

Department of Interior  
Bureau of Land Management  
Hollister Field Office

# HAZARDOUS ASBESTOS AREA HEALTH AND SAFETY PLAN

January 2007

Clear Creek Management Area

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2007 UPDATE AND SUMMARY  
OF  
HAZARDOUS ASBESTOS AREA  
HEALTH AND SAFETY PLAN

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	Page
1. Introduction.....	1
2. Site Description.....	1
3. Characterization of Site Hazards .....	2
4. Site Entry/Control Program .....	6
5. Respiratory Protection Program.....	10
6. Medical Surveillance Program.....	12
7. Decontamination .....	13
8. Air Monitoring Program .....	14
9. Training.....	15
Mitigation Measures for Exposure to Asbestos and Heavy Metals.....	17
Appendix A. Atlas Mine NPL Site	
Appendix B. Training Requirements	
Appendix C. Asbestos Hazard Area Site Entry Authorization form	
Appendix D. Section 8 Vehicle and Personal Decontamination Plan	
Appendix E. Heavy Equipment Decontamination Plan	
Appendix F. Respiratory Protection Plan	
RPP	
Air Sample Procedures	
IM 2003-008: Entry onto site with potential or known hazardous substances.	
IM CA-2005-024: Respiratory Protection Program.	
Appendix G. Medical Questionnaire	
Appendix H. OSHA Fit Test Protocols	
OSHA Appendix D	
Appendix I. 29 CFR 1910.1001	

## 1. Introduction

This health and safety plan establishes procedures and practices to protect employees and subcontractors from potential hazards posed by non-invasive field activities at the site. In this health and safety plan, measures are provided to minimize potential exposure, accidents, and physical injuries that may occur during daily onsite activities and during normal working conditions. Contingencies are also provided for emergency situations. This plan shall only be modified or amended by qualified BLM personnel or a contractor, assigned by BLM, qualified to make such modifications or amendments. A completed copy shall be provided to the State Safety Manager.

This plan has been prepared to ensure compliance with OSHA regulations in 29 CFR 1910.120 and 1910.1001, (any subsequent OSHA/EPA amendments will necessitate a document revision) which govern hazardous substance response operations under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) at the NPL and is a guide for the entire ACEC. This plan shall be reviewed annually and revised as necessary. Additional information is contained in a separate reference supplement to the HASP (all references to **Appendix A**, etc. are contained in this supplement.)

## 2. Site Description

This document pertains to a portion of the 63,000-acre Clear Creek Management Area (CCMA) maintained by the Bureau of Land Management, Hollister Field Office (BLM), located in Southern San Benito and western Fresno Counties. Within this area, there is the 30,000-acre Serpentine Area of Critical Environmental Concern (ACEC), which is a region of Naturally Occurring Asbestos (NOA) mineral (chrysotile). This area has been designated as a hazardous asbestos area (HAA). The 200-acre Atlas Mine National Priority List (NPL) lies within the ACEC and the CCMA. This document provides guidance on required safety procedures for BLM personnel, contractors, and visitors utilizing the ACEC. The Atlas Mine NPL is further restricted and additional guidance can be found in **Appendix A**.

All employees will be potentially exposed to NOA, which is found in the soils and is airborne throughout the CCMA. The exposure threat is greater during arid periods of the year. During the fall, winter and spring under rainy conditions, the exposure to NOA & associated health hazards is much less likely. Those who work within the HAA are at risk of inhaling dusts containing asbestos, mercury, nickel, and other heavy metals. Inhalation of asbestos fibers is known to cause lung cancer, mesothelioma, and asbestosis. Exposure to asbestos has also been associated with cancers of the stomach, colon, kidney and larynx. Inhalation or ingestion of fibers from contaminated clothing and skin can also result in these diseases. The symptoms of these diseases generally do not appear for 15 or more years after initial exposure. There are no known acute effects from the inhalation of asbestos fibers. (29 CFR 1910.1001).

Drinking water, sanitary facilities, and telephone (831-385-1508) are located at the Section 8 Decontamination Facility at 7100 Coalinga Road, San Benito, CA.

### **3. Characterization of Site Hazards**

#### **3.1 Activities and Tasks**

This plan was prepared for all access, activities, and tasks associated with entry into the HAA, including but not limited to the following:

The functional tasks for employees working in the CCMA include:

##### **1. Vehicle Operations.**

- **SUV/Truck** – This involves LE Patrol and routine vehicle travel on main roads in a closed vehicle with no special modifications and is usually a Law Enforcement Officer on patrol or may be a staff specialist performing field work.
- **ATV** – This involves patrol, inspections, monitoring, and travel to work sites by LE or resource staff performing field work.
- **Motorcycle** - This involves patrol, inspections, and monitoring by LE or resource staff performing field work.

##### **2. Light Maintenance**

- This includes routine maintenance of recreation sites, Staging Areas, Kiosks, general clean up and repairs.
- **Restroom Cleaning** – Cleaning with power washer and general maintenance.
- **Emptying Dumpsters** – Emptying of garbage into dump truck with backhoe for removal to landfill.
- **General clearing and removal of brush.**

##### **3. Construction.**

- **Installation of Gates, Kiosks, fence posts and barriers** – This usually involves earth disturbing activities and the use of hand tools, power equipment, and can involve heavy equipment.
- **Fence construction** – Installation of T posts and stringing of wire and cable. This usually involves the use of hand tools only.
- **Installation of Signs and Route Markers** – Installation of Carsonite route markers and signs on wooden posts. This usually involves minor earth disturbing activities and the use of hand tools.
- **Restoration activities** – This activity involves placement of waddles, straw bales, woody debris, rocks and soil stabilization.
- **Fire Line construction** - This usually involves earth disturbing activities and the use of hand tools, power equipment, and can involve heavy equipment.

- ##### **4. Road Maintenance and Construction** - This is done using a dozer, grader, or backhoe which has enclosed cabs and custom hepa-filter systems included in the cab ventilation

systems. This may also involve auxiliary staff outside the equipment cab to assist with hand work.

5. **Trail Maintenance** - This is done using a SWECO (small bulldozer designed for trail maintenance and construction) or ASV (smaller tracked vehicle) has enclosed cabs and custom hepa-filter systems included in the cab ventilation systems. Trail maintenance work may also be performed with an ATV and harrow. This may also involve auxiliary staff outside the equipment cab to assist with hand work.
6. **Visitor Assistance** – Routine visitor contact and staffing of entrance station near roads.
7. **Resource Inventory and Habitat Monitoring** – Resource specialists conducting monitoring and inventory utilizing vehicle travel and hiking (foot travel).

Nearly all activities occurring in and around the CCMA pose some risk of exposure to asbestos, mercury, nickel and other heavy metals in the soil. Asbestos is a known carcinogen and is also the cause of other serious lung diseases such as asbestosis. Mercury is released by erosion, leaching, vapor emission, and by dust from ground disturbance. Most highly enriched mercury areas have been remediated. Nickel dust is also a lung irritant and a carcinogen. Risk Assessment documents will be provided for individual on-site work functions outlining various activities and their associated hazards and the precautions to undertake to reduce these hazards. These activities include; vehicle, motorcycle, and foot patrols, monitoring, construction, and other maintenance and operations activities, including search and rescue. Wearing of coveralls and BLM provided clothing (commercially laundered) and washable footwear is recommended for all activities.

Vehicle operation within the CCMA ACEC disturbs soils and contaminants. To prevent inhalation, vehicle windows shall be closed while within the HAA, and the air conditioning set to AC Max (re-circulating), to reduce transport of contaminants into the vehicle. Vehicles shall not follow closely and shall maintain an appropriate distance to reduce exposure to visible dust emissions.

Construction activities can pose a greater risk due to soil movement having the potential for producing the greatest volume of airborne contaminants. Coveralls and boots will be worn at all times for road construction/maintenance, and excavation activities.

Heat stress is a hazard we must always be aware of and must pay close attention to while wearing protective clothing and respirators. To prevent heat stress, personnel will be allowed the flexibility to schedule work during the cooler parts of the day. Alternating periods of work and rest will occur. Adequate supplies of cool drinking water will be taken into the field and workers will be encouraged to drink water frequently during the day. Each person will have the responsibility of observing any symptoms of heat stress and will insist that all safety precautions in this plan be followed. The signs and symptoms of heat stress are the following: profuse sweating, skin color change, increase heart rate, body temperature in excess of 100 F as measured by fever detectors (forehead strips) and vision problems. Anyone who exhibits any of these signs will be taken to a shaded area or air conditioned vehicle, will remove impervious

clothing and will drink cool water and put wet rags on the head and face until signs disappear. If the signs and symptoms appear critical, persist, or get worse, the affected person will immediately be driven or evacuated by helicopter to Coalinga District Hospital or the nearest medical facility.

### 3.2 Hazard Evaluation and Analysis

Substance	Concentration	Media	OSHA	FP/LEL/VP	Odor Thresh	IP	Symptoms	First Aid
Asbestos - chrysotile	Particulate	Air	1 fiber/cc 30 min. .1 fiber/cc 8hr TWA		None		Adverse pulmonary effects	N/A
Mercury & Mercury vapor	Bulk water and soil impregnation	Liquid Solids & Gas	N/A		None		Blood toxicity, adversity to brain function	N/A
Nickel & heavy	Same as above	Same	N/A		None		Same as above	N/A
Heat	NA	NA	NA	NA	NA	NA	Flushed, hot or clammy skin, dizzy, nausea, disoriented	Provide water, electrolytes, rest, cool off in shade, sponge baths, seek medical attention

Potential chemical exposure routes [provide an "X"]:

Route	Known	Possible	Unlikely
Inhalation	X		
Ingestion		X	
Dermal/Cutaneous		X	
Eye contact			X

**Chemical characteristics [provide an "X"]:**

<b>Hazard</b>	<b>Known</b>	<b>Possible</b>	<b>Unlikely</b>
<b>Toxic</b>	X		
<b>Ignitable</b>			X
<b>Reactive</b>			X
<b>Carcinogenic</b>	X		
<b>Volatile</b>			X
<b>Radioactive</b>			X
<b>Corrosive</b>			X
<b>Particulate/fibers (Inhalation /Ingestion)</b>	X		

**Possible physical hazards present during site review/preparation activities:**

<b>Hazard</b>	<b>Yes</b>	<b>No</b>	<b>Prevention</b>
<b>Terrain/Tripping</b>	X		<b>Wear sturdy footwear and be cognizant of surroundings at all times.</b>
<b>Heat/Cold</b>	X		<b>Dress properly for weather exposure. Ensure proper hydration, nourishment and physical condition.</b>
<b>Electrical</b>		X	
<b>Drowning</b>		X	
<b>Falling objects</b>	X		<b>Maintain an awareness of soils, slopes, vegetation and overall surroundings</b>
<b>Noise</b>	X		<b>Use hearing protection around heavy equipment.</b>
<b>Venomous</b>	X		<b>Be aware of the habitat where rattlesnakes or other venomous/poisonous animals or insects exist and carry necessary first aid treatment. Identify potential allergies.</b>
<b>Winter Driving</b>	X		<b>Maintain awareness of road conditions. Ensure tires have adequate tread. Use 4wd. Follow check-in check-out procedures with Porterville.</b>

## 4. Site Entry/ Control Program

### 4.1 Site Control

Site control consists of measures taken to prevent human exposure to hazardous materials at the site. The purpose of the site control program is to ensure that appropriate site control procedures are implemented to control employee exposure to hazardous substances and to reduce contamination from asbestos. Site conditions and the work proposed under this plan **do not require the establishment of exclusion zones that limit trained employee access.** However, employees should minimize potential exposures and the raising of dust. Workers are responsible for; 1) providing co-worker's with assistance, 2) observing co-worker's for evidence of chemical or heat exposure, 3) monitoring the integrity of co-worker's protective equipment, and 4) acting responsibly with regard to his/her own safety. Notify the work site team leader if emergency help is needed or any other irregularities, risks or hazards should develop.

