

# A

## Health and Safety Plan

**STANDARD SITE SAFETY PLAN  
FOR EMERGENCY/POST-EMERGENCY PHASE COAL SLURRY SPILL.**

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ATTACHMENTS (Use appropriate attachment from encl. 4)

- GENERIC HAZARDOUS SUBSTANCE INFORMATION SHEETS, (file .01A)
- (J) MSDS/RIDS/CHRIS/CHEMTOX/TOMES . . . . . (TBD)
- HAZARD INFO FOR OILS CONTAINING BENZENE. . . . . (file .01B)
- HAZARD INFO FOR OILS NOT CONTAINING BENZENE . . . (file .01C)
- HAZARD INFO FOR HYDROGEN SULFIDE . . . . . (file .01D)
- (K) SITE MAP(s) (must be generated individually) . . . (file .02 )
- SIGNS/SYMPTOMS THAT INDICATE TOXIC EXPOSURES . . (file .03 )
- (A) HEAT STRESS INFO FROM NIOSH 86-112 (SHORT FORM) . (file .04A)
- HEAT STRESS INFO FROM NIOSH 86-112 (LONG FORM) . (file .04B)
- (B) COLD STRESS AND HYPOTHERMIA (SHORT FORM) . . . . (file .05A)
- COLD STRESS AND HYPOTHERMIA (LONG FORM) . . . . . (file .05B)
- (E) SANITATION REQUIREMENTS . . . . . (file .06 )
- CONFINED SPACE ENTRY CHECKLIST . . . . . (file .07 )
- SAFE MANUAL LIFTING PROCEDURES. . . . . (file .08 )
- SIMPLIFIED WORK PLAN . . . . . (file .09 )
- LATEST MONITORING REPORT SHEETS . . . . . (file .10 )
- DECON LAYOUT . . . . . (file .11A)
- DECON FOR OIL. . . . . (file .11B)
- BRIEFING LOG. . . . . (file .12 )
- (G) PPE ENSEMBLE SHEETS. . . . . (file .13 )
- (C) HELICOPTER SAFETY . . . . . (file .14 )
- (H) SMALL BOAT SAFETY. . . . . (file .15 )
- ON-SITE MEDICAL MONITORING (ENTRY TEAM PERSONNEL) (file .16 )
- SITE SAFETY PLAN EVALUATION. . . . . (file .17 )
- SITE ORGANIZATIONS--GENERAL DISCUSSION. . . . . (file .18 )
- SAFE WORK PRACTICES FOR OILY BIRD REHAB . . . . . (file .19 )
- PRODUCTS WHICH MAY CONTAIN BENZENE . . . . . (file .20 )
- (I) EMERGENCY CONTACT NUMBERS . . . . . (file .21 )
- (D) SAFETY BRIEFING FOR MOTOR VEHICLE OPERATORS. . . (file .22 )
- (F) PROCEDURES FOR BITES, STINGS, & POISONOUS PLANTS. (file .23 )
- HANDLING DRUMS, CONTAINERS, AND SPILL CONTAINMENT (file .24 )

A. SITE DESCRIPTION:

*This Plan Revised 4-6-01  
ED Chapin*

Site generally referred to as: BIG BRANCH SLURRY IMPOUNDMENT

MARTIN COUNTY COAL CORPORATION

Location: MARTIN COUITY, KY.

Surrounding population:      industrial,      residential,  
XX rural,      un-populated,      other:

Topography: XX rocky,      sandy beach,      docks, XX cliffs,  
     marshes,      other:

Primary Hazards:

- Chemical Exposure
- Fire/Explosion
- Oxygen Deficiency
- Confined/Enclosed Space Entry
- Ionizing Radiation
- Biological Hazards
- X Safety Hazards
- X Heat Stress
- X Cold Exposure
- X Noise
- OTHER:

**B. WORK PLAN AND ENTRY OBJECTIVES:**

1. All work shall be conducted in accordance with procedures established during pre-Shift briefings and attached work plans.

X A work plan is provided as attachment: SEE DAILY INCIDENT SUMMARY PLAN.

2. - ENTRY OBJECTIVES. Daily objectives may include site surveys, mechanical cleaning, slurry recovery, booming, dispersant application, wildlife rehabilitation/hazing, and related activities. Detailed objectives shall be developed daily, and shall be described during the pre-shift briefing.

C. SITE ORGANIZATION:

DEFINITIONS:

OSC: The On-Scene Coordinator (OSC) is the pre-designated federal official responsible for incident management in accordance with the national contingency plan. The OSC's designated rep serves as the on-site supervisor for USCG pers.

SSHO: The Site Safety and Health Officer (SSHO), often referred to simply as the Site Safety Officer, is the single individual responsible for developing and implementing the OSC's site-specific site safety and health plan.

SSHP: The Site Safety Supervisor, in conjunction with the site safety and health officer (SSHO) are the individual(s) in the field responsible for enforcing the SSSHO's site-specific site safety and health plan. An SSHP must be on-site at all times while the SSSHO may be with the OSC or at other locations.

FUNCTION NAME and PHONE (if appropriate)

OSC: Art Smith (770) 335-1532/ Eric Somerville
Incident Commander: Unified Command
OSC's On-Site rep/supervisor:
Site Safety and Health Officer: See Attachment (I) Ed Chafin
Site Safety and Health Supervisor(s): Leo Music, See Attachment (I), AND ED CHAFIN
Public Affairs Officer: Todd Lyons, (252) 339-1656
State rep: Jim Webb

Local reps:

Other Fed/State/Local reps:

Corp. of Engineers
MSHA NREPC
OSM KY F&W
EPA DSMRE
KDMM

RP's Rep: Dennis Hatfield (606) 454-4403

RP's On-Site rep and Contract supervisor: John Stepp (606) 454-4402 and Larry Muncie (onsite) cell (606) 424-9510

RP's Safety and Health Officer: Ed Chafin

RP's Safety and Health Supervisor(s): Ed Chafin and Leo Music

D. SITE CONTROL:

1. No person shall enter a site without subscribing to this or another appropriate Site Safety and Health plan.

2. Training.

a. In general, all personnel on site shall be trained adequately to perform their assigned tasks safely.

b. All personnel entering the site shall be fully informed about applicable hazards and procedures on site. See section L. below for on-site informational briefings program.

3. A Site Safety Map is provided as attachment K.

4. Mine-site operations will be governed by MSHA and KDMM regulations.

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**E. GENERAL SAFE WORK PRACTICES:**

The following safe work practices shall be adhered to while on site (check those that are appropriate & add any additional).

BUDDY SYSTEM. The buddy system shall be observed inside the Work Area.

Personnel must work within sight of their assigned partner at all times unless directed otherwise. A partner shall be assigned by the site safety supervisor as personnel check in. Personnel shall use radio communication and cellular phones to indicate that they need assistance in areas where personnel may be obscured from supervisors (e.g. high grass, boulders, or warehouse areas).

**XX LIGHTING.** Fixed or portable lighting shall be maintained for dark areas or work after sunset to ensure that sufficient illumination is provided. (See TABLE H-120.1 of 29 CFR 1910.120(m) for Minimum Illumination Intensities.) Adequate equipment lighting will suffice.

**XX SLIPPERY ROCKS AND SURFACES.** All personnel in the work area shall wear chemical resistant safety boots with steel toe/shank and textured bottoms (neoprene is a common material that is fairly resistant to many oils). Boat operators may substitute clean deck shoes with textured soles kept free of oil on cloth/leather uppers.

**XX WORK NEAR WATER.** All personnel working in boats, on docks, or generally within 10 feet of water deeper than 3 feet, shall wear Coast Guard approved personal flotation devices (PFDs) or work vests. See attachment H.

