

# What to do?

In the event of a major industrial incident involving a toxic release...

## How will the population be alerted?

In the event of an incident of this type, the population is at risk and will be notified immediately on local radio and television stations. Safety instructions will be broadcasted in the event of an accidental release.

If you are contacted by an automated phone alert system or, if you hear about an incident on the local radio or television:

Tune into local radio or TV Stations for details and stay tuned for updates.

## In case the alarm is sounded:

- ▶ Unless otherwise instructed, immediately enter the closest building.
- ▶ Shelter in Place: tightly close all doors and windows, turn off all ventilation, heating, air exchange and air conditioning systems.
- ▶ Retrieve your first aid kit and keep it handy.
- ▶ Block any air vents in the room using wet towels, plastic film or tape
- ▶ Do not pick up your children from school. Teachers will apply the same instructions for the safety of your children.
- ▶ The safety and security of people in public areas (malls, hospitals etc.) will be managed by the personnel of those areas with the assistance of police and fire.
- ▶ If you are in a vehicle, immediately drive out of the affected zone as fast as possible while respecting speed limits and other traffic signs. Close your car windows and turn the heat or air conditioning off.
- ▶ Tune into the local radio station and follow the instructions.
- ▶ Evacuation instructions will be broadcast if necessary.
- ▶ Free up the phone lines for emergency services as needed.
- ▶ Do not leave your house or building until you've received information that there is an all-clear or you are instructed by the authorities to do so.



### To avoid breathing the toxic substances

Quickly and safely enter inside the closest building.

### To avoid the toxic substances from entering a building

Do not stay outside. Close and block openings for windows and doors. Stop all ventilation.

### To avoid exposure of children

Do not pick up your children at school.

### Call 911 only if you have an emergency and need help.

Phone lines must be kept clear for emergency services.

# Quick Facts

## Chemical Characteristics:

### Natural Gas Condensate | Sweet & Sour

Natural-gas condensate, also called natural gas liquid, is a clear, colourless low-density liquid mixture of hydrocarbons that are present as gaseous components in the raw natural gas produced from many natural gas fields. Some gas species within the raw natural gas will condense to a liquid state if the temperature is reduced to below the hydrocarbon dew point temperature at a set pressure.

### Petroleum Crude Oil | Sweet & Sour (PGI & PGII)

Crude oil is a black or green liquid mixture of hydrocarbons that exists as a liquid in underground geologic formations and remains a liquid when brought to the surface. It smells of rotten eggs and is an extremely flammable liquid and vapour. Petroleum is a broad category that includes both crude oil and petroleum products. The terms oil and petroleum are sometimes used interchangeably.

### Ethane

A colourless odourless very cold liquid. Boils at -88.6°C. Easily ignited and a flame can flash back to the source of a leak very easily. Vapours are heavier than air. Vapours can asphyxiate by the displacement of air from enclosed spaces. Direct contact can cause frostbite. Contact of very cold liquid with water may result in vigorous or violent boiling. If the water is hot, there is the possibility that a liquid "superheat" explosion may occur. Pressures may build to dangerous levels if liquid gas contacts water in a closed container. Under prolonged exposure to fire or intense heat the containers may rupture violently and rocket. Used in manufacturing other chemicals.

### Propane

The product that is stored and distributed from this facility is odorized with Ethyl Mercaptan making the product smell like rotten eggs or boiling cabbage to aid in detection. The following properties of the substance are worth noting when related to the risks of release and are provided below.

### Liquid Natural Gas (LNG)

Liquefied Natural Gas (LNG) is natural gas (predominantly methane, CH<sub>4</sub>, with some mixture of ethane, C<sub>2</sub>H<sub>6</sub>) that has been cooled down to liquid form for ease and safety of non-pressurized storage or transport. It takes up about 1/600th the volume of natural gas in the gaseous state (at standard conditions for temperature and pressure). It is odourless, colourless, non-toxic and non-corrosive.