The site control program is enforced by Field Manager/Assistant Field Manager who authorizes site entry. When air monitoring has indicated exposure levels are above 0.1 fibers/cc 8 hour TWA or (1 fiber/cc in any 30 minute period) or when no air sampling has occurred in the previous 30 days, respirators will be worn for all activities. All HFO BLM employees expected to access the CCMA ACEC, shall receive training meeting the requirements outlined in **Appendix B**, prior to being permitted to conducting any activities within the ACEC. All other BLM employees and volunteers expected to access the CCMA ACEC for greater than 10 days annually, shall also receive training meeting the requirements outlined in **Appendix B**, prior to being permitted to conducting any activities within the ACEC. All other authorized visitors shall be briefed on this Health and Safety Plan prior to accessing the CCMA ACEC. The Field Manager shall ensure that BLM contractors conducting activities within the CCMA ACEC follow the provisions in 29 CFR 1910.120 and 29 CFR 1926.65.

All work, except that which is absolutely necessary to the management of the area, will be rescheduled to times when airborne asbestos levels are less than 0.1 fibers/cc. BLM personnel, contractors, and authorized visitors will be required to have the Field Manager's/Assistant Field Manager's signature on the CCMA "Asbestos Hazard Area Site Entry Authorization" (**Appendix C**) prior to traveling to the site. The site entry policy applies to the entire ACEC or "red zone" also known as the Hazardous Asbestos Area. The following shall serve as a guide for site entry authorization:

#### November – April

The site entry authorization may be issued for up to 30 days for all activities except road maintenance/construction and excavation activities (1 week maximum), provided that current and consistent airborne asbestos levels are below the Personal Exposure Limit (PEL/STEL). Air sampling shall be conducted weekly for all activity categories conducted, except road maintenance/construction and excavation activities (daily). Equipment Operators in HEPA filtered cabs will conduct weekly sampling. Variations to the air sampling schedules may be authorized by the Field Manager, Assistant Field Manager, and Respiratory Protection Program (RPP) Coordinator. Law Enforcement personnel may be issued site entry authorization for extended periods of time.

May – October

The site entry authorization may be issued for up to 1 week for all activities, provided that current and consistent airborne asbestos levels are below the PEL/STEL. Air sampling shall be conducted weekly for all activity categories conducted, except road maintenance/construction and excavation activities (daily). If the PEL/STEL is reached authorization and air sampling will be on a daily basis. Law Enforcement personnel may be issued site entry authorization for extended periods of time.

Supervisors shall ensure that employees fill out the Employee Exposure Record on the reverse of the site entry authorization for multiple entries. Air sample readings shall be recorded for available work days.

When the PEL/STEL level is reached and respirators are required and the activity that is requiring respirators to be worn can be discontinued, employees may relocate a safe distance from the activity, to a dust free area for breaks (lunch, etc.). Potable water shall be available in order to facilitate hand and face washing prior to eating. Employees will not be permitted to eat, smoke, or chew gum within an area where the activity is causing the PEL/STEL to be exceeded.

The Administrative Site (Section 8) decontamination and shower facility is approximately 8 miles from the entrance to CCMA on the Coalinga/Los Gatos Road. It is recommended that the Admin Site will be the initial stop prior to entry into the Clear Creek Management Area. The decontamination supplies and other personal protective equipment (PPE) are located here. All unnecessary personal gear in the vehicle will be removed and deposited here and picked up at end of the day after the vehicle is decontaminated. The Decontamination Plans (**Appendix D, E**) further outline these procedures.

## **4.2 Management and Staff Guidelines**

### **4.2.1. Field Manager**

- 1) Ensure that all BLM personnel who may perform work within the CCMA HAA have read and understood this plan, and acknowledged such by signing the attached signature page on an annual basis.
- 2) Assures that site visits and all work performed by BLM personnel, contractors, volunteers, and any authorized visitor is conducted in accordance with this plan. May provide variance with certain procedures in this plan and will document on site entry authorization.
- 3) Assures that all required training will be provided in accordance with the schedule outlined in **Appendix B**.
- 4) Ensure that Position Descriptions clearly state the potential for exposure to asbestos hazard for positions required to work within CCMA HAA.
- 5) Informs affected applicants that they will be required to work within an area where asbestos naturally occurs and the hazards associated with this area, and assures that this notification

occurs in the vacancy announcement and interview.

6) Assures that all employees have project specific written authorization to access the ACEC HAA. This will be accomplished by use of the Asbestos Hazard Area Site Entry Authorization form, **Appendix C**. Reschedules field work if possible when asbestos levels routinely reach or exceed the OSHA action level of 0.1 fibers per cc 8 hour TWA (or 1 fiber/cc in any 30 minute period), which will require a respirator to be worn.

7) Assures that all authorized visitors and contractors are briefed on site safety procedures prior to accessing the CCMA ACEC.

8) Is responsible for establishing a program of medical monitoring for those employees required to access the ACEC hazardous asbestos area. Will insure that a full copy of the medical surveillance record for each affected employee will be maintained in the Hollister Field Office (HFO.) Will include a memo with each record requiring records be preserved and maintained for the duration of employment plus 30 years.

#### **4.2.2 Respiratory Protection Program Coordinator - Hazardous Materials Specialist**

1) Conducts initial site safety training and semi-annual safety briefings for all field personnel as described in this plan. Establishes a schedule of training requirements for BLM personnel

2) Insures that respiratory PPE for use by field personnel has been purchased and is maintained in a useable condition.

3) Is responsible for ensuring that all employees who may be required to wear a respirator have a physicians respirator clearance certificate.

4) Monitors personnel activities to insure the proper and consistent use of personal protective equipment (PPE).

5) Coordinates maintenance of records of BLM employees asbestos exposure, Site Entry Authorization forms, asbestos air sampling reports, and training.

6) Shall notify supervisors and affected employees of the results of monitoring if above OSHA's allowable exposure limits. Ensures posting of all air sample monitoring results at a centrally located place that is accessible to affected employees.

7) Trains BLM personnel in the proper use of respirators, maintenance, and their limitations, and trains BLM personnel to perform qualitative fit testing of respirators on at least an annual basis, or as new employees are hired.

8) Maintains records on all respirator qualitative fit testing.

9) Implements respirator quality assurance program and inspects all respirators prior to issue, and assigned respirators for serviceability annually.

10) Maintains asbestos sampling and calibrating equipment in good working order, and assures that equipment is sent to a manufacturer's authorized repair facility, as necessary. Ensures periodic calibration testing is performed according to manufacturer's recommendations.

11) Is responsible for providing, scheduling, and ensuring necessary paperwork is available for Annual Medical Monitoring Physicals for affected HFO personnel.

12) Maintain record keeping for the medical monitoring program, assuring that documentation relating to asbestos exposure is distributed and filed to the appropriate personnel files, and coordinates final disposition and distribution of records. Ensures record retention requirements are followed relating to all Asbestos associated records.

#### **4.2.3. Field Personnel**

1) Sign document stating you have read, understand and will follow all requirements in this plan.

2) Ensure that you have a Site Entry Authorization signed by the Field Manager permitting your access to the CCMA ACEC Hazardous Asbestos Area, and that you record dates of entry on back of form.

3) Report any unsafe practices or conditions to their supervisor.

4) Learn to perform qualitative fit testing (fit check) of respirators. Ensure proper use, maintenance, and storage of respirator.

5) Understand the need for proper hydration and the need to minimize extreme sun and heat exposure. Be aware and alert for signs and symptoms of heat stress while using PPE.

6) Ensure that proper air sampling procedures are followed in accordance with the attached supplement. Conduct sampling as required on Site Entry Authorization form. Complete the Employee Exposure Record on reverse of this form.

7) Shall strictly adhere to all decontamination procedures as outlined in the Section 8 Vehicle and Personal Decontamination Plan (**Appendix D**) and the Heavy Equipment Decontamination Plan (**Appendix E**).

#### **4.3 Medical Emergencies**

Should any medical emergency occur, dispatch will be immediately notified and the appropriate medical facility identified, along with the appropriate transportation method. BLM will notify the receiving facility that the person requiring medical attention is potentially contaminated with asbestos. If conditions allow, the person shall be decontaminated to the extent possible, prior to transport to prevent contamination of the transporting vehicle.

To reach the Coalinga District Hospital take the Los Gatos Creek Road into Coalinga and follow

the signs to the hospital. The phone number for the hospital is (559) 935-2051. Alternate hospital is available in King City via Hwy 25 and Bitterwater Road. Mee Memorial Hospital (831 385-6000). If helicopter evacuation is necessary, either the Holman mill site or the Hernandez airstrip will be used where practical. Medical and transport personnel will be advised on site conditions and asbestos hazards.

#### **4.4 Personal Protective Equipment**

##### **Protective work clothing and equipment**

\* Coveralls/BLM supplied clothing - BLM employees will be provided with this clothing and it is recommended to wear for all work activities. Coveralls will be worn at all times for road construction/maintenance, and excavation activities. Removal of asbestos from protective clothing and equipment by blowing or shaking is prohibited. Contaminated work clothing shall be placed in closed plastic bags or containers, which prevent dispersion of the asbestos outside the container. If clothing is not soiled and is to be re-worn it must be placed in plastic bags. This clothing will be commercially laundered, by a company with appropriate facilities designed to ~~launder clothing potentially contaminated with hazardous asbestos, and notified of the potential harmful effects of exposure to asbestos.~~ Bags shall be labeled to identify the asbestos hazard.

\* Personal Work Clothing – All potentially contaminated personal work clothing shall be removed in the Sec. 8 change room prior to entering the shower. Contaminated clothing shall be placed and stored in closed containers or plastic bags, which prevent dispersion of asbestos. Laundering of contaminated clothing shall be done separately, and so as to prevent the release of airborne fibers of asbestos in excess of the PEL.

\* ~~Rubber boots or foot covering~~ that can be hosed and washed off at the end of the work shifts shall be worn for all work activities.

#### **5. Respiratory Protection Program**

All employees who may be required to wear a tight-fitting respirator will be medically qualified to wear a respirator prior to entry into the HAA. In addition annual medical monitored must be conducted. Fit testing will be conducted for all required employees prior to respirator use.

\* Respiratory protection is required for all work activities when asbestos fiber counts exceed 0.1 fiber/cc (or 1 fiber/cc TWA in any 30 minute period) for a particular activity or when no air sampling has occurred in the previous 30 days. Respirators shall be worn until current and consistent readings are below the PEL/STEL. A Respirator Program has been established in accordance with 29 CFR 1910.134(b) through (d) (except (d)(1)(iii)), and (f) through (m), (and OSHA amendments for Short Term Excursion limits). Additional information relating to this program is outlined in **Appendix F**. Further guidance on BLM policy and the Respiratory Protection Program is contained in I.M. CA-99-103, attached in the appendix.

The RPP Coordinator is responsible for ensuring program compliance. The program consists of the following:

1. Respirators that are selected for use are based on the degree of protection that is needed and on employee medical examination designation. If asbestos concentrations do not exceed 2.0 fibers/cc, then a half-mask, air-purifying respirator with high efficiency filters (P100, N100, R100) is adequate. All respirators shall be NIOSH certified. Concentrations above 2.0 fibers/cc require full face-piece masks.

2. The user shall be instructed by the RPP Coordinator or other trained personnel in the proper use of respirators and their limitations. Everyone who wears a respirator shall receive fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to determine if it fits properly. Respirators shall not be worn when conditions prevent a good face seal, as determined by fit testing. To assure proper protection, a user seal check shall be conducted by the wearer, each time the respirator is put on. Each person who uses a respirator will be permitted to change the filter elements when they believe it is needed or whenever an increase in breathing resistance is detected. (After the valves are checked for sticking or resistance). Filter elements shall at a minimum be replaced every six (6) months. Contaminated filters shall be placed in closed plastic bags, and disposed of properly in garbage.

3. Respirators shall be regularly cleaned and disinfected. Half-face respirators shall be issued individually. Full-face respirators checked out from the equipment supply room shall be thoroughly cleaned and disinfected before use and prior to being returned. Respirators shall be inspected during cleaning, and before and after each use. Worn or deteriorated parts shall be replaced. Replacement or repair shall be performed only by trained personnel, with parts designed for the respirator. No attempt shall be made to replace components or to make adjustment or repairs beyond the manufacturer's recommendations. All parts replacement and repair will be coordinated through the RPP Coordinator. The respirator will be tested after repairs have been completed.

After inspection, cleaning, and necessary repair, respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. Respirators should be placed in sealed plastic bags. Respirators should not be stored in places such as lockers or tool boxes unless they are in carrying cases or cartons.

