

TAIS



*Environmental Stewardship Division (ENV-DO)*  
*Water Quality & Hydrology Group (ENV-WQH)*  
P.O. Box 1663, Mail Stop K497  
Los Alamos, New Mexico 87545  
(505) 665-1859/FAX: (505) 665-9344

Date: March 8, 2005  
Refer To: ENV-WQH: 05-036

Mr. Chris Vick  
Ground Water Protection Bureau  
New Mexico Environment Department  
Harold Runnels Building, Room N2250  
1190 St. Francis Drive  
P.O. Box 26110  
Santa Fe, New Mexico 87502

Mr. Bret Lucas  
Surface Water Quality Bureau  
New Mexico Environment Department  
Harold Runnels Building, Room N2050  
1190 St. Francis Drive  
P.O. Box 26110  
Santa Fe, New Mexico 87502

**SUBJECT: NOTICE OF INTENT TO DISCHARGE (NOI) FOR WATER/FOAM MIXTURE USE AT THE TA-15 DARHT FIRING SITE**

Dear Mr. Vick and Mr. Lucas:

Enclosed is a Notice of Intent to Discharge (NOI), including maps and pertinent information, that has been prepared for submittal to the New Mexico Environment Department (NMED) pursuant to 20 NMAC 6.2.1201 of the New Mexico Water Quality Control Commission (NMWQCC) Regulations. The NOI is being submitted to provide coverage for the discharge of a foam and water mixture to be used at the TA-15 Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility Firing Site. This water/foam mixture will be used to capture and control fugitive dusts and potential aerosolized shot contaminants from the firing site experimental activities at the Laboratory. This process will greatly reduce the levels of potential aerosolized shot contaminants from being discharged into the environment. Additionally, this method will help reduce potential exposure to workers and minimize waste produced from the experiments.

The enclosed NOI is similar to the DX PHERMEX Water/Foam NOI originally submitted to NMED on January 22, 2003. NMED determined that no discharge plan was required for the DX PHERMEX activities covered under the NOI. The Laboratory will develop BMPs for activities at TA-15 DARHT Facility Firing Site to ensure that similar water/foam collection processes are followed as identified in the January 22, 2003, NOI.



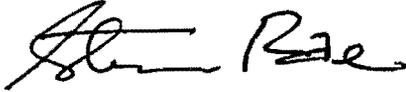
Mr. Chris Vick and Mr. Bret Lucas  
ENV-WQH: 05-036

- 2 -

March 8, 2005

Please contact Mark Haagenstad (505) 665-2014 should you have questions or require additional information.

Sincerely,



Steven Rae  
Group Leader  
Water Quality & Hydrology Group

SR:MH/lm

Enclosure: a/s

Cy: Bill Olson, NMED/GWQB, Santa Fe, NM, w/enc.  
Marcy Leavitt, NMED/SWQB, Santa Fe, NM, w/enc.  
Stephen Yanicak, NMED-DOE-OB, w/enc., MS J993  
Gene Turner, NNSA/LASO, w/enc., MS A316  
Martha Zumbro, DX-3, w/enc., MS P940  
Michael Osborn, DX-5, w/enc., MS D411  
Nancy Sauer, DX-3, w/enc., MS P940  
Franco Sisneros, DX-TSO, w/enc., MS C925  
Randy Johnson, DX-TSO, w/enc., MS C925  
Eva Birnbaum, C-INC, w/enc., MS J514  
Kenneth Hargis, ENV-DO, w/enc., MS J591  
Doug Stavert, ENV-DO, w/enc., MS J591  
Tori George, ENV-DO, w/enc., MS J591  
Mike Saladen, ENV-WQH, w/enc., MS K497  
Mark Haagenstad, ENV-WQH, w/enc., MS K497  
ENV-WQH File, w/enc., MS K497  
IM-5, w/enc., MS A150

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**Dual Axis Radiographic Hydrodynamic Test (DARHT)  
DX 15-312 FOAM  
NOTICE OF INTENT**

1. **Name and address of facility making the discharge.**  
Los Alamos National Laboratory  
Dynamic Experimentation Division (DX)  
P.O. Box 1663  
Los Alamos, New Mexico 87545
  
2. **Location of the discharge (In Township, Range and Section, if available).**  
DARHT Firing Site  
Technical Area (TA) 15, Building 312  
NAD 1983 New Mexico Central  
GPS Point: 1758798.0 easting  
GPS Point: 1624835.0 northing  
See Enclosure 1 for maps of the DARHT Firing Site.
  
