Emergency Contingency Program V1.0

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INTRODUCTION

PURPOSE

The purpose of the Emergency Contingency Program (ECP) is to provide the framework for the response and recovery measure which will be taken to enhance the health and safety of Westshore employees and contractors during major emergencies or disasters.

The objectives of the plan are to:

- Identify the functional roles and responsibilities of responding personnel, departments and agencies
- Identify lines of authority for all responding personnel, departments and agencies
- List the logistical support and resource requirements necessary for implementing the plan

POLICY

The policy of WTLP ECP is to avoid injuries, environmental damage and minimize loss to terminal property during an emergency situation. No person is expected to endanger their safety during an emergency. If a situation arises that a person feels may be unsafe, is beyond their training, or requires modifications in standard operating procedures, that person should immediately report back to their Supervisor for further instructions. In all hazardous or potentially hazardous situations, it is important that all persons work as a team and follow established procedures. This will aid in minimizing the effects of the emergency and promote a rapid return to normal operations.

SCOPE

The scope of this program covers Westshore Terminals and includes response procedures for accidental and unintentional incidents applicable to a Bulk Terminal environment.

The assumptions used in the creation of this plan are:

- Local first responders will be available to provide emergency response services
- Staff will be trained and exercised in the ECP
- Sufficient staffing levels to perform roles within ECP

RESPONSIBILITIES

MANAGEMENT

- Ensure the Emergency Contingency Program is current, effective and accessible to workers
- Ensure relevant equipment and training is available as required
- Ensure that all required procedures are available
- Conduct a periodic review of the program to ensure effectiveness

SUPERVISORS

- Ensure that they are familiar with the requirements of the Emergency Contingency Program
- Follow all applicable procedures
- Participate in drills and exercises
- Assist in ensuring that workers are aware of their responsibilities in an emergency

WORKERS

- Follow all applicable procedures
- Participate in drills and exercises

JOINT OCCUPATIONAL HEALTH AND SAFETY COMMITTEE

- Participate in any program review and feedback as required

DEFINITIONS

Act of Violence	The attempted or actual exercise by any physical force so as to cause injury to a worker, and includes any threatening statement or behavior which gives reasonable cause to believe that there is risk. This could include any situation involving a weapon, threat or act of terrorism etc.
After Action Report (AAR's)	Analytical AARs are formal documents, intended to serve as aids to performance evaluation and improvement, by registering situation-response interactions, analysing critical procedures, determining their effectiveness and efficiency, and proposing adjustments and recommendations.
Chain of Command	There is an orderly line of authority within the Incident Command Structure (ICS) with lower levels subordinate to, and connected to, higher levels. The Command Staff and General Staff report to and support the Incident Commander (IC).
Corrective Action Plan (CAP)	Corrective Action Plans are improvements to an organization's processes taken to eliminate causes of nonconformities or other undesirable situations
Critical Emergency Incident	A critical (disaster) emergency incident is an event that affects the entire Roberts Bank area and surrounding community. Normal business operations are suspended. The effects of the emergency are wide-ranging and complex. A timely resolution of the disaster conditions will require company-wide co-operation and extensive coordination with external jurisdictions. In the event of a critical incident, governmental emergency operation centres may be activated. The Incident Commander shall coordinate the emergency response activities with the outside responders. In the event of activation of these centres, the Vice President & General Manager shall act to advise all employees on company matters. **Examples:** ● Extreme weather event ● Earthquake with major damage ● Widespread chemical or biological agent contamination.
Critical Incident Stress Management (CISM)	Critical Incident Stress Management, or CISM, is an intervention protocol developed specifically for dealing with traumatic events. It is a formal, highly structured and professionally recognized process for helping those involved in a critical incident to share their experiences, vent emotions, learn about stress reactions and symptoms and given referral for further help if required. It is not psychotherapy. It is a confidential, voluntary and educative process, sometimes called 'psychological first aid'.
Critical Incident Stress Management Team	A team comprised of trained WTLP person(s) who assists in the after incident debriefing.
Dangerous Goods Incident	A major spill/exposure of substances or articles that pose a risk to people, property or the environment at Roberts Bank. They are usually classified with reference to their immediate risk.
Demobilization	The orderly, safe, and efficient return of an incident resource to its original location

	and status
Emergency	An unexpected event/incident that requires immediate action to prevent or limit injury to persons or damage to services, property or the environment.
Emergency Operations Centre(s) (EOC)	An EOC is a designated location that has been established following a major or critical incident. The EOC is activated whenever there is an event has taken place that causes significant property damage, potential or actual business disruption or has the potential to cause a significant impact on the business. The EOC supports the incident site activities, coordinates information, policy guidance and provides strategic direction. The EOC may include the GM, HR Director, Maintenance and Operations Management
Fire Warden	An appointed WTLP employee who is responsible for managing the evacuation of personnel from his/her designated area during a fire or other emergency. A Fire Warden duties include: advising nearby personnel of the nearest and safest exit route, performing a head count at the muster station, as well as other duties related to the safety of individuals during an emergency.
First Aid Attendant	A person who holds a valid first aid certificate issued by a recognized institute and who is designated to administer first aid by the employer. Also known as OFAA (Occupational First Aid Attendant). At WTLP all OFAA's are level 3.
Information Officer (IO)	The IO is responsible for developing and releasing information about the incident to the news media, to incident personnel, off duty staff and to other appropriate agencies and organizations. The IO role is generally activated following a Major or Critical incident. A role generally assumed by On-Duty Superintendent.
Incident Action Plan (IAP)	Is an organized course of events that addresses all phases of incident control within a specified time. An IAP is necessary to effect successful outcomes in any situation, especially emergency operations, in a timely manner. An IAP can be written or oral.
Incident Commander (IC)	The IC is typically an Operations Foreman who has been assigned this duty to coordinate tactical resources and activities at the scene. They liaise directly with the Liaison Officer and outside emergency service. A role generally assumed by Westshore Operations Foremen
Incident Command Post (ICP)	The Incident Command Post is the location on scene from which all incident planning operations are directed
Incident Command System (ICS)	ICS is a standardized approach to the command, control, and coordination of emergency response providing a common hierarchy within which responders from multiple agencies can be effective.
Incident Command Structure	A clearly defined chain of command. The reporting channels are simple and clearly delineated, so that all participants know to whom they will report, and to whom they must convey received information
Incipient Fire	A fire which is in the initial or beginning stage. Fire is limited to the objects near the point of origin, there is limited smoke and heat. A fire in this phase can be controlled with a portable fire suppression device such as a fire extinguisher and without the need for protective clothing or breathing apparatus.
Liaison Officer (LO)	The LO is a member of the Command staff who serves as the primary contact between the Incident Commander and representatives from cooperating or assisting

agencies (usually called agency representatives). The LO will be responsible for the initial interface with representatives of WTLP Management, Global Container Terminals, BC Ferries, Port Metro, Federal and Municipal Agencies A role generally assumed primarily by the Operations Coordinator.

Major Emergency Incident

An emergency incident that disrupts a significant portion(s) of the terminal property and/or affects a substantial subset of the daily operations. This type of emergency incident likely will require assistance from external agencies. These events may escalate quickly, and have serious consequences on life-safety and/or business operations. An incident of this scope will require a defined, organized and identified command and communications structure. The Incident Commander will receive information of the scope of the incident and determine if activation of the ECP and the Emergency Operations Centre (EOC) is required. Other management personnel may be alerted, as appropriate.

Examples:

- Large fire
- Major structural damage
- Severe flooding
- Major chemical spill
- Extensive power outage
- Man in water
- External emergency incident that may impact more than WTL personnel and/or operations.

Media Control Centre (MCC)

A designated area where all media personnel can congregate. All media statements shall be issued from this location unless otherwise approved by WTLP Public Relations - Information Officer.

Minor Emergency Incident

An emergency incident may be regarded as a minor localized incident that occurs in a specific area of the terminal or affects a small portion of the property, and can be quickly resolved with existing company resources or limited outside help. This level of emergency incident has little or no impact on the daily operations except in the affected area. Normally, this type of emergency incident would not require activation of the ECP.

Examples:

- Industrial accident/ injury
- Localized hazardous spill
- Localized fire and plumbing or power failure

Muster Station

A gathering place where people should report when there is an emergency.

Operating Channels

Ch.1 Operations
Ch.3 Maintenance
Ch.5 Monitors all channels
Ch.2,4 to 15 Spare
Ch.16 **Emergency**- used to broadcast emergency notification on all channels

Radio Call Signs

17- Mechanical personnel
18- Electrical personnel
20- Operations Coordinator
21- Berth 1 Operations FM
21- Berth 2 Operations FM
23- Mechanical Trouble-shooter

24- Electrical Trouble-shooter
25- Management
30 – Operations Day FM

Safety Officer (SO)

The SO is responsible for monitoring and assessing hazardous and unsafe situations and developing measures to assure personnel safety.
The Safety Officer will correct unsafe acts or conditions through the regular line of authority, although the Safety Officer may exercise emergency authority to prevent or stop unsafe acts when immediate action is required. Only one Safety Officer will be assigned for each incident. The SO role is generally activated following a Major or significant incident. This is a role will be assigned by the IC or assumed by a member of the Safety Department.

Staging Area

Locations that are set up at or near the incident where resources can be placed while awaiting assignment.

Transfer of Command

As the incident grows a more qualified person may take over as Incident Commander to handle the ever-growing needs of the incident, or in reverse where as an incident reduces in size, command can be passed down to a less qualified person. Other reasons to transfer command include jurisdictional change, the area of responsibility, or normal turnover of personnel due to extended incidents. The transfer of command process always includes a face to face briefing and an exchange of the prepared incident documents.

Unified Command (UC)

UC allows all agencies with jurisdictional authority or functional responsibility for the incident to jointly provide management direction through a common set of incident objectives and strategies and a single IAP. Each participating agency maintains its authority, responsibility, and accountability.

Unity of Command

Each individual participating in the operation reports to only one supervisor. This eliminates the potential for individuals to receive conflicting orders from a variety of supervisors, thus increasing accountability, preventing freelancing, improving the flow of information, helping with the coordination of operational efforts, and enhancing operational safety. This concept is fundamental to the ICS chain of command structure.