Respirators should be placed or stored so that the face-piece and exhalation valve will rest in a normal position.

4. Persons will not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. Employees shall ensure respirators are available for use when needed. The BLM will provide a medical evaluation to determine the employee's ability to use a respirator, prior to being fit tested or required to wear the respirator in the workplace. The BLM shall identify a physician or other licensed health care professional to perform medical evaluations using the appropriate medical questionnaire attached in **Appendix G**. Medical clearance to wear respirators will be done each year as part of the medical examination.

5. Qualitative respirator fit testing will be conducted by the RPP Coordinator for each person who will be wearing a respirator. The testing will be done in the spring before the dry season

begins and every six months thereafter for those who have been assigned a respirator. All others will be tested when respirators are checked out of the supply room. All-fit testing shall conform to OSHA accepted fit test protocols, as contained in **Appendix H**.

6. The RPP Coordinator will ensure respirators are inspected at least annually to determine serviceability and ensure the elastic straps have not become unserviceable, the cartridges are being replaced occasionally, cleaning is being done, the parts are all assembled properly, nothing is missing, and none of the parts are dried out or cracked.

#### **6. Medical Surveillance Program**

Medical surveillance shall be provided in accordance with 29 CFR 1910.120 and 1910.1001 for employees exposed or potentially exposed to asbestos and heavy metal dusts. The program is required for employees who are or who may work within the CCMA ACEC Hazardous Asbestos Area for 30 days or more a year, and will be provided to all HFO personnel who access the HAA

Medical examinations and consultations shall be made available for each covered employee at the following times:

1. Prior to the beginning of the field assignment;
2. At least once every 12 months (annually);
3. The BLM shall provide, or make available a termination of employment examination to any employee who has been exposed to airborne concentrations of fibers of asbestos at or above the PEL/STEL. The examination will be given within 30 days before or after the date of termination.
4. As soon as possible upon notification by an employee that he/she has developed signs or symptoms indicating possible overexposure to asbestos and heavy metal dusts;
5. At more frequent times, if the examining physician determines that it is medically necessary, or if the employee has cause for alarm or reason to suspect a medical condition exists;

All medical examinations and procedures shall be performed by or under the supervision of a licensed physician or registered respiratory therapist, and shall be provided without cost to the employee, without loss of pay, and during regularly scheduled work hours.

The BLM shall provide the following information to the examining physician:

1. A copy of 29 CFR 1910.120 and 1910.1001 and appendices;
2. A description of the employees duties as they relate to the employee's exposures;
3. The employee's exposure levels or anticipated exposure levels;
4. A description of personal protective requirement used;

5. Information from previous medical examinations of the employee which is not readily available to the examining physician (with consent of the employee);

The employee Medical Monitoring File shall include at least the following information:

1. The name and social security number of the employee;
2. Physician's written opinions;
3. Any employee medical complaints related to exposure to asbestos and other heavy metal dusts;
4. A copy of the information provided to the physician.
5. The physicians written opinion, any recommended limitations, and authorization to proceed with assigned duties.

These records will be maintained for the duration of employment plus 30 years, in accordance with 29 CFR 1910.20. The records will be collected and maintained at the BLM HFO until termination or reassignment, at which time they will be forwarded to the BLM California State Office (CASO), for inclusion in the Official Personnel File (OPF). The results of the medical surveillance program must be made available to the employee (including a written opinion from the physician regarding the fitness of the employee for the required task.) Copies of these records can be released only with the employee's consent.

The BLM shall maintain an additional Personal Exposure File for each employee, to keep an accurate record of all measurements taken to monitor employee exposure to asbestos, and access to the HAA. This record shall include at least the following information:

1. The date of measurement;
2. The location and activity that is being monitored;
3. Sampling and analytical methods used and evidence of their accuracy;
4. Number, duration and results of samples taken;
5. Type of respiratory protective devices worn, if any;
6. Copies of the Site Entry Authorization form, indicating dates of access to the HAA;
7. Name and social security number and exposure of the employees whose exposures are represented, during that time period.

These records will be maintained for the duration of employment plus 30 years, in accordance with 29 CFR 1910.20. The records will be collected and maintained at the BLM HFO. Copies of these records can be released only with the employee's consent.

## **7. Decontamination**

### **Vehicle Decontamination-General Requirements**

Vehicles that are used at the site become contaminated. This contamination can be reduced to a great extent by following procedures identified in the Vehicle and Personal Decontamination Plan **Appendix D**. Procedures identified in this plan are mandatory for all BLM personnel accessing the CCMA HAA. Windows, vents and doors will be kept closed on vehicles while

traveling within HAA, except as necessary to enter and leave the vehicle. All vehicles will be thoroughly washed including washing of interiors with a damp rag and vacuuming of interiors with a HEPA vacuum prior to being used by other personnel. All vehicles will be washed and vacuumed at the wash rack located at the Section 8 administrative site, immediately, upon leaving the CCMA. During decontamination, it is recommended that coveralls and respirators will be worn. Washing of the engine compartment is not allowed. In the event the wash rack is in-operable vehicles shall be taken to a commercial car wash. All equipment shall be checked periodically to insure proper working order. Detailed requirements and procedures for vehicle decontamination are contained in **Appendix D**.

#### Personal Decontamination-Shower Trailer

All BLM personnel accessing the HAA, shall perform personal decontamination at the Section 8 administrative site, immediately, upon leaving the CCMA. In order for the decontamination process to work properly, an extra set of clothes is required to be placed at the "clean side" of the shower trailer prior to entry into the HAA. After field work has been completed within the HAA all work clothing will be removed at the shower trailer, placed in impervious plastic bags, and sealed. The BLM supplied coveralls will be bagged separately and tagged to indicate the size of overall and quantity. Each exposed person will shower and put on clean clothes and footwear. The contaminated laundry will be carried back to Hollister's office within the sealed plastic bag in the back of the truck, trunk of the car or in sealed double plastic bags in other vehicles. The contaminated coveralls will remain bagged and stored in a designated location for a commercial laundry to properly treat and clean the clothing. The laundry will be informed of the contents and the hazards of exposure to asbestos. Detailed requirements and procedures for personal decontamination are contained in **Appendix D**.

#### Decontamination Equipment Sources

All equipment purchases will be conducted by the RPP Coordinator. For air mask/respirators contact: Delta-Rubber Company, 1356 Dayton Ave, Salinas, Ca 93901, Phone # (408) 757-6261, Vacuum bags and HEPA filters contact: CRSI 30510, Huntwood Ave, Hayward, Ca 94544, Phone # (415) 471-8383.

#### 8. Air Monitoring Program

The purpose of the program is, 1) to meet the monitoring requirements in 29 CFR 1910.1001 (and OSHA Short-term Excursion Limit Amendment), and 2) to develop baseline air monitoring data to evaluate the need for respirator use.

Monitoring frequency and samples shall be of such frequency and pattern as to represent with reasonable accuracy the levels of exposure of the employees.

Air monitoring is required to document asbestos emissions and exposure during work conditions. Asbestos air sampling will consist of the use of a personal air pump, set to sample between 2.0 and 2.5 liters of air per minute. The pumps will be worn clipped to employee's belt and the air cassette clipped to employee's shirt collar. Monitoring will be performed during the start-up of

any new work activity, not previously monitored for within the last month, or if conditions have changed (dry, dusty, windy conditions), samples will be taken daily. At minimum, weekly sampling will be performed for each work activity (i.e. vehicle patrols, fence repair, minor maintenance, road work).

If all results from the first round of sampling demonstrate that the personnel exposures are below the PEL of 0.1 fiber/cc or STEL 1.0 fiber/cc, then the frequency of air samples can be reduced to one per week. Frequency of sampling will increase to daily sampling for a specific activity if 0.1 fibers per cubic centimeter (or 1 fiber/cc in any 30 minute period) are exceeded in any one sample period.

The air-monitoring device will be calibrated before use and after use. The devices will be run at 2 - 2.5 liters per minute rate, and after sampling, data sheets will be filled out and submitted along with the filters to the HFO Administration Section. Data sheets should include a detailed description of the work activity.

The samples will be shipped via Federal Express overnight delivery. The filters are shipped in padded envelopes to minimize filter/fiber separation. After receipt of monitoring results the Administration section will enter into the appropriate spreadsheet and ensure posting of results in an appropriate central location accessible to the affected employees.

The Field Manager will be notified immediately after receiving any monitoring results exceeding 0.1 fibers per cubic centimeter (or 1 fiber/cc in any 30 minute period) and will inform employees that respirator use is required for that activity, if engineering controls and work practices cannot be modified to reduce exposure below the PEL.

All samples taken to satisfy the monitoring requirements shall be personal samples collected following the procedures specified in 29 CFR 1910.1001 and Attachment 1 to the HASP. Additional information is in separate Reference Guide, Appendix I

## **9. Training**

All BLM HFO personnel who access or work within the CCMA ACEC Hazardous Asbestos Area, shall receive training meeting the requirements of 29 CFR 1910.120 and 1910.1001, prior to being permitted to engage in any activities or operations within the HAA. The training provided shall insure that each employee is informed of the following:

1. The health effects associated with asbestos and other heavy metal exposures;
2. The relationship between smoking and exposure to asbestos in producing lung cancer;
3. The location of the hazardous asbestos area and the specific nature of operations which could result in exposure to asbestos and heavy metal dusts, and the Risk Assessment for each site task and operation;
4. The appropriate work practices by which an employee can minimize risks to hazards and from exposure to asbestos and heavy metal dusts;
5. Personal protective equipment to be used by employees for specific tasks and operations, including the purpose, proper use, and limitations;

6. The purpose, proper use, fitting instructions, and limitations of respirators as required by 29 CFR 1910.134;
7. The purpose, and description of the medical surveillance program and requirements;
8. The content of the above cited sections of the CFR;
9. Names of personnel responsible for site safety and health;
10. Frequency and types of air monitoring, sampling techniques and instrumentation to be used;
11. Decontamination procedures.
12. The consequences for failure to comply with the identified procedures and training in the HASP.

The BLM HFO shall maintain all related employee training records for one (1) year beyond the last date of employment of that employee. Specific training requirements are in **Appendix B.**

### **Mitigation Measures for Exposure to Asbestos and Heavy Metals**

Asbestos, nickel and mercury dust inhalation hazards can be reduced or mitigated by the following management practices.

- 1) Keep windows closed and ventilation on recirculation.
- 2) Avoid opening vehicle doors when exiting until any visible dust clouds have dissipated.
- 3) Lift gates and rear hatch door accumulated large amounts of dust, be careful when closing these, do not slam and be up wind if possible.
- 4) If work is required along heavily traffic areas, restrict vehicle traffic or close the road and/or trail (if possible) or wet soil in the immediate are of the job site to reduce emissions.
- 5) When the area has high wind conditions, above 15 mph, wear a respirator. Always work upwind of any dust disturbing activity.
- 6) During wet and muddy conditions, use boot covers or other techniques to avoid bringing in mud and soil into the vehicle.
- 7) When respirators are required, to be worn, you may take a rest-break to eat or drink or rest in a clean enclosed vehicle.
- 8) When performing any construction or intensive surface disturbing activity in a new area, check with your supervisor or Field Manager to make sure this work area is not within a contaminated mercury zone.

## **Appendix A**

### **Atlas Mine National Priority (NPL) Site**

All elements of the Hazardous Asbestos Area Health and Safety Plan apply to the Atlas Mine NPL Site, with the following additional requirements.

- \* Only authorized visitors shall be allowed to access the site, and a site specific control program, documenting all on-site visitors shall be implemented.
- \* Appropriate site control procedures shall be implemented to control employee exposure to hazardous substances.
- \* The buddy system (two employees working in tandem) shall be used for all activities except routine patrols and site visits.
- \* General site workers engaged in hazardous substance removal or remediation activities, which expose or potentially expose workers to hazardous substances or health hazards, shall receive the full 40 hour Hazwoper training. Workers on site only occasionally for a specific limited task and who are unlikely to be exposed over the PEL, shall receive a minimum of 24 hours of training.
- \* Personal air sampling shall be conducted for all site visits to the Atlas Mine NPL Site.