3. **The means of discharge. (To lagoon, Flowing stream, Water course, Arroyo, Septic tank, other).**  
The discharge will be mitigated at the Dual Axis Radiographic Hydrodynamic Test (DARHT) (TA-15-312) firing point area and the discharge will not be into a watercourse. This site is used by the DX Division for explosives experimentation as part of the Laboratory's mission of Stockpile Stewardship.  
  
The water/foam mixture will be generated in a containment silo consisting of a metal silo or cloth tent centered on the firing point to hold it in place during the experiment. After the experiment is complete, the foam will collapse into a liquid within the collection system (see Enclosure 2). The collection system consists of a sloped concrete apron and trench that drain into a holding tank. The recovered mixture will be pretreated at DX with an activated carbon filtration system and then transported to the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF) for final disposal. Although the concrete apron and trench system are designed to capture all of the water/foam mixture, as much as 5% of the water/foam mixture may be dispersed beyond the collection system. Best efforts will be made to retrieve such mixture that escapes the collection system; the small amount of foam (an estimated 10.5 gallons of AFC-380 concentrate, see section 5) that might escape the collection system and reach the surrounding soil will not be recoverable. The use of the water/foam mixture is covered under an existing Storm Water Pollution Prevention Plan (SWPPP). Best Management Practices (BMPs) will be implemented as required by the SWPPP. A figure of the collection system with associated BMP designs is enclosed for NMED's review (see Enclosure 2). A Contingency Plan has been developed to handle unusual catastrophic failures and the draining of the silo (see Enclosure 3).
  
4. **The estimated concentration of contaminants (if any) in the discharge.**  
Water will be mixed with the AFC-380 concentrate to generate a water/foam mixture. An MSDS Sheet for the foam concentrate is provided as Enclosure 4. Water/foam mixture rates will be 94% water to 6% concentrated foam. Following the experiment, potable water will be used to clean up the firing point area by flushing the water/foam mixture into the collection system. Particulate contaminants trapped by the water/foam mixture include beryllium and depleted uranium at estimated concentrations of up to 60 ppm and 360 ppm, respectively. The water/foam mixture (including particulate contaminants) collected in the holding tank after the firing site activity will be pretreated at DX with an activated carbon filtration system and transported to the RLWTF for

additional treatment and disposal. A Waste Profile Form and the TA-50 RLWTF NPDES Permit provide coverage for the water/foam mixture waste.

5. **The type of operation from which the discharge is derived.**

Operations requiring the use of water/foam mixture as a contaminant control measure at DX include high explosives experimentation for stockpile stewardship activities. Specifically, the water/foam mixture provides control of aerosolized shot component contaminants at the DX Division DARHT Firing Site. Additionally, this method will help reduce potential exposure to workers and minimize waste produced from the experiments. The water/foam mixture will be generated in a containment silo consisting of a metal silo or cloth tent centered on the firing point to hold the foam in place during the experiment. After the experiment is complete, the foam will collapse into a liquid within the collection system (see Enclosure 2).

6. **The estimated flow to be discharged per day.**

Ten experiments involving a water/foam mixture are proposed for this site; five experiments over a twelve-month period beginning in March 2005 through March 2006 and the balance performed through 2007. Approximately 3500 gallons of the water/foam mixture will be used per experiment. For each of these proposed experiments, it is estimated that a maximum of 5% or 175 gallons of the water/foam mixture may be released beyond the collection system to the adjoining dirt apron and earthen berm portion of the firing point, impacting approximately 2000 square yards of surface area. Fugitive foam that may escape the containment area will be retrieved as best as possible. Additionally, the firing site has a SWPPP in place that outlines BMPs that will be in place to eliminate, reduce, and control the spread of any contaminants from the general area of the DARHT firing site.

AFC-380 concentrate used at 6% of the total water/foam mixture will yield up to an estimated 210 gallons of AFC-380 concentrate for each experiment. Based on a loss factor of up to 5%, an estimated 10.5 gallons of AFC-380 concentrate may be dispersed beyond the collection system as a water/foam mixture. Therefore, an estimated 175 gallons of water/foam mixture may be discharged to the environment (i.e. 10.5 gallons of AFC-380 concentrate and 164.5 gallons of water) per experiment.

7. **The estimated depth to Ground-Water (if available)**

The estimated depth to Ground Water is 1,150 feet below ground surface at TA-15.