**XX HEAT STRESS.** The site safety and health supervisor shall generally be guided by the ACGIH guidelines in determining work/rest periods. Fluids shall be available at all times and encouraged during rest periods.

Further guidelines are provided as attachment:  A

**E. GENERAL SAFE WORK PRACTICES: (continued).**

**XX COLD STRESS.** The site safety and health supervisor shall generally be guided by the ACGIH guidelines in determining work/rest periods. Workers shall be provided with adequate warm clothing, rest opportunities, exposure protection, warm and/or sweet fluids shall also be available during rest periods. For prolonged water temperatures below 59 degrees F, or a combined water and air temperature less than 120 degrees F, exposure suits shall be worn by personnel working/traveling in small boats, and immersion suits shall be available for vessel operations other than small boats.

**X** Further guidelines are provided as attachment:  B .

**XX HIGH NOISE LEVELS.** Hearing protection shall be used in high noise areas (exceeding 84 dBA--generally where noise levels require personnel to raise their voices to be heard) designated by the site safety supervisor.

**XX ELECTRICAL HAZARDS.** Mine-site regulations regarding Electrical Installations will be followed. All off mine-site areas for which subsequent know electrical hazards develop shall be marked with suitable placards, barricades, or warning tape as necessary.

**XX TRAP HAZARDS.** Open manholes, pits, trenches, or similar hazards shall be covered and identified in the Pre-shift Briefing.

**XX MUD.** Dangerous mud areas shall be identified and covered in the Pre-shift Briefing.

**XX HELICOPTER OPERATIONS.** Pilots shall provide safety briefing for all passengers. Helicopter procedures are provided as attachment:  C .

**XX MOTOR VEHICLES.** Drivers shall maintain a safe speed at all times, and shall not be allowed to operate vehicles in a reckless manner.

**XX** A vehicle safety briefing is provided as attachment  D  and safe driving conditions and procedures will be identified and covered in the Pre-shift Briefing.

**E. GENERAL SAFE WORK PRACTICES: (continued).**

**XX DRUM HANDLING AND SPILL CONTAINMENT.**

**XX** Manual lifting and handling of drums and containers shall be kept to a minimum. To the extent possible, mechanical devices, drum slings or other mechanical assisting devices designed for that purpose shall be used.

**XX** Safe Lifting Procedures such as LIFT WITH LEGS NOT BACK shall be followed.

**XX NIGHT OPERATIONS**

**XX** Coal slurry containment and removal operations are continuous and during night operations, extreme caution must be exercised in the field. All personnel involved shall wear safety reflective articles for easy identification at night. Portable light stands throughout the property shall be illuminated in area's of construction and pumping operations. All vehicle traffic shall exercise caution and maintain safe operating speeds while in transit.

**POISONOUS\INFECTIOUS INSECTS, BITES, STINGS, PLANTS.**

**XX** BEE STINGS (also hornet or wasp bites) See attachment F.

**XX** POISONOUS SPIDERS (black widows or brown recluse)

**XX** TICKS (carriers of rocky mountain spotted fever, and lymes disease)

**XX** ANIMAL BITES (infection hazard, and/or rabies from some common sources such as: skunks, prairie dogs, foxes, bats, dogs, cats, raccoons, and cows).

**XX** SNAKE BITES (pit vipers (e.g., rattlesnakes and water moccasins); and coral snakes)

**XX** POISONOUS PLANTS (poison ivy, oak, or sumac)



**2. GENERAL SAFE WORK PRACTICES (continued).**

**GENERAL PREVENTION:**

- During pre-shift briefings, provide information on the location of hazards and how to deal with problems.
- Personnel should be provided with
  - long sleeved clothing
  - insect repellent
  - snake leggings as needed
- Personnel should inspect each other for ticks and signs of infected bites during breaks when working in designated areas.
- Personnel with allergies to bee stings or insect bites may suffer a medical emergency if bitten. Supervisors on site should be prepared to deal with these medical emergencies.
- Personnel with severe allergies must work in areas away from known/suspected hazards.
- Personnel with allergies to bee stings or other insect bites should notify their supervisors AND the site safety supervisor when reporting on this site.
- Personnel shall be briefed on procedures in accordance with the guidelines provided as attachment: I, call EMT's.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

On mine-site areas, all applicable regulations regarding personal protective equipment on mine-sites will be followed. The following PPE ensembles shall be used while off site.

See the PPE ensemble descriptions provided as attachment G.

LOCATION:	TASK:	Circle appropriate I.P.P.E.:	
<u>GENERAL</u>	monitors/supervisors	A B C <input checked="" type="checkbox"/> D	
	shoreline cleanup crew	A B C <input checked="" type="checkbox"/> D	
	vac truck crews	A B C <input checked="" type="checkbox"/> D	
	high pressure wash crew	A B C <input checked="" type="checkbox"/> D	SAFETY GLASSES or FACE SHIELD
	abrasive cleaning crew	A B C <input checked="" type="checkbox"/> D	
	hot water wash crew	A B C D	
	boat drivers	A B C <input checked="" type="checkbox"/> D	
	boat crews	A B C <input checked="" type="checkbox"/> D	
	skimmer crews	A B C <input checked="" type="checkbox"/> D	
	boom crews	A B C <input checked="" type="checkbox"/> D	
	sampling teams	A B C <input checked="" type="checkbox"/> D	
	survey teams	A B C <input checked="" type="checkbox"/> D	
	product pumping	A B C <input checked="" type="checkbox"/> D	
	Dispersant crews	A B C D	
	bioremediation crews	A B C D	

I. COMMUNICATIONS (Continued):

3. Phone communications:

On-Scene Coordinator:

~~(XX)~~ Art Smith                      (\_voice \_fax \_cellular \_pager \_home)  
( )                      (\_voice \_fax \_cellular \_pager \_home)

Site Safety and Health Officer:

(XX) See attachment I (\_voice \_fax \_cellular \_pager \_home)  
( )                      (\_voice \_fax \_cellular \_pager \_home)

Agency for Toxic Substance and Disease Registry (ATSDR)  
(404) 639-0615 (24 hr) (voice) 0655 (fax)

ATSDR can provide emergency medical and toxicological information, assist in determining procedures for potential chemical overexposures, and can provide on scene assistance for certain chemical emergencies.

Police:

( 606 ) 395-2326                      (\_voice \_fax \_cellular \_pager \_home)

Fire:

( 606 ) 395-2326                      (\_voice \_fax \_cellular \_pager \_home)

Ambulance/EMT/Hospital:

( 606 ) 395-2326                      (\_voice \_fax \_cellular \_pager \_home)

( 606 ) 298-0068                      (\_voice \_fax \_cellular \_pager \_home)

OTHER NUMBERS:

( )                      (\_voice \_fax \_cellular \_pager \_home)

( )                      (\_voice \_fax \_cellular \_pager \_home)

( )                      (\_voice \_fax \_cellular \_pager \_home)

( )                      (\_voice \_fax \_cellular \_pager \_home)

J. SITE SAFETY BRIEFINGS/MEETINGS:

1. All personnel, employees, contractors, and subcontractors shall be provided with site hazard training to communicate the nature, level and degree of hazards expected on site.

K. The SITE SAFETY OFFICER:

The Site Safety and Health Officer for this incident is:

Ed Chafin

The responsibilities of the SITE SAFETY OFFICER include (but are

not limited to):

- o coordination of all safety and health concerns for the entire work site;
- o keeping this plan current; and
- o liaison with site safety officers from other organizations.

