

G/m/99

HSWA LANL

LANL, ~~1999~~ 1999

**PLEASE SEE GRANT FILE FOR FURTHER  
INFORMATION REGARDING THIS PERCHLORATE  
SURVEY WITH REGARDS TO THIS PARTICULAR  
FACILITY.**

**GRANT FILE IS TITLED:**

**SURVEY OF PERCHLORATE-RELATED SITES IN NEW  
MEXICO, 1999-2000**



13302



GARY E. JOHNSON  
GOVERNOR

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**  
*Hazardous and Radioactive Materials Bureau*  
*Harold Runnels Building*  
*2044 A Galisteo, P.O. Box 26110*  
*Santa Fe, New Mexico 87502-6110*  
*Telephone (505) 827-1567*  
*Fax (505) 827-1544*



PETER MAGGIORE  
SECRETARY

September 29, 1999

To: Fort Bliss, Fort Wingate, Melrose Bombing Range,  
Cannon Air Force Base, White Sands Missile Range,  
Technologies to Products, Kirtland Air Force Base,  
Sandia National Laboratories, Holloman Air Force Base,  
Los Alamos National Laboratories (see Distribution List below)

Subject: Survey of Perchlorate-Related Sites in New Mexico

The Hazardous and Radioactive Materials Bureau (HRMB) has received a grant from EPA Region VI to conduct a survey of perchlorate occurrence in New Mexico at RCRA regulated facilities. We will be collecting soil, groundwater, and surface water samples at approximately 10 sites in New Mexico. We request your assistance in helping us select the specific sites that will be sampled. In addition, we request your assistance with identification of any and all perchlorate-related sites associated with your facility, including sites that are not considered RCRA- or HSWA-regulated sites and sites that are not located on your property.

EPA is working with the states to identify the occurrence of perchlorate in the environment. Part of this effort is focused on identifying the type of activities that result in perchlorate contamination. EPA is concerned about perchlorate because of its high toxicity, mobility, persistence and because it may be widespread in the environment. Perchlorate contamination is expected to be present at many DOD and DOE sites because it is used as an ingredient in rocket fuel, explosives, and pyrotechnics. Perchlorate contamination is most commonly associated with rocket maintenance activities, such as removal and repacking of solid rocket fuel. However, perchlorate contamination of groundwater has been found to be associated with the management of liquid rocket fuel and open burning/open detonation (OB/OD) of explosives.

Please identify four sites associated with your facility that have the most potential to have perchlorate contamination and complete the attached survey for each site. Please use the criteria on the attached instruction sheet when selecting the four sites. We would appreciate the completed forms be faxed to our office by October 31, 1999. The fax number is (505) 827-1544.

In addition, please complete and submit the attached survey for all perchlorate-related sites associated with your facility, including sites that are not considered RCRA- or HSWA-regulated sites and sites that are not located on your property. We would appreciate these completed forms be sent to our office by December 31, 1999. Thank you very much for your assistance in this matter. If you have any questions, please contact me at (505) 827-1561, ext. 1023.

Sincerely,

  
Julie Wanslow

Distribution:

Keith Landreth  
Director of Environment  
Building 624  
Fort Bliss, TX 79916

Commander  
Tooele Army Depot  
Tooele, Utah 84074

Tom Turner  
Chief, Environmental Office  
Tooele Army Depot  
Tooele, Utah 84074

Loyd S. Utterback, Colonel, USAF  
Commander  
100 S DL Ingram, Suite 100  
Cannon Air Force Base, NM 88103-5214

Denny Barnett  
27 CE/CEV  
506 N. DL Ingram Blvd.  
Cannon Air Force Base, NM 88103

Thomas A. Ladd, Director of National Range  
Environment and Safety Directorate  
U.S. Army  
STEWS-NR-ES  
White Sands Missile Range, NM 88002

Robert Myers, Geologist  
U.S. Army  
STEWS-NR-ES-ES  
White Sands Missile Range, NM 88002

Mr. Joseph Fries, Manager  
National Aeronautics and Space  
Administration (NASA)  
Lyndon B. Johnson Space Center  
White Sands Test Facility  
P.O. Box 20  
Las Cruces, NM 88004-0020

Chris DeWitt, Director, Environmental  
Management Division  
377 ABW/EMR  
2050 Wyoming Blvd SE, Room 123  
Kirtland Air Force Base, NM 87117-5270

Jerry Sillerud  
377 ABW/EMR  
2050 Wyoming Blvd SE, Room 126  
Kirtland Air Force Base, NM 87117-5270

Warren Cox  
Sandia National Laboratories  
P.O. Box 5800  
Albuquerque, NM 87185-1147

Dr. John Browne, Director  
Los Alamos National Laboratory  
P.O. Box 1663, MS A100  
Los Alamos, NM 87545

Dennis J. Erickson, Director  
Los Alamos National Laboratory  
ES&H Division, MS K491  
Los Alamos, NM 87545

Theodore Taylor, Project Manager  
Los Alamos Area Office  
Department of Energy  
528 35th St., MS A316  
Los Alamos, NM 87544

Julie Canepa, Project Manager  
Los Alamos National Laboratory  
LANL ER Project  
MS M992  
Los Alamos, NM 87545

Survey of Perchlorate-Related Sites in New Mexico  
September 29, 1999  
Page 4

Paul Bryan, Vice President, Energetic  
Materials Division  
Technologies to Products, Inc. (TPL)  
3921 Academy Pkwy North NE  
Albuquerque, NM 87109-4416

