Emergency Management Plan

Approval 10348-03-01
Sec. 4.6.34(z)

Ryley Facility, Alberta

April 2024

Revision Summary

Section	Revision Detail	Approved By (Name and Title)	Date Approved
All	Annual review	Stan Yuha, Facility Manager	January 9, 2023
Rev. Summary	Added Revision Summary section	Brian Fraser, ECM	June 23, 2023
Phone Numbers	Updated contacts	Brian Fraser, ECM	April 17, 2024

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EMERGENCY MANAGEMENT PLAN

Approved By: Stan Yuha, Facility Manager _____
Signature

Approved By: Wayne Codd, Operations Manager _____
Signature

1.0 Introduction

1.1 Emergency Management Plan

This Emergency Management Plan has been written with the intent of providing operating guidelines to deal with any foreseeable emergencies which may arise during the course of operations at the Ryley Facility or during transportation of wastes to or from Ryley.

1.2 Purpose

The purpose of the Emergency Management Plan is to provide a framework for both general and specific policies and procedures and lines of communication that can be put into motion in the event of an emergency. By implementing and maintaining an effective Emergency Management Plan, Clean Harbors Canada, Inc. plans to reduce the Corporations exposure to loss by providing for:

i) The safety and well-being of all employees and others;
ii) Minimizing damage to the environment;
iii) Process of recovery and resumption of operations;
iv) And effective incident reporting chain.

1.3 Revision Procedure

1.3.1 The Emergency Management Plan policies, frameworks, roles, and responsibilities described, will be reviewed and revised annually and will be the responsibility of the Facility Manager or his delegate. Employees who actually participate in any emergency response are in the best position to determine the safest and most efficient methods.

1.3.2 Revisions to the Plan will be initiated by completing the Revision Request Form (Figure 1). The Revision Request must pass through the stages identified on the form.

1.3.3 The Facility Manager or his delegate has the responsibility for maintaining the currency of the Emergency Management Plan procedures at Clean Harbors Canada, Inc. (Ryley).

2.0 Company Operations

2.1 Clean Harbors Canada, Inc. (Ryley), owns and operates a Transfer Station, Class 1 Secure Landfill, and Hazardous Waste Transportation and Service Centre.

2.2 Clean Harbors Canada, Inc. (Ryley), offers as a service, the transportation, consolidation, and storage of acceptable specified waste streams.

2.3 Office Location

Clean Harbors Canada, Inc.
50114 – Range Road 173
Ryley, Alberta T0B 4A0
Ph #780-663-3828
Fax #780-663-3539

3.0 Emergency Response

3.1 In case of emergency, this facility is equipped with an audible emergency alarm system. This system consists of alarm horns located throughout the facility. The horns are positioned in such a manner that they will be heard regardless of an employee's location, or activity. The alarm will be activated from a control panel located in the dispatcher's office. Personnel working in landfill will be notified of an emergency via the radio

3.2 For the purpose of the alarm system, certain areas of the plant have been designated as emergency assembly points. The locations of these points are as follows:

a) Primary assembly point – NW corner of parking lot in front of office facilities;
b) Secondary assembly point – green landfill shack;
c) Tertiary assembly point – move crosswind to a safe distance from the emergency site; this area will be determined by the E.R.T. Coordinator at the time.

4.0 Facility Alarm System Procedure

4.1 Emergency Procedure

In the event of an emergency, the alarm system will be activated, causing the plant emergency horn to sound. After approximately twenty (10) seconds, the horn will cease. Once the alarm has sounded, employees will proceed as follows:

a) Secure their worksite to ensure that it is not left in a hazardous state;
b) Insure that all personnel in the area are aware that the alarm has been sounded;
c) Proceed to the appropriate assembly point and await instructions.

Termination of an emergency will be announced over the loud speaker (All-Clear).

In the event of an emergency, the Facility Manager or designate will initiate the Facility Alarm System.

4.2 Emergency Phone List

Fire Dept 911
RCMP, Tofield 911
Ambulance, Tofield 911
Village Office 780-663-3653
County Office……780-6633730
Alberta Public Safety Service 1-800-272-9600
(Evacuation and Disaster Services)
Hospital (Health Center). 780-662-3263
Poison Center 1-800-332-1414
(If busy, call Calgary) 1-403-270-1414
Federal Health & Safety Office……...1-800-641-4049
Canutec 1-613-996-6666
Alberta Environment & Protected Areas (AEPA) . .1-800-222-6514

4.3 Facility Alarm System

4.3.1 Testing Procedures

Testing of the plant alarm system to ensure operational readiness should take place once monthly before the 15 (fifteenth) day of the month. It will consist of activating the alarm system for approximately 5-10 seconds.

5.0 Emergency Situations Classification

5.0.1 This section will outline the responsibilities and communications network for the following incidents:

5.1 Serious injury/death at facility
5.2 Fire/explosion at facility
5.3 Leaks/spills
5.4 Bomb threats
5.5 Demonstration/pickets at facility
5.6 Storms and Tornadoes

5.0.2 During most of the above listed incidents, the Resource Team will convene to assist and advise the Response Team and Emergency Response Coordinator. The Resource Team will consist of the following personnel:

i) Facility Manager (Stan Yuha)
ii) The Emergency Response Coordinator position will be filled by the Operations Manager (Wayne Codd)

iii) Receiving Coordinator (who will bring office radio to the conference room).

5.0.3 Duties of the Resource Team

i) To assemble in the conference room in the Administration Building or alternate, as required.
ii) Pick-up visitor's log and driver's sign-in log on the way to conference room.
iii) Receive all area head counts and confirm with records.
iv) Advise and assist the Emergency Response Team to deal with the incident.
v) Advise building wardens as to where the staff should reassemble in the event of adverse weather or changes in conditions.
vi) To provide assistance to Facility Manager, as required.
vii) To advise when "all-clear" can be sounded.
viii) To contact all external agencies for accident investigation.

5.0.4 The incidents involving fire, explosion, bomb threat, and evacuations of the plant outline some of the responsibilities for the Building Wardens, listed below:

i)	Administration/Maintenance Building:		Krystle Venables
		Alternate:	Leanne Monteith
ii)	Drum Staging & Process Building:		Thomas Peschel
		Alternate:	Nick Sideroff
iii)	Lab Buildings:		Todd Webb
		Alternate:	Thomas Peschel
iv)	Landfill Area:		Jerimiah Meyn
		Alternate:	Bill Fawcett

5.0.5 For all buildings, a Warden shall be named.
5.0.6 The degree to which the outlined procedures are implemented will depend upon the severity of the incident.

5.1 Serious Injury or Death at Facility

The following procedures outline the responsibilities and communications network in the event of a serious injury or death. Serious injury would include broken bones, traumatic amputation, internal bleeding, loss of an eye, third degree burns, paralysis, poisoning, or significant exposure to designated substances.

5.1.1 Senior Employee at the Scene

Should a serious injury occur at the facility, the Senior Employee should:

- **i)** Sound alarm and inform Dispatch;
- **ii)** Assess hazards and provide First Aid until relieved;
- **iii)** Secure and isolate area;
- **iv)** In the event of a fatality, the body should be covered but not moved.

The senior employee will then secure the accident site until Emergency Response Team arrives and makes notes for a preliminary accident investigation.

5.1.2 Supervisor

The Operations Supervisor should:

- **i)** Advise Facility Manager of incident and situation;
- **ii)** Conduct detailed assessment of cause of incident, and damage to material or equipment;
- **iii)** Determine if additional personnel or equipment is required;
- **iv)** Act as coordinator between Emergency Response Team and Resource Team;
- **v)** Log sequence of events as they occur.

5.1.3 The Facility Manager

The Facility Manager should:

- **i)** Begin Clean Harbors Canada, Inc. (Ryley) incident alert procedures;
- **ii)** Convene Resource Team;
- **iii)** Maintain communication with E.R. Coordinator;
- **iv)** See Figure 2;
- **v)** In the event of a fatality, the RCMP must be notified. They will then contact the Medical Examiner's Office.
- **vi)** Notify the Federal Health & Safety Office.

Note: Telephone use is to be restricted during an emergency. All incoming calls are to be forwarded to the Resource Team.

5.2 Fire and/or Explosion at Facility

The following procedures outline the responsibilities and communications network in the event of a fire and/or explosion at the Facility. The activities outlined may be implemented in varying degrees depending upon the nature and extent of the situation. See Figure 3. For location of the fire hydrant, stand pipes and man-gates, See Figure 4, 5 and 6.

Fire, Level I

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1			■		
2					
3					
4					High

Risk Reduction:

Electrical fires when the transfer pumps are in operation would be the most common cause of a fire. The risk is reduced by having the electrical systems checked as part of the regular maintenance schedule.

ABC CO_2 fire extinguishers are located strategically throughout the facility (see figures 4, 5, 6). Every pump shack has a fire extinguisher.

Fire, Level II

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1				■	
2					
3					
4					High

Risk Reduction:

A Level II fire could be caused by an escalated electrical fire or fuel being ignited.