PROGRAM DETAILS

LEVELS OF EMERGENCY

WTLP has defined 3 levels of emergency that should be used as a general guideline for activation of the ECP.

Minor Emergency Incident

An emergency incident may be regarded as a minor localized incident that occurs in a specific area of the terminal or affects a small portion of the property, and can be typically resolved with existing company resources. This level of emergency incident has little or no impact on the daily operations except in the affected area. Normally, this type of emergency incident would not require full activation of the ECP.

Examples:

Industrial accident/ injury, localized hazardous spill, Localized fire and plumbing or power failure

Major Emergency Incident

An emergency incident that disrupts a portion(s) of the terminal property and/or affects a subset of the daily operations. This type of emergency incident likely will require assistance from external agencies. These events may escalate quickly, and have serious consequences on life-safety and/or business operations. An incident of this scope will require a defined, organized and identified command and communications structure. The Incident Commander will receive information on the scope of the incident and determine if activation of an Incident Command Post (ICP) is required. Other management personnel may be alerted, as appropriate.

Examples:

Large fire, Major structural damage, Severe flooding, Major chemical spill, Extensive power outage, Man in water, External emergency incident that may impact more than WTLP personnel and/or operations.

Critical Emergency Incident

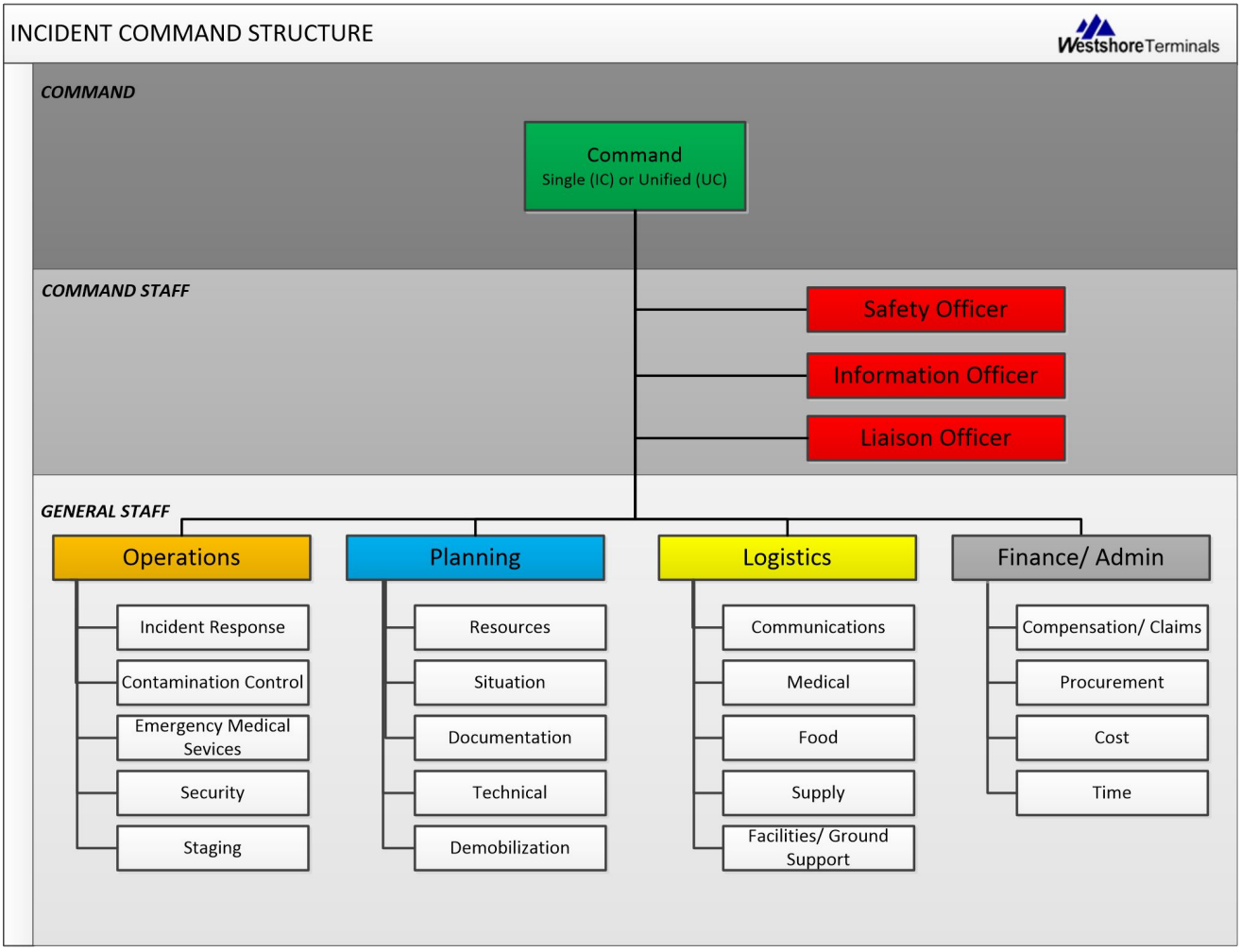
A critical (disaster) emergency incident is an event that affects the entire Roberts Bank area and surrounding community. Normal business operations are suspended. The effects of the emergency are wide-ranging and complex. A timely resolution of the disaster conditions will require company-wide co-operation and extensive coordination with external jurisdictions.
In the event of a critical incident, the Incident Commander will likely activate an Incident Command Post (ICP) and an Emergency Operations Centre (EOC) may also be established. The Incident Commander shall coordinate the emergency response activities with the outside responders and EOC will provide ongoing site support and manage external communications.

Examples:

Extreme weather event, Earthquake with major damage. Widespread chemical or biological agent contamination.

INCIDENT COMMAND

WTLP employs the **Incident Command System (ICS) in the event of an emergency (Appendix B).** The (ICS) is a standardized approach for the command, control, and coordination of emergency response, providing a common hierarchy within which responders from multiple agencies can be effective.



This is what a fully expanded ICS structure typically looks like. Emergency Incident.

The **Incident Command Structure** is a clearly defined chain of command within the ICS. The reporting channels are simple and clearly delineated, so that all participants know to whom they will report, and to whom they must convey received information.

INCIDENT COMMAND FUNCTION AND DUTIES

COMMAND STAFF

COMMAND	UNIFIED COMMAND	SAFETY	LIAISON	INFORMATION
• Responsible for initiating response • Responsible for managing all tactical resources& operations • Command may be transferred, based upon who has primary authority for overall control of the incident	• Allows all agencies with jurisdiction for an incident to establish common set of objectives and strategies • Unified command does not involve losing authority, responsibility or accountability	• Monitors safety conditions and develops measures for ensuring the safety of all assigned personnel • Corrects unsafe situations via the chain of command • May stop activity if personnel are in imminent danger	• Serves as the primary contact for cooperating or assisting agencies on larger incidents • Maintains a list of agency representatives • Monitors incident to identify key waypoints • Monitors incident to identify inter-organizational issues	• Serves as the point of contact for the media or other organizations seeking information directly from the incident or event • There should be only one Information Officer. Others will serve as assistants

GENERAL STAFF

OPERATIONS	PLANNING	LOGISTICS	FINANCE	STAGING
• Directs and coordinates all tactical operations • Determines resources required by the section • Assists command in developing objectives & strategies for the incident • Requests/ releases resources via command	• Collects, evaluates and displays incident information • Conducts long-range planning & develops demobilization plan • Maintain status of all resources assigned to the incident • Maintain Incident documentation	• Responsible for all the services and support need of the incident • Obtaining essential personnel and maintain facilities, equipment and supplies • Requests additional resources as needed	• This section is set up for any incident that may require on-site financial management • Larger incidents increasingly require Financial/ Administration sections to monitor costs and track claims for insurance or government funds	• Established to temporarily locate resources awaiting assignment • Resources are always ready assignment • Staging area manager designated

Command

Command will generally be established during a **Major or Critical Emergency** Incident.

The **Incident Commander** has the overall responsibility for managing the incident. In most circumstances an Operations Foreman will initially assume the role of "Incident Commander". He will retain this role until the incident has been concluded or he has transferred command.

The command function may be conducted in one of two general ways:

1. Single Incident Commander **(IC)**
When an incident occurs within a single jurisdiction and there is no jurisdictional or functional agency overlap, a single IC will be designated with overall incident management responsibility

2. Unified Command **(UC)**
UC is an important element in multi-jurisdictional or multi-agency incident management. It provides guidelines to enable agencies with different legal, geographic, and functional responsibilities to coordinate, plan, and interact effectively. As a team effort, UC allows all agencies with jurisdictional authority or functional responsibility for the incident to jointly provide management direction through a common set of incident objectives and strategies. Each participating agency maintains its authority, responsibility, and accountability.

Comparison of Single IC and UC

Single Incident Commander:	**Unified Command:**
The IC is solely responsible (within the confines of his or her authority) for establishing incident objectives and strategies. The IC is directly responsible for ensuring that all functional area activities are directed toward accomplishment of the strategy.	The individuals designated by their jurisdictional or organizational authorities (or by departments within a single jurisdiction) must jointly determine objectives, strategies, plans, resource allocations, and priorities and work together to execute integrated incident operations and maximize the use of assigned resources.

Transfer of Command

The most qualified individual at the scene that has the jurisdiction for the incident initially established command. Transfer of command may take place for the following reasons:

- More qualified person assumes command
- Incident situation changes over time
- Jurisdictional or agency change in command is legal requirement
- Turnover of personnel normally occurs on long or extended incidents

The transfer of command at an incident will require that there be a full briefing for the incoming Incident Commander and notification to all personnel that a change in command is taking place. If the Incident Commander role is transferred to an outside governmental emergency response official, the WTLP Incident Commander will continue to be responsible for the coordination of any response activities assigned to WTLP employees.