Signed: Martha Zumbro

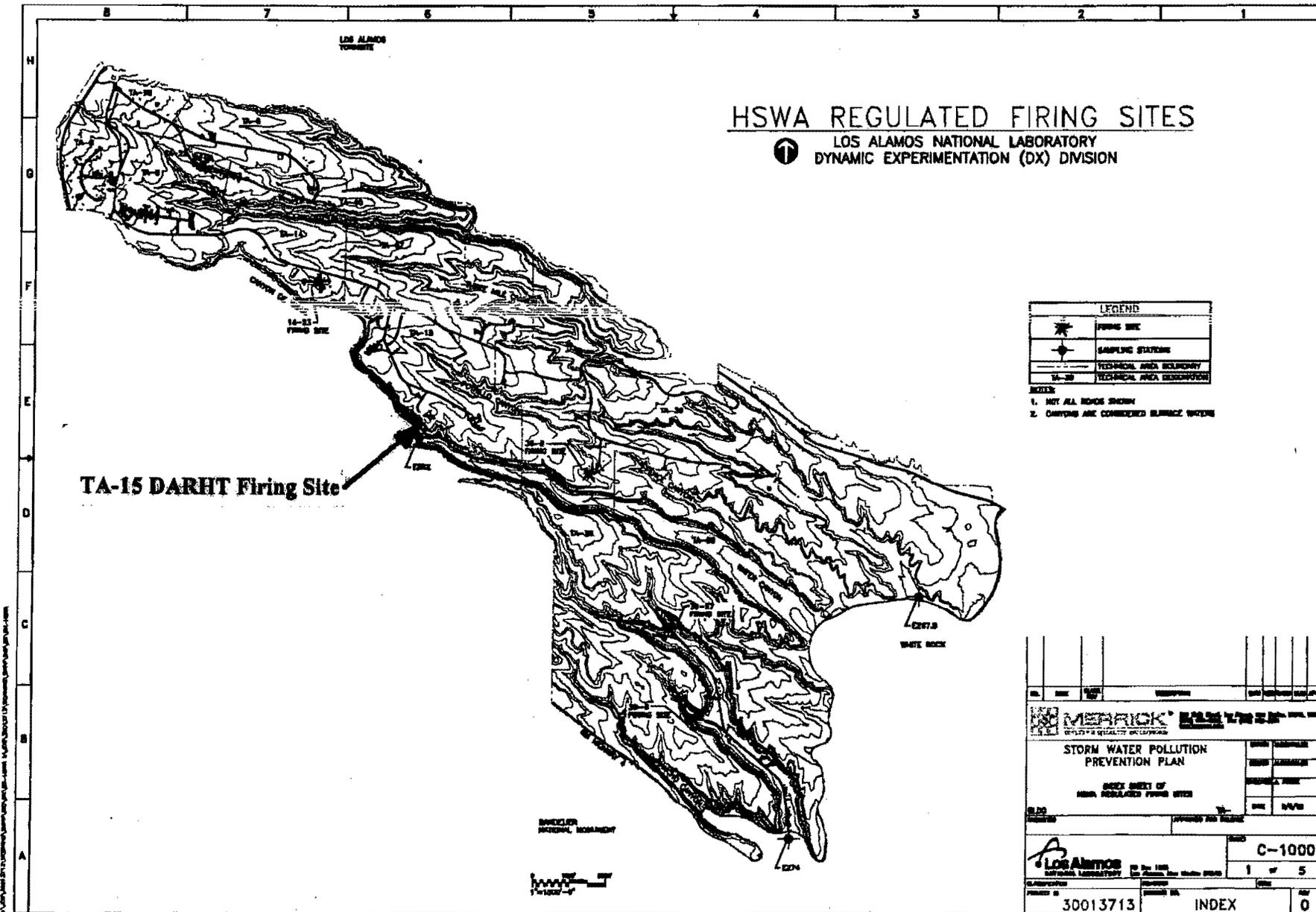
Date: 2/25/05

Martha Zumbro, Group Leader  
Dynamic Experimentation Division  
DX-3 Hydrodynamics Group

