

**DAN A. HUGHES
COMPANY LP
2011-12 Drilling Program**

**EMERGENCY
RESPONSE PLAN**

San Francisco Creek Well #1

ERP PREPARED BY WESTERN LAND SERVICES

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FOR ALL EMERGENCIES CALL 911

MEDICAL EMERGENCY:

Del Norte, Colorado
Rio Grande Hospital
0310 County Road 14
Del Norte, CO 81132
(719) 657-2510

Rio Grande County SHERIFF (719) 657-4000

LOCAL EMERGENCY NUMBERS (HAZ-MAT)

FIRE:

Dial 911

Pueblo Interagency Fire Dispatch Center 719-553-1600. (Supply township, range, section and quarter /quarter information and GPS coordinates listed on page 6).

Del Norte Fire Protection District (719) 657-3622

Rio Grande County SHERIFF (719) 657-4000

BLM Saguache Field Office, Colorado. Contact Andrew Archuleta (719) 655-2547

POISON CONTROL CENTER (800) 764-7661

UTILITY NOTIFICATION CENTER

Utility Notification Center of Colorado dial - 811

CONTACT LIST:

Client

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Operations Manager
Beeville, Texas 78104**

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**Dana Martin – Independent Drilling Consultant
JAND Consultants, LLC
Austin, Texas 78332**

Tel: 361-701-8069

Robert Holder - District Land Manager

Tel: 361-358-3752

Permitting, etc:

**Western Land Services
195 North 100 East, Suite #201
Richfield, UT 84701**

**Tel: 435-896-5501
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FIRE PREVENTION

Smoking is prohibited on all BLM and Forest Service land

During dry weather grass or brush fires can be caused by various means.

- a. Inadequate methods of cigarette disposal**
- b. Catalytic converters on vehicles**
- c. Hot machinery parts coming in contact with vegetation**
- d. Lighting, or**
- e. Spontaneous Combustion**

FIRE EMERGENCIES

Smoking is prohibited on all BLM and Forest service land

“First Stage” – Small Fires

- Extinguish immediately using available personnel and equipment. Make routine notification to immediate Project Manager/Drill Push.

“Second Stage” – Major Fire, Dangerous Conditions

- Investigate and Check the scene. Be sure the scene is safe.
- Gather information:
 - Account for all personnel
 - Exact location of Fire
 - Extent of Fire – area likely to be affected
 - Equipment involved in Fire
 - Note prevailing wind direction
 - Is Fire manageable?
 - Manpower and equipment on site
 - Manpower and equipment needed

CALL FOR HELP QUICKLY!

Contact Project Manager/Drill Push, begin **Emergency Contact Procedures (Next Page)**

Project Manager will contact Fire Department (911) and Crew Office.
Project Manager will coordinate crew response, appoint site leader to maintain radio communication.

Fight Fire with available personnel and equipment until help and additional equipment arrive. Contact and inform all surrounding landowners within proximity to the fire. Secure area from bystanders and non-essential personnel. Dispatch a vehicle to meet Fire Department responders.

- *DO NOT* fight fires involving electrical power lines or pipelines!
- *DO* contain fires from reaching any explosives or flammable materials if you are able to do so without risking your own safety.

FIRE EMERGENCY CONTACT PROCEDURES:

1. **Do Not Panic! Remain Calm. Survey the Scene. (*never fight an explosives fire*)**
2. **Extinguish the fire immediately, only if it can be accomplished safely without imminent danger.**
3. **At first sign of any fire, no matter how small. All crew operations involved will contact their Supervisors: Drill crew will contact the Project Manager/Drill push.**
4. **Give exact location of fire:**