Mark Lillie, Plant Manager @ Fort Wingate  
Technologies to Products, Inc. (TPL)  
3921 Academy Pkwy North NE  
Albuquerque, NM 87109-4416

Court Fesmire, IRP Program Manager  
550 Tabosa Avenue  
Holloman Air Force Base, NM 88330

John Poland  
550 Tabosa Avenue  
Holloman Air Force Base, NM 88330

## ATTACHMENT

### Instructions for Completing the Perchlorate Survey

By October 31, 1999, complete the **entire survey** (Questions 1-18) for four perchlorate-related sites at your facility, **including sites that are not considered RCRA- or HSWA-regulated sites and sites that are not located on your property.**

By December 31, 1999, complete the **top portion** (Questions 1-8) for all the rest of the perchlorate-related sites at your facility, **including sites that are not considered RCRA- or HSWA-regulated sites and sites that are not located on your property.**

#### Criteria for Selecting the Four Sites:

1. Select sites where there is a high potential for perchlorate to have contaminated the groundwater or surface water.
2. Select sites that are located near groundwater monitor wells or surface water (if possible).
3. Select up to four different types of perchlorate-related sites (if possible).

**Types of Perchlorate-Related Sites:** Perchlorate-related sites include sites where explosive items, ammunition, ordnances, solid or liquid rocket fuel, and rocket/missiles underwent certain activities including manufacturing, maintenance, storage, distribution, testing, high-pressure wash out, launching, thermal destruction, open burning, open detonation, or land disposal.

Examples of different types of perchlorate-related sites include:

- open burn and open detonation (OB/OD) sites that were used for outdoor testing or destruction of explosive items (e.g., ammunition, ordnances), solid or liquid rocket fuel, and rockets/missiles,
- waste piles or disposal trenches associated with OB/OD sites,
- sites used for the incineration or thermal destruction of explosive items in enclosed or partially enclosed devices (e.g., incinerators, popper furnaces)
- sites used for manufacturing of explosive items (e.g., ammunition, ordnances),
- sites used for storage or distribution of explosive items (e.g., ammunition, ordnances),
- sites used for maintenance of explosive items (e.g., ammunition, ordnances),

- sites used for storage of spent or unspent rockets, missiles, or solid or liquid rocket fuel,
- sites used for manufacturing of rockets, missiles, or solid or liquid rocket fuel,
- sites used for maintenance or refueling of rockets, missiles (e.g., high pressure wash out of rocket fuel, repacking of solid or liquid rocket fuel),
- sites used for launching of rockets or missiles containing solid or liquid fuel,
- sites used for testing of propellants, rockets, or missiles containing solid or liquid fuel (e.g., sled testing),

Facility Name: \_\_\_\_\_  
Facility Contact Person: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Date: \_\_\_\_\_  
Page \_\_\_ of \_\_\_

September, 1999

**Perchlorate Survey of Sites in New Mexico**

Please complete one sheet for each site. Complete Questions 1-18 for four sites with the most potential for perchlorate contamination. See instruction sheet for criteria for selecting the four sites. Please complete Questions 1-8 for all the rest of the perchlorate-related sites associated with your facility, including sites that are not considered RCRA- or HSWA-regulated sites and sites that are not located on your property.

1. Site Name: \_\_\_\_\_
2. Type of perchlorate-related site (see instructions for definition): \_\_\_\_\_  
\_\_\_\_\_
3. Describe the management practices of perchlorate-contaminated materials and the estimated volumes that were managed:  
\_\_\_\_\_  
\_\_\_\_\_
4. Has groundwater ever been sampled for perchlorate? YES NO  
If yes, indicate dates of sampling and maximum concentrations\*: \_\_\_\_\_
5. Has surface water ever been sampled for perchlorate? YES NO  
If yes, indicate dates of sampling and maximum concentrations\*: \_\_\_\_\_
6. Has soil or sediment ever been sampled for perchlorate? YES NO  
If yes, indicate dates of sampling and maximum concentrations\*: \_\_\_\_\_
7. Do you suspect this site to have perchlorate contamination? YES NO  
If yes, specify which media is suspected as being contaminated? \_\_\_\_\_
8. Describe future plans for collecting groundwater, surface water, soil, sediment samples for perchlorate (also describe proposed analytical method and detection limit):  
\_\_\_\_\_  
\_\_\_\_\_

Questions 9-18 need to be completed for only four sites with the most potential for perchlorate contamination

9. Horizontal Distance to nearest downgradient GW monitor wells (in feet):  
\_\_\_\_\_
10. Specify dates for the next four scheduled GW sampling events: \_\_\_\_\_  
\_\_\_\_\_
11. Depth to shallowest monitored zone (in feet): \_\_\_\_\_
12. Range of Total Dissolved Solids (TDS) in GW: \_\_\_\_\_
13. Horizontal Distance to Surface Water (in feet): \_\_\_\_\_
14. Range of TDS of Surface Water: \_\_\_\_\_
15. Specify dates for the next four scheduled surface water sampling events: \_\_\_\_\_  
\_\_\_\_\_
16. Would the facility like to split soil, sediment, GW, surface water samples with HRMB? YES NO
17. Could the facility provide GPS information and a map of the sample locations? YES NO
18. Site Access Problems (describe): \_\_\_\_\_

\* If concentrations were below detection, indicate the detection limit.