Signed: Marc E Clay

Date: 2/25/05

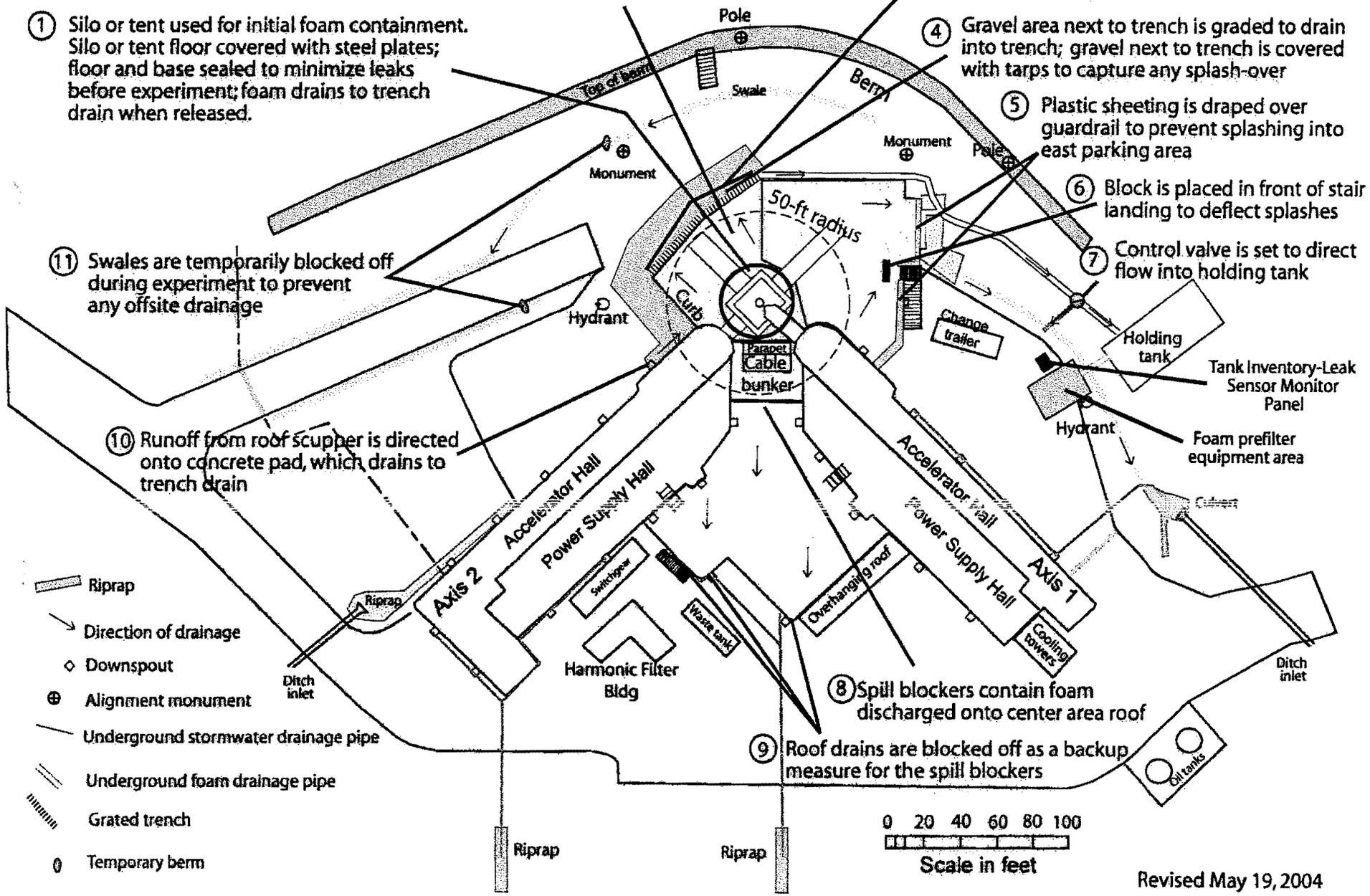
Marc E Clay Acting Office Leader  
Dynamic Experimentation Division Technical Support Office (DX-TSO)



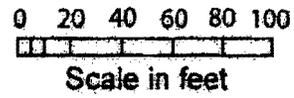


### Enclosure 2. BMPs for Post-shot Foam Recovery on the DARHT Firing Site

- ① Silo or tent used for initial foam containment. Silo or tent floor covered with steel plates; floor and base sealed to minimize leaks before experiment; foam drains to trench drain when released.
- ② Sloped concrete pads drain foam to trench drain and underground lines that drain to holding tank
- ③ Triangular silt dikes placed parallel to trench drain minimize foam flow over the trench when foam is released from the silo
- ④ Gravel area next to trench is graded to drain into trench; gravel next to trench is covered with tarps to capture any splash-over
- ⑤ Plastic sheeting is draped over guardrail to prevent splashing into east parking area
- ⑥ Block is placed in front of stair landing to deflect splashes
- ⑦ Control valve is set to direct flow into holding tank
- ⑧ Spill blockers contain foam discharged onto center area roof
- ⑨ Roof drains are blocked off as a backup measure for the spill blockers
- ⑩ Runoff from roof scupper is directed onto concrete pad, which drains to trench drain
- ⑪ Swales are temporarily blocked off during experiment to prevent any offsite drainage