634 Wagon Wheel Road, Del Norte Colorado 81132

Township 39N Range 5E Section 24 NWSE

Latitude 37.607890 Longitude -106.377440

- a. **Manager/Drill Push to contact:**
 - **911**
 - **Pueblo Interagency Fire Dispatch Center 719-553-1600. Supply township, range, section and quarter /quarter information, also include GPS coordinates listed above.**
 - **Del Norte Fire Protection District (719) 657-3622.**
 - **County Sheriff – Rio Grande County (719) 657-4000.**
 - **BLM Management Office. Andrew Archuleta (719) 655-2547 office.**
5. **Try to extinguish the fire if possible.**
6. **All personnel should move to a designated safe area for a head count.**
7. **Vehicles or equipment in the path of the fire should be moved, if this can be accomplished safely and without imminent danger to personnel.**
8. **Personnel should remember that wind and weather conditions could change quickly. A safe head count area at the start of a grass or brush fire can suddenly become unsafe. Plan ahead, stay alert and be ready to move men and equipment out of harms way.**

***** If a person's clothing catches on fire, wrap them in a blanket, rug, woolen coat, or any other natural fiber. Wrap around the head and neck first, then have the victim drop to the floor or ground and roll over slowly. If water is available, douse and have him roll in the spilled water.**

GENERAL COMMUNICATIONS

COMMUNICATIONS:

Communications between personnel will be through cell phones, satellite phones, or Channel Band (CB) Radio units.

INCIDENT REPORTING:

Incident reporting must be done correctly. Employees are required to report injury, illness, threats or acts of violence, vehicle incidents and near misses and hazards to their supervisors and or HSE advisors.

When using emergency 911, you must be specific on the location:

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Latitude 37.607890 Longitude -106.377440

MEDICAL EMERGENCIES

EVACUATION CONTINGENCY:

Determine the means of evacuation via land ambulance or Air-med.

Land ambulance procedures as follows:

The first person at the scene will access the injury then notify the proper personnel.

The person with the injured party will organize the evacuation by assigning the personnel necessary to carry out the evacuation.

The Drill/Survey Supervisor will determine the means of transportation for the injured, by vehicle, or ambulance. Notify Project Management immediately.

Air- med procedures as follows:

The Drill/Survey Supervisor will give the E.M.S. the exact location via lat/long numbers if possible and a land mark.

The person with the injured will do whatever is necessary to assure a quiet and visible area in order to hear and see the air - med approaching. Make the scene as visible from the air as possible via spot-light, colorful items, safety orange panels, mirrors or other shinning objects etc.

In the event of a serious injury, the first person to arrive on site will stop whatever work is happening and use his available personnel to carry out the following procedure.

FIRST AID PROCEDURES:

Access the area first to ensure that the scene is safe and render first aid to the limit of your ability.

Casualty is to be moved **ONLY** if there exists further immanent danger to the casualty and / or care giver.

Prevent injury or condition from becoming worse.

If you see an accident take place, call for emergency assistance immediately. Getting trained personnel to a victim is the best you can do for them, at this point in time. Then what? Let's review what we should and shouldn't do as we wait for trained professionals to arrive. Remember this...***Never attempt anything for which you have not been trained and that this Training Review Topic is in no way a replacement for formal first aid training.***

There are a wide range of injuries, which you may encounter, including:

*Shock	*Burns	*Bleeding	*Broken bones
*Eye injuries	*Electrical shock	*Chemical exposure	

The following routine should be memorized by all on-site personnel. Routine should be followed by personnel when they come upon an accident:

1. Call for medical assistance
2. Bring help to the victim
3. Check the victim for pulse and respiration
4. Don't move an injured person unless they are in further danger
5. Know where medical first aid is kept
6. Never do anything for which you have not been trained

Each type of medical emergency has its own first aid procedures:

Bleeding: Control it by placing a clean cloth on it and applying pressure. Direct pressure to the wound is probably all you will need. If the wound bleeds through the cloth or compress, apply another remembering not to remove the old one.

Shock: An injured person may go into shock, which could be fatal. Lay the person down; maintain body temperature by covering the victim. Raise the feet above the heart level and don't give the victim anything to drink. Check the pulse and respiration frequently.

Broken bones: Don't move the victim unless they are in further danger of injury. The wrong move may create further serious injury. Treat for shock and wait for trained personnel.

Eye injury: Eye injuries should be treated immediately by flushing with clean water for 15 minutes. Cover both eyes with a clean cloth. Never attempt to remove anything from the eye. Keep the person calm and wait for professional assistance.