L. AUTHORIZATIONS:

SITE SAFETY OFFICER:

Ed Chafin

DATE: 10-24-00

ON SCENE COORDINATOR:

Fred [Signature]

Marva Saley

DATE: 10/27/00

Revisions to 10-24-00 plan  
Signed 4-6-01  
Ed Chafin

**HEAT STROKE.** Heat stroke is the most serious of health problems associated with working in hot environments. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. The body's only effective means of removing excess heat is compromised with little warning to the victim that a crisis stage has been reached.

A heat stroke victim's skin is hot, usually dry, red or spotted. Body temperature is usually 105 degrees F or higher, and the victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur.

Any person with signs of symptoms of heat stroke requires immediate hospitalization. However, first aid should be immediately administered. This includes removing the victim to a cool area, thoroughly soaking the clothing with water, and vigorously fanning the body to increase cooling. Further treatment, at a medical facility, should be directed to the continuation of the cooling process and the monitoring of complications which often accompany the heat stroke. Early recognition and treatment of heat stroke is the only means of preventing permanent brain damage or death.

**HEAT EXHAUSTION.** Heat exhaustion includes several clinical disorders having symptoms which may resemble the early symptoms of heat stroke. Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated. In most cases, treatment involves having the victim rest in a cool place and drink plenty of liquids. Victims with mild cases of heat exhaustion usually recover spontaneously with this treatment. Those with severe cases may require extended care for several days. There are no known permanent effects.

**HEAT CRAMPS.** Heat cramps are painful spasms of the muscles that occur among those who sweat profusely in heat, drink large quantities of water, but do not adequately replace the body's salt loss. The drinking of large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Shortly thereafter, the low salt level in the muscles causes painful cramps. The affected muscles may be part of the arms, legs, or abdomen; but tired muscles (those used in performing the work) are usually the ones most susceptible to cramps. Cramps may occur during or after work hours and may be relieved by taking salted liquids by mouth.

**FAINING.** A worker who is not accustomed to hot environments and who stands erect and immobile in the heat may faint. With enlarged blood vessels in the skin and in the lower part of the body due to the body's attempts to control internal temperature, blood may pool there rather than return to the heart to be pumped to the brain. Upon lying down, the worker should soon recover. By moving around, and thereby preventing blood from pooling, the patient can prevent further fainting.

**HEAT RASH.** Heat rash, also known as prickly heat, is likely to occur in hot, humid environments where heat is not easily removed from the surface of the skin by evaporation and the skin remains wet most of the time. The sweat ducts become plugged, and a skin rash soon appears. When the rash is extensive or when it is complicated by infection, prickly heat can be very uncomfortable and may reduce a worker's performance. The worker can prevent this condition by resting in a cool place part of each day and by regularly bathing and drying the skin.

**TRANSIENT HEAT FATIGUE.** Transient heat fatigue refers to the temporary state of discomfort and mental or psychological strain arising from prolonged heat exposure. Workers unaccustomed to the heat are particularly susceptible and can suffer, to varying degrees, a decline in task performance, coordination, alertness, and vigilance. The severity of transient heat fatigue will be lessened by a period of gradual adjustment to the hot environment (heat acclimatization).

### PREPARING FOR WORK IN THE HEAT

Adjustment to heat, under normal circumstances, takes about a week, during which time the body will undergo a series of changes that will make continued exposure to heat more endurable. With each succeeding daily exposure, hazardous physiological responses will gradually decrease, while the sweat rate will increase. When the body becomes acclimated to the heat, the worker will find it possible to perform work with less strain and distress.

Gradual exposure to heat gives the body time to become accustomed to higher environmental temperatures. Heat disorders in general are more likely to occur among workers who have not been given time to adjust to working in the heat or among workers who have been away from hot environments and who have gotten accustomed to lower temperatures. Hot weather conditions of the summer are likely to affect the worker who is not acclimatized to heat. Likewise, workers who return to work after a leisurely vacation or extended illness may be affected by the heat in the work environment. Whenever such circumstances occur, the worker should be gradually reacclimated to the hot environment.

Heat stress depends, in part, on the amount of heat the worker's body produces while a job is being performed. The amount of heat produced during hard, steady work is much higher than that produced during intermittent or light work. Therefore, one way of reducing the potential for heat stress is to make the job easier or lessen its duration by providing adequate rest. Rather than be exposed to heat for extended periods of time during the course of a job, workers should, wherever possible, be permitted to distribute the workload evenly over the day and incorporate work-rest cycles. Work-rest cycles give the body an opportunity to get rid of excess heat, slow down the production of internal body heat, and provide greater blood flow to the skin.

**REST AREAS.** Providing cool rest areas in hot work environments considerably reduces the stress of working in those environments. There is no conclusive information available on the ideal temperature for a rest area. Rest areas should be as close to the work area as possible, and provide shade. Individual work periods should not be lengthened in favor of prolonged rest periods. Shorter but frequent work-rest cycles are the greatest benefit to the worker.

**DRINKING WATER.** In the course of a day's work in the heat, a worker may produce as much as 2 to 3 gallons of sweat. Because so many heat disorders involve excessive dehydration of the body, it is essential that water intake during the workday be about equal to the amount of sweat produced. Most workers exposed to hot conditions drink less fluids than needed because of an insufficient thirst drive. A worker, therefore, should not depend on thirst to signal when and how much to drink. Instead, the worker should drink 5 to 7 ounces of fluids every 15 to 20 minutes to replenish the necessary fluids in the body. There is no optimum temperature of drinking water, but most people tend not to drink warm or very cold fluids as readily as they will cool ones. Whatever the temperature of the water, it must be palatable and readily available. Individual drinking cups should be provided—never use a common drinking cup.

Heat acclimatized workers lose much less salt in their sweat than do workers who are not adjusted to the heat. The average American diet contains sufficient salt for acclimatized workers even when sweat production is high. If for some reason, salt replacement is required, the best way to compensate for the loss is to add a little extra salt to the food. Salt tablets **SHOULD NOT** be used.

**CAUTION—PERSONS WITH HEART PROBLEMS OR THOSE ON A "LOW SODIUM" DIET WHO WORK IN HOT ENVIRONMENTS SHOULD CONSULT A PHYSICIAN ABOUT WHAT TO DO UNDER THESE CONDITIONS.**

**PROTECTIVE CLOTHING.** Clothing inhibits the transfer of heat between the body and the surrounding environment. Therefore, in hot jobs where the air temperature is lower than skin temperature, wearing clothing reduces the body's ability to lose heat into the air. When air temperature is higher than skin temperature, clothing helps to prevent the transfer of heat from the air to the body. The advantage of wearing additional clothes, however, may be nullified if the clothes interfere with the evaporation of sweat (such as rain slickers or chemical protective clothing).

Frostbite and hypothermia are major hazards of working in cold temperatures. A cold environment can reduce the efficiency of a worker, a healthy worker who is properly protected and takes reasonable precautions can function efficiently in cold environments. See Appendix C of site safety program manual for further information.

## I. FACTORS AFFECTING COLD EXPOSURES.

- A. Important factors contributing to cold injury:  
 exposure to humidity and high winds, contact with moisture or metal, inadequate clothing, age, and general health.

Physical conditions that worsen the effects include:  
 fatigue, allergies, vascular disease, smoking drinking, and certain specific drugs or medicines.

### B. Important Warnings:

1. Pain in the extremities may be the first warning of dangerous exposure to cold.
2. Severe shivering must be taken as a sign of danger requiring removal from the cold exposure.
3. A worker should go immediately to a warming shelter if any of the following symptoms occur:
  - pain in the extremities (or frostnip), onset of heavy shivering, excessive fatigue, drowsiness, or
  - euphoria.

