



**DEPARTMENT OF THE ARMY**  
JOINT PROGRAM EXECUTIVE OFFICE  
FOR CHEMICAL AND BIOLOGICAL DEFENSE  
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REPLY TO  
ATTENTION OF  
SFAE-CBD

DEC 3 1 2007

MEMORANDUM FOR COMMANDER, HEADQUARTERS AIR FORCE SPECIAL  
OPERATIONS COMMAND/A71

SUBJECT: Procurement of Non-Standard Commercial Equipment for Chemical  
Warfare Agent Consequence Management

The Headquarters Air Force Special Operations Command (AFSOC)/A71 submission for procurement of the Lightweight Inflatable Decontamination System (LIDS) has been reviewed in accordance with the Non-Standard Equipment Review Panel process.

In the absence of National standards and considering the independent Government test results and concept of use provided by the AFSOC, the LIDS meets the provided concept of use with the constraints, limitations and residual safety risks noted at the enclosure.

Point of contact for this action is David Wilhide at commercial (703) 681-1607 or email Curt.Wilhide@jpeocbd.osd.mil.

STEPHEN V. REEVES  
Major General, USA  
Joint Program Executive Officer  
for Chemical and Biological Defense

Enclosure

CF:  
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## **LIDS General Comments**

- According to the information provided on the independent tests performed on the LIDS a full system evaluation was not conducted.

## **Operational Capabilities**

- LIDS is a lightweight, self-contained decontamination system that can be quickly and easily transported from a central location to where it is needed to decontaminate air and ground crews.
- This system provides all of the equipment required to sustain decontamination operations in toxic environments.
- The system provides all necessary contamination control area equipment and contamination avoidance signs needed for processing personnel into clean areas while controlling cross contamination during this procedure.
- All consumables for the LIDS are available in the Air Force and Department of Defense supply systems.

## **Operational Limitations**

- Eleven change recommendations were made by the users. NSERP recommends that the user consult with the vendor regarding implementation of as many of these corrections/changes as possible prior to purchase of the system.
- It is unclear as to what, if anything is distinctive or special about the LIDS operating in a nuclear or high explosive environment. A recommended and seemingly more appropriate descriptive statement is that the LIDS will allow installations to process large numbers of personnel through a contamination control area (CCA) in chemically, biologically, and radiological contaminate environments.

## **Residual Safety Risks**

- If the boots required to be worn on the exterior of the HAZMAT ensemble are not worn, the ensemble will be torn, exposing the wearer to 5% bleach solutions that may result in burns on their feet.
- The risk of agent transfer is significantly decreased during decontamination if dedicated attendants who perform all of the removal steps are used as opposed to a contaminated partner performing the processing steps. In particular those wearing the Battle Dress Overgarment have a fairly high (40%) transfer rate due to the nature of the design of the BDO and doffing of the garment.



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR FORCE SPECIAL OPERATIONS COMMAND

MAY 01 2008

MEMORANDUM FOR CONCERNED AGENCIES

FROM: HQ AFSOC/A7X  
427 Cody Avenue, Suite 303  
Hurlburt Field FL 32544-5434

SUBJECT: Response To Enclosure Items In JPEO LIDS Approval Letter

1. The following responses are provided regarding the 11 user recommended changes identified during the testing process. All but one of these recommended changes is closed. It is important to note that none of these recommended changes affected the operational capability of the system or its ability to satisfactorily pass the inspection requirements.

**Recommended Change:**

Establish 30-second time requirement for exposure in the shower misting station.

**Corrective Action:**

Processing Signs were changed to incorporate a 30-second exposure in the shower at misting station.

**Recommended Change:**

Update processing signs as procedures are finalized.

**Corrective Action:**

At the time of the test, DoD approved Ground Crew HAZMAT LEVEL-A and JFIRE Processing procedures had not yet been fully developed, once approved and released they will be incorporated into signage as applicable. Additionally, DoD approval for the "new" aircrew CBRNE processing artwork is still in coordination and responsibility fully resides within the government. to provide the data to the vendor as it becomes available..

**Recommended Change:**

Provide an additional strap for aircrew members to maintain balance during flight boot removal.

**Corrective Action:**

This recommendation is completed and has been incorporated at the boot removal station, these are now standard in all systems.

**Recommended Change:**

Provide a blower unit hanging rack in the overboot removal area for aircrew members.

**Corrective Action:**

A swivel bar has been added to the Boot Removal Sign Rack allowing Aircrew/technicians to hang blower units prior to overboot removal.

**Recommended Change:**

The 28th TS test team identified a need for the following technical data improvements/checklists at each station to ensure proper assembly and disassembly of all zones and stations.

**Corrective Action:**

Color coded and laminated documents for each station and system training manuals have been developed and are provided with each system.

**Recommended Change:**

Include all steps or illustrations for each station in the set-up flowchart. Use a checklist or quick reference format and increase the font size for reading during mission oriented protective posture (MOPP) Level 4 or night operations.

**Corrective Action:**

Detailed Set-Up procedures are provided with each system.

**Recommended Change:**

Include detailed strike instructions to supplement the pictures for packing the system.

**Corrective Action:**

Detailed Strike procedures are provided with each system.

**Recommended Change:**

Two shower nozzles broke during the test; the vendor had replacement parts, but there were none in the repair kit. Additionally, the quality and quantity of misting reduced with continued operation due to the corrosive nature of the 5% bleach.

**Corrective Action:**

Repair kit has been expanded to include non-corroding replacement nozzles.

**Recommended Change:**

After extended use, the deluge shower head developed corrosion as a result of continual flow of 5% bleach over a five day period.

**Corrective Action:**

Non corrosive shower heads have been incorporated into the LIDS.

**Recommended Change:**

The misting station collection floor failed after the first run; however, this was not classified as a critical failure as it did not impede the continued processing. The failure of the floor was a due to a small hole in the inflatable wall that the vendor repaired. The test team concluded using a thicker material would withstand wear from high traffic. The system contractor redesigned the floor to the same thickness as the shelter airbeams.

**Corrective Action:**

The thicker floor was manufactured and sent to the test location (within 48 hours) and the new

reinforced liner was used for the remainder of the test without failure. This change has been incorporated into all systems.

**Recommended Change:**

The test team observed the need to include tools necessary to mix and apply the glue for the patch in the repair kit.

**Corrective Action:**

New technology "Peel and Stick" Patches as permanent repair for damaged tubes have been incorporated into the tool kit.

**Recommended Change:**

Install isolation valves in each stall and relocate the main valve inside of the misting station.

**Corrective Action:**

A readily accessible main valve on the inside of the misting station has been incorporated.

2. Additionally, the NSERP panel stated that a "full" evaluation was not conducted because not all test objectives were not accomplished, however, the test team was fully satisfied with the results and satisfactorily passed our purpose, statement, and overview.

3. Questions regarding this issue can be directed to me at DSN 579-4683, Commercial (850) 884-4683, or e-mail at [thomas.graham@hurlburt.af.mil](mailto:thomas.graham@hurlburt.af.mil).

  
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Chief, Readiness Division