- Riprap
- Direction of drainage
- Downspout
- Alignment monument
- Underground stormwater drainage pipe
- Underground foam drainage pipe
- Grated trench
- Temporary berm



Revised May 19, 2004

**Enclosure 3**  
**DARHT (10-312) Foam Contingency Plan**  
**DX Division Management Approval**

Approved by: Martha Zumbro Date: 2/25/05

Martha Zumbro  
DX-3 Group Leader

Reviewed By: Gerald Seitz Date: 2/25/05

Gerald Seitz  
DARHT Firing Point Leader

Reviewed By: Franco Sisneros Date: 2.16.05

Franco Sisneros  
DX Environmental Team Leader

## Dual Axis Radiographic Hydrodynamic Test (DARHT) Foam Contingency Plan

A water-based foam (AFC-380) may be used during dynamic experimentation shots at the Dynamic Experimentation Division (DX) Dual Axis Radiographic Hydrodynamic Test (DARHT) Firing Site (TA-15-312) to provide particulate and dust suppression. The foam will also help with fire suppression.

This Foam Contingency Plan has been developed to handle unusual catastrophic failures of the foam containment silo (metal silo or cloth tent) system at the DARHT Firing Site. Existing DX-3 and DX-6 Procedures describe site operations, maintenance, and experiment set up. Appendix A of the DARHT SWPPP includes site maps with topography, and Section 3.4 describes standard spill response procedures.

Standard Best Management Practices (BMPs) to be used for foam operations include: training, routine inspections of the site, foam collection system, erosion controls, and equipment before and after experiments; rescheduling experiments in the event of possible inclement weather as determined during the pre-shot weather check; designing experiments to minimize foam loss to the environment; and collection of spent foam in the collection system.

The DARHT firing point includes an integral foam collection system consisting of a sloped concrete apron and trench that drain into a foam holding tank. Attached is a general sketch of the foam collection system at DARHT (See Enclosure 2). During an experimental shot involving foam, a 20' high by 38' wide hexagonal cloth tent structure (or similar silo structure) will be constructed on the firing point to contain the foam prior to the shot. In the event that the foam containment silo must be emptied prior to performing a shot, a contingency containment berm will be deployed to capture foam as it is drained from the silo and hold the foam until it collapses and can then be transferred into the foam holding tank pending disposal. The contingency containment berm will consist of a commercially available containment system or a berm constructed using a 30-mil synthetic liner, and will be deployed on the southwest side of the firing point along Axis II. The contingency containment berm will be constructed of a liner that is at least 30-mil thick, chemically compatible with the foam, and resistant to deterioration by UV on the time scale it is in use. Lightweight tarps will be placed adjacent to areas outside the liner area to facilitate additional foam spray recovery. Prior to reinitiating the experiment, foam within the contingency containment berm will be transferred into the holding tank pending pretreatment and disposal at LANL's Radioactive Liquid Waste Treatment Facility (RLWTF).

Possible scenarios of unusual catastrophic failures in foam management include: failure of the foam containment silo, larger than planned foam releases during usage, and failure of the collection area. Measures to deal with potential catastrophic failures are put into place before the foam is generated.

- If a larger than planned foam ejection occurs during an experiment, best efforts will be made to retrieve foam that escapes the collection system, retrieval methods may consist of the pumping of pooled water/foam mixture and/or vacuuming of dried foam.
- If the firing point foam collection system were to fail after an experiment, as much foam as possible would be collected from the adjacent gravel and tarp areas. Best efforts will be made to retrieve foam that escapes the collection system; retrieval methods may consist of the pumping of pooled water/foam mixture and/or vacuuming of dried foam.
- If the foam containment silo were to lose containment of the foam before the experiment occurs, the foam would be drained into the contingency containment berm pending collapse of the foam and subsequent transfer into the holding tank pending disposal.
- If the contingency containment berm were to fail the foam would flow to the southwest onto a relatively flat basecourse area.