A litter should be used if possible for all but the mildest cases.

4. Hypothermia/Cold Stress victims must be re-warmed, but must not be re-warmed TOO FAST. In particular, victims should not be re-warmed by submersion in water at any temperature.

II. Hypothermia: Hypothermia is an abnormally low body temperature caused by exposure to cold in air or in water. Hypothermia results as the body loses heat faster than it can produce it. Air temperature alone is not enough to judge the cold hazard of a particular environment. Hypothermia cases often develop in air temperatures between 30-50 degrees Fahrenheit. When you figure in such factors as wind chill, the effective temperature can be significantly lower.

### A. Early warnings of hypothermia are:

1. uncontrollable shivering and the sensation of cold;
2. the heartbeat slows and sometimes becomes irregular, the pulse weakens, and the blood pressure changes;
3. fits of shivering, vague or slurred speech, memory lapses, incoherence, or drowsiness are some symptoms which may occur, and
4. other symptoms which may be seen before unconsciousness are cool skin, slow, irregular breathing, low blood pressure, apparent exhaustion, and inability to get up after a rest.

**B. First aid for hypothermia:** The main objective in handling potential cases of hypothermia is re-warming the body core evenly and without delay. **HOWEVER**, doing it **TOO RAPIDLY** can disrupt body functions such as circulation.

1. The outer layer of clothing should be removed when entering a warm shelter.
2. The remaining clothing should be loosened to permit sweat to evaporate.
3. Alcohol should not be consumed while in the warm environment.
4. Anyone on medications such as blood pressure control or water pills should consult a physician about possible side effects of cold stress.
5. If medical help is not immediately available:
  - a. Keep the person quiet, but keep them awake, if possible.
  - b. Avoid unnecessary movement. If it's necessary to move a hypothermia victim, use a litter the exertion of walking could aggravate circulation problems.
  - c. In a case of mild hypothermia where the person is conscious, the body may be packed with heat packs or warm towels at the neck, groin, and armpits.
  - d. As the extremities begin to recover warmth give conscious victims sweet, warm drinks. **AVOID** caffeine or alcoholic drinks.
  - e. Don't re-warm the core and the extremities at the same time. The sudden return of the cool blood pooled in the extremities to the heart can cause shock.

**C. WATER IMMERSION VICTIMS.** Flotation is the most important factor in water immersion survival, but may not be available if not provided in advance (see protective clothing notes below).

1. It is especially important to keep your head dry.
2. Avoid thrashing about and assume the **HELP** position (Heat Escape Lessening Posture) by crossing your wrists over your chest and drawing your knees close to your chest to avoid losing excess body heat. By using the **HELP** position, the head, neck, armpit, and groin areas are protected which are all high heat loss areas.
3. If others are in the water with you, huddle together to reduce heat loss, aid in rescue, and boost morale.

### III. OTHER COLD STRESS INJURIES:

#### A. FROSTBITE

1. Symptoms:
  - a. Whitened areas on skin
  - b. Burning sensation at first
  - c. Blistering
  - d. Affected part cold, numb, and tingling



**2. Treatment:**

- a. Cover the frozen part
- b. Provide extra clothing and blankets
- c. Bring person indoors
- d. Place the part in warm water or rewarm with warm packs
- e. If no water is available, wrap gently in a sheet and blanket or place frostbitten fingers under armpits
- f. Discontinue warming when the affected part becomes flushed and swollen
- g. Exercise part after rewarming but do not allow the person to walk after the affected part thaws
- h. Give sweet warm fluids to conscious person
- i. If feet are affected, put on dry socks over footwear
- j. If cheeks are affected, cover cheeks with warm hands
- k. Do not rub the part with anything
- l. Do not use heat lamp, hot water bottles, place part near stove or break blisters.
- p. Obtain medical assistance ASAP

**B. CHILBLAIN****1. Symptoms:**

- a. Recurrent localized itching, swelling, and painful inflammation of the fingers, toes, or ears.
- b. Severe spasms

**2. Treatment:**

- a. Remove to warmer area
- b. Consult physician

**C. FROSTNIP****1. Symptom: Skin turns white.****2. Treatment:**

- a. Remove to warmer area
- b. Refer to treatment for frostbite

**D. ACROCYANOSIS****1. Symptom: Hands & feet are cold, blue, and sweaty****2. Treatment:**

- a. Remove to warmer area
- b. Loosen tight clothing
- c. Consult physician

**E. TRENCH FOOT**

1. Symptoms:
  - a. Edema (swelling) of the foot
  - b. Tingling, itching
  - c. Severe pain
  - d. Blistering
2. Treatment:
  - a. Remove to warmer area
  - b. Refer to frostbite treatment
  - c. Consult physician

**F. RAYNAUD'S DISEASE**

1. Symptoms:
  - a. Fingers turn white and stiff
  - b. Intermittent blanching and reddening of the fingers and toes
  - c. Affected area tingles and becomes very red or reddish purple
2. Treatment:
  - a. Remove to warmer area
  - b. Consult physician

**IV. PREVENTING COLD STRESS**

- A. Reduce manual work loads.
- B. Prevent dehydration.
- C. Provide warm locations for breaks.
- D. Provide wind breaks & shelters.
- E. Schedule coldest work for the warmest part of the day.
- F. Move work to warmer areas whenever possible.
- G. Assign extra workers to highly demanding tasks.
- H. Relief workers available for workers needing a break
- I. Enforce the BUDDY SYSTEM.
- J. Minimize sitting/standing still for long periods.
- K. Older workers need to be extra careful in the cold.
- L. Sufficient sleep and good nutrition are important for maintaining a high level of tolerance to cold.
- M. Provide appropriate PROTECTIVE CLOTHING/EQUIPMENT. See Appendix C of the site safety program for more details.

1. **PRIORITY CLOTHING** includes protection of FEET, HANDS, HEAD, and FACE. Keeping the head covered is important because as much as 40% of body heat can be lost when the head is exposed.

2. ENSEMBLES FOR WORK WHEN WATER IMMERSION MAY OCCUR.

- a. Flotation (personal or throwable devices)
- b. Air trapped between layers of clothing will provide buoyancy and heat insulation, but Personal Flotation Devices (PFDs) offer the best chance for survival in cold water. Type III PFDs include float coats and mustang suits which provide flotation and thermal protection.
- c. Preposition throwable flotation devices in boats or work areas near water.

**I. BASIC SAFE WORK PRACTICES FOR ALL PASSENGERS/GROUND CREWS:**

A. Passengers should receive a safety briefing from helicopter operators including safety features and equipment, their location on the individual aircraft, water landing procedures when appropriate, and emergency information cards before taking off.

B. Passengers or ground crew members approaching helicopters shall stay in a crouched position, and shall be in clear view of the pilot while approaching or departing a helicopter.

C. Passengers and ground crew should approach/depart from the FRONT of the helicopter ONLY when signaled by the pilot; and should NEVER walk under or around the tail.

D. Loose fitting clothing, hats, hard hats, or other gear which might be caught in rotor down wash must be secured or removed within 100 feet of operating helicopters.

E. Passengers shall maintain a distance of 50 feet from helicopters while rotors are turning. Ground crew should also maintain this distance unless specific work practices are developed for closer work.

F. Passengers shall wear seat belts at all times.

G. Passengers and ground crew shall wear hearing protection (including communications headsets, or helmets) at all times around operating helicopters.

H. Passengers shall generally assist the pilot in watching for other traffic or ground obstacles as directed by the pilot.

I. During emergency landings in water:

1. Do not exit until rotor blades stop turning or pilot signals all clear.
2. Do not inflate life preservers until outside of the helicopter.