Transfer of command should include:

- Current status of the incident
- Safety concerns and considerations
- Incident objectives and strategies

- Site organization
- Deployment and assignment of resources and personnel
- Need for additional resources
- Potential for incident expansion
- Current organization chart

Incident Commander (IC) is responsible for:

- Determining the scope and impact of the incident, using information provided by the other responders.
- Prioritizing emergency actions.
- Developing and re-evaluating the Incident Action Plan, (objectives, strategies & tactics).
- Managing and directing the activities of the various departments that will be involved in emergency response and recovery.
- Acquiring & deploying resources and personnel for incident operations. It is the responsibility of the Incident Commander (IC) to provide incident status reports, as well as to inform the LO as to what resources and personnel are needed, for tactical operations.
- Disseminating timely, accurate and appropriate information to management and employees.
- Coordinating with federal, provincial, and local officials, and other agencies, as appropriate.
- Filling out ICS documents:
    - *o* Incident Briefing Form, IC-201 (Appendix D)
- Participating in Incident Briefings and Post Incident Reviews

Incident Commander (IC) - Initial Response Duties:

An Incident Commander (IC) will generally be assigned during a **Major or Critical** Emergency Incident. The (IC) will typically be an Operations Foreman who will assume this duty and coordinate activities at the scene. They liaise directly with outside emergency services as and when required

Their response duties include:

1. Establishing command and the incident command post
2. Ensuring responder safety
3. Assessing incident priorities
4. Determining operational objectives
5. Developing and implement the Incident Action Plan
6. Developing an appropriate organizational structure
7. Maintaining a manageable span of control
8. Manage incident resources
9. Coordinating overall emergency activities
10. Establishing and maintaining an effective liaison with outside agencies and organizations, including an emergency operations centre if one is established
11. Act as a WTLP representative to assist emergency services with site layout information, equipment operations and waterfront knowledge.

12. Requesting updates from the Liaison Officer regarding any unrelated WTLP site operations or scene conditions that may impede response actions and response personnel safety.
13. Participating in Incident Briefings and Post Incident Reviews.
14. Requesting Liaison Officer to assist with accountability of all WTLP staff on site, visitors, and ship's crew.

Liaison Officer (LO) – Initial Response Duties

A Liaison Officer will generally be assigned during a **Major or Critical** Emergency Incident.

Their response duties include:

Upon receipt of an emergency incident alarm, the LO shall;

1. Assign one person to the role as Incident Commander (IC) (usually an Operations Foreman) and to immediately have him attend the incident scene and initiate an assessment.
2. Announcing on Channel 16 that there is an emergency underway and channel 1 will now be designated to the event and used for emergency communications only.
3. Contact outside emergency response agencies as required.
4. Inform a Westshore Management Representative that an emergency is response underway
5. If required, alert those operating within the Westshore site complex that emergency is under way i.e. Samplers, Sample Plant, Staff, Offices, Contractor representatives, Rail Staff.
6. If required, alert external stakeholders GCT & BCR that emergency is underway.
7. Work closely with IC to take / make telephone calls and communications.
8. As required, contact the ships at berth and advise that a terminal emergency incident is underway and to stand-by for further information/instructions.
9. Coordinate personnel pick-up to evacuation staging areas, as required.
10. Assign person/ persons to complete head count in the evacuation staging areas.
11. Advise the WTLP First Aid Attendant to attend the incident scene or stand-by for further instructions.
12. Contact Westshore Security and advise that the terminal has an emergency incident and to stand-by for further instructions.
13. Contact Port of Vancouver and ensure that security gates are opened and are being escorted to Westshore Guard gate.
14. Contact Westguard Security and ensure that Emergency vehicles are marshalled to site access gate.
15. Contact B.C. Rail and advise that the terminal has an emergency incident. Advise B.C. Rail to stand-by for further information/instructions.
16. Assign WTLP employees, as required, in vehicles to meet emergency response agencies at the Causeway Junction. Await their arrival; escort them to the incident scene or staging area; return to the causeway junction to meet and escort any additional emergency response vehicles to the appropriate area.

17. Provide the Incident Commander with frequent activity updates.
18. Record all incident events and timetables.
19. Identify key witnesses and role players during the complete incident response to ensure correct people are assembled post incident.
20. Participate in Incident Briefings and Post Incident Reviews.

Safety Officer (SO) – Initial Response Duties

A Safety Officer will generally be assigned during a **Major or Critical** Emergency Incident.

Their duties include:

1. Identify and mitigate hazardous situations at the scene.
2. Ensure safety messages and briefings are made.
3. Exercise emergency authority to stop and prevent unsafe acts.
4. Review the Incident Action Plan for safety implications.
5. Assign assistants qualified to evaluate special hazards.
6. Initiate preliminary investigation of accidents within the incident area.
7. Review and approve the Medical Plan.
8. Participate in any planning meetings.
9. Employee and visitor accountability at the scene
10. Participate in Incident Briefings and Post Incident Reviews.

Information Officer (IO) – Initial Response Duties

An Information Officer will generally be assigned during a **Major or Critical** Emergency Incident.

Their duties include:

1. Informing senior management that an emergency response has been initiated.
2. Writing and issuing news releases and arranging media briefings.
3. Posting emergency information on the Internet and intranet.
4. Providing notices and public service announcements to broadcasters.
5. Answering media and public inquiries.
6. Monitoring media and the Internet, correcting inaccuracies and dispelling rumors.
7. Providing communications advice to the Ministry Action Group.
8. Advising and liaising with municipal officials.
9. Participate in Incident Briefings and Post Incident Reviews.

The application of ICS within the Westshore context would see the Information Officer interacting with the following Media groups:

- News
- Radio

- o Television
- o Other

a) The following WTLP Management personnel will be the only authorized communicators to the News Media for the issuing of information releases and arranging news conferences and interview sessions. Vice President & General Manager.
b) Director, Human Resources
c) Manager Operations
d) Other persons designated by a), b) or c)

If any employees are contacted by the Media, Government, VPC, Fire, Police or other similar Public Official asking for information relating to any WTLP emergency incident or to speak to a terminal spokesperson, **direct the inquiry to the Information Officer.**

If the above personnel are not available, ask the caller for their name/telephone number advise them someone will call them back as soon as possible.

The Information Officer if required will establish a **Media Control Center (MCC).** A MCC is a designated area where all media personnel can congregate. All media statements shall be issued from this location unless otherwise approved by Information Officer.

Media personnel who attend at WTLP during an emergency incident shall be directed to congregate at:

1. Main Building Carpark
2. Designated area outside MARSEC

First Aid (FA)

First Aid will generally be assigned during a Minor, Major or Critical Emergency Incident.
Their duties include:

1. Attend the emergency incident scene as directed by the Liaison Officer or Incident Commander. If an Operations Section Chief is appointed they will report directly to them.
2. Co-ordinate all first aid treatment of injured person(s) until:
   a. a place of medical treatment is reached by the injured person(s), or
   b. the injured person(s) is passed to an ambulance service, or
   c. the responsibility for treatment of an injured person(s) is accepted by another attendant with a Level III certificate, a physician, a registered nurse, or Emergency Medical Assistant.
3. Report first aid incident scene activities to the Incident Commander (IC).
4. If assistance is required by the First Aid attendant for medical treatment of injured person(s), they shall request additional aid through the Incident Commander (IC).
5. Participate in Incident Briefings and Post Incident Reviews.

General Staff

General Staff may be activated during a **Major or Critical** Emergency Incident.

The General Staff is responsible for the functional aspects of the incident command structure.
The General Staff consists of the Operations, Planning, Logistics, and Finance/Administration Section Chiefs/ Heads.
The Section Chiefs may have one or more deputies assigned, with the assignment of deputies from other agencies encouraged in the case of multi-jurisdictional incidents.

The General Staff could consist of any or all of the following:

a. Vice President and General Manager
b. Director, Human Resources
c. Director, Finance & Corporate Services
d. Director, Engineering and Environmental Services
e. Manager, Maintenance
f. Manager, Electrical
g. Manager, Purchasing & Contracts
h. Manager Occupational Health and Safety
i. Manager, Operations
j. Ast. Manager Operations
k. Westshore Foremen
l. Westshore Superintendents

Operations

Operations will generally be assigned during a **Major or Critical** Emergency Incident. An Operations Section Chief will be appointed.

Their duties include:

1. Assisting the IC with objective and strategical direction focused on reducing the immediate hazard.
2. Saving lives and property.
3. Establishing situational control.
4. Restoring normal operations.

Lifesaving and responder safety will always be the highest priorities and the first objectives in the Incident Action Plan (IAP).

Staging

Staging may be assigned during a **Major or Critical** Emergency Incident. In large scale response staging may become a stand alone section under general staff reporting to Incident Command. Staging Manager may be assigned.

Their duties include:

1. Temporarily locate resources that are awaiting assignment.
2. Ensure that resources are ready for deployment as and when required.

Planning

Planning will generally be assigned during a **Major or Critical** Emergency Incident. A Planning Section Chief will be appointed.

Their duties include:

1. Collects, evaluates, and disseminates incident situation information and intelligence to the IC/UC and incident management personnel.
2. Prepares status reports.
3. Displays situation information.
4. Maintains the status of resources assigned to the incident.
5. Prepares and documents the IAP, based on Operations Section input and guidance from the IC/UC.

Logistics

Logistics will generally be assigned during a **Major or Critical** Emergency Incident. A Logistics Section Chief will be appointed.

The Logistics Section is responsible for all service support requirements needed to facilitate effective and efficient incident management.

Their duties include:

1. Ordering resources from off-incident locations.
2. Providing facilities, security (of the incident command facilities and personnel), transportation, supplies, equipment maintenance, fuel & food services.
3. Communications and information technology support.
4. Emergency responder medical services, including inoculations, as required.

Finance

Finance will generally be assigned during a **Major or Critical** Emergency Incident. A Finance Section Chief will be appointed.

Finance/Administration Section is established when the incident management activities require on-scene or incident-specific finance and other administrative support services.

Their duties include:

1. Recording personnel time.
2. Maintaining vendor contracts.
3. Administering compensation and claims.
4. Conducting an overall cost analysis for the incident.

Common Responsibilities – All Incident Personnel

This listing provides an overview of the common responsibilities applicable to all employees who may be asked to assist in an emergency response and/or EOC activation.