### Butane

Butane is a colorless gas with a faint petroleum-like odour. For transportation it may be odorized. It is shipped as a liquefied gas under its vapour pressure. Contact with the liquid can cause frostbite. It is easily ignited. Its vapours are heavier than air. Any leak can be either liquid or vapour. Under prolonged exposure to fire or intense heat the containers may rupture violently and rocket.

## Potential Health Impacts

Although is it unlikely that such an incident would occur, exposure to Chlorine Dioxide could potentially cause the following health impacts

Route of Exposure		Description	
Natural Gas Condensate	Sweet	Eye Contact	May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing and blurred or hazy vision.
	Sweet & Sour	Skin contact	Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
		Ingestion	May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Ingestion of Isopentane may cause ventricular fibrillation and kidney, liver and bone marrow damage.
		Inhalation	Fatal if inhaled. May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. This product contains Hydrogen Sulphide which may accumulate in confined spaces. Inhalation of Hydrogen Sulphide may cause loss of sense of smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness, and fluid buildup in the lungs (pulmonary edema), which can be fatal.
Propane	Sour	Eye Contact	Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing and blurred or hazy vision. Hydrogen Sulphide may cause eye irritation at 1-20 ppm and acute conjunctivitis at higher concentrations. Above 50 ppm H <sub>2</sub> S, eye irritation may include symptoms of redness, severe swelling, tearing, sensitivity to light and the appearance of 'halos' around lights.
	Eye Contact	Eye Contact	Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. The pain after contact with liquid can quickly subside. Permanent eye damage or blindness could result.
		Skin Contact	Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. Symptoms of frostbite include change in skin color to white or grayish-yellow. The pain after contact with liquid can quickly subside.
Inhalation	Inhalation	May displace oxygen and cause rapid suffocation. Central nervous system depression can occur if product is present in concentrations that will reduce the oxygen content of air below 18 % (vol). Symptoms may include headache, light-headedness, drowsiness, disorientation, vomiting and seizures. Unconsciousness and death may occur with severe oxygen deprivation. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness and nose and throat pain.	