**II. SAFE WORK PRACTICES FOR CARGO HANDLING ARE FOUND IN 29 CFR 1910.183 AND INCLUDE:**

A. Use proper slings and tag lines in accordance with 29 CFR 1910.183(c) and 1910.184.

B. Testing and use of cargo hooks and electrically operated cargo hooks shall be performed in accordance with 29 CFR 1910.183(d) and (i).

C. Static charge on suspended loads shall be dissipated with a grounding device before ground crew touch the suspended load unless protective rubber gloves are being worn.

D. External loads shall not be lifted unless determined to be within the helicopter manufacturer's recommended rating.

E. Communications shall be maintained in accordance with 29 CFR 1910.183.

F. Ground and flight crew members shall be familiar with, and use the manual signaling system described in 29 CFR 1910.183.

# Martin County Coal Corporation

## Surface Hazard Training Checklist

### Hazard Recognition and Avoidance:

1. All persons on mine property are required to follow directions of the company official in charge.
2. Yield the right-of-way to larger and/or loaded vehicles.
3. Be alert for mobile equipment movement. Equipment operator's vision is limited. Be prepared to move quickly to a safe location.
4. Do not attempt to mount or dismount from moving vehicles or equipment.
5. Obey all warning signs, traffic signs and other signs posted on the mine property.
6. Low, medium and high voltage electrical circuits are present on mine property. Avoid contact with these sources - all represent potential sources of danger.
7. Repairs shall not be performed on equipment or machinery until power is turned off and the equipment or machinery has been blocked securely against motion.
8. All vendors, supply/delivery personnel, and other visitors shall check-in with the appropriate company official when they arrive on mine property.
9. When necessary for personnel to be near a highwall, visual examinations shall be made for loose or hazardous material prior to entering and while working in the area.
10. All compressed gas cylinders, full or empty, shall be kept secured and in an upright position. The caps shall be secured over the valves of the tanks when not in use. Gauges shall be disconnected and the caps secured before transporting the cylinders.

### Emergency and Evacuation Procedures:

1. First aid supplies are provided at strategic locations on the mine property.
2. Fire fighting equipment is located on mobile equipment and at other strategic locations on the mine property.
3. The fire and/or emergency signal is a continuous sounding of a horn or other audible alarm.

### Health and Safety Standards:

1. Hard hats and hard toe footwear are required on the mine property.
2. Eye protection shall be worn when there is a danger of injury to the eyes from flying particles or materials.
3. The use or possession of alcoholic beverages or illegal drugs on mine property is strictly prohibited.
4. No person shall ride or otherwise be transported on any piece of equipment that is not designed for that purpose.
5. No person shall engage in horseplay, practical jokes, fighting or other activities that could cause bodily injury or property damage.
6. Unauthorized persons shall not operate equipment or machinery.

### Respiratory Devices - Hearing Protection

1. Respiratory and hearing protection devices will be issued on request.

*NOTE: This checklist is for discussion purposes only. Company employees administering hazard training shall verbally address each checklist item with the individual receiving the training. At the conclusion of the training, the person giving the training will ensure that the trainee is thoroughly familiar with the hazards that he/she may encounter and how to avoid those hazards.*

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- A. **Potable water.** An adequate supply of potable water, or other drinking fluids, shall be maintained at all times throughout the site. Containers for drinking fluids shall be capable of being tightly closed, and equipped with a tap. These containers must also be labeled in such a manner that the contents are not accidentally used for other purposes. Where single service cups are supplied, the unused cups shall be maintained in a sanitary container; and a separate disposal container provided for used cups.
- B. **Non-potable water.** Water intended for uses other than drinking or washing shall be identified in a way that it is not accidentally used for drinking, washing, or cooking. There shall be no cross-connection of potable and non-potable water supplies.
- C. **Toilet facilities.** Toilet facilities shall be provided at a minimum in accordance with Table H-120.2 (Toilet Facilities) of 29 CFR 1910.120(n).
- |                        |   |
|------------------------|---|
| 1. 20 or fewer people: | 1 facility                              |
| 20-200 people:         | 1 toilet seat, and 1 urinal per 40 pers |
| more than 200 people:  | 1 toilet seat, and 1 urinal per 50 pers |
2. Toilets shall be provided such that they are readily accessible from all work areas. Mobile crews with ready access to toilet facilities using their own transportation, do not need to have toilet facilities located at their temporary work sites.
3. Sewage shall be handled in accordance with local health codes using one of the following means:
- sanitary sewer,
  - chemical toilets,
  - recirculating toilets,
  - combustion toilets, or flush toilets.
- D. Food handling shall be conducted in accordance with the requirements of local jurisdiction.
- E. **Washing Facilities.** Washing facilities shall be readily accessible by all employees. In addition to sanitary cleaning, these facilities shall be so equipped that they can be used to remove oily residues from the skin. Washing facilities shall be maintained free of contaminants above exposure limits, and as free as practical from oily residues.
- F. **Showers.** For operations lasting more than 6 months, showers and changing rooms must be provided in accordance with 29 CFR 1910.120(n)(7); and 29 CFR 1910.141(d)(3) and 1910.141(e).

Personnel briefed on first aid procedures must understand that "FIRST" aid implies that further treatment will probably be needed from trained/qualified medical personnel.

See the American Red Cross Standard First Aid Training Manual or the American Academy of Orthopedic Surgeons' "Emergency Care and Transportation of the Sick and Injured" for additional information and updated procedures.

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**B. FIRST AID FOR POISONOUS PLANTS**

I. **POISONOUS/INFECTIOUS INSECTS.** The primary concern here is ticks carrying lymes disease, poisonous spiders, bee stings, allergic sensitivities, and for certain response operations mosquitoes that may be carriers of infectious diseases.

A. **PREVENTION:**

1. During morning safety briefings, provide information on the location of hazards and how to deal with problems.
2. Personnel should be provided with long sleeved clothing and insect repellent in designated areas.
3. Personnel should inspect each other for ticks and signs of infected bites during breaks when working in designated areas.
4. Personnel with allergies to bee stings or insect bites may suffer a medical emergency if bitten. Supervisors on site should be prepared to deal with those medical emergencies.
5. Personnel with severe allergies must work in areas away from known/suspected bee hazards.

B. **BEE STINGS.** When a bee stings it may leave a stinger in the wound which will continue to inject venom. Wasps, hornets, and ants do not have this type of stinger, but they can produce multiple bites.

1. The following signs or symptoms may indicate an allergic reaction:

- swollen throat, difficulty breathing, or noisy breathing;
- sudden pain, severe itching, hives (or itching over the body), headache, acute redness and/or swelling of the wound;
- a white, firm swelling in the skin with itching;
- reduced consciousness, or shock.

2. **FIRST AID.**

- a. Wash the wound with soap and water.
- b. If symptoms of allergic reaction are present **REQUEST MEDICAL ASSISTANCE** and treat for shock.
- c. If stinger remains embedded, try to remove it **WITHOUT SQUEEZING IT** (this may inject more poison into the wound).
- d. Avoid using a tweezers since it may squeeze the stinger. Scrape the stinger out with a plastic card (e.g., credit card or drivers license).
- e. Persons with severe allergy to bee stings may carry an emergency treatment kit.
- f. Use a cold pack to reduce/limit swelling. **DO NOT PLACE A COLD PACK DIRECTLY ON THE SKIN!** Place gauze pad or clean cloth on the skin to prevent direct skin contact with the pack.



- g. Keep the wounded area below the level of the heart to slow the venom's spread.
- h. DO NOT administer aspirin or alcohol since this will dilate blood vessels enhancing spread of poison.