The tanks are grounded, are not under pressure, and they are all above ground. Each tank has a containment area, so if the contents ever ignited, the fire would not likely spread out of the containment area. Multiple emergency system shut down buttons are located around the facility, and as previously mentioned, fire extinguishers are located on site. The warehouse is also equipped with a fire suppression system.

Fire, Level III

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1					
2					
3					
4					High

Risk Reduction:

A Level III fire would be caused by a Level I or II fire out of control, a major electrical problem in the pump shack, ignition of all waste material or a natural gas explosion.

All electrical equipment is maintained as per the maintenance schedule.

The tanks are grounded, are not under pressure, and they are all above ground. Each tank has a containment area, so if the contents ever ignited, the fire would not likely spread out of the containment area. Multiple emergency system shut down buttons are located around the facility and fire extinguishers are located on site. The warehouse is also equipped with a fire suppression system.

Figure 1

Clean Harbors Canada, Inc
Ryley, Alberta

Suggested Revision of Operating Policies and Procedures

Location: _____ Section: _____

Suggested Revision: _____

_____

_____

_____

_____

_____

_____

_____

Suggested Date: _____ By: _____

Concurred By: _____

Routing: Operations Manager

Figure 2

SERIOUS INJURY OR DEATH

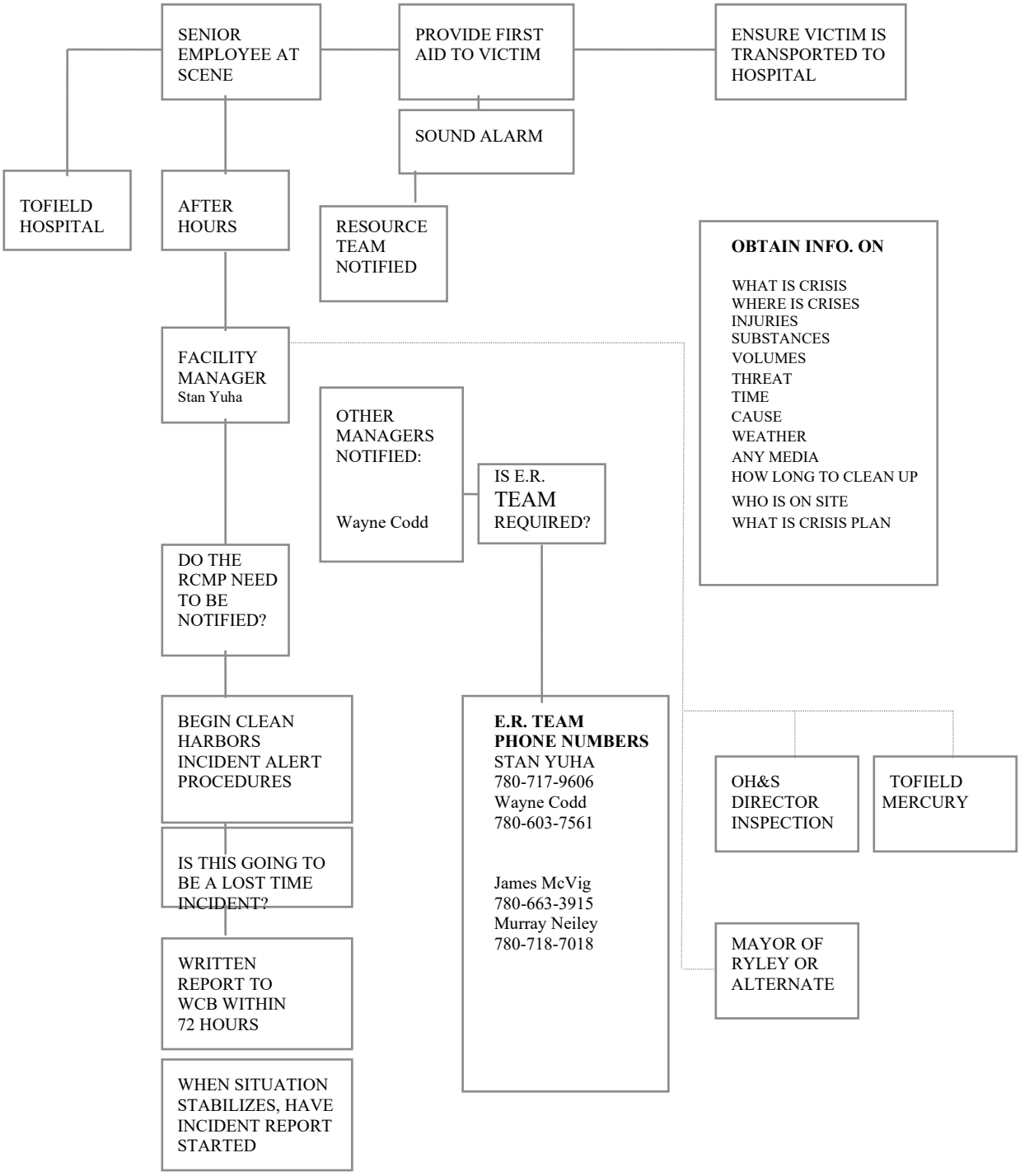


Figure 3

FIRE AND/OR EXPLOSION

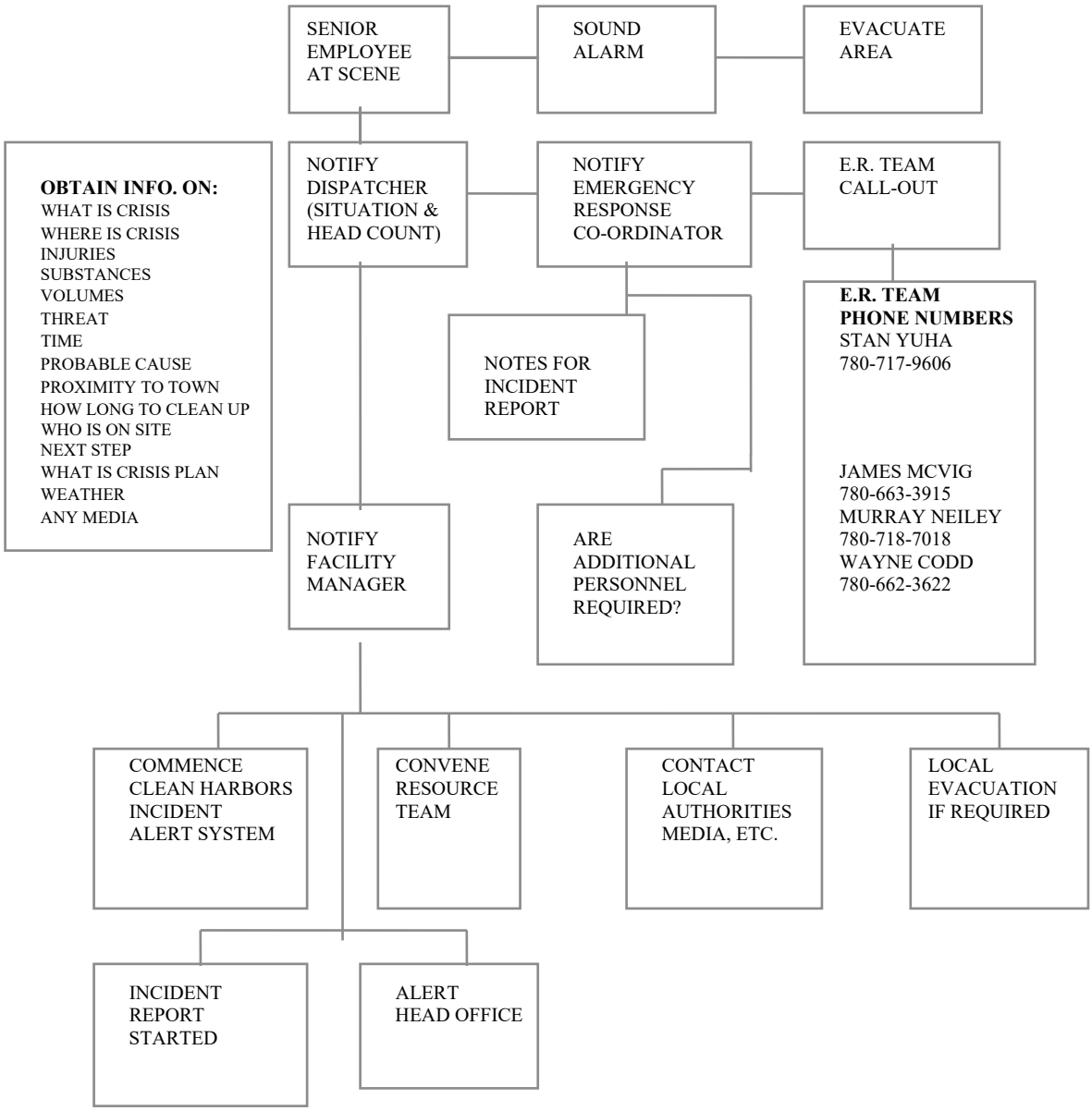


Figure 4

FIRE EXTINGUISHER LOCATIONS - LANDFILL

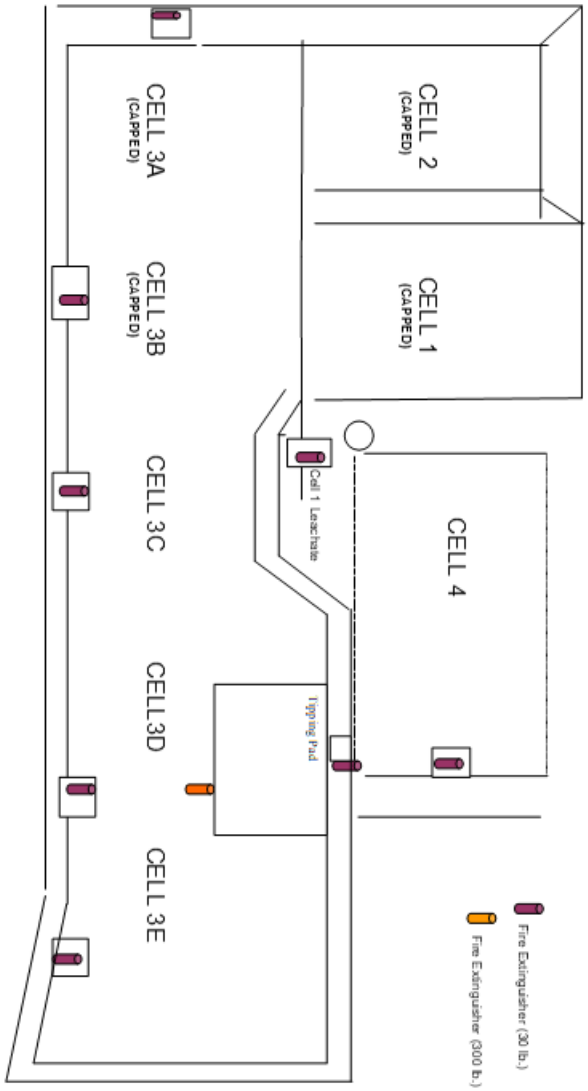


Figure 5

FIRE HYDRANT AND EXTINGUISHER LOCATIONS

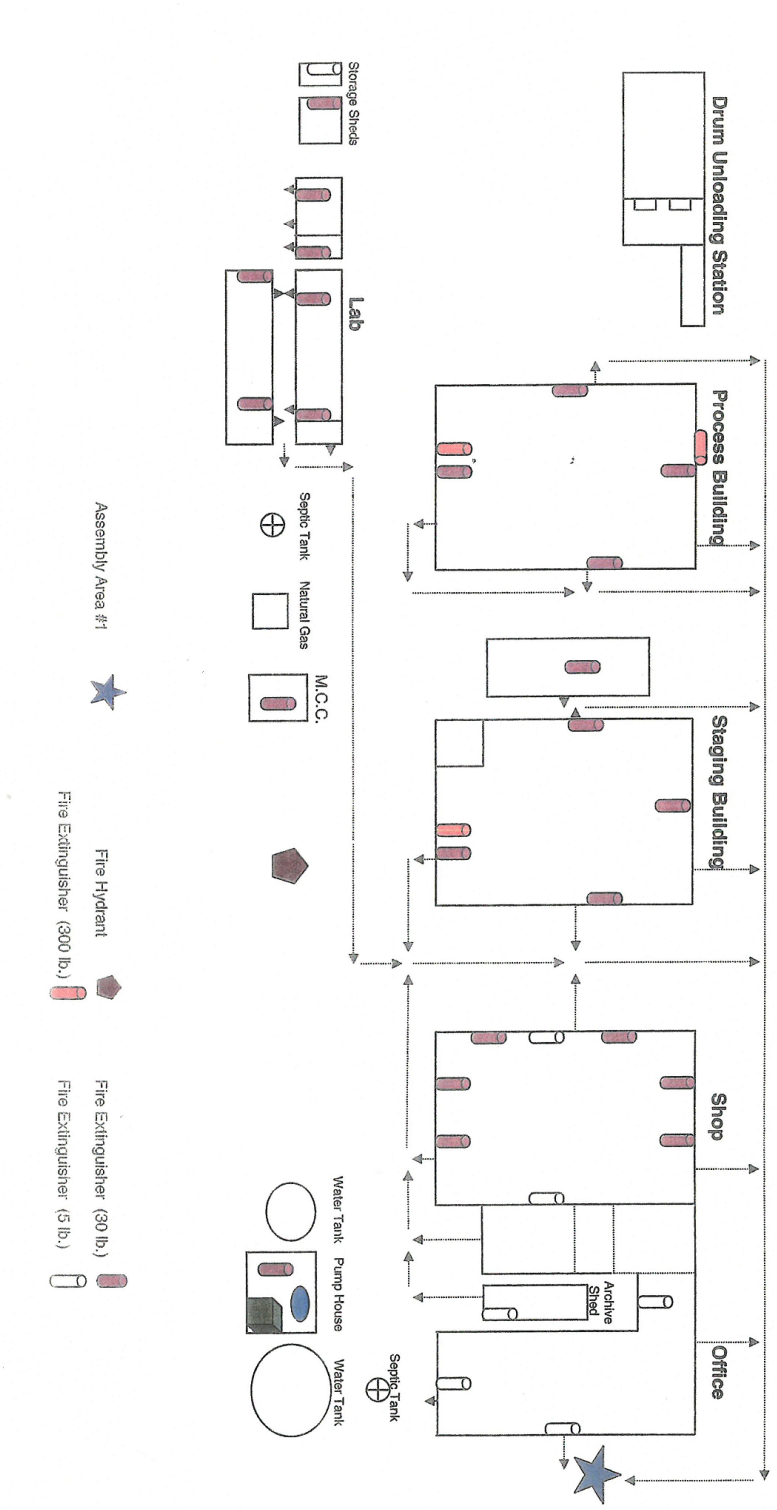
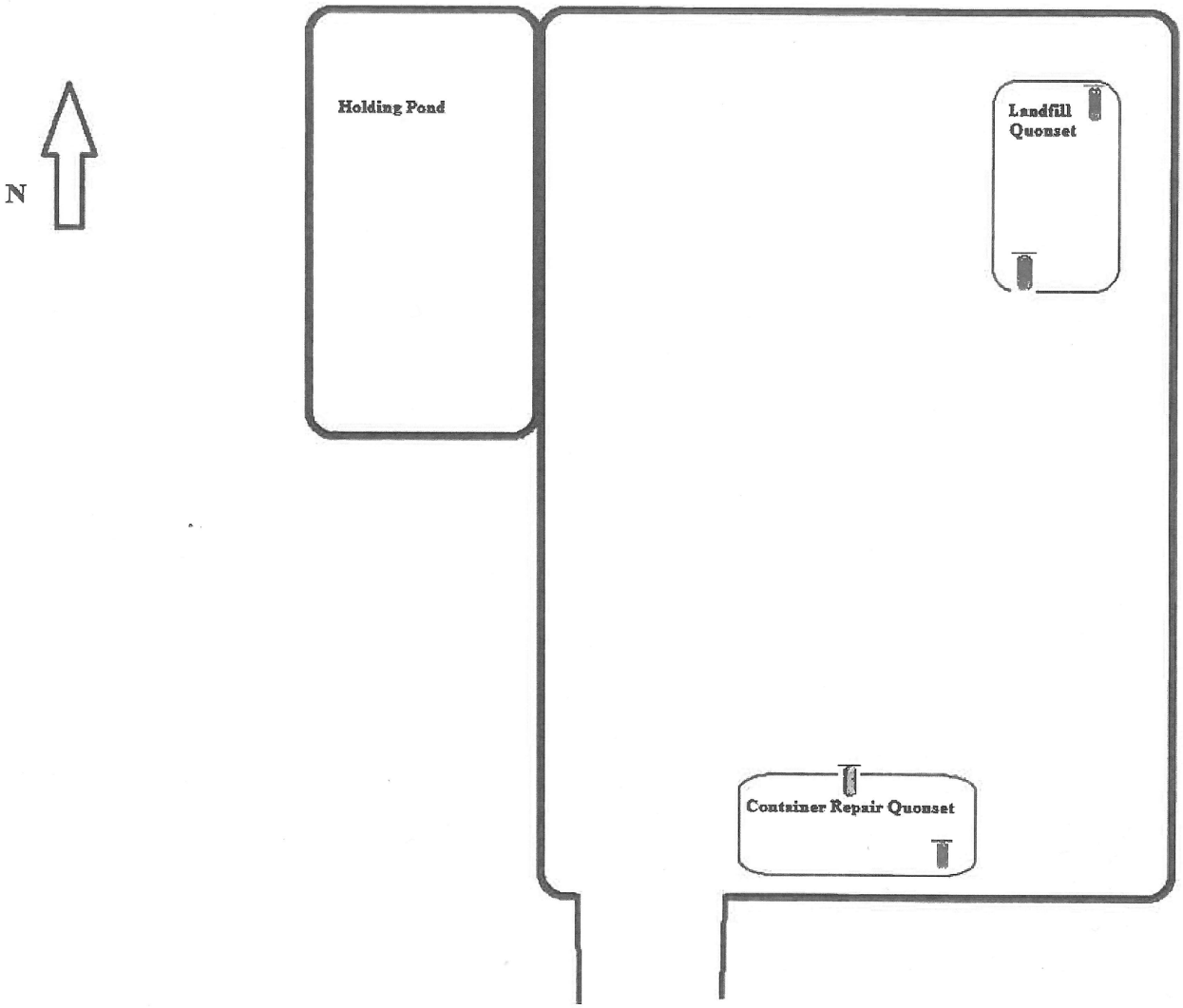


Figure 6

FIRE EXTINGUISHER LOCATIONS - LAYDOWN AREA



5.2.1 Senior Employee at Scene

Should a fire or explosion occur at the Facility, the Senior Employee should:

- **i)** Sound alarm and inform Dispatch
- **ii)** Assure that all personnel are accounted for and out of danger;
- **iii)** Secure and isolate area;
- **iv)** Assess additional manpower needs for firefighting;
- **v)** Take steps to minimize risk to personnel and loss or damage equipment or material;
- **vi)** Be prepared for the situation to deteriorate further.

