-site, commercial Resource Conservation Recovery Act (RCRA) permitted Treatment Storage Disposal Facility (TSDF). The purpose of the proposed action is to eliminate the hazards associated with the stored chemical agent in a safe, environmentally acceptable, and expedient manner. The neutralization of drained VX would be the same as the no action alternative and accomplished in a reactor by mixing the agent with a sodium

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hydroxide (NaOH) and water solution. In the ensuing hydrolysis reaction, VX would be destroyed, producing a hydrolysate that would consist primarily of water and NaOH, with small amounts of the sodium salts of ethyl-methylphosphonic acid, an amino thiol compound, and other organic compounds. Accelerated destruction will be achieved at the NECDF by processing the VX agent more quickly than originally proposed. This will be accomplished by using the manually operated Chemical Agent Transfer System (CHATS) instead of the automated Ton Container Cleanout (TCC). With CHATS, up to 10 TCs can be processed at a time, whereas with the TCC line, only 1 TC can be processed at a time.

The hydrolysate shipped off-site for disposal under the proposed action will be classified a hazardous waste. Loading facilities would be constructed next to the storage tanks to support transfer of hydrolysate to tanker trucks for shipment to a TSDF. It is recognized that some impacts that would be avoided or reduced at NECDF will be transferred to a receiving TSDF. However, the permitted off-site TSDF selected for treatment and/or disposal of NECDF waste streams will be audited to ensure that the facility is safely treating the hydrolysate in accordance with applicable federal, state, and local regulations and the TSDF's environmental operating permits. The TSDF's compliance with these regulations and permits will ensure that treatment and/or disposal of the liquid effluents from the NECDF will be conducted in a safe and environmentally acceptable manner.

Drained ton containers will be decontaminated by washing twice with a NaOH solution in the CHATS, and then rinsed with water. The spent decontamination solution water will be reused in the caustic solution used in the VX neutralization process. Decontaminated ton containers will be monitored to confirm that they meet the Army's surface decontamination level (3X). Any ton containers not meeting the 3X level would be treated again. Decontaminated ton containers will be cut into halves. Ton container halves will be shipped to Rock Island Arsenal for thermal treatment, smelting and recycling. Recycling the ton containers would yield approximately 2.7 million pounds of carbon steel.

Anticipated Environmental Effects

The Proposed Action will have no significant adverse impact on air quality, land use, ecological resources, water use and water quality, socioeconomic resources in the area, archaeological and historic resources, human health, and minority and low-income populations living near the project site. Indeed, in almost all resource areas, accelerated NECDF will reduce impacts relative to the original proposed action because of the shorter duration of operations.

The Proposed Action has a significant benefit for the communities adjacent to the installation because it requires fewer facilities and involves a shorter duration of operations. There may be slightly increased risks to NECDF workers because more operations are conducted manually, but these risks are expected to be minimized by the implementation of a comprehensive and proactive safety program and operating procedures. The end result will be a safe design, safety-oriented training programs, safe working procedures, and safety oversight by trained Army and contractor professionals during all agent processing operations. The Indiana Department of Environmental Management will also provide oversight.

Facts and Conclusions Leading to a FONSI

The Proposed Action would result in the destruction of the VX agent stockpile at NECDF by early 2004,

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two years earlier than originally scheduled. PMATA concludes that the certain benefit of early destruction of the stockpile more than outweighs possible risks to workers because those risks will be mitigated. The Proposed Action poses no additional risk to the community at large.

Administration of Environmental Documentation

The Department of the Army will receive written comments on this proposal for a 30-day period from the date that this FONSI is published. Address comments to: U.S. Army Public Affairs Office, Newport Chemical Stockpile Outreach Office, 140 S. Main Street, Newport, IN, 47966 or email comments to: poio@pmcd.apgea.army.mil The Environmental Assessment may be reviewed by the public at the following locations:.

Newport Chemical Stockpile Outreach Office
140 South Main Street
Newport, IN 47966

Newport Public Library
350 East Market Street
Newport, IN 47966

Clinton Public Library
313 S. 4th Street
Clinton, IN 47842

Rockville Public Library
106 North Market Street
Rockville, IN 47872

Danville Public Library
319 North Vermillion Street
Danville, IN 61832

Vigo County Public Library
1 Library Square
Terre Haute, IN 47807

Dana Public Library
140 North Maple Street
Dana, IN 47847

Covington Public Library
622 5th Street
Covington, IN 47932

Montezuma Public Library
212 Crawford Street
Montezuma, IN 47862