

DRAFT
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

**Proposed Installation and Operation of a Small-Scale Incineration Unit for
the Destruction of Chemical Agents Tabun and Lewisite at the Deseret
Chemical Depot in Utah**

Description of the Proposed Action:

The US Army Chemical Materials Agency (CMA) is evaluating the proposed addition of a small-scale liquid incinerator system to thermally destroy both the chemical agents Tabun (GA) and Lewisite, as well as the spent decontamination solutions and other liquid waste solutions generated during operations at the Deseret Chemical Depot (DCD) in Utah. The incinerator and its associated pollution abatement system (PAS) and auxiliary equipment would be installed within the boundary of DCD's Area 10 in a previously disturbed area. The proposed liquid incinerator (LIC) would be approximately one-third the size of one of the existing TOCDF LICs.

The purpose of the action is to provide for the safe and timely destruction of DCD's inventory of GA and Lewisite in parallel with ongoing TOCDF mustard disposal operations. This action is needed to meet current U.S. obligations and timetables under the Chemical Weapons Convention (CWC) and Congressional directives at DCD. Design, construction and completion of operations of the proposed action would be completed before the CWC treaty deadline of April 2012. In order to minimize the potential for significantly extending the operational lifetime of the TOCDF, additional on-site treatment capacity is required to support the destruction of GA and Lewisite. Specifically, the proposed LIC would provide the capacity for destroying the GA and Lewisite while mustard disposal operations were ongoing at the TOCDF. The proposed action would eliminate the risk to the public from continued storage of these chemical agents and associated bulk storage containers.

PROJECT ALTERNATIVES:

The alternatives to the Proposed Action that were considered include (1) the no-action alternative of continued storage without destruction (2) use of the existing TOCDF incinerators (3) neutralization.

ANTICIPATED ENVIRONMENTAL EFFECTS:

The information and analyses presented in the Environmental Assessment (EA) entitled the *Proposed Installation and Operation of a Small-Scale Incineration Unit for the Destruction of Chemical Agents Tabun and Lewisite at DCD in Utah*, December 2008, indicate that the proposed action of installing a small-scale liquid incinerator system and auxiliary systems at DCD and operating this unit to

destroy the DCD's stockpile of agents GA and lewisite would have no significant environmental impacts. Installation and operation of the proposed equipment would help ensure the timely and efficient destruction of agents GA and Lewisite.

Installation and operation of a new PAS would ensure the emissions from the proposed small-scale incinerator would be in compliance with applicable regulatory limits. Based upon examination of the findings of previous human health and ecological risk assessments conducted on the emissions from the existing TOCDF, the emissions from the small-scale incinerator with the PAS in operation would not result in significant impacts to human health or to ecological resources. Consumption of additional resources, such as water, to support the proposed action would involve incremental quantities that are small fractions of the consumption requirements for the existing TOCDF. The additional waste streams to be created by the proposed action are likewise only small, incremental amounts of the wastes normally generated by baseline operation of the TOCDF.

The alternatives to the Proposed Action that were considered include (1) the no-action alternative of continued storage without destruction (2) use of the existing TOCDF incinerators (3) neutralization.

An evaluation of the no-action alternative indicates that no significant impacts would occur; however, the no-action alternative could jeopardize the ability of the US to comply with chemical warfare agent destruction deadlines established under the CWC and Congressional directives. Furthermore, choosing the no-action alternative would require the continued commitment of resources for stockpile monitoring, surveillance, and maintenance for as long as the agents GA and Lewisite remained in storage.

Compliance with the US obligations under the CWC Treaty for the timely and complete destruction of the chemical agent stockpile was an important consideration in the selection of the current proposed action. The existing incinerators at the TOCDF have repeatedly demonstrated they can safely destroy chemical agents. However, since the GA and Lewisite destruction would need to be sequenced in series with the current mustard processing campaign, the ability for the TOCDF to meet the CWC Treaty deadline for 100% destruction of all chemical agents would be in jeopardy. Neutralization was not pursued further as a disposal option because it would also work against the effort to meet the CWC Treaty milestone.

FACTS AND CONCLUSIONS LEADING TO A FONSI:

On reviewing the EA *Proposed Installation and Operation of a Small-Scale Incineration Unit for the Destruction of Chemical Agents Tabun and Lewisite at DCD in Utah*, December 2008, and other project information, the Commander of the DCD has concluded that installing and operating a small-scale liquid

incinerator system to thermally destroy both the GA and Lewisite, as well as the spent decontamination solutions and other liquid waste solutions generated during operations would have no significant adverse impact on land use, air quality, water use and/or water quality, ecological resources, socioeconomic resources in the area, cultural (i.e. archaeological and historic) resources, human health, minority or low-income populations in the area, or on waste management practices. The cumulative impacts of the proposed action in relation to the impacts of past, present and reasonably foreseeable actions related to storage and destruction of chemical agents and in the general area would likewise not be significant. Therefore, an environmental impact statement will not be prepared.

ADMINISTRATION OF ENVIRONMENTAL DOCUMENTATION: Persons wishing to comment may do so within 30 days of the date of publication of this notice in the *Tooele Transcript*, *Salt Lake Tribune* and the *Deseret News*. All comments received during the comment period will be considered in developing the final decision of the Proposed Action.

Requests for copies of the EA and this Draft FONSI are available from:

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