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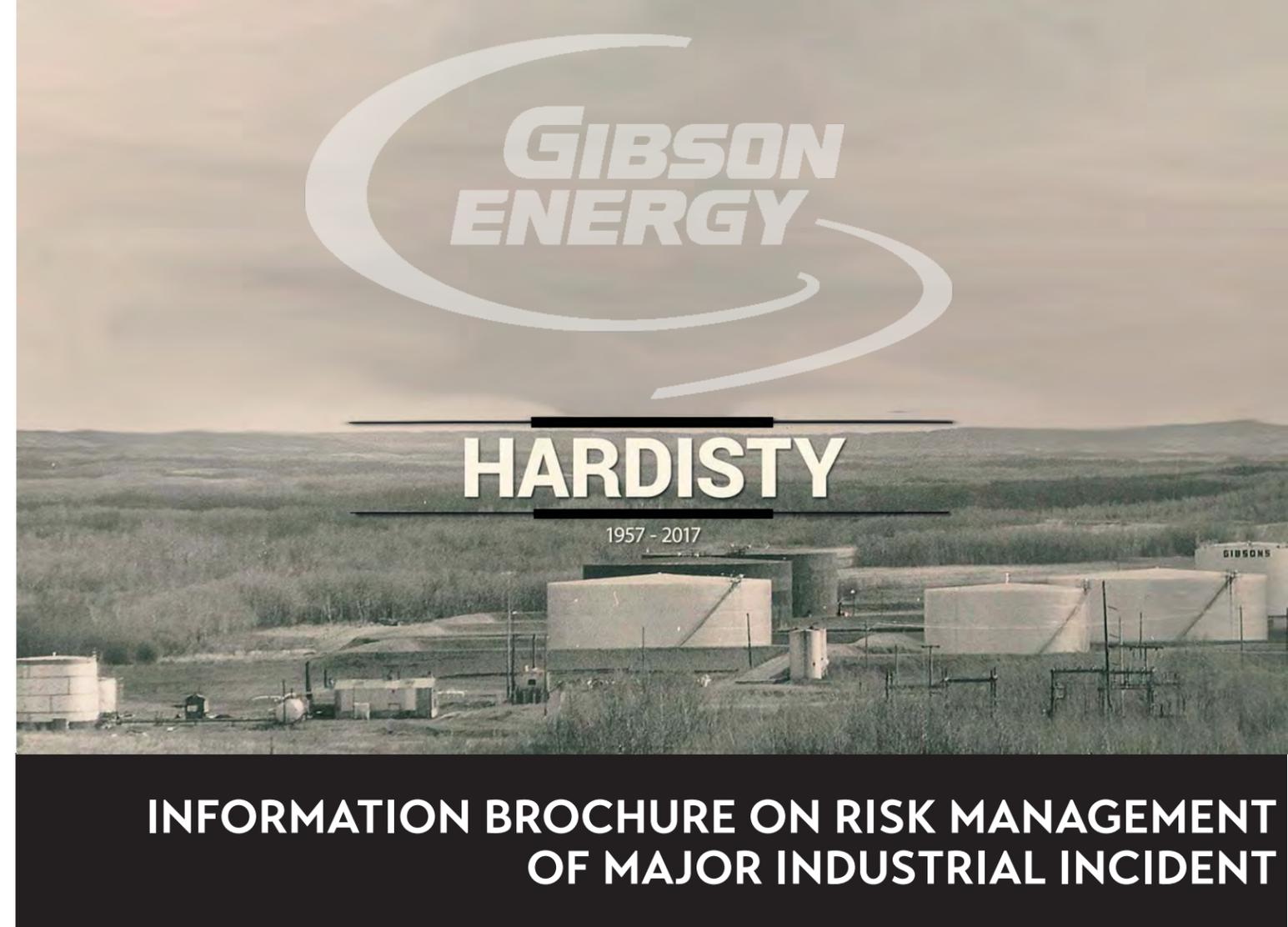
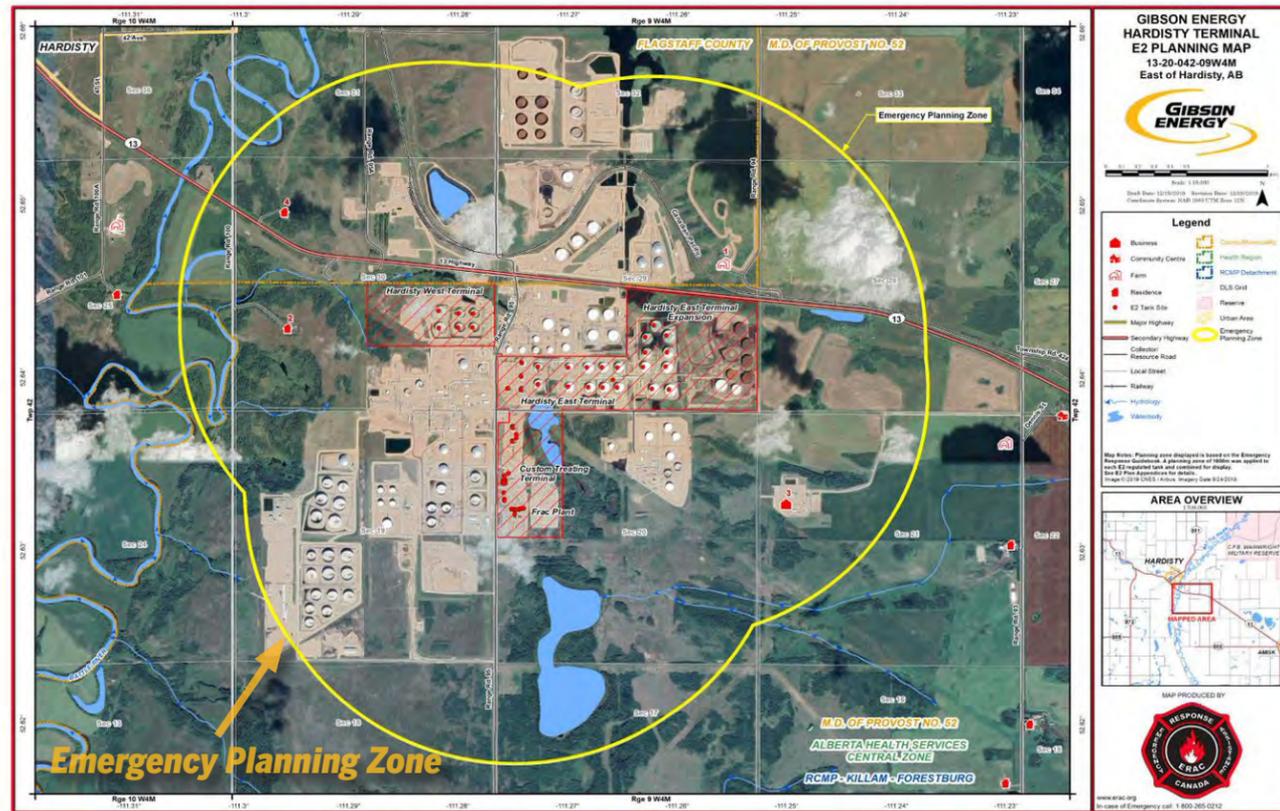
Route of Exposure		Description
Petroleum Crude Oil : Sweet & Sour (PG / PGI / PGII)	Eye Contact	Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hydrogen sulphide may cause eye irritation at 1-20 ppm and acute conjunctivitis at higher concentrations. Above 50 ppm H <sub>2</sub> S, eye irritation may include symptoms of redness, severe swelling, tearing, sensitivity to light and the appearance of 'Halos' around lights.
		Skin contact
	Ingestion	May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Ingestion of Isopentane may cause ventricular fibrillation and kidney, liver, and bone marrow damage.
		Inhalation
Liquid Natural Gas   Butane   Ethane	Eye Contact	Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. The pain after contact with liquid can quickly subside. Permanent eye damage or blindness could result. May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
		Skin contact
	Inhalation	May displace oxygen and cause rapid suffocation. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness and nose and throat pain. This product may contain small amounts of Hydrogen Sulphide. Inhalation of Hydrogen Sulphide may cause loss of sense of smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness and fluid buildup in the lungs (pulmonary edema), which can be fatal.