## Appendix B

### OSHA Training Requirements for BLM Employees working in the Asbestos Hazard Area of Critical Environmental Concern

#### Background:

Pursuant to Federal OSHA Regulations 29 CFR 1910.120, 1910.1001, and BLM's internal Instruction Memorandum #2003-008, all BLM employees who conduct site visits and/or project work within the Clear Creek Hazardous Asbestos Area/Area of Critical Environmental Concern must follow specific rules and regulations. This summary is for the training requirements that employees must have completed, PRIOR to site entry.

These requirements apply to all HFO BLM employees expected to access the CCMA ACEC. All other BLM employees, service contractors, and volunteers expected to access the CCMA ACEC for greater than 10 days annually, shall also receive training meeting the requirements outlined herein, prior to being permitted to conducting any activities within the ACEC. All other authorized visitors shall be briefed on this Health and Safety Plan prior to accessing the CCMA ACEC. The Field Manager shall ensure that BLM construction contractors conducting activities within the CCMA ACEC follow the provisions in 29 CFR 1910.120 and 29 CFR 1926.65.

#### **Type of Work & OSHA PEL Exposure Conditions:**

##### Type 1- Low Exposure Conditions (generally wet season, November to early April)

Site visit or project work during low exposure conditions would require a minimum of OSHA training, such as the 8-hour OSHA Hazardous Material Awareness training. Some examples of this work could include routine vehicle patrols with little or no pedestrian foot traffic, or short duration project work during saturated soil conditions or working in an enclosed HEPA cab.

This eight hour training would consist of a complete review of BLM's Health & Safety Plan, off-site personal & vehicle decontamination and if necessary personal air monitoring. Additional training would be needed if site conditions are likely to change (loss of soil moisture, windy, more intensive soil disturbance) and may become a Type 2 work condition.

##### Type 2 - Moderate or Variable OSHA PEL Exposure (generally late Spring & early Fall or Winter drought)

This work may include increased soil disturbance, and increased potential for asbestos emission and exposure at or near the OSHA personal exposure limit of 0.1 fibers/cubic centimeter. Examples of site work under this exposure scenario could include most work activities within the HAA, when low soil-moisture is present, including minor maintenance, sign & fence repair, road

maintenance, vehicle patrols, monitoring, and inventories.

Training requirements would include those in Type 1 (above), as well as the OSHA 24-hour Hazwoper Supervisor Training (see DYNAMAC 2003 training manual). Medical monitoring is also required and will be provided under the current US Public Health Service Inter-Agency Agreement. A respirator fit test will be required and respirators will be worn if the exposure cannot be administratively controlled or engineered to reduce exposure below the PEL.

Type 3 - High or Variable Exposure Conditions (generally Summer) or Superfund/AML work:

General site workers engaged in hazardous substance removal, AML operations, and heavy construction activities involving excavation, shall meet the training and work requirements including the OSHA 40-hour & current 8-hour Annual Refresher, Medical Monitoring, current respirator fit test, and access authorization approval.

Employees on site for a specific limited task, including vehicle patrols, monitoring, inventory, minor maintenance, and general area inspections, shall meet the requirements of a minimum 24 hour OSHA training & current 8-hour Annual Refresher.

Type 4 - Unknown Conditions - (See Type 3)

If site conditions are unknown, initial site entry monitoring will be conducted to determine any hazardous conditions. For hazardous substance removal, and hazardous waste clean-up and emergency response operations for the release of hazardous substances, the 40 hour OSHA training is a minimum requirement.

Training Sources:

The 24-hour training can under emergency conditions be conducted by BLM in the Hollister Field Office. Under other non-emergency situations, this training may be routinely scheduled from California Division of Forestry (low cost) or by a private vendor within the San Jose-Santa Cruz-Monterey area.

The cost for the private vendor depends on the number of students and can range from \$200-\$500 per person.

Below is a partial listing of available courses, posted on the internet  
[www.envirohealthservices.net](http://www.envirohealthservices.net):

Asbestos Abatement Worker (AHERA) - 4 days  
Asbestos Contractor/Supervisor (AHERA) - 5 days  
Asbestos Building Inspector (AHERA) - 3 days  
Asbestos Project Designer (AHERA) - 3 days  
Asbestos Operations & Maintenance (AHERA)- 2 days

Asbestos Awareness (OSHA 1910.120) 2 hour  
Asbestos Annual REFRESHER (OSHA 1910.120) 8 hours

HAZWOPER (OSHA 1910.120) 40-hour  
Hazardous Waste Supervisor (OSHA 1910.120)  
HAZWOPER Annual Refresher (OSHA 1910.120) 8-hour  
Hazard Communication (OSHA 1910.120)  
Hazardous Materials Awareness (OSHA 1910.120) 8-hour

Respiratory Protection (OSHA 1910.139)  
Respiratory Fit-testing (OSHA 1910.139)  
Personal Protective Equipment (OSHA 1910.132) 4 hour  
OSHA Recordkeeping 4 hour

# Appendix C



# ASBESTOS HAZARD AREA SITE ENTRY AUTHORIZATION

Dates of Proposed Site entry \_\_\_\_\_

Proposed Site Work Activity \_\_\_\_\_

Previous 4 Air Sample Results for Similar Work Activity (within the last 30 days)

DATE	SAMPLE RESULT
_____	_____
_____	_____
_____	_____
_____	_____

Name of Employee(s)	Air Sample Required ( daily/weekly ) Return Time ( 8 hours, 24 hours )	Respirator Required ( Yes/ No )
_____	-- _____ --	_____
_____	-- _____ --	_____
_____	-- _____ --	_____
_____	-- _____ --	_____

Based upon the information provided above (work activity and air results), I authorize work to be performed with the necessary OSHA levels of protection.

FIELD MANAGER AUTHORIZATION \_\_\_\_\_

## INSTRUCTIONS:

1. Fill out authorization form in its entirety.
2. Group employees that will be conducting the SAME activity.
3. Once signed, make a copy for each employee listed.
4. Each employee must fill out the back showing what day they actually worked.
5. Copies of an air sample for that day or week (if weekly) must accompany this form for it TO BE COMPLETE.
6. To obtain another authorization, this completed document must be given to the Field Supervisor or his representative.
7. The EMPLOYEE is required to keep a copy for their personal record.
8. The FIELD SUPERVISOR will insure that the document turned in by the employee is placed within the employee's personal exposure file.



**BUREAU OF LAND MANAGEMENT**  
**CCMA Air Sampling DATA**

**Bureau of Land Management**  
20 Hamilton Court, Hollister, CA 95023  
PHONE 831-630-5000 FAX 831-630-5055

**R.J. Lee Group, Inc.**  
530 McCormick Street, San Leandro, CA 94577  
PHONE 510- 567-0480 FAX 510- 567-0488

**Please complete ALL (front and back) fields and submit with your sample cartridge to the Hollister Field Office.**

**Sample Data, Lab Blank and 30 minute STEL with Location Information**

**General Job Description: (Activity During Sample Collection)** \_\_\_\_\_

**Sample Date: (MM/DD/YYYY)** \_\_\_\_/\_\_\_\_/\_\_\_\_

**Sample Number: (MM-DD-YYYY-##)** \_\_\_\_-\_\_\_\_-\_\_\_\_-\_\_\_\_

**Location to Hazardous Asbestos Area: (circle one) INSIDE - OUTSIDE - IN/OUT**

**Sample Calibration and Use Parameters**

**Using Military Time Format:**

**Stop Time:** \_\_\_\_\_

**Start Time:** \_\_\_\_\_

**Stop Flow Rate:** \_\_\_\_ . \_\_\_\_

**Start Flow Rate:** \_\_\_\_ . \_\_\_\_

**Total Sample Time: (In Minutes)** \_\_\_\_\_

**Sampler Data**

**Last Name of Individual Wearing Air Sample Unit:** \_\_\_\_\_

**Last Name(s) of Additional Individual(s) in Sampler Group:** \_\_\_\_\_

- **Make copy for sampler and each person listed in sampler group, before turning into office.**
- **Each person must attach copy of the air sample(s) taken to their individual Asbestos Hazard Area Entry Authorization Form.**

**SAMPLE RESULTS WITH 8 HOUR TIME WEIGHTED AVERAGE  
NEED WITHIN 8 HOURS or 24 HOURS**

## BLM HOLLISTER FIELD OFFICE

### SECTION 8 VEHICLE AND PERSONAL DECONTAMINATION FOR DUST AND ASBESTOS PROCEDURES AND REQUIREMENTS

**GENERAL INFORMATION:** The Clear Creek Management Area includes a large area of serpentine outcrop. This serpentine outcrop contains many types of minerals including high concentrations of chrysotile asbestos. To protect BLM employees, their families, and the public from exposure to asbestos and other potentially harmful minerals due to activities within the Clear Creek Management Area, Vehicles, Equipment and Employees entering the Hazardous Asbestos Area (HAA) as depicted on the BLM Clear Creek Management Area Map shall be decontaminated immediately upon leaving the area.

The decontamination process shall remove and capture all dust and friable soil material at the decontamination site, preventing the spread of these materials to uncontaminated areas.

BLM provides protective clothing to its employees in the form of coveralls, which must be worn for road construction/maintenance and excavation activities within the HAA, or in special cases other previously approved outer garments. Coveralls are recommended for all other activities. All garments will be treated as asbestos containing material after use in the HAA. Therefore they must be removed, bagged and tagged at the decontamination site so they can be identified and properly treated after use.

Vehicles and equipment, including tools used within the HAA, will have asbestos containing materials removed by washing the exterior, and vacuuming and damp wiping the interior. Items not needed within the HAA should be left behind prior to entering, to reduce the time it takes to decontaminate them. Where specialized types of equipment are required, but may not be used due to the nature of the work being done, it will be packaged in washable dustproof containers and decontaminated upon leaving the HAA. An example of this would be the items a law enforcement officer carries in the vehicle such as first aid equipment.

**A. Prior to leaving the office:**

1. Check recent air sample results for respirator requirements.
2. Submit Clear Creek access request and have it signed by the AM or his/her designee. (This may take several days, do it in advance.)
3. Select appropriate vehicle. The smaller vehicle with fewer seats equates to less to decontaminate. Ensure the vehicle selected has washable upholstery and flooring.
4. Remove and secure all unnecessary items from the vehicle, and bag or box required equipment and tools that may not be used.
5. Bring personal items you may wish to use in decontamination
  - a. Soap, Shampoo
  - b. Clean Clothes
  - c. Towel
  - d. Grooming items, comb, brush etc.
6. Bring respirator if necessary or desired.
7. Check status of water in car wash water tank.
8. Pick up any clean coveralls or supplies that need transportation to the Section 8 decon site.
9. Don't forget to bring your lunch and water for drinking.
10. In winter bring an extra pair of shoes or boots.

**B. Visit decontamination site (Section 8) enroute to Clear Creek MA:**

1. Pick up and calibrate air sampler (if required)
2. Step into clean side of shower area and place personal items from 5 above. Don coveralls (be sure they are large enough to cover your jacket in winter)
3. Turn on AC in shower in summer, or heater in winter
4. Last chance to remove excess items from vehicle.
5. Check fit of respirator if required.
6. Check the car wash water tank to be sure it has sufficient water to decontaminate your vehicle upon your return from the HAA
7. Check the wash rack sump to be sure the drain is not plugged with leaves. You may have to move the grate aside to reach down and clear it, bag any material removed from the sump and place it into the trash. (Simply throwing aside will possibly scatter asbestos fiber)

**C. Entering Clear Creek:**

1. Roll vehicle windows up tight as soon as you hit the dirt road.
2. Turn vehicle A/C to max cool and adjust temp. Note: the max cool position causes the A/C to recycle air within the vehicle, leaving the dusty outside air outside. The temp control does not have to be set to its coldest position though. Within the A/C unit, the cooling unit will condense moisture from the air as it cools. The moisture inside the A/C unit will then trap some of the dust in the recirculating air in the vehicle, thereby reducing the interior dust level.
3. When exiting the vehicle, before you open the door make sure the dust cloud following you (during dry conditions) has blown away or settled. Then exit and close the door.
4. When re-entering the vehicle, sit on the seat with your feet outside and smack your feet together a couple of times, this will cause most loose material and dust on your shoes/boots to fall off outside, then bring your legs and feet in. During the winter, it is wise to have a large plastic bag on the floor of the vehicle and open. When you enter the vehicle put your muddy boots inside the bag and take them off. Then close the bag. Put on the extra pair of shoes you brought. Now you won't have a bunch of mud on the floor to dry and make dust inside your vehicle on the way home, and you won't have as big a cleanup job inside your vehicle at decon time.