5.2.2 Operations Manager

The Operations Manager should:

- **i)** Advise Facility Manager of incident and situation;
- **ii)** Conduct detailed assessment of cause of incident, and damage to material or equipment;
- **iii)** Determine if additional personnel or equipment is required;
- **iv)** Act as coordinator between Emergency Response Team and Resource Team;
- **v)** Log sequence of events as they occur.

5.2.3 Facility Manager

The Facility Manager should:

- **i)** Convene Resource Team;
- **ii)** Maintain communication with E.R. Coordinator;
- **iii)** Begin Clean Harbors Canada, Inc. (Ryley) emergency response procedure;
- **iv)** Contact local authorities as required (RCMP, etc.).

5.3 Leakage and Spills at Facility

5.3.1 The following procedures outline the responsibilities of personnel and the communication network to be established in the event of a leak or spill at the Facility.

5.3.2 The activities outlined may be implemented in varying degrees depending upon the nature and severity of the incident. See Figure 7.

5.3.3 Definitions

A **leak** is defined as seepage of special waste from a drum or small container or tank (less than 10 liters).

A **small spill** is defined as seepage or spillage of special waste from a drum or small container (more than 10 liters but less than 100 liters).

A **large spill** is defined as a loss of special waste from a drum or drums, or other containers, or from a tank in which the amount lost is greater than 100 liters.

Non-flammable Spill, Level I

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1					
2					
3	■				
4					High

Risk Reduction:

This kind of spill would be most probable when the transfer of liquids is occurring. All loading, unloading and liquid transfer sites have containment areas around them or controlled drainage directed to a sump so liquids will not enter the environment. In addition, there are spill kits located on site.

Non-flammable Spill, Level II

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1					
2		■			
3					
4					High

Risk Reduction:

This kind of spill would most probably occur when loading, unloading or liquid transfer takes place, or in the event that a drum ruptured. Drums can have a typical volume of 205L. All loading, unloading and liquid transfer sites have containment areas around them or controlled drainage directed to a sump so liquids will not enter the environment. In addition, spill kits are located on site.

Non-flammable Spill, Level III

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low			■	
1					
2					
3					
4					High

Risk Reduction:

A Level III spill would only happen if the integrity of the containment areas was damaged by an act of nature. This may cause some discharge to the environment. There are provisions to dyke the area. External assistance may be required.

Chemical or Flammable Spill, Level I

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1		■			
2					
3					
4					High

Risk Reduction:

A chemical or flammable Level 1 spill could occur if one of the containers in the container storage area in the warehouse ruptured or spilled, or if a small volume of material was spilled during transfer.

Oxidizers are kept in their own row away from all other chemicals so it has less chance of reaction.

All the drums are made from compatible material and are covered at all times with sealed lids. All drums are stored away from material that would cause punctures. Drums and containers containing incompatible materials are kept segregated from each other. The area has curbing to contain any container spills or leaks. Spill kits are available for spill clean-up.

Chemical or Flammable Spill, Level II

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low			■	
1					
2					
3					
4					High

Risk Reduction:

A Level II chemical or flammable spill would occur only if more than one of the containers of chemical in the container storage area ruptured or spilled, or material was spilled during loading, unloading, or transfer.

Oxidizers are kept in their own row away from all other chemicals so it has less chance of reaction.

All the drums are made from compatible material and are covered at all times with sealed lids. All drums are stored away from material that would cause punctures. Drums and containers containing incompatible materials are kept segregated from each other. The area has curbing to contain any container spills or leaks. Spill kits are available for spill clean-up.

Chemical or Flammable Spill, Level III

Probability & Severity of Possible Damage:

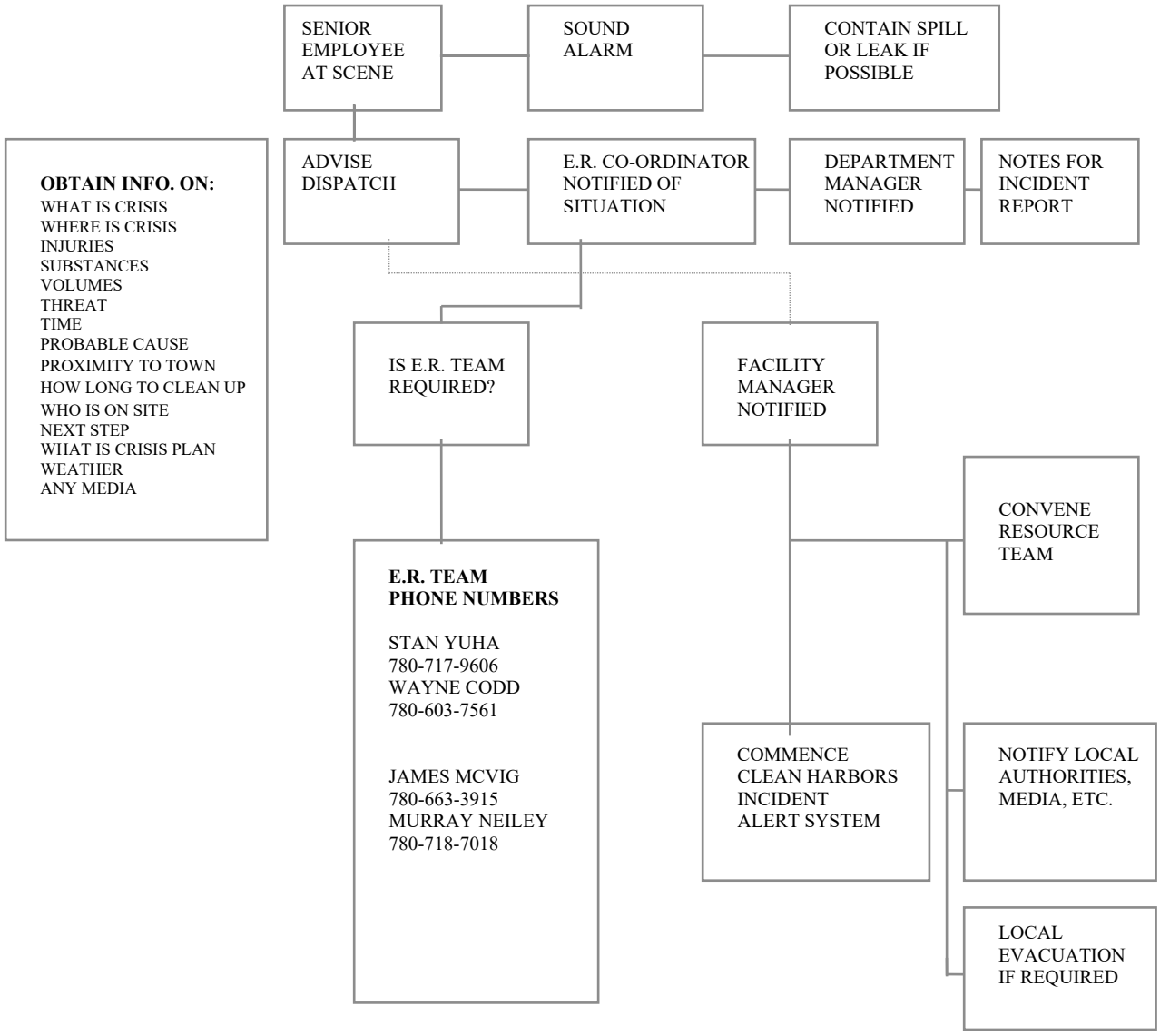
PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1					
2					
3					
4					High

Risk Reduction:

A Level III chemical or flammable spill would only happen if the integrity of the containment areas was damaged by an act of nature. This may cause some discharge to the environment. There are provisions to dyke the area if necessary. External assistance may be required.

Figure 7

LEAKAGE AND SPILLS



5.3.4 Senior Employee at Scene

The Senior Employee should:

- **i)** Take measures to contain spill or stop leak, if possible;
- **ii)** Identify the components of the waste that has been spilled or is leaking;
- **iii)** Advise Dispatcher;
- **iv)** Refer to appropriate WASTE PROFILE SHEET and MATERIAL SAFETY DATA SHEET for information on substance, potential hazards and handling precautions.