At times employees will be asked to perform one-time actions, while other tasks that are assigned are repetitive for the duration of the incident.

An employee may be assigned to report to a specific group or individual within the Incident Command Structure including:

- Command
- Command Staff
- General Staff – Functional

The responsibilities assigned may be customized to the response role, as and when required.

Employees should be given clear and specific instructions from that assigned group including:

- Job assignment (e.g. Unit Leader reporting to, etc.)
- Position dispatched to.
- Reporting location.
- Reporting time.
- Travel instructions and directions.
- Safety instructions.
- Any special instructions (e.g. radio channel etc.).

All Employees must:

- Check-in at designated Check-In location.
- Receive briefing from immediate supervisor.
- Clarify any questions.
- Clarify specific job responsibilities.
- Review position responsibilities and acquire work materials.
- Define functional work areas.
- Eating/sleeping arrangements. (if applicable)
- Clarify procedural instructions for obtaining additional supplies, services and personnel.
- Identification of operational period work shifts.
- Clarification of any important points pertaining to assignments.
- Provisions for specific debriefings/handover at the end of the operational period.
- Organize and brief subordinates (if applicable).
- Wear appropriate personnel protective equipment, (PPE).

Post Incident

Once an incident has been concluded there are 3 key elements in ensuring that both the business can resume its normal activity but also key events of the incident are reviewed for organizational learning purposes and if necessary the ICS can be improved.

Demobilization

The purpose of demobilization from a response or activation of the ICS is to plan for a smooth transition of the emergency response back to normal daily operations and document and analyze actions that took place during the response.

Planning for incident demobilization is often overlooked. Effective demobilization planning must begin early in the incident response as responders are often anxious to leave the scene and return to their regular roles or homes as soon as possible.

The Incident Commander or Unified Command will initiate incident demobilization as appropriate.

Duties include:

- Authorize demobilization of sections, branches and units when they are no longer required.
- Notify relevant organizations and jurisdictions of the expected planned demobilization time.
- Ensure that any open actions not yet completed will be handled after demobilization.
- Ensure that all required forms or reports are completed prior to demobilization.
- Be prepared to provide input to the Post Incident Investigation.
- Demobilize incident facilities and operations at the designated time, as appropriate.

Goals for Demobilization

A successful demobilization for WTLP will ensure that the following goals are achieved:

- Collect and collate information of the entire event
- Create a comprehensive and accurate After Action Report and Corrective Action Plan
- Create a timeline of key activities that occurred during the response
- Document when resources were needed most and when we had an abundance of resources (note: resources can mean people, things and information)
- Track when key decisions were made

Post Incident Review

A Post Incident Review should take place immediately after an incident. Key individuals involved in the incident must take part in the review process. The purpose of the review is to take the demobilization goals and use them to establish “Organizational Learning”. This is achieved through a timely and objective after-action report/ review process that is designed to capture the positive aspects and the learning opportunities of the response ICS.

Findings should be documented in an outline format that can be organized on a spreadsheet and tracked. Key components in the process include for each issue:

- a brief description of the issue
- background information
- recommendations
- follow-up actions

Improvements should focus on the ICS organization, processes, and training or equipment/supply issues, rather than on individual personnel actions.

The review should also examine how effectively each asset integrated into the overall system, as well as how the response tiers coordinated with each other. Indicated changes should be accomplished based on priority and incorporated into the appropriate documentation.

Critical Incident Stress Management

Recovery from an incident can mean more that returning to normal operation. It can also refer to longer-term activities that extend beyond demobilization and other response activities. Critical Incident Stress Management is a specific technique designed to assist others in dealing with the physical or psychological symptoms that are generally associated with trauma exposure. Debriefing allows those involved with the incident to process the event and reflect on its impact. Ideally, debriefing can be conducted on or near the site of the event

WTLP will ensure, when required, that anyone who has been affected post incident will receive the necessary professional help from Critical Incident Counselors in coordination with CISM onsite team before they return to their duties.

Some key objectives for the Critical Incident Counselor are to:

- Assess the impact of the critical incident on support personnel and survivors.
- Use defusing to allow for the ventilation of thoughts, emotions, and experiences associated with the event and provide "validation" of possible reactions.
- Predict events and reactions to come in the aftermath of the event.
- Conduct a "Systematic Review of the Critical Incident" and its impact emotionally, cognitively, and physically on survivors. Look for maladaptive behaviors or responses to the crisis or trauma.
- Bring "closure" to the incident "anchor" or "ground" support personnel and survivors to community resources to initiate or start the rebuilding process (i.e., help identify possible positive experiences from the event).

Some key objectives for the onsite CISM team are to:

- educate individuals about stress reactions and ways of coping adaptively with them;
- instil messages about the normality of reactions to critical incidents;
- promote emotional processing and sharing of the event;
- provide information about, and opportunity for, further trauma-related intervention if it is requested by the participant;
- develop and provide peer and family understanding and support to the individuals;
- develop stress reduction techniques, and
- help re-establish a sense of control, mastery and empowerment.

Debriefing assists in the "re-entry" process back into the community or workplace. Debriefing can be done in large or small groups or one-to-one depending on the situation. Debriefing is not a critique but a systematic review of the events leading to, during and after the crisis situation.

INCIDENT COMMAND SYSTEMS FACILITIES

If during an emergency various Incident Command System locations have been established it is important that both the Incident Command Post and Emergency Operations Centre use the same operational language to reference these key facilities on tabletops, maps, or photos.

ICS FACILITIES	
ICP 	• Location where primary command functions are performed • Only one per incident • Should make its location known as soon as possible • If not in a pre-designated area as per the ICS, it should be identified by flag, lights or distinctive banner or sign
EOC 	• Located in close proximity to ICP • Only one per incident • Should make its location known as soon as possible • If not in a pre-designated area as per the ICS, it should be identified by flag, lights or distinctive banner or sign
STAGING 	• Temporary location at an incident where personnel and equipment awaits assignment • A Staging Area Manager will be assigned • Designated by general location • Resources are made ready for assignment
BASE 	• Fixed location for primary support activity • Location for out-of-service equipment and personnel • Only one base per incident • Base manager will always be designated
CAMP 	• Temporary location to provide services to incident personnel • May be moved- several may be required • Camp Manager will always be assigned • Designated by geographical name or number
HELI-PAD 	• Temporary location where helicopters can safety land and take off • Used to load or off-load personnel, equipment, and supplies • Heli-Pad Manager may be assigned
HELI-SPOT 	• A designated location where a helicopter can safely take off and land • Some helispots may be used for loading and unloading supplies, equipment and personnel • Can also be used for medical evacuation • Large incidents may have several helispots

KEY

FACILITIES

For the purposes of the Westshore ECP the following areas have been designated as Incident Command Facilities:

	The Incident Command Post will be designated by the Incident Commander. It is normally a

	field location at which the primary command function is executed.
	Unless otherwise designated by the Incident Commander. The EOC will be **Meeting Room 258.** The room contains: o Liaison Officer - Vest Grab Bag o Safety Officer- Vest Grab Bag o Operations Section- Vest Grab Bag o Planning Section-Vest Grab Bag o Logistics Section-Vest Grab Bag o Finance Section-Vest Grab Bag o Site Map o Conference telephone o Dry wipe board o Stationary o Investigation kit
Media Control Centre	Unless otherwise designated by the Incident Commander. The Media Control Centre will be the Boardroom. The room contains: o Site Map o Conference telephone o Dry wipe boards o Various Media

EMERGENCY SERVICES

In the event of an emergency, outside emergency personnel may or may not be required. However, if the incident has potential to escalate it is recommended to notify the appropriate emergency agencies as soon as possible. They can be stood down if the situation changes.

In the case of an emergency, 9-1-1 is the most efficient way to contact emergency services, including Canadian Coast Guard, (in addition to: VHF channel 16, and by cellular - *16).

Westguard Security will be responsible for marshalling Emergency services to the Westshore Security Gate. A WTLP employee will be assigned to meet the responding emergency services at the Westshore Security Gate

and escort them to the incident. That employee will then return to the Security Gate to escort any further responding emergency vehicles to the incident or staging.

Upon arrival at the scene, emergency services personnel will require a “face to face” incident update from the IC. They may assume command of the incident and request that the IC acts as a WTLP representative to assist the new commander with site layout information, equipment operations and waterfront knowledge.

There may be the possibility that the responding emergency services representative will want to form a unified command (UC). In this command structure the Incident Commander’s (IC) response duties will be shared by emergency services commander(s), and a WTLP individual, each having authority and responsibility over the incident.

EMERGENCY HELICOPTER LANDING AREA

In the event that an evacuation is required by air ambulance an area in the SW corner of the site has been identified as a dedicated landing area. This area has been registered with Air Ambulance and the coordinates for the landing area are automatically accessed when they are despatched.
See Appendix i.

EMERGENCY COMMUNICATIONS

Once an emergency has been confirmed by the IC, channel 1 will become the designated emergency channel and only communication that pertains to the incident will be transmitted on this channel. The LO will communicate this information by announcing on all WTLP channels via channel 16 that there is an emergency underway and channel 1 will now be designated to the event and used for emergency communications only.

All emergency communications will go through the IC. Response communications from the site will be directed through the Liaison Officer (LO). Response communications are those messages that involve response actions at the incident site.

INCIDENT RESPONSE PROCEDURES

For all emergency incidents that occur at WTLP the emergency reporting procedures will be followed. Specific procedures depending on the nature of the incident will then be enacted.