## ENCLOSURE 4

**CHEM GUARD** INC.

4 S. 6th Avenue  
Mansfield, Texas, USA 76063  
7-473-9964  
7-473-0606 fax  
www.chemguard.com

**MATERIAL SAFETY DATA SHEET****AFC-380****SECTION I: Identity****Manufacturer**

Chemguard, Inc.  
204 South Sixth Ave.  
Mansfield, TX 76063  
(817) 473-9964  
Emergency telephone (817) 473-9964

Chemical name: mixture

Chemical family: N/A

Formula: N/A

CAS No.: N/A

Revision date: 3-11-99

**SECTION II: Ingredients**

Hazardous Ingredients	%	CAS No.	ACGIH TLV	Other Limits
Diethylene glycol monobutyl ether	6.2	112-34-5		
2-methyl-1-propanol	4.0 %	0078-83-1		
<b>Other Ingredients</b>				
Proprietary mixture of hydrocarbon surfactants, solvents and polymers				

**SECTION III: Physical/Chemical Characteristics**

Boiling point:	212°-375°F	Flash point (PMCC):	>140° F.
Melting point:	32°-35°F.	Vapor density (air = 1):	N/A
Specific gravity:	1.01 g/ml	Solubility in water:	100%
Vapor pressure (mm Hg):	N/A	Evaporation rate (butyl acetate = 1):	<1
pH:	7.5	Appearance and odor:	liquid/solid slurry

**SECTION IV: Fire and Explosion Hazard Data**

Flash point (PMCC): >212°F. Flammable Limits: non-flammable  
 Extinguishing media: Compatible with CO<sub>2</sub>, water, foam, dry chemical and halon.  
 Special Fire Fighting Procedures: Follow usual fire fighting procedures.  
 Unusual Explosion Hazards: NONE

**SECTION V: Reactivity data**

**Stability:** stable  
**Hazardous Polymerization:** Will not occur.  
**Incompatibility:** Avoid contact with strong oxidizers, strong acids and bases.  
**Decomposition Products:** CO<sub>2</sub>, CO, possibly NH<sub>3</sub>

**SECTION VI: Health Hazard Data**

**Routes of entry - Eye:** May cause eye irritation.  
**Inhalation:** May cause mild irritation.  
**Skin:** May cause mild irritation.  
**Ingestion:** Not an expected route of entry.

**Health Hazard - Acute:** Irritation of eyes, skin and mucous membranes.  
**Chronic:** None known.

**Carcinogenicity:** Not a carcinogen.

**OSHA regulated?** No

**Medical Conditions Generally**

**Aggravated by Exposure:** Skin irritation to individuals with sensitive skin.

**Signs and Symptoms of Exposure:** Watering of eyes, reddening of skin.

**Emergency and First Aid Procedures:**  
**Eyes:** Flush with water and contact physician  
**Skin:** Rinse with water. Wash with soap and water.  
**Inhalation:** Remove to fresh air.  
**Ingestion:** Do not induce vomiting. Call Physician.

**SECTION VII: Precautions for Safe Handling and Use**

**Precautions for Handling and Storage:** Store in original container.  
**Release or Spill Measures:** Contain and collect spill. Dispose according to applicable regulations.  
**Waste Disposal Method:** Dispose according to applicable regulations.  
**Other Precautions:** Areas on which a spill has occurred may be slippery.

**SECTION VIII: Control Measures**

**Respiratory Protection:** Not generally needed.  
**Ventilation:** Use if available.  
**Protective Gloves:** Latex or rubber.  
**Eye Protection:** Safety glasses with side shields, or goggles.  
**Other Protective Clothing or Equipment:** None recommended.  
**Industrial Hygienic Practices:** Clean spills.

12/19/96 14:01 505-442188

SNL 5800/9600

004/009

## OFFICIAL USE ONLY

Training Plan, Exercise 95-1

April 12, 1995

Appendix B

MSDS

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\*\*\*\*\*PRODUCT IDENTIFICATION\*\*\*\*\*

**Name:** AFC-380

**Synonyms:** Stabilized Aqueous Foam Concentrate

**Chemical Formula:** Mixture of proprietary materials - see below

**Health Hazard:** Moderate irritant to eyes

**Fire Hazard:** Aqueous mixture, not combustible

**Reactivity:** Not reactive

**Use:** Generation of stabilized water-based foam

**CAS Registry Number:** Mixture - see below

**RTECS Number:** Mixture - see below

**Manufacture:** Sandia National Laboratories, Albuquerque, New Mexico 87185

\*\*\*\*\*PHYSICAL DATA\*\*\*\*\*

**Physical Description:** Colorless, Viscous Liquid

**Molecular Weight:** Mixture of materials

**Boiling Point:** 100 C. at 760 mm hg

**Liquid Density:** Approximately .95 (water =1.0)

**Freezing Point:** 0 C

**Flash Point:** Not Applicable

**Solubility in Water:** Water based solution

**Evaporation Rate:** Same as water

**pH:** 6.3

## OFFICIAL USE ONLY

Training Plan, Exercise 95-1

April 12, 1995

Appendix B

MSDS

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## CHEMICAL IDENTITY

**Chemical Name:** This product is a mixture.

**Generic Description of Components:** Alkyl sulfonates, fatty alcohols, xanthan polymer, alcohol, glycol ether, and water.