Electrical shock: Electrical shock can be fatal to not only the victim, but also to you the rescuer. Don't touch a person who is in contact with live electrical current. Turn off the power before any attempt to help the victim. If you must remove the victim, use a dry non-conductive tool such as a belt or dry wood. After the victim is removed, check for pulse and respiration. Treat accordingly.

Burns: Treat chemical burns by flushing them with water for at least 15 minutes and remove contaminated clothing. Immerse in cold water, for a first or second-degree burn. Apply a moist sterile dressing and elevate burned limbs. Treat the victim for shock until medical providers arrive.

Chemical Exposure: If a person has swallowed, inhaled or been splashed with a hazardous chemical, refer to the chemicals label or MSDS sheet to determine proper treatment. Some assistance can be provided until medical assistance arrives.

- Eyes and skin: Flush with water for at least 15 minutes
- Inhalation: Move victim to fresh air and administer artificial respiration, if needed.
- Swallowing: Get medical help coming, check MSDS sheet or contact the poison control center

The most important thing is to refresh in your mind ahead of time, what you will need to do in an emergency. Then react quickly and stay calm. Your response in this time of crisis can literally be the difference between life and death.

GENERAL EMPLOYEE EMERGENCY RESPONSE PROCEDURES:

1. Get information and facts about the accident! Check the scene!! Is it safe for you to assist?! Contact the supervisor!

Be prepared to provide this information to the Supervisor:

- a. How many victims
- b. Condition of the victims
- c. **EXACT** location of the accident

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- d. Life threatening injuries
- e. Emergency equipment & help needed at the scene
- f. Help already at the scene
- g. Rescue needed

2. First Aid Action Guide (in this order)

- a. Remain calm
- b. DO NOT FURTHER HARM
- c. Do not move the victim unless absolutely necessary
- d. **GET TRAINED HELP ON THE WAY TO THE SCENE**

If Qualified:

- e. Check, Monitor, and Maintain: Airway, Breathing, Circulation
- f. Control bleeding
- g. Treat for shock
- h. Monitor vital signs
- i. Treat broken bones

3. Emergency Action Tips

- a. Notify Supervisor or Crew Office
 - The Supervisor will coordinate the emergency on a crew-wide level
 - The Supervisor/Crew Office will call hospital & authorities
- b. ONE PERSON will control & coordinate the accident site
 - Accident site leader
 - Remains in contact with the Supervisor
 - Directs crew personnel in the accident site area

- **In charge of site regardless of normal crew rank**
- e. **Check the scene and be sure the scene is safe**
- f. **Get first aid equipment, personnel, etc. To the scene quickly**
- g. **Contain the hazard(s)**
- h. **Treat the victim(s) – do not further harm**
- i. **Secure the area**
 - **Keep site from being disrupted**
 - **Shut off equipment, vehicles, etc.**
 - **Post guards to protect integrity of site**
 - **Keep bystanders, unauthorized, non-essential personnel away**
 - **Direct traffic as needed**
- i. **Dispatch a vehicle to meet ambulance and lead it to the site**
- j. **Keep access to the site open. Do not allow access to become blocked**
- k. **Keep communication lines open. STAY OFF THE RADIOS unless authorized**
- l. **Give a report to authority's if/when they arrive**

Meanwhile, the Supervisor shall ensure that EMS is notified as soon as possible by whatever means is available.

EMS should be given the location and the condition of the casualty. Be prepared to meet and lead EMS into the location, to help ensure a quick and accurate removal of the casualty.

EMS should be kept updated, never hang up unless directed to.

Only if no other alternative is available, ready causality for transport, and transport to the nearest point of access by EMS specialists. Unless as stated above, do not move the casualty.

First responder should remain with casualty to monitor vital signs and control bleeding as necessary.

SITE SPECIFIC HAZARDS

Uneven and slippery terrain – steep hills, grass lands, creeks, canyons, loose soil and/or washouts. Extreme weather conditions including; blizzards, high winds, and heavy snow.