GENERAL EMERGENCY RESPONSE

EMERGENCY REPORTING – General Response

EMERGENCY REPORTING PROCEDURE – All Incidents	
TRY TO REMAIN CALM	
If you discover or are advised of an emergency:	• **Immediately contact Westshore Operations Coordinator 20**
For all emergencies the radio call should be:	• **Announce emergency on Channel One (1) Internal 469 or External 604.946.3469** **"EMERGENCY, EMERGENCY, EMERGENCY"** ***then* "STATE TYPE OF EMERGENCY"**
Contact Operations Tower By Radio on Channel 1	• **Provide the following details:** **WHAT HAPPENED?** **WHERE DID IT HAPPEN?** **WHEN DID IT HAPPEN?** **WHO DID IT HAPPEN TO?** **WHAT IS THE EXTENT OF THE INJURIES?** **WHAT HELP IS NEEDED?** **WHAT IS YOUR NAME?** **IS THE SCENE SAFE?**
Acknowledgment of Emergency Call:	• **The receiver of the call will confirm back and acknowledge that he understood the transmission by REPEATING THE ABOVE MENTIONED INFORMATION.**
CHANNEL 1	• **When an emergency call is transmitted, personnel will clear all channels and standby. The Command Staff may direct them to carry out specific tasks related to the response.** • **Channel 1 will then be designated as the Emergency response channel**
Update Incident Commander	• **Wait for Incident Commander to arrive on-scene** • **Notify Incident Commander of all response actions taken**
NOTE	• **Fixed on-site radio stations are located inside Substations 3 & 6, Berth #2 Life Jacket Shack, all rainbird and Big Bertha pump houses.**

FIRE – General Response

FIRE RESPONSE When fire is discovered:	
TRY TO REMAIN CALM	
If you discover or are advised of a fire:	• Immediately contact Westshore Operations Coordinator 20 • Activate the nearest fire alarm pull station • Verbal notification to people nearby
For all emergencies the radio call should be:	• Announce emergency on Channel One (1) or External 604.946.3469 Internal 469 **"EMERGENCY, EMERGENCY, EMERGENCY"** ***then* "STATE TYPE OF EMERGENCY"**
Contact Operations Tower By Radio on Channel 1	• Provide the following details: **WHAT HAPPENED?** **WHERE DID IT HAPPEN?** **WHEN DID IT HAPPEN?** **WHO DID IT HAPPEN TO?** **WHAT IS THE EXTENT OF THE INJURIES?** **WHAT HELP IS NEEDED?** **WHAT IS YOUR NAME?** **IS THE SCENE SAFE?**
Acknowledgment of Emergency Call:	• The receiver of the call will confirm back and acknowledge that he understood the transmission by REPEATING THE ABOVE MENTIONED INFORMATION.
EVACUATE	• Evacuate the building/area immediately • Take only your personnel items with you that are within your reach • Proceed to designated muster stations • Fire warden will assist with egress and accountability • Do not re-enter the building/area until it is safe to do so
EXTINGUISH	• If it is a small contained incipient fire or if 911 has been notified • If there is an available charged fire extinguisher nearby • A water truck is available (if applicable) • If there is a clear means of egress identified • Evacuation is underway
Update Incident Commander	• Wait for Incident Commander to arrive on-scene • Notify Incident Commander of all response actions taken

MEDICAL EMERGENCY – General Response

MEDICAL EMERGENCY
First WTLP employee on scene shall:

TRY TO REMAIN CALM	
If you discover or are advised of an emergency:	• **Immediately contact Westshore Operations Coordinator 20**
For all emergencies the radio call should be:	• **Announce emergency on Channel One (1) or External 604.946.3469 Internal 469** **"EMERGENCY, EMERGENCY, EMERGENCY"** ***then* "STATE TYPE OF EMERGENCY"**
Contact Operations Tower By Radio on Channel 1	• **Provide the following details:** **WHAT HAPPENED?** **WHERE DID IT HAPPEN?** **WHEN DID IT HAPPEN?** **WHO DID IT HAPPEN TO?** **WHAT IS THE EXTENT OF THE INJURIES?** **WHAT HELP IS NEEDED?** **WHAT IS YOUR NAME?** **IS THE SCENE SAFE?**
Acknowledgment of Emergency Call:	• **The receiver of the call will confirm back and acknowledge that he understood the transmission by REPEATING THE ABOVE MENTIONED INFORMATION.**
Ensure Scene Safety	• **Shutdown any equipment or power that may impede access to the patient or jeopardize the safety of responders** • **Do not attempt a rescue or provide first aid to the patient until the scene is safe and free of hazards** •
Provide First Aid & Patient Comfort	• **Do your best to provide first aid to the patient within the scope of your knowledge, skills and ability until the WTLP First Aid attendant arrives on scene** • **Do not move any patient with a suspected spinal injury** • **Provide patient comfort (reassurance, blanket, jacket etc.)** • **Do not leave the patient alone** • **Provide patient updates to the Operations Tower as the situation requires**
Update Incident Commander	• **Wait for Incident Commander to arrive on-scene** • **Notify Incident Commander of all response actions taken**

MAN IN WATER – General Response

MAN IN WATER
First WTLP employee on scene shall:

TRY TO REMAIN CALM	
If you discover or are advised of an emergency:	• **Immediately contact Westshore Operations Coordinator 20**
For all emergencies the radio call should be:	• **Announce emergency on Channel One (1) or External 604.946.3469 Internal 469** **"EMERGENCY, EMERGENCY, EMERGENCY"** ***then* "STATE TYPE OF EMERGENCY"**
Contact Operations Tower By Radio on Channel 1	• **Provide the following details:** **WHAT HAPPENED?** **WHERE DID IT HAPPEN?** **WHEN DID IT HAPPEN?** **WHO DID IT HAPPEN TO?** **WHAT IS THE EXTENT OF THE INJURIES?** **WHAT HELP IS NEEDED?** **WHAT IS YOUR NAME?** **IS THE SCENE SAFE?**
Acknowledgment of Emergency Call:	• **The receiver of the call will confirm back and acknowledge that he understood the transmission by REPEATING THE ABOVE MENTIONED INFORMATION.**
Ground Level Response	• **Throw a buoyancy device(s) as close to the individual as possible** **Take into consideration movement of the ocean and the tide.** **If the device does not reach the person initially, current may float the device downstream to them.** • **If at a Berth - deploy a life ring and / or Dan buoy**
Ship Loader Operator Response	• **Operator should stop the loader and immediately contact the Operations Control Tower by radio on channel 1:** ✓ **identify himself** ✓ **the location of the man in the water** ✓ **provide other incident details as per the WTLP Emergency Reporting Procedures.** • **Remain in the cab and try to maintain continual visual contact with the man in water.**
Update Incident Commander	• **Wait for Incident Commander to arrive on-scene** • **Notify Incident Commander of all response actions taken**

BOMB THREAT – General Response

BOMB THREAT
WTLP Employee receiving a bomb threat shall:

TRY TO REMAIN CALM	
Most bomb threats are made by telephone. When you are prepared for such a call, you can respond in a calm manner, ask for specific information about the bomb and listen for some identifying characteristics of the caller.	
When speaking to the bomb threat caller	• **LISTEN.** • **BE CALM AND COURTEOUS.** • **DO NOT INTERRUPT THE CALLER.** • **OBTAIN AS MUCH INFORMATION AS YOU CAN BY ASKING THE FOLLOWING QUESTIONS:** **WHEN IS THE BOMB GOING TO EXPLODE?** **WHAT DOES IT LOOK LIKE?** **WHAT KIND OF BOMB IS IT?** **WHAT WILL CAUSE IT TO EXPLODE?** **WHY DID YOU PLACE THE BOMB?** **WHAT IS YOUR NAME?** **WHAT IS YOUR ADDRESS?**
Document as much of the details of the bomb threat call as possible	• **Date:** • **Time (include a.m. or p.m.)** • **Duration of call** • **Exact wording of threat** • **Was the caller male or female?** • **Did they have an accent?** • **Characteristics of their voice:** **Familiar** **Loud** **Soft** **Fast** **Slow** **Calm** **Emotional** **Vulgar** • **Were there background noises?** • **Was the caller familiar with the WTLP site and/or staff?**
When the call has concluded, immediately contact by phone:	• **Immediate Supervisor** • **Superintendent** • **Operations Tower**

ACT OF VIOLENCE – General Response

ACT OF VIOLENCE
WTLP employee shall:

Acts of violence are unpredictable and evolve quickly. Quickly determine the most reasonable way to protect your own life	
COMMUNICATION 9-1-1	**Try to remain calm** **Information to provide 9-1-1 call taker:** • **Location of the perpetrator(s) on the WTLP site** • **Number of perpetrators, if more than one** • **Physical description of perpetrator(s)** • **Number and type of weapons held by the perpetrator(s)** • **Number of potential victims**
EVACUATE	**If there is an accessible escape path, attempt to evacuate the area:** • **Have an escape route & plan in mind** • **Evacuate regardless of whether others agree to follow** • **Leave your belongings behind** • **Help others escape, if possible** • **Call 9-1-1** • **Prevent individuals from entering an area where the perpetrator may be** • **Keep your hands visible** • **Follow the instructions of the Police**
HIDE OUT	**If evacuation is not possible, find a place to hide where the perpetrator is less likely to find you. Your hiding place should be:** • **out of the perpetrator's view** • **Provide protection if shots are fired in your direction** • **If you are in an office secure the door** • **If you are in a hallway get into an office and secure the door** • **Silence your smartphone** • **Turn off any sources of noise** • **Remain quiet**
TAKE ACTION	**If evacuation & hiding out are not possible:** • **Dial 9-1-1, if possible, to alert police to the perpetrator's location** • **If you cannot speak, leave the line open and allow the call taker to listen** **As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the perpetrator by:** • **Acting aggressively as possible against him/her** • **Throwing items and improvising weapons** • **Yelling** • **Committing to your actions** • **Were there any background noises that could heard**

DANGEROUS GOODS INCIDENT – General

DANGEROUS GOODS INCIDENT RESPONSE
First WTLP employee on scene shall:

TRY TO REMAIN CALM	
When a spill occurs involving a petroleum based product or hazardous material it is essential to minimize risk to persons and property. An incident of this type may originate at, and affect the WTLP site as well as GCT.	
If you discover or are advised of an emergency:	• **Immediately contact Westshore Operations Coordinator 20**
For all emergencies the radio call should be:	• **Announce emergency on Channel One (1) or External 604.946.3469 Internal 469** **"EMERGENCY, EMERGENCY, EMERGENCY"** ***then* "STATE TYPE OF EMERGENCY"**
Contact Operations Tower By Radio on Channel 1	• **Provide the following details:** **WHAT HAPPENED?** **WHERE DID IT HAPPEN?** **WHEN DID IT HAPPEN?** **WHO DID IT HAPPEN TO?** **WHAT IS THE EXTENT OF THE INJURIES?** **WHAT HELP IS NEEDED?** **WHAT IS YOUR NAME?** **IS THE SCENE SAFE?**
Acknowledgment of Emergency Call:	• **The receiver of the call will confirm back and acknowledge that he understood the transmission by REPEATING THE ABOVE MENTIONED INFORMATION.**
Ensure scene safety	• **Turn off all nearby power equipment and vehicles** • **If safe to do so activate fuel shutoff emergency stop** • **Extinguish all smoking materials** • **Prevent people entering the spill area and disrupting the product and/or contaminating themselves** • **Before making a radio transmission ensure you are not near a vapour concentration as portable radios can spark during transmission** • **Move upwind from spill**
Attempt to contain or confine the product	• **Don available personal protective equipment:** **If available shut off the product supply** **use the spill response equipment** **Prevent product from entering into lower portions of buildings and underground utilities**
Document	• **Take photographs of:** **The spill** **The product container** **The placards on the container** **The ship, if the spill originated from a ship**

FUEL-PROPANE. GASOLINE, DIESEL	• Stage upwind from leak • Turn off all nearby power equipment and vehicles • Extinguish all smoking materials if possible • Prevent entrance of gas into lower portions of buildings and underground utilities • Before making a radio transmission ensure you are not near a vapour concentration as portable radios can spark when the mic is keyed. • If there is a valve available that can be safely accessed • Keep your head away from the valves on your tank or cylinder • A sudden release of propane liquid from the safety relief valve could result in serious injury • Have a water source or fire extinguisher nearby • Have an identified clear means of egress
Update Incident Commander	• Wait for Incident Commander to arrive on-scene • Notify Incident Commander of all response actions taken

EARTHQUAKE – General

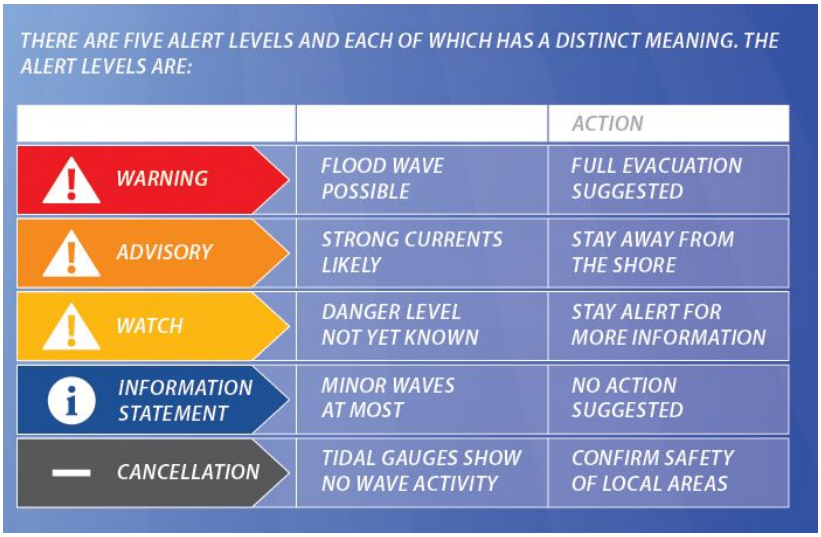
EARTHQUAKE
TRY TO REMAIN CALM

The first sign of an earthquake may be loud bang or roar. The ground may start to pitch and roll like a ship on the ocean for several seconds to minutes. Aftershocks may occur over the following hours or days.	
If indoors	**Drop, Cover & Hold –On:** • Take immediate cover under tables or desks, or crouch against an interior wall (do not stand in a doorway because you become a silhouette for a shrapnel hazard) that will offer protection against flying glass or debris. Keep away from windows to avoid flying glass. Do not stand under light fixtures, near stock shelves, etc. Do not leave cover until the shaking completely stops. Remain there for 60 seconds after shaking stops • After a major shock, evacuate the Terminal Buildings as in a fire, REMEMBER, additional shocks or tremors may occur. • Keep calm. Do not run outdoors. Watch for falling debris or electrical wires when leaving the Terminal Buildings/Equipment. • Proceed safely to the designated muster station • If fire occurs, sound the alarm (Westshore 20) and follow procedures outlined in the "Fire Response" section of the ECP. • If qualified, render first-aid to those in need. If not qualified, assist those rendering/requiring first-aid. • Report any missing persons to the IC • Landline telephones are to be reserved for emergency use only.
If outdoors:	• Stay in the open, away from equipment, buildings and power lines. • Proceed safely to the designated muster station Wait for designated Incident Command responder to arrive
If in a vehicle or machine	• When safe to do so, stop the vehicle/machine away from other equipment, powerlines and hazardous areas • After the shaking has stopped, and it is safe to do so, evacuate the machine • REMEMBER, additional shocks or tremors may occur • Proceed safely to the designated muster station
Post-earthquake update	• Notify Incident Commander of your status and location

TSUNAMI – General

TSUNAMI ALERT
TRY TO REMAIN CALM

Tsunamis are rare events and not all earthquakes will generate a tsunami. If a wave has been generated by a Cascadia subduction earthquake, the estimated time of arrival at Roberts Bank is approximately two hours from the time of the initial earthquake.

NOTIFICATION OF TSUNAMI	• **Generally, a tsunami will follow a very large earthquake** • **The Provincial Notification system (PENS) that will notify coastal communities of an inundating tsunami.** • **Emergency Management BC will broadcast, official tsunami alerts and information by radio, television, telephone, text message, social media, & weather radios.** • **The Canadian Coast Guard's Marine Communications Traffic Services broadcasts tsunami alerts to mariners.** • **Emergency Management divides the coastal communities into zones. Metro Vancouver including Westshore Terminals are located in Notification Zone E.** 
SIGNS	• **An Earthquake that lasts for more than 20 seconds** • **Rapid and unexpected recession of ocean levels below the expected low tide. This can occur minutes before the shoreline is struck by a tsunami.** • **According to Emergency Management BC., a tsunami would reach Delta approximately 2 hours after a Cascadia Subduction Zone earthquake**
ACTIONS	• **Incident Commander will initiate the evacuation order on all WTLP radio channels and conduct a sweep of the terminal by vehicle** • **Evacuate the site by vehicle or other means of transport** • **Car pool to limit the number of vehicles evacuating Roberts Bank**
DURING EVENT	• **If a tsunami warning has been issued and there is time, move to higher ground** • **If you cannot get to higher ground in time, go indoors and stay to the landward side of the structure away from windows.** • **Be aware - there may be multiple waves.**
AFTER EVENT	• **There may be flood waters that can be dangerous to walk or drive through. Before driving anywhere, it is best to listen to rescue officials, who will be coordinating evacuation plans.** • **Meet at the nearest WTLP Muster station or designated offsite location for a**

	site accountability check.

EVACUATION – General

EVACUATION
TRY TO REMAIN CALM
Evacuation may be co-ordinated with GCT regarding designated safe evacuation areas and shelters in the event of inclement weather or other hazards.

ACTION	**Upon hearing an evacuation alert and being advised of a safe area;** • **All non-designated employees will proceed to an evacuation muster stations and report to their Manager, Superintendent or Foreman.** • **All contractors and visitors shall report to their WTLP representative at an evacuation assembly area** • **Ship's crew on berthed vessels shall be advised of the evacuation order and safe assembly area.** • **Once evacuated, no person is permitted to re-enter any evacuated area until advised by the IC or Fire Department representative.** **IF ORDERED TO EVACUATE *DO NOT* COLLECT PERSONAL BELONGINGS, FINISH WORK OR REMAIN AT YOUR WORK STATION.** **LEAVE THE TERMINAL IF TOLD TO DO SO.**
MUSTER	**Muster stations are designated areas where personnel gather in an emergency so that a "head count" can be taken and instructions can be passed onto personnel through the Incident Commander. The Incident Commander may deem an alternate or additional muster station incident dependant.** **MUSTER STATION A: BACK OF MAIN BUILDING** **MUSTER STATION B: FRONT OF MAIN BUILDING AT SECURITY POST** **MUSTER STATION C: RESERVOIR 5** **MUSTER STATION D: TECK/ SAMPLERS BUILDING** **MUSTER STATION E: DUMPER 31 – SOUTH SIDE**
Designated Evacuation Personnel Duties	• **Alert and assist all persons to evacuate an area. The designated evacuation person shall be the last person to leave an area, ensuring all area doors are closed and all occupants have evacuated,** • **Check all washrooms, ensuring all occupants have evacuated,** • **Conduct a head count and report to the Incident Commander,** • **Convene at the assembly area to provide assistance or receive direction from the Incident Commander.** • **Restrict anyone from going back into an evacuation area under any circumstances until given permission** • **Co-ordinate with the Incident Commander for temporary relocation facilities for occupants**

IMMEDIATE ACTION PLANS

The IMMEDIATE ACTION PLANS require trained ICS Responders to use the following appendices:

A. Emergency Telephone Numbers
B. Incident Command Structure
C. Activation of Incident Command System Organizational Structure Flowchart
D. Incident Briefing Form C-201
E. Muster Stations
F. Emergency Container Contents
G. 200 Person Kit Contents
H. Above Ground Storage Tanks Fire and Spill Response

FIRE- Immediate Action Plan

FIRE Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• **Level of response will be determined by Incident Commander**

	• Determined that fire exceeds incipient response level
INITIAL ACTIONS	• Immediately contact Westshore Operations Coordinator 20 • Incident Commander assesses size of fire
ACTIVATE ICS STRUCTURE (OPS)	• Incident Commander function activated • Activate Incident Command Post and issue Command attire • Accountability of Personnel
NOTIFICATIONS	• Call 911 • Notify Port Metro Vancouver-initiate gate access • Notify Westguard- Marshall vehicles • Notify Westshore Security- initiate gate access • Notify Deltaport (GCT) • Notify Westshore First Aid
NEXT STEPS	• Determine appropriateness of deploying water truck
SCENE INTEGRITY (OPS)	• Incident Commander (IC) on scene • Secure and clear area • If safe to do so instruct employees to electrically isolate affected area • Assign Foreman/ personnel to meet emergency vehicles at Westshore Security gate entry point • Post person/ people at gates to direct and accompany emergency vehicles • Deploy First Response Truck
INTERNAL STAFF COMMUNICATIONS	• Prepare instructions to employees based on fire characteristics