**D. Leaving Clear Creek HAA**

1. Go straight to the decon facility at Section 8 Site, do not stop or visit until after decon is completed. Once at Section 8, park on the wash rack as soon as possible to reduce the possibility of asbestos containing mud from falling onto the ground. If you notice some mud has fallen from your vehicle, immediately pick it up with a shovel and place it into the car wash sump.
2. You may open the windows enroute to Section 8 decon site, but close them prior to washing the vehicle.
3. It is best to plan your day so that you complete the decon process before it gets dark. It is difficult to see mud on your vehicle after dark.

**E. The decontamination process. Washing your vehicle**

1. Park your vehicle in the center of the wash-rack pad. Centering your vehicle helps ensure the mud that falls off in the washing process will be captured in the sump.
2. Be sure the drain is clear of debris.
3. If you have muddy boots in a bag, put them back on, or minimally place them on the wash rack for washing. (Don't forget to place the bag in the trash)
4. Make sure the windows are rolled up.
5. Open the doors of the pump cabinet on the end of the water tank and pull out the wand and hose to a length sufficient to reach all parts of the vehicle. (typically to a couple of feet beyond the end of the concrete pad) Be sure the hose does not rub on the vehicle as you pull it out, it will damage the paint.
6. At this time you may wish to don your respirator, and eye protection.

7. Turn on the high pressure pump by depressing the square button on the control box, it is located near the door at the top right side of the cabinet. There is a timer inside the control box that will shut the pump off after about 20 minutes. If it does shut off, simply depress the button again. Do the same to turn it off.
8. If it is summer and your vehicle is only dusty, you will only need to give it a good spray, once over, starting on the roof and working your way down. Be sure to do the inner fenders, frame components and wheels. You should do the inner portion of the wheels ~~last to give the brakes time to cool before washing. Then open the hood and spray~~ around the engine compartment, being careful not to get too much water on the distributor and ignition wire components.
9. After washing everything, quickly squeegee off the windows and mirrors while they are still wet to prevent water spotting.
10. During the winter you might want to start on the mud around the wheel openings first, then do the inner wheel wells and underbody components. Be sure to do up inside the rear panel where the tail lights are, inside the back side of the bumpers, under the body, and on top of suspension components like springs, spare tire and fuel tank, and skid plates. Then hose the big globs of mud into the drain. Go back and do the top and work your way down picking up anything you missed around the fenders, mirrors etc. Again be sure and do a light spray around the engine compartment.
11. Prior to putting away the hose, take out the rubber floor mats and give them a good wash, and wash your boots. Be sure and get between the tread on the bottom. Also, be sure to wash down the concrete pad, washing all mud and debris into the sump. Remember, when it dries it becomes a potential hazard, so wash it all down the drain.
12. After turning the pump off and rolling up the high pressure hose get out the vacuum cleaner. This is a HEPA vacuum, which should not release asbestos dust. Beware of the vacuum cleaner, when it has its wheels on, it will roll into the side of your vehicle and make a dent in it.
13. There is an electrical outlet along side of the concrete wash pad near the center to plug in the vacuum cleaner. All flat surfaces in the vehicle that collect dust may be vacuumed. Vacuuming non-washable surfaces, including the seat and floor is required. Try not to get the hose all muddy.
14. After vacuuming, fill the mop bucket in the cabinet about 1/2 full of water, and using the rags in the cabinet, damp wipe all washable surfaces starting at the top and working your way down. As you wipe, each swipe should be with a fresh surface of the rag. When you have used each surface, rinse the rag in the mop bucket. This process will help to prevent relocating any dirt and dust to a new spot inside the vehicle. When done properly there should be no white smeary residue on the vehicle interior when it dries. A small amount of soap in the wash water will help. Do not run the hose inside the vehicle flooding the floor mats. This will wash asbestos containing mud into the padding under the mat and wet the mat, resulting in mold and mildew growing in the padding under the mat. Once the interior wipe down is complete, you must empty and rinse the mop bucket. Be sure all the water and debris goes into the sump.
15. When done move the vehicle off the wash rack to make room for the next person, or leave the keys in so it can be moved if necessary. Don't forget to pick up your boots and floor mats.

F. The decontamination process. Washing you.

1. Go to the shower trailer to begin the final phase of the decon process, empty your pockets and take off your shoes or boots before going inside, also leave any jackets etc on the handrail. That way you don't have to go back in and get them later, and you won't track any mud or gravel inside off the driveway.
2. Turn on the lights and the pump switch. The pump switch will turn on the negative pressure air pump and HEPA filter, trapping any dust generated inside the trailer. It will also start the water pump that drains the built in sump. (Near the doorstep to the clean

side there is a small 6inch door that opens to a timer switch that may also have to be turned on to get the sump pump to run. This is on a 5 minute timer)

3. Once you have removed your coveralls, place them into a plastic bag and close the bag with one of the tags with the wire ties. You should also place the dirty rag from the vehicle wiping operation in this bag as well. The tag must be marked in large neat clear writing, CAUTION ASBESTOS. You should also mark how many pairs of coveralls and rags are inside the bag.
4. Place the remainder of your clothes you take off before showering in another plastic bag and dampen them to prevent any possibility of dust emerging when the bag is opened later to wash those clothes in a separate load. Then after you have completed showering put on the clean clothes you placed on the clean side. Open the outside door of the dirty side momentarily before your shower and toss the plastic bags out.
5. When you have completed your shower, dry any puddles you may have left on the floor, pick up any trash you may have generated, turn off the lights, heater or A/C, pick up your belongings, step outside and put your shoes on. Go around and turn off the lights and pumps on the dirty side. Collect the stuff from your pockets, your jacket and whatever else you may have placed on the handrail.

#### G. Final Steps.

1. Go to the office, recalibrate the air sampler and prepare the paperwork to send the sample cartridge to the lab. Don't forget to bring it back to Hollister FO and turn in to the Haz Mat specialist.
2. Pick up any mail or other items needing to go to Hollister.
3. Make sure you have picked up all items you removed from the vehicle.
4. Be sure and lock the office door, check the pumphouse, be sure the fuel tank switch (blue) is off and lock the pumphouse door. Check the truckbox storage in the wareyard and be sure it is locked.
5. Check the washrack and be sure all cleaning items have been cleaned and put away, and be sure the pump cabinet doors are locked shut.
6. Check the lock on the fuel nozzle, being sure it is in place and locked
7. Prior to leaving, make notes regarding any shortage of supplies, leaks, maintenance discrepancies, or opportunities to improve the process and turn into your supervisor upon returning to Hollister. Everyone who uses the decon facility is individually responsible to be sure supplies and coveralls are adequate, and everything is working properly. If not you must report it.
8. As you leave the site, be sure and lock the gate unless someone has specifically asked you to leave it open.

# BLM HOLLISTER FIELD OFFICE

## VEHICLE DECONTAMINATION FOR DUST AND ASBESTOS PROCEDURES AND REQUIREMENTS

### Supplement

- I. Electrical Supply
  - A. PGE is the primary electrical supply for the Section 8 site, but occasionally the power is off for various reasons. When that happens, we lose power to run the high pressure car wash pump at the wash rack, the positive pressure HEPA filtration ventilation system, sump pump, and heating and air conditioning at the shower trailer.
  - B. The auxiliary generator located inside the pumphouse produces 11,000 watts, or approximately 48A continuous at 230V and a bunch more, momentary. The high pressure pump at the car wash uses about 22 A and the heater A/C unit in the shower around 10A. The positive pressure air filtration system in the shower uses 1-2 A and the lights around 2-3A. The sump pump uses around 5A. So All totaled up the decon equipment requires up to 42 A. Leaving some left over for area lighting, shop lighting and whatever may be on in the house trailer. In the event you are using auxiliary power to decon, before starting the generator it would be best to shut off the breaker to the mobile home to ensure adequate power to run the decon equipment.
    1. It will be the implementation teams responsibility to ensure the auxiliary generator is connected, fueled, filled with oil, run periodically and the battery is up so the electric starter works during the winter months (November through the end of March) During the remainder of the year the electrical supply is more reliable and the generator is occasionally utilized for other purposes.
    2. It will be all employees responsibility to report any problems noted while using the equipment.
- II. Water supply: There are seasonal problems with the water supply at the Section 8 site. It will be the implementation teams responsibility to monitor the water level and quality in the potable water tank on top of the hill and the car wash tank. Each employee must not assume there is water enough to decontaminate their vehicle when they go out in the morning. To check, it is fairly simple to feel the temperature difference on the sunny side of the tank where the water is and where it isn't. Some type of water level sight will be installed at some point.
  - A. When the well is able to keep up with the need for water at the Section 8 site the car wash tank will be filled by the normal water system.
  - B. When the well is not able to keep up with the demand the valve to the wash tank will be closed and the tank will be filled as needed by truck.
- III. Alternatives: In the event the power is down or the electrical high pressure pump is inoperative decontamination will be accomplished using the gas powered high pressure pump stored in the truck box in the wareyard. This can be attached to the

hose bib at the wash rack and the vehicle washed in the same manner as if using the electric pump. Before using check the fuel level in the tank, and the oil level. It starts much like a lawn mower. After connecting the hose and turning on the water, turn the fuel shutoff to on, flip the small red switch to on, place the choke lever on, then pull the cord. It will start within 1 or 2 pulls. Once it starts, move the choke lever to off and proceed with your decon. When finished, turn the engine off with the red on/off switch, and turn off the fuel. After the rest of your decon is completed, put the pump back into the storage locker after it has cooled off. If there are any problems with this please be sure and report your trouble to your supervisor who will in turn inform the implementation team.

- IV. In the event there is no possible way to decontaminate your vehicle upon returning to the Section 8 site call your supervisor immediately for further instructions.

## Appendix E Supplemental

### Heavy Equipment Decontamination CCMA H/S Plan

#### **Discussion:**

The wash rack at Section 8 was sized and constructed to accommodate standard passenger vehicles, SUV's, and pick-up trucks. Even though it may be possible to physically park a larger vehicle over the wash rack, decontaminating that vehicle there may compromise the site. Offloading some heavy equipment and placing it on the wash rack cement slab may cause damage to the site. Washing equipment on large trailers, such as backhoe or trail machine will result in some material being washed onto the ground outside the concrete slab where it can not be washed into the sump. The same can be said for larger vehicles such as the dump truck and transport tractors. Eventually a facility will be constructed to accommodate decontaminating whatever equipment we may be using, but in the meantime supplemental procedures should be implemented.

The utility trucks set up to support heavy equipment, such as tool trucks and pickups with auxiliary fuel tanks, and the smaller construction equipment, although not ideal, can be accommodated at the existing wash rack and at this time, should be decontaminated there following the standard decontamination procedures with the following restrictions.

1. Any service vehicle with any type of fuel leak or overflow spillage problem will be repaired and cleaned prior to entering the HAA to prevent polluting the sump and leach field with petroleum products.
2. Support-type vehicles will be decontaminated using the standard vehicle decontamination procedures.
3. The smaller construction equipment (ASV, SWECO, and backhoe) will be off-loaded onto the cement slab and will be decontaminated using the standard vehicle decontamination procedures.
4. The dump truck will be decontaminated using the standard vehicle decontamination procedures as long as the trailer does not also require cleaning.

#### **Procedures:**

Heavy Equipment will not be decontaminated each day, as long as it remains within the CCMA. It would be appropriate to remove excess asbestos containing material from places such as enclosed cabs on an as needed basis or weekly at a minimum to reduce potential operator exposure within the HEPA enclosed cab. This will be done with wet towels and the HEPA vacuum.

Prior to leaving the CCMA all heavy equipment which has entered the Red Zone will be clean and free of all asbestos containing material. There will be a "Primary" wash and "Final" rinse. The primary wash will be done by using water pumped from a water truck or nearby creek by means of a trash pump and fire hose. The final rinse will be with a nurse tank of "clean" water and a gas powered pressure washer once the equipment has been loaded. The cab area will be HEPA vacuumed and wiped with wet towels once the equipment is loaded for transport.