Heavy traffic may be encountered on County Road 13 as well as Wagon Wheel Road.

Slow moving vehicles – Farm equipment, county maintenance vehicles and privately owned ATV's could be found on local roads. **Always yield the right of way.**

Wildlife Hazards:

Poisonous snakes, animals with rabies, Insects including Ticks, Wasps, Bees, Spiders, etc; Deer, mountain lions, rattlesnakes, are in the area and may be encountered.

(More details will be provided by the Safety Dept. on a daily basis)

TOP PROJECT HAZARD LIST

- **Traffic**
- **ATV's**
- **Livestock**
- **Slips / Trips / Falls**
- **Inclement Weather**
- **Heat Exhaustion**
- **Lightening**
- **Communications**
- **Potential for Buried Utilities**
- **Electric Power Lines**
- **Pipelines**
- **Hunters**
- **Remote Areas**
- **Rough Terrain**
- **Wildlife (Mountain Lions, Bobcat, Bears)**
- **Snakes**
- **Spiders**
- **Scorpions**
- **Wasps/Bees**
- **Spills**

INCLEMENT WEATHER

All Potentially threatening weather will be monitored and any developing storms will be tracked. As soon as the determination is made that a situation is developing, the Supervisor will determine when a potential weather emergency arises and will assign someone or himself to make all telephone calls required.

SNAKE BITE PROCEDURES

The following procedure is designed to render aid in the event of a snake bite. The signs and symptoms of a snake bite are as follows:

- Swelling and pain at the bite site
 - Headache (DO NOT give aspirin)
 - Nausea
 - Vomiting
 - Joint pain
 - Muscle cramps
1. Keep the victim calm and as still as possible. Preferably in a prone position.
 2. DO NOT elevate the bitten area. This will only hasten the spread of the venom. Try to keep the bite lower than the heart.
 3. Treat for shock.
 4. Attempt to identify the snake by a method that will not expose someone else to additional danger.
 5. Transport the victim to a medical facility immediately.

EMERGENCY SPILL RESPONSE

Any oil/chemical/fuel spill (regardless of size) must be treated and reported as an incident. The date, location, and estimated size of the spill must be reported. Clean up all spills and properly dispose of the hazardous waste, including contaminated soil (including snow), contaminated water, and clean-up materials.

MOBILIZE to the site with the needed safety and response equipment listed below:

- Fire extinguishers and fire prevention equipment
- Absorbent material
- Containment and berms
- Plastic tarps and liners
- First aid supplies
- Special PPE (neoprene gloves, aprons, goggles, breathing apparatus)
- Containers for clean-up materials
- Other tools and equipment as needed

ASSESS the scene for safety for your clean-up team and others:

- Evacuate the area, if necessary
- Notify landowners within proximity of the area, if necessary
- Eliminate hazard, if you can do so safely
- Contact others to eliminate hazard, if necessary
- Take steps to prevent fires or explosions
- Stop the source of the spill as soon as it is safe to do so
- Contain the extent of materials/liquids already spilled

CLEAN UP the contaminated area:

- Pick up as much of the contaminant as reasonably possible
- Use absorbent pads, pillows, mops, etc.
- Dispose of contaminated materials used for absorption in plastic bags
- Dispose of contaminated soil/snow and any organic matter
- Disposal of any materials shall be transported to an approved disposal site

VEHICLE ACCIDENT procedures: If a vehicle or truck/trailer carrying HAZARDOUS MATERIALS should get in an accident:

- Stay 500' away from accident
- Use binoculars to identify the placards posted on vehicle and/or trailer
- Call 911:
 - *Identify all numbers, colors & symbols from the placards
 - *Report legal location and/or mile marker
 - *Report all vehicles involved
 - *Report number of injuries
 - *Services needed, i.e. Sheriff, Highway Patrol, Fire Dept, Ambulance, HAZMAT team, etc.