FIRE – Command Staff Prompts

FIRE Command Staff Prompts	
REMAIN CALM	• Gather as much information from the witness/caller as possible

	• Determine level of emergency and activate the ECP accordingly
COMMUNICATION	• Channel 1 is now dedicated to the incident • Activate & assume command positions • Advise staff to remain at their workstations and standby for further instructions • Contact Emergency Services 9-1-1 • Contact Port of Vancouver Operations to ensure access for response vehicles is permitted • Notify Westguard that Emergency Services will be attending site • Notify WestshoreSecurity that there is an emergency incident underway • Confirm that power has been shut off if incident requires • All transfer of command will be by a "face to face" incident briefing • If requested, form Unified Command with emergency services • Dispatch personnel to escort emergency services to the incident or staging area. • Dispatch the WTLP First Aid attendant to respond to the scene or stand-by • Update Management when required • Organize & participate in Command staff briefings. • Participate in the Post Incident Review
PLAN	• Define incident objectives • Build strategies • Determine tactics • ICS Command Structure • What resources are required to mitigate situation • Consider scene safety • Periodically re-evaluate response strategies and tactics for efficiency
ACTION	• Only begin response/mitigation procedures using WTLP staff if the scene is stable • Request equipment and/or personnel resources required to mitigate emergency through the Incident Commander. • Assign an individual to control access to incident scene • Continuously evaluate scene safety • Document all actions, times and outcomes • Track resources and maintain personnel accountability
SPECIAL OPERATIONS	• Consider the location of the fire and the specific response actions and resources that may be required for that type of fire. E.g. Sample Plant fire, Structure fire, etc. • If required, confirm that power and gas supplies have been shut down.

FIRE LOCATION
WHERE IS THE FIRE?

STUCTURE FIRE	• Call 9-1-1 • Fire wardens will assist with evacuations • Dispatch water trucks • WTLP Personnel and site visitors evacuate to designated muster stations • Accountability • Activate sprinkler system in Sample Plant
CONVEYER BELT FIRE	• Keep conveyor belt moving • Dispatch water trucks • Deluge hot rollers with water
PROPANE TANK FIRE	• Evacuate the area and nearby buildings • Call 9-1-1 • Do not extinguish the fire • Dispatch water trucks to cool the tank from a safe distance • If safe to do so: shut off the fuel supply • Stage upwind from fire/leak and tank ends • In the event of fire extinguishment due to water application, continue to apply water on leaking tank until Fire Official recommends otherwise
SHIPBOARD FIRE	• Notify Coast Guard/ SEASPAN • Notify Ship's crew to evacuate • Call 9-1-1 • Safeguard and move ship loaders away from ship

MEDICAL EMERGENCY- Immediate Action Plan

MEDICAL EMERGENCY Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• Level of response will be determined by Incident Commander
INITIAL ACTIONS	• Call to OPS Coordinator • Confirm nature of injury and event details
ACTIVATE ICS STRUCTURE (OPS)	• Incident Commander function activated • Activate Incident Command Post and issue Command attire • Accountability of Personnel
NOTIFICATIONS	• Call 911 • Notify Port of Vancouver-initiate gate access • Notify Westguard- Marshall vehicles • Notify Westshore Security- initiate gate access • Notify Deltaport (GCT) • Notify Westshore First Aid
SCENE INTEGRITY (OPS)	• Incident Commander (IC) on scene • Secure and clear area • If safe to do so instruct employees to electrically isolate affected area • Assign Foreman to meet emergency vehicles at Westshore Security gate entry point • Post person/people at gates to direct and accompany emergency vehicles • Deploy First Response Truck
NEXT STEPS (SERIOUS EVENT/ FATALITY)	• Enter Unified Command • Activate EOC • Prepare for Media responses • Plan for scale of operational shutdown • Prepare for Critical Incident Stress Management

MEDICAL EMERGENCY – Command Staff Prompts

MEDICAL EMERGENCY Command Staff Prompts	
REMAIN CALM	• Gather as much information from the witness/caller as possible • Determine level of emergency and activate the ECP accordingly
COMMUNICATION	• Channel 1 is now dedicated to the incident • Assume command • Have the WTLP First Aid attendant respond to the scene. • Contact Emergency Services 9-1-1 • Contact Port of Vancouver Operations to ensure access for response vehicles is permitted • Notify Westguard that Emergency Services will be attending site • Notify Westshore Security that there is an emergency incident underway • Notify Security that there is an emergency incident underway. • Dispatch personnel to escort emergency services to the incident or staging area. • Maintain continuous radio/smartphone communication with WTLP First Aid Attendant throughout incident. • Dispatch an IC to the scene. • Update Management when required. • Participate in the Post Incident Review.
ACTIONS	• Coordinate with WTLP First Aid Attendant for resource requirements. • Assign an individual to control access to incident scene. • Track & document deployed staff, resources & actions. • Meet with emergency services representatives.

MAN IN WATER- Immediate Action Plan

MAN IN WATER Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• Level of response will be determined by Incident Commander
INITIAL ACTIONS	• Call to OPS Coordinator • Ops Coordinator to give clear instructions to anyone on site with visual contact: o Confirm and maintain visual contact o Throw life ring o Deploy Dan Buoy
ACTIVATE ICS STRUCTURE (OPS)	• Incident Commander Function Activated • Activate Incident Command Post and issue Command attire • Accountability of Personnel
NOTIFICATIONS	• Broadcast a MAYDAY to Coast Guard on VHF ch16 • Call 911 • Notify Port Metro Vancouver-initiate gate access • Notify Westguard- Marshall vehicles • Notify Westshore Security- initiate gate access • Notify Deltaport (GCT) • Notify Westshore First Aid
SCENE INTEGRITY (OPS)	• Incident Commander (IC) on scene • Secure and clear area • Assign Foreman to meet emergency vehicles at PMV entry point • Post person/people at gates to direct and accompany emergency vehicles • Deploy First Response Truck
NEXT STEPS (SERIOUS EVENT/ FATALITY)	• Enter Unified Command • Activate EOC • Prepare for media responses • Plan for scale of operational shutdown • Prepare for Critical Incident Stress Management

MAN IN WATER – Command Staff Prompts

MAN IN WATER
Command Staff Prompts

REMAIN CALM	• Gather as much information from the witness/caller as possible • Determine level of emergency and activate the ECP accordingly
COMMUNICATION	• Channel 1 is now dedicated to the incident • Contact CSPAN/Coast Guard – VHF Channel 16 -May Day call • Activate & assume command positions • Advise staff to remain at their workstations and standby for further instructions • Contact Marine Emergency Services on VHF radio • Contact Emergency Services 9-1-1 • Contact Port of Vancouver Operations to ensure access for response vehicles is permitted • Notify Westguard that Emergency Services will be attending site • Notify Westshore Security that there is an emergency incident underway • Dispatch personnel to escort emergency services from Gate to the incident or staging area. • Have the WTLP First Aid attendant respond to the scene • Update Management when required • Participate in the Post Incident Review
PLAN	• Define incident objectives • Build strategies • Determine tactics • ICS Command Structure • Scene safety • Consider the ocean and conditions prior to response operations.
ACTION	• Only begin response/mitigation procedures using WTLP staff if the scene is stable • Is the WTLP safety boat a deployable resource for this incident? • Request equipment and/or personnel resources required to mitigate emergency through the Incident Commander • Assign an individual to control access to incident scene • Document all actions, times and outcomes • Track resources and maintain personnel accountability

HYPOTHERMIA RATES

Water Temp	Loss of Dexterity (with no protective clothing)	Time to Exhaustion or Unconsciousness	Expected Survival Time
32.5 °F	Under 2 min.	Under 15 min.	Under 15 - 45 min.
32.5-40 °F	Under 3 min	15 to 30 min	30 to 90 min
40 - 50 °F	Under 5 min	30 to 60 min	1 to 3 hrs
50 - 60 °F	10 to 15 min	1 to 2 hrs	1 to 6 hrs
60 - 70 °F	30 to 40 min	2 to 7 hrs	2 to 40 hrs
70 - 80 °F	1 to 2 hrs	2 to 12 hrs	3 hrs to indefinite
> 80 °F	2 to 12 hrs.	Indefinite	Indefinite

BOMB THREAT- Immediate Action Plan

BOMB THREAT Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• Level of response will be determined by Incident Commander
INITIAL ACTIONS	• Call to OPS coordinator • Determine level of threat
ACTIVATE ICS STRUCTURE (OPS)	**If an On – Site incident:** • Incident Commander function activated • Activate Incident Command Post and issue Command attire • Accountability of personnel • Unified response initiated on arrival of emergency service **If an incident at Deltaport GCT:** • Contact or be contacted by GCT • Determine level of threat • Determine relevant Westshore response
NOTIFICATIONS	• Call 911 • Notify Port Metro Vancouver-initiate gate access • Notify Westguard- Marshall vehicles • Notify Westshore Security- initiate gate access • Notify Deltaport (GCT) • Notify Westshore First Aid • Notify vessels
MUSTER AND EVACUATION	• If necessary, muster • Determine need to evacuate

BOMB THREAT – Command Staff Prompts

BOMB THREAT Command Staff Prompts	
REMAIN CALM	• **Gather as much information from the witness/caller as possible**
COMMUNICATION	• **Contact Management to discuss:** ✓ **If the threat is valid?** ✓ **If evacuation of the terminal is necessary?** ✓ **Contacting Police?** ✓ **Contacting GCT?** • **If evacuation is ordered, advise all personnel to:** ✓ **Take with them all personal property, such as bags, briefcases, purses** ✓ **Unlock drawers, cabinets, etc. for search crew.** ✓ **Don't touch or move anything - report any suspect object.** ✓ **Evacuate the building/area immediately** ✓ **Proceed to designated muster station** ✓ **Fire Warden will assist with egress and accountability** • **Do not re-enter the building/area until the all clear is given by a Police Officer or Fire Warden**