**Location(s):**

**Oak Flat**

For equipment leaving the CCMA via Clear Creek Road the Oak Flat decontamination site shall be used. The area adjacent to Oak Flat Campground at the start of T103 between Clear Creek Rd. and Clear Creek will be used for equipment washing.

**Holman Mill**

For equipment leaving the CCMA via White Creek Road the Holman Mill Site shall be used. The existing concrete pad at the Holman site will be used

**APPENDIX F**

**Hollister Health & Safety Plan 2007  
RESPIRATORY PROTECTION PLAN FOR THE  
CLEAR CREEK HAZARDOUS ASBESTOS AREA  
BUREAU OF LAND MANAGEMENT  
HOLLISTER FIELD OFFICE**

	Page
INTRODUCTION.....	2
TYPES OF RESPIRATORS FOR ASBESTOS.....	3
WHEN EMPLOYEES NEED TO WEAR RESPIRATORS.....	4
RESPIRATOR TRAINING .....	5
MEDICAL MONITORING.....	6
AIR MONITORING .....	7

## **INTRODUCTION**

This document is prepared to assist employees with the safe use of air purifying respirators when required for use in the Clear Creek Management Area's Hazardous Asbestos Area. It is to be used in conjunction with the Hollister Health & Safety Plan (HASP) and other required OSHA training materials.

The use of personal protective equipment and exposure to asbestos, shall be in conformance with 29 CFR 1910.1001, 1910.134, and BLM's IM-2003-008, which includes that this job responsibility be included in all position descriptions, medical monitoring will be conducted, and appropriate health and safety training courses be completed.

A copy of this Instruction Memorandum is attached for reference.

Respiratory protection is required for all work activities when asbestos fiber counts exceed PEL of 0.1 fiber/cc TWA (or 1 fiber/cc TWA in any 30 minute period) for a particular activity or when no air sampling has occurred in the previous 30 days. When possible, if the PEL/STEL is exceeded, work will be re-scheduled administratively or engineering controls such as dust suppression or HEPA enclosed vehicles will be employed.

**\*\* Dust or Comfort Masks are not NIOSH or OSHA approved and shall not be worn by employees for any activity.**

## TYPES OF RESPIRATORS

BLM will provide employees with NIOSH approved air purifying respirators (APR's) with high efficiency particulate air (HEPA) filters. HEPA filters are also called P100, N100 or R100. The half mask respirators are made by 3M and North, the sizes are small/medium and medium large.

If needed full-face powered air purifying respirators (PAPR) are also available.

Half-face respirators will be individually issued to employees, full-face PAPR will be made available upon request. Full face PAPR's and the half-face APR's are stored in the locked property room in the Hollister Field Office. Additional asbestos personal protective equipment (PPE) is also located in this room.

A non-approved NIOSH full-face motorcycle helmet has been modified with a HEPA PAPR, this equipment is not to be worn if the PEL is reached.

If work is to be conducted on any abandoned mercury mines, additional air purifying filters will be needed. BLM does have on hand a limited number of mercury vapor filters, however they do have a end-of-life indicator and may have to be re-stocked if they are expired.

## WHEN EMPLOYEES NEED TO WEAR RESPIRATORS

In general, respirators must be used during emergency response and clean-up when effective engineering controls are not feasible or effective. Respiratory protection is also required for all work activities when asbestos fiber counts exceed PEL of 0.1 fiber/cc (or 1 fiber/cc TWA in any 30 minute period) for a particular activity, or when no air sampling has occurred in the previous 30 days. BLM does provide a HEPA filtered enclosed environment in several pieces of heavy equipment (front end loaders, backhoe, road grader).

Respirators have their limitations and are not a substitute for effective engineering or administrative controls. Where respirators are required to protect worker health, specific procedures are necessary to overcome any potential deficiencies and to ensure the effectiveness of the equipment.

---

Respirators shall be worn under these conditions, and only when authorized by Field Manager:

- 1) When a specific fieldwork activity has not been air monitored in the previous 30 days.
- 2) When an existing comparable work activity has been air monitored and the results are at the 95% upper confidence level (UCL) of 0.1 fibers/cc.
- 3) When environmental conditions change (dry, dusty, windy conditions) and dust suppression or engineering controls are either not available or inadequate, and there is a reasonable expectation that a work activity may result in new or additional exposure above the PEL/STEL.

## TRAINING REQUIRED FOR RESPIRATOR USE

The Code of Federal Regulations (CFR) 29 Part 1910.120(e)(3)(ii) requires employees who are on site occasionally for a specific limited task and are unlikely to be exposed over the permissible exposure limit (PEL) shall receive a minimum of 24 hours off-site instruction and 8 hours of supervised field experience.

BLM contracted with DYNAMAC in November 2002, to provide this OSHA 24-hour training. The handbook will be the basis for all future new employee training as well as the required 8 hour annual refresher. In addition, BLM has downloaded OSHA respirator training documents from the Internet. These guidance manuals will be used for all employee orientation and instruction. These are attached as a technical appendix.

The following is a summary of items covered in respirator training:

- 1) Read and follow all manufacturer's instructions on use, maintenance, cleaning and care and any warnings regarding the limitations of the selected respirator.
- 2) Know when and how to properly perform a user seal check, as instructed by both written and oral instructions.
- 3) Know how to clean respirator, by removing the filters, disassembly of various face piece components and re-assembly.
- 4) Know how to perform the qualitative fit test.

## MEDICAL MONITORING PROGRAM

The use of an APR requires medical monitoring to ensure that the employee is physically fit and that the respirator use will not adversely affect the employee's pre-existing conditions.

The monitoring program will consist of an annual physical examination or pre-employment physical to establish a baseline condition. All affected permanent full-time employees who are duty stationed at the Hollister Field Office will have the medical exams performed by the U.S. Public Health Service (Federal Occupational Health.).

Any temporary, seasonal or full-time employee who is duty stationed elsewhere, but working on special assignment in the Hollister Field Office, may use local health care professionals for the pre-employment (base-line) physical.

Both the base-line and annual physical have OSHA standards, and are summarized below:

- 1) Medical and occupational history
- 2) Asbestos medical questionnaire
- 3) Physical exam (blood pressure, vision & hearing, EKG, urine & blood tests)
- 4) Chest X-ray
- 5) Pulmonary function test.

Termination physical exams will be conducted, and all health records will be maintained at the Hollister Field Office, and archived in permanent retention in Sacramento, California BLM State Office.

## ASBESTOS AIR MONITORING PROGRAM

Air monitoring is required to document asbestos emissions and exposure during work conditions. Asbestos air sampling will consist of the use of a personal air pump, set to sample between 2.5 and 3.0 liters of air per minute. The pumps will be worn clipped to employee's belt and the air cassette clipped to employee's shirt collar. During the start-up of any new work activity, not previously monitored for within the last month, or if conditions have changed (dry, dusty, windy conditions), samples will be taken daily. At minimum, weekly sampling will be performed for each work activity (i.e. vehicle patrols, fence repair, minor maintenance, road work).

If all results from the first round of sampling demonstrate that the personnel exposures are below the PEL of 0.1 fiber/cc or STEL 1.0 fiber/cc, then the frequency of air samples can be reduced to one per week.

If any samples are reported from the laboratory as overloaded, or if the pump malfunctions, than that sample is not valid. Overloading the sample indicates very heavy dust conditions, which may require shorter exposure and air monitoring intervals.

The collection of air samples is the responsibility of both the employee and his/her supervisor. All samples should be valid for that work activity. Once the air cassette is recalibrated and sent to the Hollister office, the administrative staff will send it to the laboratory via FEDEX, in a padded envelope.

The lab results are then faxed to BLM's Hollister office, where the administrative staff inputs the 95% upper confidence limit result into an electronic database, which is then e-mailed to employees and supervisors. The Hazardous Materials Specialist shall, after receipt of any monitoring results, notify the supervisor of the affected employees of these results in writing either individually or by posting of results in an appropriate location accessible to the affected employees.

**Air Sample Analysis Procedures**  
**Clear Creek Management Area**  
**Hazardous Asbestos Area**

Determination of employee exposure will be made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short term exposures for work activities. Representative 8-hour TWA employee exposures will be determined on the basis of one or more samples representing full-shift exposures for each shift for each employee in each job classification in each work area. Representative 30-minute short-term employee exposures will be determined on the basis of one sample representing a 30 minute exposure associated with operations that are most likely to produce exposures above the excursion limit for each shift for each job classification in each work area.

**Equipment**

Gilian BDXII Abatement samplers will be used along with a Gilian Bubble Generator for calibration. The sampling medium for air samples is mixed cellulose ester filter membranes designated by the manufacturer as suitable for asbestos counting. The collection devices are 25-mm diameter cassettes. Cassettes will not be reused or reloaded for asbestos sample collection. An air flow rate between 2.0 liter/min and 2.5 liters/min will be selected for the 25-mm cassette. Calibrate each personal sampling pump before and after use with a representative filter cassette installed between the pump and the calibration devices. Connect each pump to the base of each sampling cassette with flexible tubing.

**Sampling Method**

Remove the end cap of each cassette (not just the plug) and take each air sample open face. Assure that each sample cassette is held open side down in the employee's breathing zone during sampling. The distance from the nose/mouth of the employee to the cassette should be about 10 cm. Secure the cassette on the collar or lapel of the employee using spring clips or other similar devices. Two air sampling pumps may be used; one for the 8 hour TWA and one for the 30 minute excursion limit. The 30 minute sample shall be taken during a representative portion of the work activity and work day.

Immediately after sampling, close and seal each cassette with the base and plastic plugs. Do not touch or puncture the filter membrane as this will invalidate the analysis. Attach a sample analysis sticker to the cassette with sample number, date time, and calibration information from the Air Sampling Data Sheet (see attached). Send the samples to the RJ Lee laboratory with paperwork requesting asbestos analysis. List any known fibrous interferences present during sampling on the paperwork. Also note the workplace operation(s) sampled.

## Blanks

Each set of samples taken will include 10% field blanks or a minimum of 2 field blanks for each twenty samples. These blanks must come from the same lot as the filters used for sample collection. Blank samples are used to determine if any contamination has occurred during sample handling. Prepare two blanks for the first 1 to 20 samples. For sets containing greater than 20 samples, prepare blanks as 10% of the samples. Handle blank samples in the same manner as air samples with one exception: **Do not draw any air through the blank samples.** Open the blank cassette in the place where the sample cassettes are mounted on the employee. Hold it open for about 30 seconds. Close and seal the cassette appropriately. Store blanks for shipment with the sample cassettes.

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
WASHINGTON, D.C. 20240  
[www.blm.gov](http://www.blm.gov)

September 27, 2002

In Reply Refer To:  
1703 (360) N  
Ref. IM No. 93-106 and  
IM No. 2002-138

EMS TRANSMISSION 10/07/2002  
Instruction Memorandum No. 2003-008  
Expires: 09/30/2004

To: All Washington Office and Field Officials

From: Assistant Director, Minerals, Realty and Resource Protection

Subject: Policy for Entry of BLM Personnel onto Sites with Potential or Known Hazardous  
Substance Releases

Program Area: Protection and Response, Field Operations Safety

**Purpose:** This Instruction Memorandum (IM) provides guidance for all BLM employees who enter sites with potential or known hazardous substances for specific purposes within their job responsibilities. The goals of this policy are to protect the health and safety of all BLM employees, minimize potential liability for BLM, and emphasize compliance with regulations under the Occupational Safety and Health Administration (OSHA), which apply to all BLM employees.

**This policy does not apply to situations where BLM employees enter active industrial operations** that are permitted or authorized to be on public lands, and which are in compliance with environmental and safety regulations of other agencies. For example, active aboveground and underground mines are subject to the regulations and standards enforced by the Mine Safety and Health Administration (MSHA). Oil and gas surface operations and facilities on rights of way (e.g., power plants) are subject to the regulations and standards enforced by OSHA. Entry onto sites not regulated by industry-specific safety requirements such as these is subject to the guidance contained in this policy.

**Policy/Action:** This IM establishes conditions under which it is permissible for an authorized BLM employee to enter known or potential hazardous substance release sites for specific purposes within the scope of their job responsibilities. **This policy does not impose any additional requirements on any BLM employee to enter hazardous substance sites.** Rather, it is intended to clarify requirements for those who currently are authorized to enter such sites.