- DO NOT try to save the driver/passengers if hazardous materials are leaking or spilling from containment
- If driver/passenger leaves the scene and approaches you, DO NOT touch them, but keep in communication from a safe distance
- Ask driver/passenger if they are hurt and assess their situation, pass this information on to EMT's upon arrival
- Provide traffic control in or around the scene while keeping everyone at least 500' from the accident

PIPELINE LEAK OR RUPTURE RESPONSE PLAN

THE FOLLOWING PLAN WILL BE USED IN THE EVENT OF A PIPELINE LEAK OR RUPTURE:

1. Pipelines carry gas and liquids used in the manufacture of many vital consumer products such as paint, plastics and clothing.
2. It is unlikely that you would experience a leak, but should a leak occur, the information below would help you.
 - a. Know how to identify pipeline signs and markers.
 - b. Know how to recognize a leak.
 - c. Know what to do if you notice a leak.
 - d. Know how to immediately report a leak.
3. Pipelines are constructed of steel pipe and are protected to prevent corrosion (rust). Assuming nothing strikes the pipeline, a properly designed, constructed, operated and maintained pipeline can last indefinitely.
4. If you can see a pipeline leak or you can smell it, the following signs might indicate a pipeline leak:
 - a. A strange or unusual odor near the pipeline (the products will have a typical petroleum odor)
 - b. A hissing or roaring sound (from escaping gas)
 - c. A patch of dead or discolored vegetation in an otherwise green setting along the pipeline
 - d. A slight mist of ice or a frozen area on exposed pipes, valves or the ground
 - e. Flames originating from the ground or valves along the pipeline route
 - f. Continuous bubbling in wet, flooded areas or marshlands, rivers creeks and bayous
 - g. Depending on weather conditions, leaked gas can collect in low places, become transparent or dissipate into the air
 - h. A dense white cloud of fog
5. Pipeline leaks can form a highly flammable white fog called a “vapor cloud.” If you find a pipeline leak or suspect there might be a problem on the pipeline, please take the following precautions:
 - a. Turn off any machinery and/or equipment in the immediate area. (Note: If a vapor cloud has surrounded a piece of running equipment do not go into the vapor cloud to turn off the equipment.)
 - b. Do not create any sparks or heat sources, which could ignite escaping gas or liquids. For example, do not start a vehicle, turn on or turn off any light switches, or light a match or cigarette. Turn off any lit gas pilots.

- c. Immediately leave the area on foot in a crosswind direction away from the vapor cloud and maintain a safe distance.
- d. Warn others to stay away from the leak.
- e. Do not drive into or near a vapor cloud. The car engine might ignite the vapor cloud.
- f. Find a pipeline marker that identifies the pipeline. Get the location, name and phone number of the pipeline company.
- g. Advise the Observer, Party Manager and HSE Manager immediately. Standby in a safe upwind area and wait for instructions

REQUIRED SAFETY EQUIPMENT

- Current project ERP with contact lists.
- Fire extinguishers in all trucks
- First aid kits in all trucks
- Hard hats, safety glasses and safety vests/orange shirts. Safety vests are not recommended for drillers unless other authorities require them.
- Daytime running lights are required while vehicles are in use
- Back up alarms on all company field vehicles and equipment.
- Safety belts must be worn at all times while operating all field units
- Sturdy, steel-toed boots. Only applicable for Drill units & Mechanics
- Snake Gaiters

TRASH

Responsibilities

It is everyone's responsibility to make sure all trash is picked up; we must leave the area as clean if not cleaner than it was before we arrived.

Personal Supplies

Some of the supplies that we consider as trash that we bring onto the job as follows:
Food containers, personal hygiene paper, cigarettes and containers and clothing.

Methods of Containing Trash

Do not throw trash loosely in the floor board of vehicles or in the back of the vehicle. This includes lunch bags, drink containers etc. Trash must be disposed of in the correct manner at the end of the day.

I, the undersigned, have received, and understand the Emergency Response Plan. It has been explained to me, and I agree to all the conditions.

PRINT NAME: _____

SIGNATURE: _____

DATE: _____

EMERGENCY CONTACT NUMBER:

Signature of person conducting employee orientation

WESTERN LAND SERVICES