



## Department of Energy

Washington, DC 20585

March 7, 2006

The Honorable A. J. Eggenberger  
 Chairman  
 Defense Nuclear Facilities Safety Board  
 625 Indiana Avenue, N.W.  
 Suite 700  
 Washington, D.C. 20004-2941

Dear Mr. Chairman:

This letter provides the National Nuclear Security Administration (NNSA) and the Office of Environmental Management (EM) *Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System* consistent with Commitment 8.4 of the Department of Energy's (DOE) Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) 2004-2, *Active Confinement Systems*.

These listings were prepared at the sites, and were reviewed and approved by NNSA and EM line management and the Central Technical Authorities.

The next actions in the Implementation Plan require confinement ventilation system reviews in accordance with the *Ventilation System Evaluation Guidance for Safety-Related and Non-Safety-Related Systems* that was previously submitted as Deliverables 8.5.4 and 8.7. We are considering revising the review schedules that are established in the Implementation Plan. DOE will continue to work with your staff to coordinate this proposed revision and to complete the actions in the Implementation Plan.

If you have any questions, please contact me at (301) 903-0104.

Sincerely,

Richard Black  
 Director  
 Office of Nuclear and Facility Safety Policy

Enclosure

cc:  
 M. Whitaker, DR-1  
 J. McConnell, NA 2.1  
 C. Lagdon, US-1  
 D. Churg, EM-24



SEPARATION

PAGE



Department of Energy  
National Nuclear Security Administration  
Washington, DC 20585



FEB 28 2006

MEMORANDUM FOR: Richard L. Black  
Director  
Office of Nuclear and Facility  
Safety Policy

FROM: Jerald S. Paul *Jerry Paul*  
NNSA, Central Technical Authority

SUBJECT: National Nuclear Security Administration Input for  
Commitment 8.4 of Defense Nuclear Safety Board  
Recommendation 2004-2

The attached listing provides the National Nuclear Security Administration (NNSA) *Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System* as delineated in Commitment 8.4 of the Implementation Plan (IP) for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2004-2, *Active Confinement Systems*.

The appropriate concurrences are included under each site office as specified in the Commitment 8.4 deliverable, and in the IP that states "The CTA and PSO will review and concur with the facilities listed".

If you have any further questions, please contact Mr. James McConnell, NNSA Chief of Defense Nuclear Safety, at (202) 586-4379.

Attachment

cc: M. Whitaker, DR-1

RECEIVED  
FEB 28 2006  
OFFICE OF NUCLEAR AND FACILITY SAFETY POLICY

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U. S. Department of Energy  
National Nuclear Security Administration

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*Listing of Hazard Category 3 Defense Nuclear Facilities  
With an Active Confinement Ventilation System*

Commitment 8.4 of  
Implementation Plan for Defense Nuclear  
Facilities Safety Board Recommendation 2004-2



Washington, D.C. 20585

February 2006

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### Introduction:

This document represents the National Nuclear Security Administration (NNSA) *Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System*, to satisfy Commitment 8.4 in DOE's Implementation Plan for Board Recommendation 2004-2.

Section 7.5 of the DOE's Implementation Plan states: "*For hazard category 3 defense nuclear facilities with an active confinement ventilation system that are not excluded in the Recommendation 2004-2 Exclusion Report, a facility listing will be prepared and submitted for site or field office review and approval. The appropriate CTA and PSO will review this listing and provide concurrence. No further evaluation as part of this implementation plan is required for these facilities since these facilities have only localized consequences, and therefore the safety function of a ventilation system is primarily for in-facility workers, not as a confinement for protection of collocated workers. The 2004-2 Core Team will oversee the adequacy of this process.*"

The facility listing was tabulated and submitted for NNSA site office review and approval and Central Technical Authority (CTA) and Program Secretarial Office (PSO) concurrence. These signatures are displayed as part of the Table below.

The format for the NNSA Table the *Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System* provides the following information:

- Facility name
- Brief description of the facility and summary of system classification for the ventilation system
- Current Status
- Comments, as needed.