5.3.5 Department Supervisor

The Department Supervisor should:

- **i)** Confirm the identification of the spilled or leaking waste;
- **ii)** Determine volume of spilled or leaking waste;
- **iii)** Confirm all necessary immediate response has been initiated;
- **iv)** Assess need for additional manpower, i.e.: Response Team, contractors;
- **v)** Advise Facility Manager
- **vi)** Make notes for incident report.

5.3.6 Facility Manager

The Facility Manager should:

- **i)** Commence Clean Harbors Canada, Inc. (Ryley) Incident Alert System;
- **ii)** Convene Resource Team;
- **iii)** Communicate with E.R. Coordinator during response.

5.4 Bomb Threats

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1					
2					
3					
4					High

Risk Reduction:

Remain calm. See 1.2.3 and Figure 8. Do not threaten or yell at the caller. Take down as much information as possible. Record the phone number or caller ID.

5.4.1 The following procedures outline the responsibilities of personnel and the communications network in the event of a bomb threat at the Facility.

5.4.2 The activities outlined may be implemented in varying degrees depending upon the nature and severity of the incident.

5.4.3 This procedure is designed to combat bomb threats by incorporating the following basic elements:

- **i)** Obtain as much information as possible from caller;
- **ii)** Contact Tofield RCMP (911) and other emergency services (Facility Manager);
- **iii)** Appraise the threat (see Flow Chart for questions). Figure 8;
- **iv)** Record time, take notes;
- **v)** Keep caller on the line as long as possible;
- **vi)** Ask where the bomb is;
- **vii)** Ask when the bomb will go off;
- **viii)** Listen for any clues that may be helpful;
- **ix)** Did the caller have an accent?;
- **x)** List for background noises and sounds.

5.4.4 Emergency Action

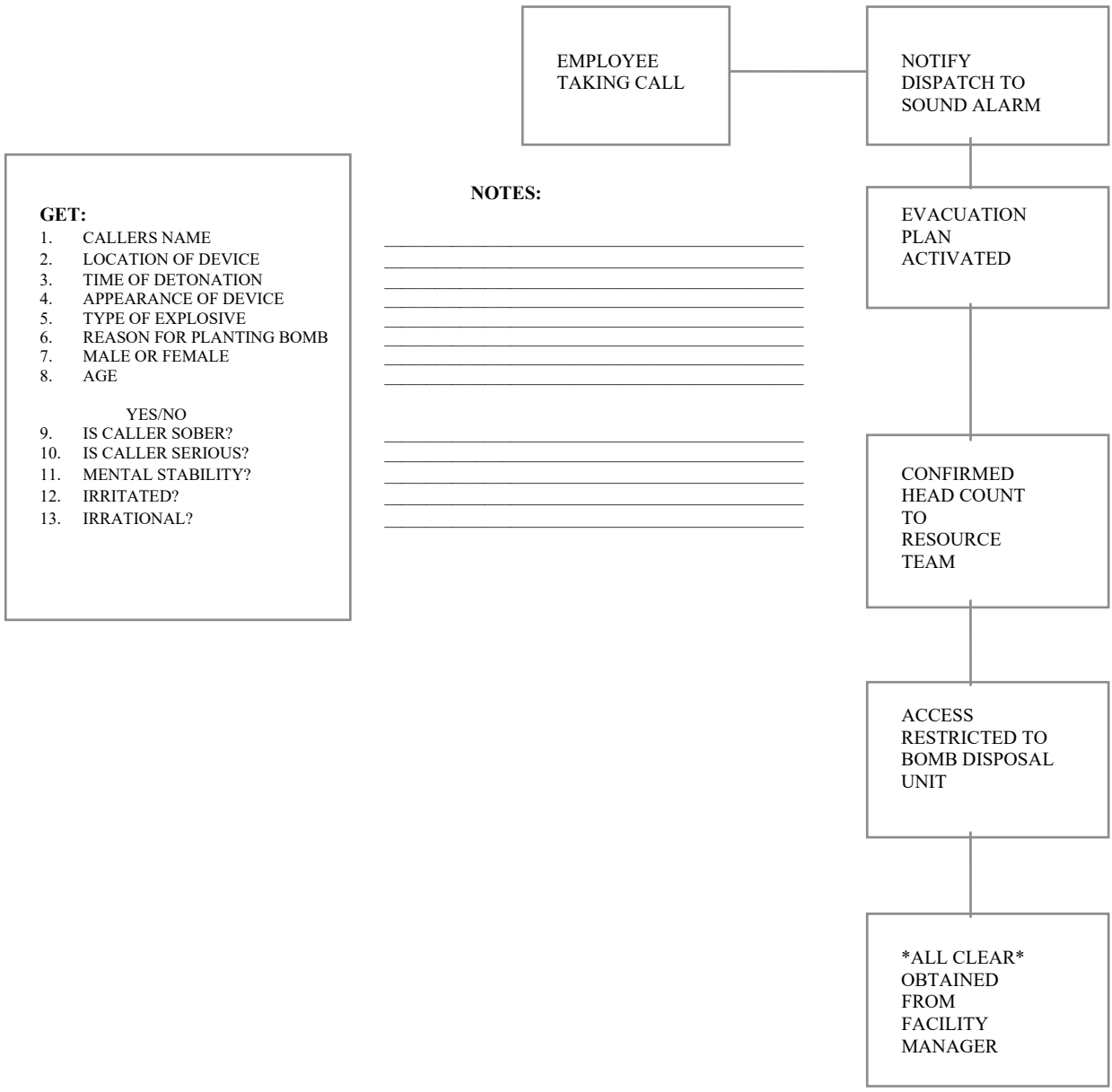
Upon receipt of information, the person answering the phone will advise Dispatch to sound alarm.

The Dispatcher will inform the E.R. Coordinator of the situation and then inform the Facility Manager.

Once all personnel have been evacuated from all Facility buildings, no one is allowed to re-enter any building for any reason, until given “all-clear” by the responding Bomb Disposal Unit Supervisor in consultation with the Facility Manager.

Figure 8

BOMB THREATS



5.5 Demonstration and Pickets

Probability & Severity of Possible Damage:

PROBABILITY	SEVERITY 0	1	2	3	4
0	low				
1					
2					
3					
4					High

Risk Reduction:

Do not engage or debate protestors. Contact the police. Review and assess security. Monitor access to the facility.

The possibility exists that the Facility will be a target of demonstrators and pickets. During any such incident, the physical security of the plant assumes a greater importance than under normal conditions.

5.5.1 Advance Warning

Any employee learning that a demonstration is to occur will inform his Department Supervisor or the Facility Manager as soon as possible.

5.5.2 Facility Manager

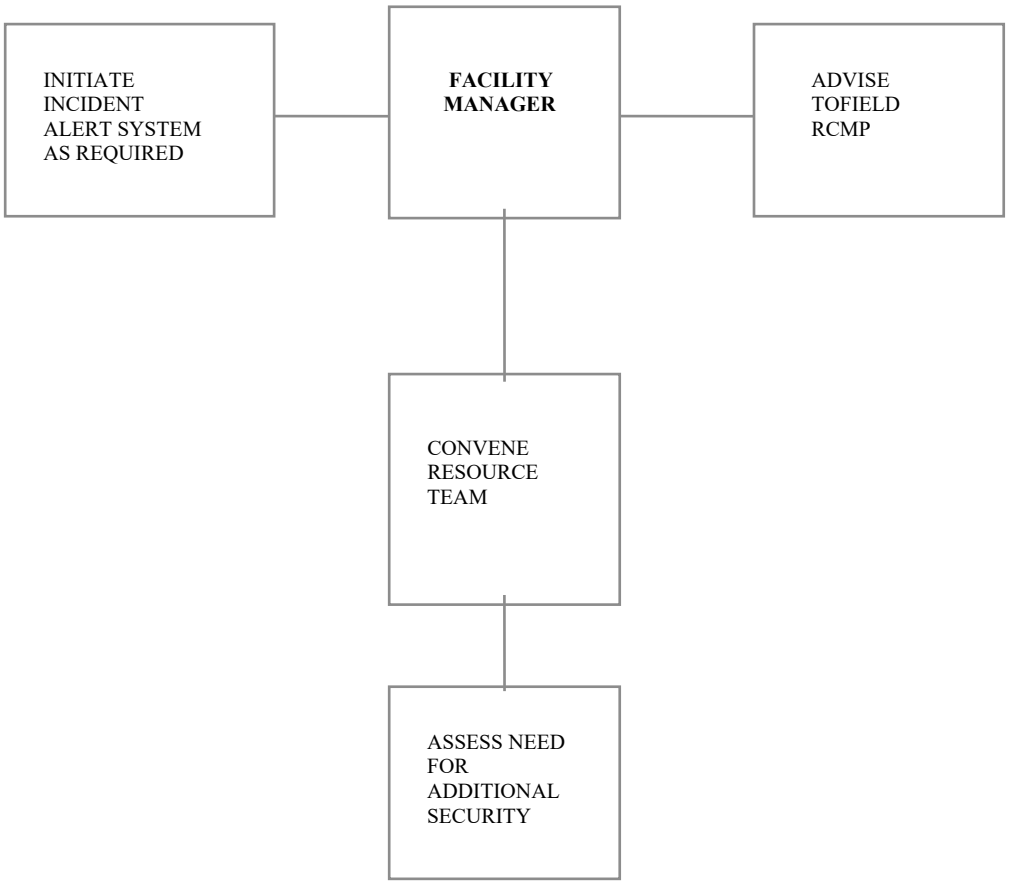
Once the Facility Manager becomes aware that a demonstration will occur, he will:

- **i)** Initiate Incident Alert System as required;
- **ii)** Advise the Tofield RCMP (911) and request assistance;
- **iii)** Assess the need for additional Facility security;
- **iv)** Review physical protection of essential services and supplies (water, gas, electrical and phone);
- **v)** Advise all personnel against antagonistic or threatening behavior;
- **vi)** Move personal vehicles into secure area if possible;
- **vii)** Ensure that no shipments will be received until further notice and process operations suspended and secured;
- **viii)** Discuss with Resource Team;
- **ix)** See Figure 9.