**Title III chemicals:** Diethylene glycol monobutyl ether, CAS reg. No. 112-34-5, isobutyl alcohol, CAS reg. No. 78-83-1.

## HEALTH HAZARD INFORMATION

**HEALTH HAZARD(S):** This product is a mixture which has not been tested for health hazards. The assumption is made in the OSHA Hazard Communication Rule that an untested mixture will present the same health hazards as do the components which comprise one percent or more. Health hazards information for all components is, therefore, included as part of this MSDS.

One or more components are reported to cause skin irritation (on contact), eye irritation or burns (on contact), nose and throat irritation (by breathing vapor). In high concentration, vapor of one component may cause nausea, dizziness, headache, and stupor. The chronic effects of repeated exposure to relatively small doses of one component may cause lesions of the kidneys.

**SIGNS AND SYMPTOMS OF EXPOSURE:**

See Health Hazards

**PRIMARY ROUTE(S) OF ENTRY:**

See Health Hazards

**TARGET ORGANS:**

See Health Hazards

**MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE:**

No information

**EXPOSURE LIMITS (OSHA PEL, ACGIH TLV, OTHERS USED OR RECOMMENDED):**

One component has an OSHA PEL of 50 ppm

**CARCINOGENICITY DATA:**

No information; chemicals are not listed in National Toxicology Program (NTP) Annual Report on Carcinogens, not found to be potential carcinogens in the International Agency for Research on Cancer (IARC) Monographs, not listed by OSHA.

12/18/96 14:02 505 42193

SNL 5600/8600

006/009

**OFFICIAL USE ONLY**

Training Plan, Exercise 95-1

April 12, 1995

Appendix B

MSDS

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**\*\*\*\*\*EMERGENCY FIRST AID PROCEDURES\*\*\*\*\*****INHALATION:**

If inhaled, remove to fresh air.

**EYE CONTACT:**

Flush with large quantities of water. Seek medical attention if irritation persists.

**SKIN CONTACT:**

Flush with water. Seek medical attention if irritation occurs.

**INGESTION:**

If swallowed get medical attention immediately. If vomiting occurs, keep head lower than hips to prevent aspiration into lungs.

**\*\*\*\*\*EXPOSURE CONTROL INFORMATION\*\*\*\*\*****PROTECTIVE CLOTHING:**

Wear waterproof gloves for exposures longer than two hours

**EXHAUST VENTILATION:**

At the source of the vapors if used in closed work area

**\*\*\*\*\*ENVIRONMENTAL PROTECTION\*\*\*\*\*****STORAGE REQUIREMENTS:**

Store in containers approved for Aqueous solutions. All storage sites where a release would be into the uncontrolled environment requires secondary containment barriers.

**SPILL OR LEAK:**

Contain all spills and leak with dikes or absorbent to prevent uncontrolled migration of foam and/or foam concentrate.

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Training Plan, Exercise 95-1

April 12, 1995

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DISPOSAL METHODS:

All waste materials must be disposed of in accordance with all applicable federal state and local regulations. Empty containers may be reclaimed for reuse for this product.

\*\*\*\*\*MATERIAL SAFETY DATA SHEET PREPARATION\*\*\*\*\*

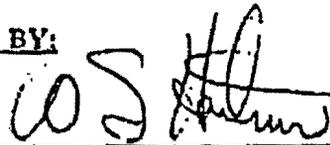
MSDS PREPARED BY:

Department 1702 and 9614  
Sandia National Laboratories

DATE:

December 1, 1993

DISTRIBUTION APPROVED BY:



W.F. Hartman, NEST Program Manager  
Sandia National Laboratories  
(505) 844-6937

3/25/94  
Date

The above Material Safety Data Sheet contains the information required by the Federal OSHA Hazard Communication Rule, 29 CFR 1910.1200 (g)(2).