**Los Alamos National Laboratory**

Facility	Description and System Classification	Current Status	Comments
LANSCE 1L Target (TA-53-7)	The 1L target consists of two tungsten targets producing neutrons from a linear accelerator beam of 800Mev protons at 150µa. Building HVAC and HEPA filters are designated as Safety Significant systems.	Active Facility	

Submitted By: <i>Gerald Schyn</i>		Approved By: <i>Robert J. E. Whit</i>	
Signature	Organization: <i>NSA/LASO</i>	Signature	Date: <i>2/10/06</i>
Date	Date	Organization	Date
PSO Concurrence: <i>[Signature]</i>		CTA Concurrence: <i>[Signature]</i>	
Signature	Organization: <i>NSA/NA-70</i>	Signature	Date: <i>2/16/2006</i>
Date	Date	Organization: <i>NA-2.1 for Jerry Paul</i>	Date

Livermore National Laboratory

Facility	Description and System Classification	Current Status	Comments
Building 331 (includes Tritium Facility Modernization)	Glovebox cabinet for H2 is an active defense in depth system. Tritium gloveboxes are safety significant passive systems and the structure, condensers/ducts are passive defense in depth systems. B331, the Tritium Facility, is currently being used primarily for uranium recovery and for some actinide experiments.	Undergoing a major modification. Active Facility	Building structure is being considered for upgrade to a TSBK Design Category, and those portions of the structure that support the SS gloveboxes will be designated as SS.
Building 334	Active building ventilation system is not safety related. HEPA filters and associated ducting is a passive safety significant system. Condensers are a passive defense in depth system. B334 is an engineering test facility.	Active Facility	
B696S	Active HEPA ventilation system is a defense in depth system. Glovebox is a passive safety significant system. Glovebox room and duct/condenser are passive defense in depth systems. B696S and B695 have a single DSA and together are considered a single facility, which is used for decontamination and treatment of radioactive waste.	Active Facility	Glovebox is planned only for LLW at this time. Glovebox operations have not been authorized pending completion of RA. Only LLW is allowed in Ductwork.
B695	Active HEPA ventilation system is a defense in depth system. Passive systems include the TRU Waste Container (SS), Chaperon/rodler (DD), and Radioisotope Glovebox, Lead Atmosphere Glovebox and Combustion Hazard Glovebox all of which are not safety related. B696S and B695 have a single DSA and together are considered a single facility, which is used for decontamination and treatment of radioactive waste.	Active Facility	Workers will use PPE when Chaperon/rodler batches exceed 0.52 PB-GX Chaperon / dross/rod operations have not been authorized pending completion of RA. Only small quantities of LLW are allowed in these gloveboxes, which are used for sampling. Gloveboxes have HEP A filtration.

Reviewed By: *[Signature]*  
 Signature: *[Signature]*  
 Organization: *Technical Services*  
 Date: *2/9/06*

ISO/CS Outcomes: *By NUSAWA-10 2/22/06*  
 Signature: *[Signature]*  
 Organization: *NUSAWA-10*  
 Date: *2/22/06*

Approved By: *[Signature]*  
 Signature: *[Signature]*  
 Organization: *N. N. N. N.*  
 Date: *2/9/06*

CSM Concurrence: *[Signature]*  
 Signature: *[Signature]*  
 Organization: *for long term 2/16/06*  
 Date: *2/16/06*

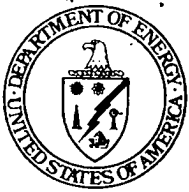
**Y12 Site**

Facility	Description and System Classification	Current Status	Comments
9201-5 Complex	The 9201-5 complex manufactures and stores depleted uranium and other hazardous material components. Active ventilation system with HEPA is a defense in depth system. The building structure is a passive safety significant system and containers are a passive defense in depth system.	Active Facility	Active CVS is a partial system referring to a system that provides ventilation to a process area, a process, or a glovebox
Submitted By: <i>Arona Polubins</i> Y-12 Site Office 2/13/06 <small>Signature Organization Date</small>		Approved By: <i>[Signature]</i> Y-12 S.L. Office 2/13/06 <small>Signature Organization Date</small>	
PSC Concurrence: <i>M Sell</i> NNSA/NA-10 2/22/06 <small>Signature Organization Date</small>		CIA Concurrence: <i>[Signature]</i> for [unclear] NA-2.1 2/16/2006 <small>Signature Organization Date</small>	



SEPARATION

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Department of Energy  
Washington, DC 20585

JAN 26 2006

MEMORANDUM FOR RICHARD L. BLACK  
DIRECTOR, OFFICE OF NUCLEAR  
AND FACILITY SAFETY POLICY  
OFFICE OF ENVIRONMENT,  
SAFETY AND HEALTH

FROM: DR. INÉS R. TRIAY *Inés Triay*  
CHIEF OPERATING OFFICER FOR  
ENVIRONMENTAL MANAGEMENT

SUBJECT: Transmittal of List of Office of Environmental  
Management Hazard Class 3 Facilities with Active  
Confinement Ventilation Systems

The purpose of this memorandum is to transmit the List of Office of Environmental Management (EM) Hazard Class 3 Facilities with Active Confinement Ventilation Systems to satisfy Commitment 8.4 of the *Department of Energy Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 2004-2, Active Confinement Systems*, August 2005. The attached lists were developed in accordance with the guidance and criteria contained in *Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System*, August 2005. The lists were prepared and approved at each of the EM sites. My office has approved the submittal with the concurrence of the Chief of Nuclear Safety.