DO NOT CONFRONT PICKETERS, PLAY A PASSIVE ROLL

Figure 9

DEMONSTRATIONS AND PICKETS



5.6 Storms and Tornadoes

Notification: Upon receipt of a severe weather alert via radio, the Dispatcher will notify the Operation's Manager via portable radio and the rest of the plant via the P.A. System.

Severe Weather Warning and Severe Thunderstorms Imply the Possibility of Tornadoes

5.6.1 Direct Response

- **i)** The Emergency Response Coordinator should watch for approaching storm and keep the Plant updated on storm's path via the Dispatcher;
- **ii)** If a tornado is sighted, inform all staff over the radio and a 911 call will be placed immediately;
- **iii)** Alert Emergency Response Team to be ready to respond to the aftermath of a severe thunderstorm/tornado;
- **iv)** Take cover if necessary. See Safety Hints 5.6.3, 5.6.4, 5.6.5, and 5.6.6.

Watch Procedure for Tornadoes

- **i)** Upon receiving a "Tornado Watch" via radio or Weather Alert System, the Dispatcher will notify the Coordinator via the portable radio; the Plant Employees via P.A. System; and Landfill via the mobile radio;
- **ii)** The Coordinator needs to watch the sky for approaching severe weather, which implies possibility of a tornado;
- **iii)** The Dispatcher will keep the Coordinator updated by listening to the radio;
- **iv)** Based on area conditions around the Plant site, the Coordinator will send a spotter to a watch point. The Coordinator will select the watch point and spotter. The spotter must have a clear view in the direction in which the possible tornado is most apt to come from, and stay relatively close to the Plant. This person will stay in continuous contact with the Coordinator via the mobile and/or portable radio.
- **v)** Upon spotting a tornado, the spotter will notify the Coordinator immediately and proceed to move out of the path himself.
- **vi)** When the Coordinator and Dispatcher hear that there is a tornado approaching the site, the Dispatcher will announce over the P.A. System for everyone to take cover and also notify Landfill via mobile radio. The Coordinator will notify everyone wearing a portable radio.
- **vii)** Shut Main Breakers in MCC and Maintenance Shop. After power shutdown radios will work on channel 2 only.
- **viii)** At this time all Operations will be shut down and the Operators will take cover in the closest safe place.

ix) Everyone will stay in the safe area until the Coordinator gives the “all clear” via radio, then they will report to their supervisor for a head count;

x) The Coordinator is responsible for activating any Emergency Response Teams required to respond to the aftermath of a tornado.

xi) Restoration of power will be determined after the evaluation of any damage.

5.6.2 Safety Hints (Tornado)

i) Stay away from windows, doors and outside walls;

ii) Protect your head;

iii) Shelter under a stairway, sturdy table or in a closet;

iv) Stay near the center of a building or the side away from the storm;

v) Avoid large unsupported roof areas like the Vehicle Maintenance Building. If caught in such a building, head for the lowest floor, an inside hallway, small room or get under something sturdy;

vi) If caught outside or in the tornado path, move away at a right angle. Example: flat in a ditch, depression or ravine;

vii) DO NOT remain in a small vehicle or light truck, it may over turn;

viii) If no shelter can be found, hang onto a small tree or shrub.

5.6.3 Safety Hints (Thunderstorm)

i) Downpours accompanying thunderstorms can cause flash floods, so do not shelter where you may be trapped by rising water.

5.6.4 Safety Hints (Lightning)

i) Don’t make yourself into a lightning rod or stand near a possible lightning conductor;

ii) Don’t project yourself above the surrounding terrain.

iii) Stay indoors and away from electrical appliances;

iv) Avoid using phones or showers;

v) Don’t stand under trees or near tall objects;

vi) In open country drop to your knees, bend forward so that your head is lower than your back, put your hands on your thighs, but don’t let your head touch the ground. Don’t lie flat on the ground.

vii) Stay away from open water and metal objects such as clotheslines; wire fences, rails, golf carts, bicycles and farm machinery;

viii) Don’t carry such things as umbrellas, golf clubs, fishing rods, etc.

ix) <u>Remember</u> that people who are struck by lightning receive severe shocks and may be burned, but they can be handled safely. Victims who appear dead may be revived.

Artificial resuscitation is a good start point after help is activated.

x) Refer to the Facility's Severe Weather Action Plan for more details.

5.6.5 Safety-Hints (Hailstorm)

i) Large hail often accompanies severe thunderstorms. If caught outdoors, crouch to create as small as an area as possible and protect your head and neck.

5.6.6 All Clear

i) The Emergency Response Coordinator will announce the "All Clear" via portable radio.

ii) The Dispatcher will relay this information via the Plant P.A. System.

6.0 Evacuation Plan

6.1 In the event that a local evacuation is required, coordination with local authorities will be required. Call 911 and ask for Police and Fire and answer all the questions of the 911 dispatcher to the best of your ability. Once Police and Fire arrive they will obtain as much information as possible to assist their evacuation plans. They will initiate and coordinate any evacuation if needed.

7.0 Emergency Response Team Areas of Responsibility

7.0.1 In the event of an emergency team (E.R.T.) call out, the areas of responsibility must be established to avoid duplication of effort, confusion and delay in action.

7.0.2 Upon arrival at the scene, the E.R.T. captain should begin the site assessment and control of two (2) priorities, which are as follows:

a) Search and rescue (SAR); immediately call Fire & EMS (911)

b) Control of hazard (CH).

7.1 Search and Rescue

7.1.1 A three-(3) man team should immediately begin to co-ordinate a SAR effort. The ERT Captain can contact the E.R. Coordinator to confirm and determine whether or not all personnel have been accounted for. Specific items to be determined by the SAR leader are:

a) Extent of hazard;

b) Specific hazards not readily noticeable;

c) Probable/possible locations of any personnel not accounted for;

d) Equipment required initiating response;

e) Probable cause;

f) Any other pertinent information.

7.1.2 The remaining members can begin to assemble personal equipment deemed necessary to affect a rescue. When the SAR captain has finished his assessment, he can brief the other members as to what

specialized equipment or procedures will be required to commence rescue operations. While the other team members are assembling the required gear, the captain can brief the E.R.T. Coordinator, then begin to organize his own personal gear into position.

7.2 Control of Hazard

7.2.1 The E.R.T. members not involved in SAR should begin an immediate control of hazard response. The CH team should begin an immediate site assessment to determine the appropriate response action. The E.R.T. Captain can request through the E.R. Coordinator, information from computerized MSDS files, which may help to determine;

- **a)** Extent of hazard;
- **b)** Specific hazards not readily noticeable;
- **c)** Equipment required initiating response;
- **d)** Probable cause;
- **e)** Any other pertinent information.

7.2.2 The CH team leader can then brief the other CH team members to what specialized equipment or procedures will be required to initiate the response. While the other members are assembling the required gear, the captain can brief the E.R.T. Coordinator, then begin to assemble his own gear into position.

7.3 Specific Personnel Requirements

7.3.1 The E.R.T. Coordinator should ideally be someone from management (Operations). This position is to act as a liaison between the E.R.T. Captain and the Resource Team. The Resource Team will be composed of the Facility Manager, the Transportation Supervisor, and the Lab Supervisor, and will liaise with off-site resources such as Ryley Fire Department, RCMP, Ambulance and Hospital and the media.

7.3.2 The E.R.T. Captain is responsible for the command and control of the team while on call-out. He should keep the E.R.T. Coordinator briefed of the situation and of any developments as they occur, within reason.

7.3.3 One of the CH team members should be a chemical technician with knowledge of the properties and characteristics of substances being dealt with. The other CH team member should be a driver/operator. The remaining members of the team can be made up of personnel that have received the prerequisite training.

7.3.4 The E.R.T. Coordinator can brief other plant personnel and designate assistance if deemed necessary by the E.R.T. Captain. (i.e.: firefighting, etc.).

