## OBJECTIVE:

Fire is one of the worst things that can occur. In a facility such as ours any fires involving Methane Gas can be extremely dangerous due to the uncontrolled nature and flow of gas as well as its explosive potential. Obviously, everyone must work to prevent fires by utilizing safe work practices, including good housekeeping, sound monitoring and good maintenance practices. All personnel shall be trained on how to use available firefighting equipment and to recognize the type of fire for which each is designed. In the event of fire, personnel in the immediate vicinity are expected to use their training in the following order of priority to:

(a) Preserve human life,
(b) Protect public safety, and
(c) Minimize property damage.

Personnel are expected to turn on a fire alarm immediately when applicable and to extinguish the fire if it can be done so safely with the available equipment they have been trained on. Personnel are expected to initiate the facility specific shutdown procedures and evacuate to the designated staging area. Trained personnel may be assigned to specific fire watch and or suppression duties. These duties may be assigned verbally by employee's supervisor, may be posted, or may be contained in a site emergency plan, depending on local requirements. You are responsible for knowing what your duties are in the event of a fire. All fires need to be reported to your supervisor, as per local reporting procedures.

## Scope

What is Fire? Fire is a rapid chemical reaction. Fire burns because four components are present: fuel (crude oil, paper, wood), oxygen (air), heat (sparks from welding, static electricity, friction, hot surfaces, electrical equipment, flames), and chain reaction (involving the fuel and oxygen). Remove one of these—fuel, oxygen, or heat—or stop the chain reaction and the fire will go out. Just as it takes all four sides to make a pyramid, it takes all four components—fuel, oxygen, heat and a chain reaction—to make a fire. Speeding up the process results in an explosion.

## ENGINEERING CONTROLS/WORK PRACTICES

Ignition source control shall be used as an engineering control against the potential for fire at all business units and field project sites.

**Portable Fire Extinguishers**

Portable fire extinguishers shall be provided for use in incipient stage firefighting. All employees shall receive appropriate training before using a fire extinguisher. If for some reason an employee has not yet received the appropriate training, that employee shall evacuate the hazardous area immediately once a fire has been detected.

**Portable fire extinguishers shall be**:

- The correct class for the flammable materials present (minimum 1:A,10B:C for office, truck and shop; field service minimum per site requirement),
- Distributed so that the travel distance from any fire hazard area to an extinguisher is 50 feet or less, visually inspected every month, and subjected to an annual maintenance check.

**Fixed Suppression Systems:**

It is important for employees whom work at facilities with fixed systems such as sprinkler systems, F500, CO2 and other Clean Agent systems to know how to manually activate these during a fire. It is up to each employee to understand these systems. The company will provide training on these systems and guidance on when they should be operated.

**Types of Fires**

It is important that you be able to identify the type of fire to be fought, so that proper firefighting equipment can be used. The National Fire Protection Association classifies five categories of fire:

- **Class A**: These are fires in ordinary combustible materials, such as wood, paper, textiles, packing materials and rubbish. The cooling or quenching effects of water are effective in extinguishing these fires. Class A fires are also extinguished by multi-purpose chemicals, which provide rapid knock-down of the flame and form a fire retardant coating that prevents re-flash.

- **Class B**: Flammable liquids, such as oil, grease, gasoline or paint, and flammable gases are the sources of Class B fires. These fires can occur in the vapor-air mixture over the surface of the flammable and combustible liquids. A smothering or combustion-inhibiting effect is necessary to extinguish this type of fire. Dry chemicals, foam, Halon, carbon dioxide and water fog all can be used as extinguishing agents.

- **Class C**: These fires occur in electrical equipment (motors, generators, switch panels and computers) where a non-conduction extinguishing agent must be used. Dry chemicals, Halon and carbon dioxide are suitable. However, carbon dioxide and Halon are not recommended for use outdoors because they are readily dispersed by the wind. *When you fight any electrical fire, disconnect the power source first*. Do not use foam and water on a Class C fire; they conduct electricity and could cause personal injury or could short-circuit the equipment.

- **Class D**: Class D fires involve combustible metals such as magnesium, zirconium and sodium. Special techniques, extinguishing agents (such as dry powder) and equipment are required. Certain types of cathodic protection systems may contain combustible metals.

- **Class K**: Class K fires involve combustible cooking oils. An example of these fuels is vegetable or animal fats and oils that burn at extremely high temperatures. While most of these fuels are found in commercial kitchens and industrial cooking facilities, they can also be found in private homes where high-temperature turkey fryers are used. Wet chemicals are used in the extinguishing systems and portable extinguishers for Class K

## TRAINING

Employees receive training through lecture, video and/or computer-based presentations which may for certain employees be followed by hands-on drills. Supervisors shall ensure that all employees receive a thorough site-specific briefing upon assignment. Refresher training shall be provided at least annually. Training, conducted on initial assignment, includes:

- Fire hazards to which an employee is exposed
- What to do if employee discovers a fire
- Demonstration of alarm, if more than one type exists
- How to recognize fire exits
- Evacuation routes
- Assisting employees with disabilities
- Measures to contain fire (e.g., closing office doors, windows, etc. in immediate vicinity)
- Head count procedures (see EAP for details)
- Returning to building after the "all-clear" signal

## OTHER REQUIREMENTS

Insubordination in regards to this standard will be dealt with as per Big Ox Energy - Siouxland LLC's Disciplinary Program.