If you have any questions, please call me at (202) 586-0738 or Mr. Dae Y. Chung, Acting Deputy Assistant Secretary for Integrated Safety Management and Operations Oversight, at (202) 586-5151.

Attachment

cc: R. Lagdon, CNS-ESE  
D. Chung, EM-3.2



Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System

Savannah River Site

Facility Segment/Section	BLDG	Description	EXCLUSION CRITERIA	COMMENTS JUSTIFICATION	Owner
Analytical Labs NR Facilities	772001F	Process Control 772-1F Laboratory	Haz 3 Active Ventilation	Confinement ventilation is passive with active GS components Main and Off Gas Exhaust Systems (SS passive components)	F/H Lab
HTF-Other	259000H	WM Maintenance Facility	Haz 3 Active Ventilation	Active high bay ventilation system (PS) Passive WCT (PS) WCT Cell (PS)	LWDP
SRNL Technical NR Facilities	776003A	Strainer Change House	Haz 3 Active Ventilation	Active confinement ventilation (GS)	SRNL
SRNL Technical NR Facilities	776002A	Tank Building	Haz 3 Active Ventilation	Active confinement ventilation (GS)	SRNL
SRNL Technical NR Facilities	776004A	High Level Vent Filter House	Haz 3 Active Ventilation	Active confinement ventilation (GS)	SRNL
SRNL Technical NR Facilities	776005A	Tank Building Vent Area	Haz 3 Active Ventilation	Active confinement ventilation (GS)	SRNL
SRNL Technical NR Facilities	776006A	Waste Loading Station	Haz 3 Active Ventilation	Active confinement ventilation (GS)	SRNL
Saltstone Process/Control NR Facilities	210000Z	Process Building	Haz 3 Active Ventilation	Active confinement ventilation	Waste Solidification
Saltstone Process/Control NR Facilities	704000Z	Saltstone Operations Building	Haz 3 Active Ventilation	Actual inventories are below Haz Cat 3 thresholds, typical of a Radiological Facility.	Waste Solidification

Hazard Category Key:

- 1. Hazard Category 1
- 2. Hazard Category 2
- 3. Hazard Category 3
- R Radiological Facility
- High High Hazard Chemical
- Low Low Hazard Chemical
- OI Other Industrial Fac.

{3} Supports a Nuclear Facility

Does not contain any inventory

Owner Key

- DP - Defense Programs
- F/H Lab - F/H Area & Ops Project
- F-Area CP - F Area Closure Project
- FSS - Field Support Services Business Unit
- H-Area CP - H Area Completion projects
- I&S - Infrastructure & Services
- LWDP - Liquid Waste Disposition Project
- NMM - Nuclear Materials Management
- NNP - Nuclear Nonproliferation Program
- PD&CS - Projects Dept & Construction Services

SFP - Spent Fuels Project

- SGCP - Soil & Groundwater Closure Project
- SRNL - Savannah River National Laboratory
- SUD - Site Utilities Department
- SWMF - Solid Waste Management Facility



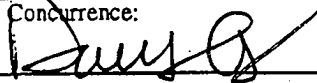

S&M = Surveillance & Maintenance

**Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System**

Submitted by: <i>J. D. Townsend for M. S. Miller</i>	Submitted by:
<i>[Signature]</i> <i>WASTE SEPARATION</i> <i>12/7/05</i>	<i>NA</i>
Signature      Organization      Date	Signature      Organization      Date
Submitted by:	Submitted by:
<i>[Signature]</i> <i>LWDP</i> <i>12/7/05</i>	<i>NA</i>
Signature      Organization      Date	Signature      Organization      Date
Submitted by:	Submitted by:
<i>[Signature]</i> <i>SRNL</i> <i>12/7/05</i>	<i>NA</i>
Signature      Organization      Date	Signature      Organization      Date
Submitted by:	Submitted by:
<i>[Signature]</i> <i>for R. Conster FHLAB</i> <i>12/16/05</i>	<i>NA</i>
Signature      Organization      Date	Signature      Organization      Date
Submitted by:	Submitted by:
<i>NA</i>	<i>NA</i>
Signature      Organization      Date	Signature      Organization      Date