### C. POISONOUS SPIDERS.

#### 1. The BLACK WIDOW.

a. The black widow has a glossy black body that is about 1/2 inch long, and is almost an inch long when including the legs. The body is bulbous in shape with a characteristic red hour glass shape on the bottom side of the abdomen (it is not easily seen from above).

b. The black widow is a web building spider found in most parts of the U.S. and even into Canada, but generally prefers warm climates.

c. The most serious symptoms of a black widow bite are those of systemic poisoning. Initially the bite may produce no pain, and may not swell or cause local symptoms. As systemic symptoms develop they may initially appear similar to a severe case of the flu, but can develop into other more severe symptoms. Signs and symptoms can include:

- severe abdominal pain (similar to appendicitis), rigidity, pain/cramps in the muscles, and/or tightness in the chest and difficulty breathing;
- pain in the soles of the feet;
- alternating dry mouth and heavy salivation, nausea, and/or vomiting;
- profuse sweating, or swollen eyelids.

#### d. FIRST AID.

- (1) Wash the wound with soap and water.
- (2) Request medical assistance to address symptoms. The person usually recovers after several days of illness.
- (3) If symptoms of allergic reaction are present treat for shock.
- (4) A cold pack may be helpful if the bite is quickly recognized.

#### 2. The BROWN RECLUSE.

a. The brown recluse has a brown body about 1/8 inch long and about 1/2 inch long including the legs. It has a characteristic fiddle shape on the back.

b. The brown recluse does not build webs but may be encountered indoors in hiding locations. For this reason these spiders rarely bother humans, but some bites occur in the areas around Texas, Oklahoma, Kansas, and Missouri.

c. The most serious symptoms of the brown recluse bite are local effects. There may be no noticeable effect from this bite. In severe cases a red area appears around the bite. A crust may develop and fall off while the area of redness grows deeper. These bites may take several months to heal.

**d. FIRST AID.**

- (1) Wash the wound with soap and water.
- (2) If symptoms of allergic reaction are present **REQUEST MEDICAL ASSISTANCE** and treat for shock.
- (3) There is no good first aid for spider bites other than cleaning the wound if it can be found. A cold pack may be helpful if the bite is quickly recognized. A physician can address symptoms and the person usually recovers after several days of illness. In particular the local tissue damage from a brown recluse bite may develop gangrene.

**D. TICKS.**

1. Ticks are about 1/4 inch long. They attempt to bury their heads and crab-like pincers beneath the skin leaving only their bodies exposed above the skin.
2. Ticks carry infectious diseases (rocky mountain spotted fever or lymes disease) in this way into your blood. In most cases disease will not result, but flu like symptoms may develop several days later including:
  - fever,
  - rash,
  - joint pain, or
  - headaches.

**3. FIRST AID FOR POISONOUS/INFECTIOUS INSECTS.**

- a. Wash the wound with soap and water.
- b. If symptoms of allergic reaction are present **REQUEST MEDICAL ASSISTANCE** and treat for shock.
- c. Try using alcohol, oils, or a heated paper clip to encourage the tick to release it's grip. Grasp the tick and remove it quickly when it shows signs of letting go (the tick may wiggle its legs in an attempt to withdraw from the skin). If the head remains under the skin, soak the area several times daily and use a tweezers to attempt to remove.
- d. If fever, rash, or headaches develop within several weeks contact medical personnel.

**II. POISONOUS SNAKES, ANIMAL BITES, AND MARINE ANIMAL PUNCTURES.****A. GENERAL.**

1. In addition to animal bites (including bites by humans) and snake bites; stings from jellyfish, Portuguese man-o-war, anemones, corals, and hydras may be painful or cause allergic reactions. Similarly urchins, cone shells, stingrays, spiny fish (e.g., catfish, certain toads, or oyster fish) can cause allergic reactions or infection.

2. Personnel should also be briefed on procedure follow in the event of a bite, and known or suspected locations where problems may occur.
3. All personnel working in designated areas should be provided with snake leggings or hip high boots. Appropriate work clothing will also help prevent many other bite related problems.
4. If personnel notice potentially infected animals on site they should notify their supervisor immediately, **EVEN IF NO ONE HAS BEEN BITTEN**. Other personnel must be kept away from potentially infected animals until animal control authorities take appropriate action.

## **B. ANIMAL BITES AND RABIES.**

### **1. PREVENTION.**

a. The following signs/symptoms may indicate infected **ANIMAL BITES** in unreported cases (infection can develop within hours of a bite):

- pain or tenderness of a wound
- redness, heat, or swelling around the wound
- pus under the skin or in the wound
- red streaks trailing from the wound
- swollen lymph nodes in arm pits/groin/neck.

b. **RABIES** is a serious infection typically passed to humans by the saliva of diseased animal carriers such as those listed below.

(1) It is generally recognized that rabid animals may drool or act irritable, but any strange/abnormal behavior can also indicate infected animals. Infected animals may also act strangely quiet, partially paralyzed, or unafraid of humans.

(2) Some common animal sources of rabies include:

- skunks,
- prairie dogs,
- foxes,
- bats,
- dogs,
- cats,
- raccoons, and even
- cows.

c. If personnel notice potentially infected animals on site they should notify their supervisor immediately, **EVEN IF NO ONE HAS BEEN BITTEN**. Other personnel must be kept away from potentially infected animals until animal control authorities take appropriate action.

**2. FIRST AID FOR ANIMAL BITES/RABIES.**

- a. Get medical attention ASAP to address infection hazards and/or poisoning.
- b. Determine when person last had tetanus immunization (contact unit holding medical records for assistance).
- c. Interview victims and witnesses to attempt to identify the specific type of animal that gave a bite and/or unusual behaviors.
- d. **GENERAL** first aid for animal bites:
  - (1) Control serious bleeding. Apply pressure using a gauze pad. Use of tourniquets IS NOT advised unless absolutely necessary.
  - (2) **WASH YOUR HANDS** before touching a wound. Personnel should also wear **RUBBER GLOVES** and **FACE SHIELD** for working around human blood.
  - (3) Wash wounds that are not bleeding heavily. Use plain soapy water. Trained medical personnel must clean serious wounds.
  - (4) Cover with clean dressing and bandage.
- e. **RABIES** treatment must be administered by medical personnel. Prompt treatment is essential since there is no cure for rabies if it is allowed to develop in a wound. Rabies shots must be started quickly in order to prevent infection by building up immunity.

**C. SNAKE BITES.****1. PREVENTION AND GENERAL INFORMATION.**

- a. Many **SNAKE BITES** will not transmit venom.
- b. Snakes tend to be shy and will not attack people unless provoked! Water Moccasins are more aggressive than other snakes.
- c. With the exception of coral snakes, the common poisonous snakes of the United States will leave fang marks (two side-by-side holes). These will be about a half inch apart surrounded by an area of swelling, discoloration, and pain.
- d. In some cases teeth marks will also be present along with the fang marks.

**2. PIT VIPERS (such as rattlesnakes) are the most common poisonous snakes in the U.S.**

- a. Pit vipers produce a strong sensation of heat around the fang marks starting within several minutes of being bitten. This sensation continues to spread for about a day and a half.

(G)

Table 8-6. (cont.)