7.4 Communications

7.4.1 During an E.R.T. call-out, <u>all</u> communications should follow the same path as the organization chart. During call-out, personnel, by human nature, will respond adversely to stress, which will be present. By following prescribed guidelines for communication, errors or omissions

can be reduced, allowing for a faster, more effective response to be achieved.

7.4.2 Ideally, communications should be secured to prevent the unauthorized release of information to those not having the “need to know”. All information relative to the response should be made available to the Resource Team, who can then determine which information can be given wider circulation.

7.4.3 A possible series of codes to indicate given situations should be established for use with radio communications to keep information secure. (See Figure 10).

8.0 Quarantine

8.1 When an E.R.T. response is initiated, and it has been determined where the problem has occurred, all documentation relative to that shipment should be quarantined to provide an accurate record of material. By keeping an accurate record of material, it will be possible to determine how much, if any, material is lost during the response. (ie. by fire, leak, or evaporation, etc.).

8.2 Other documents to be put under quarantine should also include the following:

- **a)** Visitor lists;
- **b)** Contractor lists.

9.0 Department Wardens

9.1 A designated warden for each department will provide a head count of each department to the Resource Team. The normal Resource Team station will be the Administration building Conference room, and the alternate station will be the Lab Office.

10.0 Wrap-up

10.1 When the response has been completed, the E.R.T. members will:

- **a)** Decontaminate, clean, store, and replenish gear as required;
- **b)** Make notes of aspects of response that they were directly involved in;
- **c)** Make notes of any aspects of the response that they witnessed;
- **d)** Make notes of any deficiencies, errors, or omissions in the procedures, equipment, etc.

10.2 All notes should be given to the E.R.T. Captain so that a brief report can be written (1 hour) and submitted to the E.R.T. Coordinator. An in-depth report should then be written (24 hour) covering all aspects of the response.

10.3 During Step A, team members should be discouraged from discussing the response, in order that a clear progression of events can be maintained by each member. These can then be cross-referenced to the E.R.T. Coordinator’s log of events to obtain a precise record of the response. Response members should then meet to discuss the incident in order to diffuse stress.

10.4 A follow-up meeting should be held (1 week) to address any concerns, and allows for input regarding changes or additions to policy, procedure, etc.

Arrangements for critical incident stress debriefing can be determined as required.

11.0 Training

11.1 Training requirements at the Ryley Facility have been set such that response team employees will receive as a minimum, the following courses:

- **a)** Fire extinguisher training;
- **b)** First aid;
- **c)** CPR;
- **d)** WHMIS;
- **e)** TDG.

12.0 Response Team Training

12.1 In addition to the general plant training, the Response Team may also receive, but not limited to the following additional training:

- **a)** Fire-fighting;
- **b)** Emergency response;
- **c)** Confined spaces entry and rescue.

12.2 Training will be provided to members such that a level of competence, that meets industry standards, is achieved.

13.0 Drills

13.1 The E.R.T. will perform practice drills of varying difficulty and scope. These drills will be defined as follows:

- **a)** **Minor** – a leaking drum or flange;
- **b)** **Moderate** – split container, vehicle accident (including injuries), small fire; moderate emergencies are such that they have a very real potential of becoming major if not acted upon quickly.
- **c)** **Major** – a large spill involving a large tank, difficult terrain, fire, toxic chemicals, or men down.

- **Note** – A major drill may incorporate a moderate drill and a moderate drill may incorporate a minor drill.

13.2 Drill Log and Evaluation

A record shall be kept indicating when emergency response drills are performed, the scope of the drill (minor, moderate, or major) and the effectiveness of the drill.

Figure 10

Radio Secure Transmission Codes

INJURY/DEATH

Green	- minor injury	- treatable on site
Yellow	- moderate injury	- treatable off site - not requiring hospitalization
Red	- major injury	- treatable off site - requiring hospitalization
Black	- fatality	- do not move unless threatened by fire

FIRE/EXPLOSION

Orange	- fire	- any fire on site shall be considered serious, regardless of size
White	- explosion	- may be a result of fire or may cause fire to spread

These codes may be given in random to explain sequence of event.

LEAKS/SPILLS

Brown	- loss of containment of waste.

13.3 Emergency Response Drills

13.3.1 The following scenarios listed for each category of emergency (minor, moderate, and major) will have a sub-category of injury, fire, and spill.

13.3.2 Minor emergency scenarios:

a) Leaking drum of glycol in drum storage building;
b) Small fire in wastepaper basket;
c) Person slips on ice; suspected sprained ankle.

Minor emergencies are such that they should be able to be responded to by any plant personnel. The E.R.T Captain and the E.R.T. Coordinator should be made aware of the situation as soon as possible, in the event that the situation deteriorates further. Minor emergencies pose little or no threat to personnel, property or environment.

13.3.3 Moderate emergency scenarios:

a) Tanker parked in yard has leaked approximately 200 gallons of used motor oil;
b) Fire in vehicle engine compartment;
c) Person struck by vehicle backing up; suspected broken leg and concussion.

Moderate emergencies are such that they should be responded to by the E.R.T., as special equipment or procedures may be required to affect a response. Moderate emergencies pose a possible threat to personnel, property and/or environment.

13.3.4 Major emergency scenarios:

a) Leak in tank farm; unknown quantity of caustic liquid on ground;
b) Reactive fire in labpack processing area;
c) Man down in leachate system pit area; unconscious, unknown injuries.

Major emergencies are such that they must be responded to by the E.R.T. as quickly as possible. Major emergencies constitute a definite and immediate threat to personnel, property and/or the environment.

14.0 Evaluation

14.1 A process of determining the effectiveness of the response must be laid out prior to the institution of an E.R.T. program, in order that a fair and objective evaluation can be made. By assessing each response in a similar manner, standards can be achieved and maintained at desired levels.

14.2 The evaluation should be broad in scope in order that no aspect of the response is overlooked, yet able to pinpoint areas of weakness in procedure or policy that deter from the required objective.

14.3 The following areas should be the basis of an evaluation to an emergency response:

a) Actual response times:
- how quickly after the incident was the alarm sounded;
- how long did evacuation plans take to complete;

- how long before an accurate account of personnel on site was completed;
- how long before form-up of E.R.T.;
- how long before site assessment by E.R.T. Captain;
- how long before E.R.T. Coordinator was briefed by E.R.T. Captain.

b) Operational procedures:
- are operational procedures streamlined enough to provide an effective response yet broad enough in scope to encompass all aspects of the response?

c) Technical procedures:
- most procedures (i.e. use of specialized equipment) will be set out according to the manufacturer's operations manual.

These procedures can be tailored to Ryley's own requirements as required and refined during training.

d) Communications:
- review communications network to determine any areas that require change or improvement.

e) Personnel:
- determine any areas where training of personnel can be improved. Constructive criticism of personnel performance to determine where improvements can be made.

f) Equipment:
- review equipment performance to determine effectiveness;
- maintain a catalogue of equipment, which may improve or streamline ability to complete required tasks.

g) Miscellaneous:
- any other aspects of the response that need to be addressed.

15.0 Critique of Evaluation

A critique of each evaluation should be done to determine if all aspects were dealt with accordingly. The critique should be done in a manner that ensures that ensures that criticism is kept on a constructive level.

16.0 Emergency Response Protocol

The proper emergency response requires preparation. The purpose of this document is to provide guidance for the medical management of exposure situations. Clearly, training and experience must augment portions of this protocol.

The recommended protocol is:

a) Rescue, when necessary, employing proper equipment and methods.

b) Attention to emergency health problems – breathing, cardiac functions, bleeding, shock.

c) Obtain as much exposure history as possible (a sample is attached).

d) Transfer the victim to the medical facility designated by suitable and appropriate conveyance.

e) Call the medical facility and advise them that the patient(s) is/are being sent and that they can anticipate a call from the EMR physician. EMR will contact the medical facility and request specific testing which may be appropriate. EMR physicians will monitor the care of the victim. Site officers and personnel should not attempt to get this information, as this activity leads to confusion and misunderstanding.

f) Call EMR, being prepared to provide:

- **i)** Any known information about the nature of the exposure;
- **ii)** As much of the exposure history as was feasible to determine in the time allowed;
- **iii)** Name and phone number of the medical facility to which the victim(s) has/have been taken.
- **iv)** Names of the exposed individuals.
- **v)** Name and phone number of an informed site officer who will be responsible for further investigations.

As environmental data is gathered and the exposure scenario becomes more clearly defined, this information should be forwarded to the EMR Medical Director or Assistant Medical Director.

EMR will compile the results of all data and provide a summary report of the incident. A copy of this report should be placed in each victim's medical file in addition to being distributed to appropriately designated company officials.

Each individual worker will receive a letter describing the incident but deleting any personal or individual comments. A personalized letter describing the individual findings/results will accompany this generalized summary. A copy of the personal letter will be filed in the continuing medical file maintained by EMR.