## Gibson Energy's Prevention and Emergency Measures

The principal measure that have been implemented at the Site include:

- ◆ Risk management system to ensure all risks are managed and mitigated;
- ◆ Equipment maintenance procedures and programs;
- ◆ Comprehensive training programs that include start up, shut down, emergency and other operational procedures;
- ◆ Network of high-technology surveillance and control systems;
- ◆ 24-hour monitoring of the process by qualified operators;
- ◆ Policies requiring all equipment or process changes endure a multi disciplinary evaluation and authorization process;
- ◆ Mechanical integrity program that meets or exceeds industrial standards;
- ◆ Environment, health and safety training for all employees and contractors;
- ◆ Regular emergency drills conducted in conjunction with the local fire department;
- ◆ Emergency response team in place 24 hours a day;
- ◆ Comprehensive emergency response plan;
- ◆ Preventative incident - investigation procedures;
- ◆ Regular internal and external audits to ensure risk management.

*Gibsons facility attains excellent results by identifying hazards and implementing controls to eliminate injuries.*



## Why you are receiving this Pamphlet?

You are receiving this Emergency Information Pamphlet, as one of our valued neighbors, located close to our facility, and in accordance with The Canadian Environmental Protection Act, 1999 (CEPA 1999).

In order to ensure your safety, communication with you is critical. This pamphlet will provide you with information on what to do in the unlikely case of an emergency.

We are also required to request your emergency contact information. Please call or email our Operations Manager, Kent Drager at 1-780-888-8267 or email him at [kent.drager@gibsonenergy.com](mailto:kent.drager@gibsonenergy.com) and provide your name and preferred contact number.



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*Thank you*



*Remember to keep this Information Brochure handy!*