Furthermore, this policy provides flexibility for each State to determine which employees, if any, will be authorized to enter such sites, and the responsibility for these determinations remains with each State Director.

A hazardous substance release site involves the spilling, leaking, emptying, dumping or disposing of hazardous substances into the environment. The term "hazardous substance" is an inclusive term, encompassing substances identified in several environmental statutes. Definitions of these terms are provided in Attachment 1. Any disposal of hazardous wastes on the public lands becomes, by definition, a hazardous substance release.

EPA has identified four categories of personal protective equipment (PPE), ranging from Level D to Level A, with Level A as the most protective (these categories are summarized in Attachment 2). In general, most BLM field employees encounter situations that require a minimal level of personal protective equipment, or Level D. However, in some limited situations, BLM employees do enter sites utilizing Level C or B PPE. Such trained employees may be members of hazardous materials response teams, or technical experts providing on-site assistance, who utilize Level B PPE as a greater measure of protectiveness when dealing with unknown substances. This policy accommodates a range of response strategies that may be implemented by the States, however, two limitations on site entry are contained in this policy:

1. Once a site-specific decision is made that Level B protection is warranted and necessary to perform on-site activities, all BLM employees are to withdraw, and rely on contractor or other hazmat response team support (e.g., County hazmat team) to conduct such activities.
2. Under no circumstances are BLM employees to enter a site that has been determined to require Level A protection. Level A is excluded from this site entry policy.

In order to enter sites that require any level of protection (Levels D, C, or B), certain health and safety requirements must be met, which are contained in OSHA regulations at 29 CFR 1910.120 (also known as the HAZWOPER regulations), or 40 CFR 311.1 of the National Contingency Plan (NCP). In order to ensure compliance with these regulations, BLM is establishing a system of State Rosters that list the names of those employees who are authorized to enter sites with known or potential hazardous substance releases. These Rosters will be maintained by the State or Center Directors, or their designees (e.g., State Hazardous Materials Program Leads or State Safety Officers), and will be updated as necessary, but at least once a year. The rosters will contain the following information:

- risk level (i.e., Level D, C, and/or B) for which the employee is authorized by the State Director;
- medical monitoring that will be conducted for the employee, if any;
- health and safety training courses completed (including dates); and

- indication that authorization to enter sites with known or potential hazardous substance releases is included in employee's position description.

As a matter of policy, BLM is requiring those employees authorized to enter sites with Level B protection to receive medical monitoring in the form of an annual physical. State Directors may determine that additional requirements for medical monitoring are appropriate (e.g., evaluations for employees authorized for Levels C and or D). The annual physical for Level B authorization is a minimum requirement.

Another BLM and OSHA requirement for entering a site with known or potential releases of hazardous substances is preparation of a site-specific Health and Safety Plan (HASP) (see Departmental Manual 1112-1 Safety, Chapter 26, and 29 CFR 1910.120). An outcome of the HASP is that a level of protection (i.e., personal protective equipment required) is assigned to the site/job task. This assessment allows employees and supervisors to use management controls and PPE to reduce risk to an acceptable level. A HASP must be prepared before BLM employees enter a site with known or potential hazardous substances.

Finally, there are situations where BLM personnel who are not authorized to enter hazardous substance release sites (i.e., are not included on the State Roster) may need to visit a site. Such personnel may go onto a hazardous substance release site only if authorized by management, and provided they stay at a designated command post area or off-site area as designated by the site safety officer. Such personnel may not enter areas of contamination if they have not completed required HAZWOPER training.

BLM is developing a manual that will incorporate the guidance contained in this IM. In addition, BLM is consolidating information on existing health and safety requirements to include on the ~~Hazmat website~~, located at <http://web.blm.gov/internal/wo-300/wo-360/hazmatweb/index.htm>. This website will provide specific information on existing training requirements and personal protective equipment, and include example formats for site-specific Health and Safety Plans.

**Timeframe:** This IM is effective upon receipt.

**Budget Impact:** This IM should have no effect upon the budget.

**Background:** This IM updates IM 93-106. This policy is intended to protect the health and safety of BLM personnel by establishing requirements for personnel who enter sites with known or potential hazardous substance releases for specific purposes within their job responsibilities. BLM also developed a policy for BLM field personnel who encounter suspected hazardous substances in the course of conducting their job responsibilities (see Hazardous Substance Discovery Policy, IM 2002-138, March 29, 2002).

**Manual/Handbook Sections Affected:** Manual Section 1703 is affected by this policy.

**Coordination:** This policy has been coordinated with a wide range of WO offices, including the Fluid Minerals Group, the Solid Minerals Group, the Lands and Realty Group, the BLM Safety

Manager, Renewable Resources and Planning, and Law Enforcement. In addition, this policy was distributed for review by all State Offices.

Contact: Questions or comments concerning this policy should be directed to Andrea McLaughlin, Protection and Response Group, at 202-452-7717.

Signed by:  
Bob Anderson  
Acting Assistant Director  
Minerals, Realty and Resource Protection

Authenticated by:  
Barbara J. Brown  
Policy & Records Group, WO-560

2 Attachments

1 - Definitions (2 pp)

2 - EPA Standard Levels of Protection (2 pp)

## Definitions

3. The term "release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or contaminant) (National Contingency Plan, 40 CFR 300.5). Any disposal of hazardous wastes on the public lands becomes, by definition, a hazardous substance release.
4. The term "hazardous substance" is defined in the Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120) as:
  - Any substance defined under Section 101(14) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), also known as Superfund;
  - Any biologic agent and other disease causing agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations in such persons or their offspring;
  - Any substance listed by the U.S. Department of Transportation as hazardous materials under 49 CFR 172.101; and
  - Hazardous wastes as defined in Department of Transportation regulations at 49 CFR 171.8, and regulations implementing the Resource Conservation and Recovery Act (RCRA) at 40 CFR 261.3.
3. For the purpose of this IM, a hazardous substance release site is defined as:
  - A location which has been reported to the appropriate authority, including the Coast Guard (hotline), the Environmental Protection Agency (EPA), or to a State agency with competent jurisdiction, or has been entered into the Comprehensive Response, Compensation and Liability Information System (CERCLIS), or placed on the Federal Facilities Docket;
  - A site where conditions require either Level A, B, C, or D protection in accordance with the EPA standard levels of protection (Attachment 2); or

- A site which has not been reported, assessed or investigated, but where past or present land uses or conditions or apparent evidence indicate that a response is warranted under Sections 104 or 106 of CERCLA. When in doubt, assume the worst case until additional information becomes available.

## EPA Standard Levels of Protection

### Level A

1. One or more hazardous substances have been identified and the highest level of protection for skin, eyes and the respiratory system is required due to either the measured (or potential for) high concentrations of atmospheric vapors, gases or particulates, or the site operations and work functions involve a high potential for splash, immersion or exposure to unexpected vapors, gases or particulates of materials that are harmful to skin or capable of being absorbed through the skin;
2. Substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible; or
3. Operations are being conducted in confined, poorly ventilated areas, and the absence of conditions requiring Level A protection have not been determined.

### Level B

1. The type and atmospheric concentration of substances have been identified and require a high level of respiratory protection, but less skin protection;
2. The atmosphere contains less than 19.5 percent oxygen; or
3. The presence of incompletely identified vapors or gases is indicated by a direct-reading organic vapor detection instrument, but vapors and gases are not suspected of containing high levels of chemicals harmful to skin or capable of being absorbed through the skin.

### Level C

1. The atmospheric contaminants, liquid splashes or other direct contact will not adversely affect or be absorbed through any exposed skin;
2. The types of air contaminants have been identified, concentrations measured, and an air-purifying respirator is available that can remove the contaminants; and
3. All criteria for the use of air-purifying respirators are met.

**Level D**

1. The atmosphere contains no known hazard; and
2. Work functions preclude splashes, immersion, or the potential for unexpected inhalation of or contact with hazardous levels of any chemicals.



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

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March-10, 2005

In Reply Refer To:  
1112 (CA-940) P

EMS TRANSMISSION: 3/10/05  
Instruction Memorandum No. CA-2005-024  
Expires: 09/30/06

To: DSDs, CDD District Manager, All Field Managers  
Attn: Fire Management Officers and Safety Officers

From: State Director

Subject: Policy on Respiratory Protection Program (RPP)

The attached policy restates procedures to protect employees from potential hazards associated with respiratory exposures to chemical, mineral, biological or other material agents detected in the workplace or on public lands.

The purpose of this policy is to establish the requirements for the use and maintenance of respiratory protection equipment for all California BLM facilities. This program is in compliance with Occupational Safety and Health (OSHA) regulations, 29 CFR 1910.134, 29 CFR 1910.120, and 485 DM 17.

If you have any questions regarding the policy, please call Jim Anger, State Safety and Health Manager, at (916) 978-4521.

Signed by:  
James Wesley Abbott  
Associate State Director

Authenticated by:  
Richard A. Erickson  
Records Management

3 Attachments:

1. The New OSHA Respiratory Protection Standard (3 pp)
2. Respiratory Protection Program (30 pp)
3. Appendix D to Sec.1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard (1 pp)

## THE NEW OSHA RESPIRATORY PROTECTION STANDARD

OSHA has published a final rule revising the Respiratory Protection Standard to add a new quantitative fit-testing procedure to assist workers and employers in the proper fit and selection of respirators. The rule became effective: **September 3, 2004.**

The new fit-testing protocol referred to as the Controlled Negative Pressure (CNP) REDON protocol, requires three different test exercises followed by two "redonnings" of the respirator. The three test exercises listed in order of administration are: Normal Breathing, Bending Over and Head Shaking.

The procedures for administering the new CNP REDON protocol with the three test exercises and two respirator donnings to an employee and for measuring respirator leakage during each test are summarized below:

- **Facing Forward.** In a normal standing position, without talking, breathe normally for 30 seconds; then while facing forward, hold breath for 10 seconds during sampling.
- **Bending over.** Bend at waist for 30 seconds and hold breath for 10 seconds during sampling.
- **Head Shaking.** Shake head back and forth vigorously several times shouting for approximately three seconds and, while facing forward, hold breath for 10 seconds during sampling.
- **First Re-donning.** Remove respirator, loosen all face-piece straps, and then re-don the respirator mask; after re-donning the mask, face forward and hold breath for 10 seconds during sampling.
- **Second Re-donning.** Remove respirator, loosen all face piece straps and the re-don the respirator mask again; after re-donning the mask, face forward and hold breath for 10 seconds during sampling.

Details of the new respiratory protection fit-testing requirements and notice of the final rule are published in the **August 4, 2004, Federal Register.**

The new standard reflects the current respirator technology and ways to ensure they fit. The revised standard also clarifies responsibility for administering a respirator program and its provisions, adds definitions, and provides specific guidance on respirator selection, use, hazard evaluation, medical evaluations, fit testing, and training.

The changes will simplify respirator requirements by deleting duplicated provisions in OSHA standards to make them consistent.

Major requirements of a respirator program as outlined in the new standard include:

- < A written plan with worksite-specific procedures to tailor programs to each worksite.
- < Risk Assessment (RA) is required to characterize respiratory hazards and conditions of work to help employers in selecting appropriate respirators.
- < Medical evaluations are required to determine the ability of workers to wear the respirator selected.
- < Fit testing of tight fitting respirators are required to reduce facial leakage and ensure that the respirators provide adequate protection.
- < Training is required to ensure that employees use respirators safely.
- < Periodic program evaluations are required to ensure that respirator use continues to be effective.

**CHANGES FROM THE PROPOSED STANDARD**

- < It supersedes existing standards that require semiannual fit testing and requires annual fit testing.
- < The use of portable quantitative fit testing devices is permitted.
- < The employer simply provides enough respirator choices to obtain an acceptable fit among employees instead of being required to have, at least, three different sizes of face pieces from two different manufactures.
- < The disposable respirators can be reused if they continue to protect employees.

**CHANGES FROM THE PROPOSED STANDARD**

- < The requirement of an annual review of the employee's medical status has been replaced by event driven reviews
- < A medical questionnaire rather than a hands-on physical examination can be used to evaluate an employee's ability to wear a respirator.
- < It accepts previous training in lieu of full initial training.
- < The compliance deadlines has been extended to 150 and 180 days after the effective date.