Potential Exposure Report

Name: _____ Date of Exposure: _____

Social Security No: _____ Age: _____ Sex: _____

Client Contact: _____Phone #: _____ Co: _____

I. Exposing Agent

What was individual doing? _____
How long did individual work in area before signs/symptoms developed? _____
Was protective gear being used? If yes, what was the PPE? _____
Was there skin contact? _____
Was the exposing agent inhaled? _____
Were other persons exposed? If yes, did they experience symptoms? _____

II. Signs and Symptoms (check off appropriate symptoms)

Immediately With Exposure:

Burning of eyes, nose, or throat
Tearing
Headache
Cough
Shortness of breath
Chest tightness/pressure
Nausea/vomiting
Dizziness
Weakness

Delayed Symptoms:

Weakness
Nausea/vomiting
Shortness of breath
Cough
Loss of appetite
Abdominal pain
Headache
Numbness/tingling

III. Present Status of Symptoms (check off appropriate symptoms)

Burning eyes, nose, or throat
Tearing
Headache
Cough
Shortness of breath
Chest tightness/pressure
Cyanosis
Nausea/vomiting
Dizziness
Weakness
Loss of appetite
Abdominal pain
Numbness/tingling

Have symptoms: (please check off appropriate response and give duration of symptoms)
Improved _____ Worsened _____ Remained Unchanged _____

IV. Treatment of Symptoms (check off appropriate response)

None ____ Self-medicated ____ Physician Treated ____

17.0 PCB Handling

17.1 PCB Fires

The Ryley facility's Process and Staging buildings are supplied with all necessary equipment to handle PCB fires. It should be noted that should a fire occur in one of the above-mentioned buildings, the building exhaust fans will not start as per the fire system interlock. The exhaust fans are for fume removal only, should it be required.

The foam fire suppression sprinkler system is more than capable of containing PCB fires as per the Alberta Fire Code –1997.

17.2 PPE for PCB Waste Handling

Routine precautions should be observed when handling liquids containing PCB's. The protective clothing to be worn will vary with individual circumstances, such as concentration, quantity of PCBs and whether in solid or liquid form. Where workers may come in direct contact with askarel (pure PCBs), protective clothing impervious to PCBs should be worn. Gloves, boots, disposal coveralls, bib-type aprons, and eye protection (face shields or chemical safety goggles) should be worn as necessary. Materials used to protect against dermal exposure are compared in the following Table 1.

TABLE 1

Materials used for Protection from Dermal Exposure to Undiluted PCBs

Highly Recommended (provides protection for over one hour)	Recommended (provides protection for 1 hour)	Limited use or Not Recommended (provides protection for less than 1 hour)
Butyl Rubber		
Neoprene	Chlorinated Polyethylene	Styrene Butadiene Rubber
Nitrile Rubber		Natural Rubber
Polyvinyl Alcohol		
Viton		
Saranex		
Teflon		

Where PCBs are in closed containers such as capacitors, transformers, tanks or drums, or are entrapped in solid substances or equipment, and there is not direct contact with PCBs, special clothing and apparatus may not be necessary, e.g., if a lift truck operator is moving a drum or a palleted piece of PCB equipment.

As a general rule, the handling of hot liquids should be avoided. If the temperature of the liquid is above 55^0C, a full-face, self-contained breathing apparatus should be worn for other than brief periods of exposure.

EMERGENCY PHONE NUMBERS
OUR LICENCE NUMBER: 10348-02-00

AEPA (Spill &Contravention Reporting). . . ……. . . . 1-800-222-6514

AMBULANCE – Tofield 911
RCMP – Tofield. 911
FIRE – Ryley. 911
FIRE – Tofield 911
POISON CENTRE 1-800-332-1414
CHUBB SECURITY 1-888-353-7989
1-780-423-3281
1-780-421-4841

AFTER HOURS EMERGENCY # 1-800-483-3718

VILLAGE OF RYLEY 780-663-3653
COUNTY OF BEAVER 780- 663-3730
Allan Weiss – (Regional Emergency Manager) . . . . ……. cell 1-780 208-1500
Health & Safety Officer (Federal)……...……1-800641-4049
AEPA - EMERGENCY # 1-800-222-6514
AEPA - Non-Emergency 1-800-272-9600

Ryan Taylor (Health & Safety Mgr) 1-435-393-1050
Erica Carabott (Director Environmental Compliance)…..…… 289-691-2955
Mike Parker (VP Environmental Compliance) 1-519-312-8522

Cliff's Towing – (Edmonton) 1-780-451-5555
Plumber – B & M – (Tofield) . . . . …780-662-2454
Electrician – D-2 Electric 1-780-672-8700
Backhoe & Heavy Equipment – Jerry's Backhoe – (Tofield) . . .. .780- 662-3408

Transportation Department – Mobile Numbers
Tyler Esak…. 1-780-777-6906
Leanne Monteith……1-780-235-5374
On-Call Personnel – Mobile . . . . Stan Yuha 1-780-717-9606
Wayne Codd 1-780-603-7561

RESPONSE TEAM HOME NUMBERS

Stan Yuha 780-662-3889
Wayne Codd 780-662-3622
James McVig…….. 780-663-3915
Murray Neiley……780-718-7018

EMERGENCY RESPONSE PLAN

Approved By: Stan Yuha, Facility Manager Stan Yuha

Signature

Approved By: Wayne Codd, Operations Manager

Signature

1.0 Emergency Response Procedure

1.1 Purpose of Procedure

To establish a pre-determined plan of action for facility staff and visitors during emergency situations at the facility. Such emergency procedures should be designed to protect personnel, property and the environment.

1.2 Introduction

The nature of the Ryley facility is such that emergency situations could arise from the operations of waste management. Emergency situations could include fire, spills, and uncontrolled reactions of incompatible wastes and/or reagents, personal injury accidents, severe weather scenarios and other unforeseen situations.

The Ryley facility is equipped with an alarm horn which when sounded will initiate the following emergency actions of plant staff and visitors.

The objective of these emergency procedures is to manage the emergency around the following points:

a) Sound an audible alarm to initiate appropriate actions.
b) Account for all staff and visitors by gathering all persons except our response team in a pre-determined assembly area.
c) Confirm the location and safety of individuals by means of a head count and to initiate a search for those persons unaccounted for.
d) Set up a communications system to facilitate crisis management.
e) Secure the facility, control and rectify the emergency and initiate further Incident Alert Procedures.
f) Ensure all visitors or contractors on site have an assigned sponsor to sign them in.
g) Define role of third party Emergency Response Teams if required by facility. (Local Fire Departments, Ambulance & RCMP)

1.3 Steps to Follow During an Emergency

a) Emergencies will normally be reported by plant staff via telephone, radio communication or face to face reports. Once reported, the alarm switch in the Dispatch office should be activated. Announce alarm over radio as well.

b) Once the alarm has been sounded, a brief P.A. announcement giving the nature and location of the emergency will be made. After the P.A. announcement is made, the same announcement will be made over the two-way radio system.

c) Upon hearing the alarm all personnel, including contractors, will secure their job and report immediately to the appropriate assembly area.

d) Upon hearing the alarm, the Response Team will congregate at the Fire Pump House to plan any needed response. The Operations Manager or his delegate will coordinate the Response Team.

e) Upon hearing the alarm, facility personnel, contractors and visitors will congregate at the designated assembly area. In cases of inclement weather, and at the conclusion of a satisfactory head count, plant personnel in the main assembly area may be directed to enter the administrative building for the remainder of the emergency.

f) Upon hearing the alarm, the Fire Warden or Designate will deliver the sign-in register to the conference room along with a two-way radio and cell phone. The supervisor will then secure the front gate and conduct the head count. After performing the head count, the Fire Warden will join the Resource Team in the conference room.

g) Upon hearing the alarm, the Facility Manager or designate and the Fire Warden will meet in the conference room and make up the Resource Team.

h) Upon hearing the alarm, the Receptionist will forward all incoming calls to the answering service and proceed to the appropriate assembly area for a head count.

i) The Resource Team will initiate the incident alert system as required, supply support for the Emergency Response Coordinator (the Operations Manager or his delegate).

j) Upon hearing the alarm, the Emergency Response Coordinator will determine the location and nature of the emergency and coordinate the Emergency Response Team’s response as necessary.

k) Upon hearing the alarm, it will be the responsibility of each Manager and Supervisor to account for his or her staff for the purpose of the head count.

l) Upon hearing the alarm, each sponsor of a visitor or contractor is responsible to account for his or her visitor or contractor.

m) Unless directed (otherwise), all personnel should report to the normal assembly areas. Each situation may require that an alternate assembly area be used; this alternate area will be announced on the P.A. system and radio system. Any permits issued prior to the alarm are void and new permits will have to be made out for all contractors or operations requiring them.

n) At the conclusion of the emergency, on advice from the Emergency Coordinator, the Resource Team will sound the “All Clear”.

1.4 Roles of Third Party Response Teams

a) In the event that the facility's Emergency Response Team needs assistance from a third party Emergency Response Team, this request is to be made by the Response Team Coordinator to the Resource Team who will in turn contact the required services.

b) Once the third party Emergency Response Team(s) arrive, they will stop outside the fence/gate and await further instruction from the Emergency Response Coordinator.

c) The Clean Harbors Response Coordinator will remain Incident Scene Commander or a joint command will be formed.