Approved by:		
Signature	Organization	Date
<i>[Signature]</i>	<i>ENR 32</i>	<i>1/23/06</i>
Signature	Organization	Date
PSO Concurrence:		
<i>[Signature]</i>		<i>1/24/06</i>
Signature	Organization	Date
CTA Concurrence:		
<i>[Signature]</i>		
Signature	Organization	Date

**Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System**

Oak Ridge Office - Environmental Management				
Facility	Site/ Location	Description	Current Status	System Classification
3038 Isotope Development Laboratory	ORO/ORNL	Former radio-chemical laboratory consisting of gloveboxes and hotcells. Differential pressure instrumentation for the alpha handling facility hot cell glove box process off-gas system is safety significant. Building ventilation and HEPA filters are defense-in-depth.	Surveillance and Maintenance	Safety Significant
Submitted By:		Approved By:		
 Signature		ORO-EM Organization	12/1/2005 Date	 Signature
		ORO-EM Organization	12/1/05 Date	ORO-EM Organization
PSO Concurrence:		CTA Concurrence:		
 Signature		EM 3.2 Organization	1/23/06 Date	 Signature
		EM 3.2 Organization	1/23/06 Date	33 Organization
				1/24/06 Date

### Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System

Office of River Protection - Office of Environmental Management				
Facility	Site/ Location	Description	Current Status	System Classification
Demonstration Bulk Vitrification Facility*	Hanford / 200 Area	Process Low Activity Waste into glass	In design	Safety significant
222-S Laboratory	Hanford/200 Area	Active waste analytical laboratory/building	Operational	Non Safety Related
Submitted By:			Approved By:	
<i>Jenni H. Leiby</i> ORP-AMTF 12/17/05 <small>Signature Organization Date</small>			<i>Shirley J. Olin</i> DOE-ORP 12/17/05 <small>Signature Organization Date</small>	
PSO Concurrence:			CTA Concurrence:	
<i>Jenny S</i> EM 3.2 1/23/06 <small>Signature Organization Date</small>			<i>[Signature]</i> 33 1/24/06 <small>Signature Organization Date</small>	

\* Demonstration Bulk Vitrification Facility Hazard Categorization per DOE Memo 05-TPD-117

**Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System**

Office of River Protection - Office of Environmental Management				
Facility	Site/ Location	Description	Current Status	System Classification
WTP Analytical Laboratory	Waste Treatment Plant	Analytical Laboratory	Under construction	Ventilation system only credited for passive confinement function
WTP Low Activity Waste Facility	Waste Treatment Plant	Process Low Activity Waste into glass	Under construction	Non-safety related
Submitted By: <i>[Signature]</i> DOE-ORP-AMWTP 12-12-05			Approved By: <i>[Signature]</i> DOE-ORP 12/13/05	
Signature Organization Date			Signature Organization Date	
PSOC Concurrence: <i>[Signature]</i> 1/23/06			CTA Concurrence: <i>[Signature]</i> S3 1/24/06	
Signature Organization Date			Signature Organization Date	

Enclosure 2  
 CCN 301617  
 December 5, 2005

**Listing of Hazard Category 3 Defense Nuclear Facilities with an Active Confinement Ventilation System  
 Per DNFSB Recommendation 2004-2 Commitment 8.4**

Idaho Cleanup Project				
Facility	Site/ Location	Description	Current Status	System Classification
CPP-666, FAST Fluorinel Dissolution Process Area (FDPA)	INL/INTEC	Current FDPA facility operations are limited to routine maintenance and surveillance, with one exception: the sampling, storage, repackaging, and removal of contaminated dissolver off-gas and cell off-gas filters.	In Transition. Awaiting D&D.	Not classified as safety-significant but identified as equipment important to safety. System shared with the Fuel Storage Area of CPP-666, which has a HC2 categorization.
Remote Analytical Laboratory (RAL)	INL/INTEC	These INTEC laboratories are primarily analytical and developmental facilities designed for chemical and radiochemical analyses and for bench scale development work. These facilities receive and process both radioactive and nonradioactive samples.	Operational	Not classified as safety-significant but identified as equipment important to safety.
Submitted By:		Approved By:		
<i>E. Harkhalla</i> CNE      12/5/05		<i>[Signature]</i> DOE-10      12/8/05		
Signature      Organization      Date		Signature      Organization      Date		
PSO Concurrence:		CTA Concurrence:		
<i>[Signature]</i> EM3.2      1/23/06		<i>[Signature]</i> SB      1/24/06		
Signature      Organization      Date		Signature      Organization      Date		