### Other Important Aspects

A revised table of Assigned Protection Factors (APF), the numerical ratings given to different types of respirators to tell users how much protection the respirator can provide, will be added to the final rule at a later date.

OSHA's original respirator protection standard will continue to apply to respirator use of occupational exposure to tuberculosis (TB) until the TB standard (proposed standard was published in November 1997) is made final. With regard to efficiency, any respirators certified by NIOSH under 42 CFR Part 84 and HEPA respirators certified under 30 CFR Part 11 will be acceptable to OSHA, in the interim, for protection against occupational exposure to TB.

The OSHA respirator standard and the NIOSH certification standard work together. The OSHA standard requires selection of NIOSH - certified respirators and their use as specified by the conditions of NIOSH certification. The OSHA standard is being published during the transition from respirators certified under the old NIOSH 30 CFR Part 11 certification procedures to those certified under the new NIOSH 42 Part 84 procedures. The OSHA standard accommodates respirator selection under either NIOSH standard.

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# **CALIFORNIA**

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## **BUREAU OF LAND MANAGEMENT**

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### **RESPIRATORY PROTECTION PROGRAM REQUIREMENTS**

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# RESPIRATORY PROTECTION PROGRAM

## TABLE OF CONTENTS

I.	Background	1
II.	Purpose	1
III.	Policy	1 - 3
IV.	Respiratory Protection Plan	3 - 5
V.	Hazardous Materials Technical Response Team	5 - 6

### Appendix

A.	Procedures for Selecting Respirators	7 - 8
B.	Medical Evaluation Procedures	9-10
C.	Fit Testing Procedures for Respirators	11
D.	Use of Respirators	12-13
E.	User Seal Check Procedures	14
F.	Maintenance and Care of Respirators	15-16
G.	Breathing Air Quality and Use	17
H.	Training Information	18-19
I.	Information for Employers Using Respirators When Not Required Under the Standard	20
J.	Program Evaluation	21
K.	Record Keeping	22
L.	OSHA Respirator Medical Evaluation Questionnaire	23-30

# Respiratory Protection Program (RPP)

## I. BACKGROUND

The RPP is established to provide worker protection and prevention of occupational diseases and injuries caused by employees breathing contaminated air. Respirator protection provides an important control method for limited employee exposure situations. It should never be considered a reliable control method in place of other types of respiratory protection control methods when tasks are frequent, defined, and of a continuous nature. General and local ventilation systems and substitution and process containment procedures provide priority control methods.

Many health effects of respiratory hazards are insidious and OSHA estimates that 6,850 to 11,000 cancer deaths occur annually from chronic exposure to occupational airborne carcinogens. Employees sometimes underestimate the complexity of respiratory protection and training is often general. Workers frequently receive the wrong respirator for the hazard and correct respirators are either not worn or incorrectly worn. The following RPP establishes guidelines for all California Bureau of Land Management (BLM) employees.

## II. PURPOSE

The purpose of this policy is to establish the requirements for the use and maintenance of respiratory protection equipment used at all California BLM facilities. This program is in compliance with Occupational Safety and Health (OSHA) regulations, 29 CFR 1910.134, 29, CFR 1910.120, and 485 DM 17. The objective of the RPP is to prevent employee exposure to airborne contaminants that are greater than permissible by OSHA standards. Respirators are to be used only where engineering controls of respiratory hazards are not feasible, while engineering controls are being installed, or in emergencies.

## III. POLICY

### A. RESPONSIBILITY

1. The State Director, Associate State Director, District Manager and Field Office Managers are responsible for establishing and maintaining the RPP.
2. The State Safety and Occupational Health Manager is responsible for:
  - a. Coordinating the program.
  - b. Developing and evaluating the written program.
  - c. Coordinating the medical testing, monitoring, and record keeping.

3. Each manager is responsible, based on any Risk Assessment identifying a need for worker respiratory protection, for the development and implementation of a written and work site specific RPP Program, as well as:
  - a. The selection of a suitably trained RPP administrator.
  - b. Provide employee training.
  - c. Provide employee medical evaluation.
  - d. Annual review and evaluation of the RPP.
4. The RPP administrator is responsible for:
  - a. Ensuring that employees follow the RPP program.
  - b. Procurement of selected respirators and other protective equipment.
  - c. Ensuring that employees are annually fit tested.
  - d. Provide annual training.
  - e. Assure that respirators are worn.
  - f. Ensures that employees follow established procedures for using, cleaning, and storage of the RPP equipment.
5. Employees are responsible for using their assigned respirator in accordance with instructions and training received. Employees will promptly report any problems or malfunctions to their supervisor, and comply with all provisions of the RPP. This RPP applies to all California BLM employees who are identified through Risk Assessment (RA) to be engaged in activities that may require the use of a respirator. Such activities may include occasional entry into uncontrolled hazardous waste sites for the purpose of site investigation, sampling, contract monitoring, etc.
6. Law Enforcement personnel approved to wear respirators and members of the HazMat Technical Response Team are covered by a separate RPP and will not be included in any other RPPs.
7. Where Risk Assessment (RA) does not identify any respiratory protection needs, the manager may provide respirators at the request of employees or permit employees to use their own respirators, if the RA determines that such respirator use will not in itself create a hazard. If management determines that any voluntary respirator use is permissible, the RPA shall:
  - a. Provide the respirator users with the information contained in appendix I of the Respiratory Protection Plan example included in this document.
  - b. Establish and implement those elements of a written respiratory protection program necessary to ensure that any employee using a respirator voluntarily is medically able to use that respirator, and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the user.

8. Exception: Managers are not required to include in a written respiratory protection program those employees whose only use of respirators involves the voluntary use of filtering face pieces (dust masks).

#### **IV. RESPIRATORY PROTECTION PLAN**

When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators will be used pursuant to the following requirements. Respirators will be supplied by the BLM. The BLM will be responsible for the establishment and maintenance of an RPP. The employee will use the provided respiratory protection in accordance with instructions and training received.

##### **A. REQUIREMENTS**

1. Each BLM facility will prepare a written standard of operating procedures for the RPP and identify the employees who will be included in the RPP.
2. The program must be administered by a suitably trained program administrator.
3. Respirator and cartridge selection will be based on the nature of the hazard to which the user is exposed. All BLM employees entering uncontrolled hazardous waste sites where the type and extent of respiratory hazard can not be reasonably determined prior to entry will wear a self-contained breathing apparatus (SCBA). The type of respiratory protection to be used for other safety and health related activities will be determined on a case-by-case basis through a JHA.
4. All respirators will be approved by the National Institute for Occupational Safety and Health, Mine Safety, and Health Administration.
5. Respirators will be cleaned and disinfected regularly. Respirators used by more than one worker must be thoroughly cleaned and disinfected after each use. Respirator cartridges that are used routinely must be evaluated prior to reuse. Storage of respirators must be in a convenient, clean, and sanitary location.
6. The RPP program administrator must review worker environment when anticipated changes to the work environment may occur. This review will be to determine conditions, degree of employee exposure, or stress due to atmospheric conditions.
7. Respirators will be assigned only to employees who have been determined by a physician to be able to perform the work and use the equipment. The respirator users will have their medical status reviewed annually or sooner if required by a physician, or if any changes in the user's health or work occur. Respirators will be used by only those to whom they are assigned.

Not everyone is able to wear a respirator. Conditions such as allergies, asthma, bronchitis, claustrophobia, emphysema, high blood pressure, heart conditions, and facial abnormalities (such as scars) could interfere with the safe use of a respirator.

8. **Fit Testing:** Those employees who have been medically cleared to wear a respirator will be annually fit tested by qualified personnel. There are two types of fit testing, qualitative and quantitative. During a qualitative fit test the employee is exposed to a test agent, such as an odorous chemical, while wearing the respirator. If no odor or irritation is detected, a proper fit is indicated. Quantitative fit testing offers the most accurate and detailed information on respirator fit. It involves the introduction of a harmless aerosol to the wearer while he/she is in a test chamber. While simulating workplace movements, the air inside and outside the face piece is measured for the presence of the aerosol to determine any leakage into the respirator.
9. Fit checks should be performed every time a respirator is to be used to perform a negative fit check. Employees should put the face piece on and adjust the straps for a comfortable fit. With palms over the inhalation inlets to prevent any air from getting in, inhale slowly and hold your breath for about ten seconds, the face piece should collapse inward. If it does and no leaks are felt outside, the fit should be secure. To perform a positive fit check, close off the exhalation valve with the palm of your hand and blow out slowly into the face piece and hold your breath for about ten seconds, the face piece should bulge out slightly. While holding your breath, check for air leaks between your face and the seal. If no leak can be detected and the face piece bulges out slightly, the fit should be secure. It is important to remember that a fit check is not a fit test.
10. There will be an annual evaluation of each BLM facility's RPP, by the Manager, RPP Administrator, the Field Office Safety Officer and/or the State Safety & Occupational Safety Manager, to determine the effectiveness of the program.
11. Respirator selection will be based on the following:
  - a. Nature of hazard.
  - b. Type of hazard.
  - c. Proximity to respirable air.
  - d. Time of use.
  - e. Activities.
  - f. Capabilities and limitations of respirator.
  - g. Assigned protection factors.

## **B. RESPIRATOR USE TRAINING**

1. The responsibility for respirator training is that of the RPP Administrator in coordination with the Safety Officers and Hazardous Materials Specialist located at each BLM facility. The training will address each of the following topics:
  - a. Respiratory hazards.
  - b. Engineering and administrative controls.
  - c. Selection reasoning.

- d. Respirator function, capabilities, and limitations.
- e. Donning and checking fit.
- f. Proper wearing.
- g. Maintenance, inspection, and storage.
- h. Emergency situations.
- i. Regulations.

Records of training should be documented by the RPP Administrator and copies forwarded to the State and District Office Safety and Health Specialists. These records will be maintained through a computer tracking system for the employment period of the employee.

### **C. RECORDS MANAGEMENT**

1. Records of respirator training and physician reviews must be kept for at least the duration of employment of the user or as specified by a specific contaminant exposure. Fit test and leak test records must be kept until replaced by newest test. RPP Administrators are to assure that employee records are completed and forwarded to the appropriate District Field Office and State Office Safety and Occupational Health personnel. The Safety and Occupational Health Manager will retain the records on a computer system or hard copy of the class roster and forward the documentation to CA-940 for filing in the Employee Medical File and the Safety HazMat Center.

### **V. HAZMAT TECHNICAL RESPONSE TEAM - Respiratory Protection Program**

(This section is provided as an example RPP. However, Appendix define regulatory requirements, with appendixes E, I, and L mandatory )

In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors the primary objective will be to prevent atmospheric contamination. When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators will be used pursuant to 29 CFR1910.134.

The employer will provide respirators and supplies which are applicable and suitable for the purposes intended, training, and medical evaluations.

The RPP Administrator will function as the HTRT Leader or the alternate Lead when the Leader is not available. The responsibilities of the RPP Administrator will include:

- A. Selection of respirators and related equipment, based on specific-work-site use (Refer to Procedures for selecting respirators: Appendix A).

- B. Arranging for medical evaluations for employees required to use respirators (Refer to Medical Evaluation Procedures: Appendix B).
- C. Arranging for the Fit Testing of employees using tight fitting respirators (Refer to Fit Testing Procedures for Respirators: Appendix D).
- D. Implement work-site-specific procedures for proper use of respirators in routine and reasonably foreseeable emergency situation (Refer to Use of Respirators: Appendix E).
- E. Implement procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators (Refer to Maintenance and Care of Respirators: Appendix F).
- F. Implement procedures to ensure adequate air quality, quantity, and flow of breathing respirators (Refer to Breathing Air Quality and Use: Appendix G).
- G. Provide training for employees about the respiratory hazards to which they are potentially Exposed during routine & emergency situations (Refer to Training Information: Appendix H).
- H. Provide training for employees in the proper use of respirators, including putting respirators on and removing them, any limitations on their use, and their maintenance (Refer to Training Information: Appendix H).
- I. Implement procedures for regularly evaluating the effectiveness of the program (Refer to Program Evaluation: Appendix I) and;
- J. Maintain required documentation and records related to the RPP (Refer to Record Keeping: Appendix J).

Work-site-specific procedures for respirator use will be clearly outlined in each Site Safety and Health Safety Plan (SSHP). A SSHP is required for each response the HTRT conducts.