BILL RICHARDSON  
GOVERNOR

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**

*Ground Water Quality Bureau*  
*Harold Runnels Building*  
*1190 St. Francis Drive, P.O. Box 26110*  
*Santa Fe, New Mexico 87502-6110*  
*Telephone (505) 827-2918*  
*Fax (505) 827-2965*



RON CURRY  
SECRETARY

DERRITH WATCHMAN-MOORE  
DEPUTY SECRETARY

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

March 28, 2005

Steven Rae, Group Leader  
Water Quality and Hydrology Group  
Risk Reduction and Environmental Stewardship Division  
Los Alamos National Laboratory  
P.O. Box 1663, MS K497  
Los Alamos, NM 87545

**RE: Response to Notice of Intent to Discharge for Los Alamos National Laboratory  
Water/Foam Mixture use at the TA-15 DARHT Firing Site**

Dear Mr. Rae

The New Mexico Environment Department (NMED) received a Notice of Intent on March 10, 2005 for the discharge of an AFC-380 foam/water mixture at the Los Alamos National Laboratory (LANL) DAHRT firing site. The proposed discharge is located approximately 3 miles south of Los Alamos in Section 34, T19N, R06E, Los Alamos County. The Notice of Intent satisfies the requirements of Section 20.6.2.1201 NMAC of the Water Quality Control Commission (WQCC) Regulations.

Based on the information provided in your Notice of Intent, NMED has determined that a Discharge Permit is not required as long as the discharge is as described in the Notice of Intent. The Ground Water Quality Bureau has concluded that the proposed discharge will not adversely impact ground water, and a Discharge Permit will not be required.

The exempt discharge is briefly described as follows: Water will be mixed with the AFC-380 concentrate on the firing point to generate a mixture consisting of 94% potable water and 6% AFC-380 concentrate. Approximately 210 gallons of foam concentrate will be used for each of the five experiments. The water/foam mixture will be used to capture and control fugitive dusts and potential aerosolized shot contaminants from being discharged into the environment. Following each experiment, the water/foam mixture will be collected in a synthetically lined foam collection system, followed by pretreatment in an activated carbon filtration system. The

Steven Rae, Group Leader  
Water Quality and Hydrology Group  
March 28, 2005  
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pretreated foam will then be transferred to the Radioactive Liquid Waste Treatment Facility at TA-50 for further treatment prior to being discharged. Ground water below the site is at a depth of 1,150 feet, with a total dissolved solids concentration of approximately 165 milligrams per liter.

This exemption is subject to the following condition:

LANL shall inspect the integrity of the concrete liner and associated foam collection system following each experiment, and repair any damage to the liner and collection system prior to conducting further tests. LANL shall make every effort to immediately recover any foam that escapes the collection system.

Although a Discharge Permit is not being required for this discharge at this time, you are not relieved of liability should your operation result in actual pollution of surface or ground waters. Further, this decision by NMED does not relieve you of your responsibility to comply with any other applicable federal, state, and/or local laws and regulations, such as zoning requirements, plumbing codes and nuisance ordinances.

If at some time in the future you intend to change the amount, character or location of your discharge, or if observation or monitoring shows that the discharge is not as described in your Notice of Intent, you must file a new request for exemption with the Ground Water Quality Bureau.

If you have any questions, please contact either Chris Vick at 505-827-0078 or George Schuman, Program Manager of the Ground Water Pollution Prevention Section, at 505-827-2900.

Sincerely,

William C. Olson, Chief  
Ground Water Quality Bureau

WO:cv

cc: Cecilia Williams, District Manager, NMED District II  
NMED Santa Fe Field Office  
NOI File  
County File  
Mark Haagenstad, Water Quality and Hydrology Group, Los Alamos National  
Laboratory, PO Box 1663, MS K497, RRES-WQH, Los Alamos, NM 87545  
John Young, NMED Hazardous Waste Bureau, PO Box 26110, Santa Fe, NM 87502

Steven Rae, Group Leader  
Water Quality and Hydrology Group  
March 28, 2005  
p. 3

Brett Lucas, NMED Surface Water Quality Bureau



BILL RICHARDSON  
GOVERNOR

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**

*Ground Water Quality Bureau*

*Harold Runnels Building*

*1190 St. Francis Drive, P.O. Box 26110*

*Santa Fe, New Mexico 87502-6110*

*Telephone (505) 827-2918*

*Fax (505) 827-2965*

*Fed Ex (87505)*



RON CURRY  
SECRETARY

DERRITH WATCHMAN-MOORE  
DEPUTY SECRETARY

**FAX TRANSMISSION**

DATE: November 30, 2005 PAGES, incl. cover 18

TO: John Young

COMPANY: Haz Waste

FAX: 428-2567

PHONE: \_\_\_\_\_

FROM: Chris Vick

FAX: (505) 827-2965

PHONE: (505) 827-0078

COMMENTS: John- This is what I have regarding the foam mixture. Give me a ring if you want to chat about it.

Chris