LEVEL OF PROTECTION	EQUIPMENT	PROTECTION PROVIDED	SHOULD BE USED WHEN:	LIMITING CRITERIA
C	<p><b>RECOMMENDED:</b></p> <ul style="list-style-type: none"> <li>• Full-facepiece, air-purifying, canister-equipped respirator.</li> <li>• Chemical-resistant clothing (overall and long-sleeved jacket; hooded, one- or two-piece chemical splash suit; disposable chemical-resistant one-piece suit).</li> <li>• Inner and outer chemical-resistant gloves.</li> <li>• Chemical-resistant safety boots/shoes.</li> <li>• Hard hat.</li> <li>• Two-way radio communications.</li> </ul> <p><b>OPTIONAL:</b></p> <ul style="list-style-type: none"> <li>• Coveralls.</li> <li>• Disposable boot covers.</li> <li>• Face shield.</li> <li>• Escape mask.</li> <li>• Long cotton underwear.</li> </ul>	<p>The same level of skin protection as Level B, but a lower level of respiratory protection.</p>	<ul style="list-style-type: none"> <li>• The atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect any exposed skin.</li> <li>• The types of air contaminants have been identified, concentrations measured, and a canister is available that can remove the contaminant.</li> <li>• All criteria for the use of air-purifying respirators are met.</li> </ul>	<ul style="list-style-type: none"> <li>• Atmospheric concentration of chemicals must not exceed IDLH levels.</li> <li>• The atmosphere must contain at least 19.5 percent oxygen.</li> </ul>
D	<p><b>RECOMMENDED:</b></p> <ul style="list-style-type: none"> <li>• Coveralls.</li> <li>• Safety boots/shoes.</li> <li>• Safety glasses or chemical splash goggles.</li> <li>• Hard hat.</li> </ul> <p><b>OPTIONAL:</b></p> <ul style="list-style-type: none"> <li>• Gloves.</li> <li>• Escape mask.</li> <li>• Face shield.</li> </ul>	<p>No respiratory protection. Minimal skin protection.</p>	<ul style="list-style-type: none"> <li>• The atmosphere contains no known hazard.</li> <li>• Work functions preclude splashes, immersion, or the potential for unexpected inhalation of or contact with hazardous levels of any chemicals.</li> </ul>	<ul style="list-style-type: none"> <li>• This level should not be worn in the Exclusion Zone.</li> <li>• The atmosphere must contain at least 19.5 percent oxygen.</li> </ul>

**Training**

Training in PPE use is recommended and, for respirators, required by federal regulation in the OSHA standards in 29 CFR Part 1910 Subparts I and Z. This training:

- Allows the user to become familiar with the equipment in a nonhazardous situation.
- Instills confidence of the user in his/her equipment.
- Makes the user aware of the limitations and capabilities of the equipment.
- Increases the efficiency of operations performed by workers wearing PPE.
- May increase the protective efficiency of PPE use.
- Reduces the expense of PPE maintenance.

Training should be completed prior to actual PPE use in a hazardous environment and should be repeated at least annually. At a minimum, the training portion of the PPE program should delineate the user's responsibilities and explain the following, utilizing both classroom and field training when necessary:

- OSHA requirements as delineated in 29 CFR Part 1910 Subparts I and Z.
- The proper use and maintenance of the selected PPE, including capabilities and limitations.

- The nature of the hazards and the consequences of not using the PPE.
- The human factors influencing PPE performance.
- Instruction in inspecting, donning, checking, fitting, and using PPE.
- Individualized respirator fit testing to ensure proper fit.
- Use of PPE in normal air for a long familiarity period and, finally, wearing PPE in a test atmosphere to evaluate its effectiveness.
- The user's responsibility (if any) for decontamination, cleaning, maintenance, and repair of PPE.
- Emergency procedures and self-rescue in the event of PPE failure.
- The buddy system (see Chapter 9, *Site Control*).
- The Site Safety Plan and the individual's responsibilities and duties in an emergency.

The discomfort and inconvenience of wearing PPE can create a resistance to the conscientious use of PPE. One essential aspect of training is to make the user aware of the need for PPE and to instill motivation for the proper use and maintenance of PPE.

# MASSEY COAL

MANAGEMENT SAFETY GUIDELINE 93-3

EFFECTIVE DATE: AUGUST 1, 1993

## REFLECTIVE CLOTHING

Everyone working at or visiting Massey Coal operations must follow these rules regarding reflective clothing. This standard promotes and enhances the safety of everyone by increasing their visibility to other people.

*"Reflective Clothing"* means any combination of reflective tape, decals, patches, or other materials that allows a person to be clearly visible to other persons at all times and from all directions. Such reflective material shall be placed so that it can be clearly seen regardless of wearer's stance or body position.

## UNDERGROUND OPERATIONS

- For underground operations, reflective clothing includes reflective surfaces on hard hats, belts, suspenders, jackets, coats, coveralls, shirts, pants, or any other items of outer clothing.

At the minimum, reflective materials are to be visible from the front, back and both sides of a person. Specifically, stripes at least 1/2 inch wide shall be placed around sleeves between the elbow and shoulder and around pant legs above the knee in order to insure visibility while the wearer is crawling or is in a crouched position.

If a person wears a jacket or coat only part of the time underground and takes it off at other times, then reflective materials shall be worn both on the person's jacket or coat and also on the underlying shirt.

- Every person entering a Massey Coal underground mine must wear reflective clothing as described by this guideline. The company will provide a limited quantity of reflective vests or similar articles that may be worn as a temporary substitute. However, the company cannot guarantee that an adequate supply of vests or other substitutes will be available at all times. No one will be allowed underground unless they are wearing the appropriate reflective clothing.

- The company will provide reasonable quantities of reflective tape at no cost to the member for use on that members underground mining clothing.

**PREPARATION PLANTS, LOADOUTS AND COAL HANDLING FACILITIES**

- For preparation plants and associated operations areas, loadouts and coal handling facilities, each member or visitor shall wear reflective clothing at all times. Reflective material with high visibility {orange} stripes are mandatory for all Massey members.
- At the minimum, reflective materials are to be visible on the front, back and sides of a person's upper body and on the front, back and sides of a person's hard hat. Shirts and jackets with attached reflective materials, reflective vests and reflective harness are examples of appropriate reflective clothing for preparation plants, loadouts and coal handling facilities.

**SURFACE OPERATIONS AREAS**

- For preparation plants and associated operations areas, loadouts and coal handling facilities, each member or visitor shall wear reflective clothing at all times. Reflective material with high visibility {orange} stripes are mandatory for all Massey members.
- At the minimum, reflective materials are to be visible on the front, back and sides of a person's upper body and on the front, back and sides of a person's hard hat. Shirts and jackets with attached reflective materials, reflective vests and reflective harness are examples of appropriate reflective clothing for preparation plants, loadouts and coal handling facilities.
- Surface operations areas include surface mines, shops and other similar locations. All personnel, including visitors, shall comply with this guideline.

In the event this guideline conflicts with State or Federal laws or regulations, the more stringent requirement shall govern.

Guideline Number:	MSG-83-3	Title:	Reflective Clothing
Released for Comment:	07/02/93	Effective Date:	08/01/93
Approved:	08/22/93		
Revised:	09/11/98		

A. Ensure that all boats comply with the appropriate state and federal regulations. In addition to the items discussed below certain types of vessels will require such items as USCG approved fire extinguishers, backfire flame control, powered ventilation, sound signaling devices (different from emergency signals), navigation lights/ signals, pollution placards, and marine sanitation devices.

B. Boat operators should familiarize themselves, and passengers with safety features and equipment on their boats.

C. Boats should be operated by qualified individuals.

D. Life jackets, work vests, mustang suits, or other appropriate Coast Guard approved Personal Flotation Devices (PFDs) should be worn by personnel in small boats.

1. Use of mustang suits are particularly critical under conditions of cold stress.

2. Types of Personal Flotation Devices (PFDs):

TYPE I. Off-shore life jacket provides the most buoyancy. It is effective for all waters and intended specifically for open, rough or remote waters where rescue may be delayed.

TYPE II. Near-shore buoyancy vests are intended for calm, inland water or where there is a good chance of quick rescue.

TYPE III. Flotation aids are good for calm, inland water, or where there is a good chance of quick rescue. Examples: float coats, fishing vests, and ski vests.

TYPE IV. These are throwable devices, not intended to be worn or to replace those that are worn.

TYPE V--SPECIAL USE. These are intended for specific activities (according to the conditions on the labels). Some examples: deck suits, mustang suits, work vests, and hybrid PFDs below.

TYPE V--HYBRID INFLATABLES. These PFDs contain a small amount of inherent buoyancy and an inflatable chamber. Performance equals that of a Type I, II, or III PFD (as noted on the label) WHEN INFLATED.

E. Small boats should generally not be operated for oil recovery after sunset. If this is required or poses minimal risk, routes of operations should be carefully prescribed, individual boats should maintain a communication schedule with a shore base, and should be fully equipped with appropriate running lights, emergency signals, and personnel onboard should be wearing emergency night signaling devices.

F. Distress signals (three or more for day and three or more for night) should be carried onboard all vessels. These devices may be required by regulation. They may be stored onboard or issued to individuals. If stored onboard they should be in a sealed, watertight, orange container marked "DISTRESS SIGNALS".

1. USCG approved pyrotechnic visual distress signals include red flares (hand-held or aerial), orange smoke (hand-held or floating), and launchers (for aerial red meteors or parachute flares).

**PYROTECHNIC DEVICES SHOULD NOT BE USED NEAR FLAMMABLE PRODUCT SPILLS.**



2. Non-pyrotechnic distress signals are not approved individually but need to meet certain requirements. They should be in serviceable condition, readily accessible, and certified by the manufacturer as complying with USCG requirements. These devices include orange distress flags, and electric distress lights.
3. Distress flags are day signals only. They must be at least 3 x 3 feet with a black square and ball on an orange background.
- a. Electric distress lights are for night use only. These devices automatically flash the international SOS code (... \_\_\_ ...) so a flashlight IS NOT considered a distress signal. Under inland navigation rules a high intensity strobe light is considered a distress signal.
  - b. It is a violation of regulations to display visual distress signals on the water except when assistance is required.
- G. Boat operators must keep their supervisors informed of their area of operations, especially when they change their work area (if plans call for a boat to move to another location during a shift, the operator should advise their supervisor of their actual time of departure).
- H. Boat operators should never anchor their boats by the stern. This is typically the lowest point on the boat due to design and/or loading, and is often squared off making it vulnerable to swamping.
- I. Portable fuel tanks should be filled outside of the boat. All sources of ignition in the area of fueling (e.g., engines, stoves or heat producing equipment, and electrical equipment) should be secured while fueling.
- J. Strict adherence to the buddy system must be observed in small boats; and all boats should be in direct visual or radio contact with a shore base at all times.
- K. To avoid slipping on wet decks or falling in small boats, personnel should remain seated while boat is underway. Horseplay and speeding must be strictly prohibited. Personnel should keep their center of gravity as low as possible while working in small boats.
- L. Boat operators must also ensure that boats are not overloaded. The capacity should be marked on a label on the boat. If it is not a general rule of thumb is:
- $$\text{LENGTH} \times \text{WIDTH} / 15 = \text{PEOPLE (150 lbs)}$$
- Since equipment adds to the weight it should be considered as well. Weight should be distributed evenly.
- M. Personnel working in or operating small boats should be equipped with appropriate shoes/boots designed to help maintain traction on wet surfaces.
- N. Safety sunglasses, and hearing protection should be worn by personnel working in or operating small boats where appropriate.
- O. Fixed ladders or other substantial access/egress should be provided at boat transfer locations exceeding several feet.

P. Depending on the specific nature of the operations (e.g., work in remote areas), other emergency equipment which should be considered such as: anchors, radios, bailers, first aid kits, and additional means of propulsion (e.g., paddles).

Q. Workers should be cautioned about using their legs as fenders, or getting their hands, arms, or legs between vessels or between vessels and docks or fixed structures.

ATTACHMENT 2 regel

# Martin County Coal Corporation

## Emergency Procedures

In the event of an illness or accident requiring an ambulance:

**\* Call the dispatch office at 395-2326**

If calling from a company phone, dial extension 219.

If calling from a company radio, contact Base 7.

The dispatch office, other gates and all security personnel monitor channel 15 on CB radio.

**\* Be specific as to the location and the nature of the emergency.**

The dispatch office will make arrangements for emergency medical care (EMTs) and emergency transportation (an ambulance) for ill or injured personnel.

### Additional emergency phone numbers:

NetCare Ambulance Service (Inez) (606) 298-0068

Highlands Regional Medical Center (606) 886-8511

### Martin County Coal safety personnel:

Training Center (Extension 406) (606) 395-2406

Ed Chafin, Manager of Safety (home)

Cell phone:

Leo Music, Safety Technician (home)

**Exemption 6 Personal privacy**

# Martin County Coal Corporation

## EMT/METs Available At Surface Locations

### Day Shift

<b>Stephen Boyd</b>	-	<b>MTR (SS)</b>
<b>Larry Cain</b>	-	<b>MTR</b>
<b>David Canterbury</b>	-	<b>Highwall Miner (SS)</b>
<b>Ed Chafin</b>	-	<b>Training Center</b>
<b>Steve Fraley</b>	-	<b>Haulage</b>
<b>Bobby Moore</b>	-	<b>Highwall Miner (SS)</b>
<b>L.T. Preece</b>	-	<b>MTR</b>
<b>Steve Preston</b>	-	<b>Dispatch</b>
<b>Garold Wells</b>	-	<b>MTR</b>
<b>Paul Williamson</b>	-	<b>Prep Plant</b>
<b>Charles Kirk</b>	-	<b>Prep Plant</b>

### Night/Midnight Shift

<b>Gary Daniel</b>	-	<b>MTR</b>
<b>Tim Hackworth</b>	-	<b>MTR</b>
<b>Terry Music</b>	-	<b>Prep Plant</b>

## **Martin County Coal Corporation**

### **EMT/METs Available At Other Locations**

<b>Jerry Bowen</b>	-	<b>Sandlick - Day</b>
<b>Larry Chaffin</b>	-	<b>Sandlick - Night</b>
<b>Charles Conn</b>	-	<b>Sandlick - Midnight</b>
<b>Mervil Dillon</b>	-	<b>Sandlick - Night</b>
<b>Jonah Fletcher</b>	-	<b>White Cabin - Day</b>
<b>Floyd Fletcher</b>	-	<b>Main Line Belts - Day</b>
<b>James Hamilton</b>	-	<b>Sandlick - Day</b>
<b>Dennis Hatfield</b>	-	<b>Administrative - Day</b>
<b>Robert Jordan</b>	-	<b>Security - Day</b>
<b>Milton Marcum</b>	-	<b>White Cabin - Night</b>
<b>Johnnie Moore</b>	-	<b>White Cabin - Day</b>
<b>Rodney Moore</b>	-	<b>Sandlick - Day</b>
<b>Vaughn Musselman</b>	-	<b>White Cabin - Night</b>
<b>Jerry Norris</b>	-	<b>Main Line Belts - Day</b>
<b>Danny Pack</b>	-	<b>Sandlick - Day</b>
<b>Michael Ratliff</b>	-	<b>Sandlick - Day</b>
<b>Benny Salyer</b>	-	<b>White Cabin - Day</b>
<b>John Stepp</b>	-	<b>Administrative - Day</b>
<b>Rodney Tackett</b>	-	<b>Sandlick - Day</b>