DANGEROUS GOODS- Immediate Action Plan

DANGEROUS GOODS Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• Level of response will be determined by Incident Commander
INITIAL ACTIONS	• Call to OPS Coordinator • Determine level of threat
ACTIVATE ICS STRUCTURE (OPS)	**If an On – Site incident:** • Incident Commander function activated • Gather SDS information • Determine hazardous threat • **If fuel refer to Appendix H of ECP** **If an incident is at Deltaport GCT:** • Contact or be contacted by GCT 604-267-5541 • Gather SDS information • Determine hazardous threat • Establish safety response as determined by dangerous goods • Activate Incident Command Post and issue Command attire • Accountability of personnel • Determine level of threat • Determine relevant Westshore response
NOTIFICATIONS	**If an incident at Deltaport GCT:** • Notify employees with known details

MUSTER AND EVACUATION	**If an incident at Deltaport GCT:**
	• Dependent upon information provided:
	  o Muster
	  o Determine need to evacuate

CLEAN UP	**If an On –Site incident:** • Initiate containment and clean up

DANGEROUS GOODS INCIDENT – Command Staff Prompts

DANGEROUS GOODS INCIDENT Command Staff Prompts	
REMAIN CALM	• Gather as much information from the witness/caller as possible • Determine level of emergency and activate the ECP accordingly •
COMMUNICATION	• Channel 1 is now dedicated to the incident • Activate & assume command positions - if required. • Advise staff to remain at their workstations and standby for further instructions • Contact Marine Emergency Services on VHF radio • Contact Emergency Services 9-1-1 • Contact Port of Vancouver Operations to ensure access for response vehicles is permitted • Notify Westguard that Emergency Services will be attending site • Notify WestshoreSecurity that there is an emergency incident underway • Dispatch personnel to escort emergency services from gate to the incident or staging area. • Have the WTLP First Aid attendant respond to the scene or standby. • If requested, form Unified Command with Emergency Services • Update Management when required • Organize & participate in Command staff briefings. • Participate in the Post Incident Review •
SPECIAL CONSIDERATIONS	• Decontamination/first aid of WTLP staff that may have been exposed to the product • Consider weather impacts they may have on the spill and product. • Consider the location of the spill and the specific response actions that may be required to mitigate the situation at that location. E.g. GCT, ship, etc. • Spill may require a Shelter in Place strategy where no action until situation is mitigated by emergency services. • Coordination with GCT if the spill originated from their site. • If necessary, evacuation of the terminal • If product can be identified use the Safety Data Sheets (SDS) to refer to safe distances and spill mitigation measures.
PLAN	• Incident action planning ✓ Define incident objectives ✓ Build strategies ✓ Determine tactics ✓ What resources are required to mitigate situation ✓ What are the safety concerns
ACTIONS	• Establish a perimeter based on product and spill size • Assign an individual to control access to incident scene. • Record and track on scene staff, visitors, actions, times and outcomes. • Document all actions • Track deployed resources and staff

COMMAND STAFF PROMPTS Fuel	
COMMUNICATION	• **In the case of ANY fuel leak or spill, notify Environment Canada** • **For fuel fires or spills in excess of 100 litres, immediately notify Provincial Emergency Program (PEP).** • **Notify Greg Andrew – Director, Environmental Services** • **Contact and coordinate Environmental Cleanup services**
ACTIONS	• **Any large spillage from the tankage area must be contained at the T3 containment ditch. Pump 658 must be tagged out until the spilled product has been removed.** • **All ignition sources within the area must be eliminated or restricted. The use of motor vehicles will also be restricted or eliminated.** • **If safe to do so, proceed to shut down the pumping equipment related to the leaking or burning tank.** • **If safe to do so, close the emergency shut off valve(s) associated with the leaking or burning tank.**
PLAN	• **See Appendix H for specifics relating to fuel**

EARTHQUAKE- Immediate Action Plan

EARTHQUAKE Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• Upon the occurrence of an earthquake
INITIAL ACTIONS	• Drop, cover, hold on • Confirm if location is safe to work from
ACTIVATE ICS STRUCTURE (OPS)	• Incident Commander function activated • Activate Incident Command Post and issue Command attire • Accountability of personnel • Activate EOC
NOTIFICATIONS	• Notify staff to proceed to muster stations
MUSTER AND EVACUATION	• Develop evacuation plan • Identify alternative evacuation routes from site • Muster personnel • Notify Westshore Security to open gates
RAPID DAMAGE ASSESSMENT	• Rapid damage assessment on site facilities • Rapid damage assessment on ICP • Rapid damage assessment on EOC • Rapid damage assessment on vessels and trains
NEXT STEPS	• Plan for offsite accountability of personnel • Plan for offsite EOC • Plan for offsite ICP • Plan for return to site

EARTHQUAKE – Command Staff Prompts

EARTHQUAKE Command Staff Prompts	
The EOC will be activated as soon as possible post-earthquake to support the IC and the WTLP staff. Command duties will be initiated by the Operations Coordinator and eventually the IC role & responsibilities will be assumed by a manager. If possible, transfer of command will be face to face.	
REMAIN CALM	• Drop, cover, hold-on & protect yourself. • Gather as much information from the witness/caller as possible • Activate the ECP accordingly • Determine if radio system is working •
COMMUNICATION	• If radio system is working: • IC to broadcast on all channels: ✓ EMERGENCY-EMERGENCY- EMERGENCY– EARTHQUAKE • Identify yourself as the Incident Commander and that you will be assuming command of the incident • Advise personnel that Channel 1 is now the channel dedicated to the Incident Commander communications • Advise staff to remain at their workstations for a minute after the shaking has stopped and then if safe to do so proceed to their nearest muster station • Perform a status and roll call of the site on all channels (if they are working) •
DELEGATE	• Dispatch an Operations Foreman to assume the role as IC • Operations Coordinator assumes the role of Liaison Officer • Have the WTLP First Aid attendant on stand-by
SPECIAL OPERATIONS	• IC gathers information from reports, personal visual information and other WTLP staff to plan response based on the following: • Life safety issues • Operations • Environment • Possible evacuation • Consider possible aftershocks • Work with GCT representatives to combine response. • Participate in Command staff briefings • Participate in the Post Incident Review •
PLAN	• In consultation and collaboration with the EOC develop an Incident Action Plan based on response priorities: ✓ Life Safety ✓ Operations ✓ Environment • Response actions ✓ Define incident objectives ✓ Build strategies ✓ Determine tactics ✓ What resources are required to mitigate situation? ✓ What are the safety concerns? ✓ Establish shelter and supplies

TSUNAMI- Immediate Action Plan

TSUNAMI Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• **Upon the receipt of a tsunami notification that is a "WARNING" level.**
INITIAL ACTIONS	• **Review alert levels and recommended action in tsunami notification** • **Confirm source of information (if applicable)** • **Decision made to evacuate or shelter in place**
ACTIVATE ICS STRUCTURE (OPS)	• **Incident Commander function activated** • **Activate Incident Command Post and issue Command attire** • **Accountability of personnel** • **Activate EOC**
NOTIFICATIONS	• **Notify employees of tsunami warning** • **Notify off site employees and personnel to stay away** • **Notify staff to evacuate (see Evacuation Immediate Action Plan)**

TSUNAMI – Command Staff Prompts

TSUNAMI WARNING Command Staff Prompts	
NOTIFY	• **IC to broadcast on all channels:** ✓ **EMERGENCY-EMERGENCY- EMERGENCY– TSUNAMI** • **Identify yourself as the Incident Commander and that you will be assuming command of the incident.** • **Advise personnel that Channel 1 is now dedicated as a tsunami information channel and all personnel are to refrain from using it until further notice.** • **Advise staff to remain at their workstations and standby for further instructions** • **Notify Security that there is a tsunami warning in effect and standby for further information**
DELEGATE	• **Operations Coordinator assumes the role of Liaison Officer and will await instructions on evacuation orders** • **Assign an IC to conduct a sweep by vehicle of the WTLP site for any staff, visitors or ship's crew that may have not heard the evacuation order on the radio.** • **Once terminal is deemed clear, command staff are to evacuate as well.**
COMMUNICATION	• **Maintain continuous radio/smartphone communication with members of Command Staff throughout incident.** • **Provide evacuation status updates.** • **Update Management when required**

EVACUATION- Immediate Action Plan

EVACUATION Immediate Action Plan	
ACTIVATION IDENTIFIED BY	• **Level of response will be determined by Incident Commander**
INITIAL ACTIONS	• **Notify employees of warning** • **Provide instructions to proceed to muster stations**
ACTIVATE ICS STRUCTURE (OPS)	• **Incident Commander function activated** • **Activate Incident Command Post and issue Command attire** • **Activate EOC**
MUSTER AND EVACUATION	• **Develop evacuation plan** • **Identify alternative evacuation routes from site** • **Muster personnel** • **Notify Westshore Security to open gates**
NEXT STEPS	• **Plan for offsite accountability of personnel** • **Plan for offsite EOC** • **Plan for offsite ICP** • **Plan for return to site**

EVACUATION – Command Staff Prompts

EVACUATION Command Staff Prompts	
The Incident Commander is responsible for ordering and managing an emergency evacuation once determined that the nature of an emergency incident may pose significant threat to the health and safety of persons at WTLP. An evacuation may be ordered for a specific area or the entire terminal. A manager agrees a terminal evacuation.??	
COMMUNICATION	• **Broadcast on Channel 16 the evacuation order:** ✓ **Where to go (Muster stations/ evacuate the terminal completely)** ✓ **Clear all radio channels and wait for further instructions**
DELEGATE	• **Incident Commander will delegate positions to personnel to assist with information gathering and with the execution of evacuation orders** • **Activate evacuation personnel**
SPECIAL OPERATIONS	• **If it is safe to do so, assign an competent person to conduct a sweep of the WTLP site for any staff, visitors or ship's crew that may have not heard the evacuation order on the radio and report findings back to IC.**
ACTIONS	• **The IC or Liaison Officer shall contact any vessels at berth or site visitors and advise that an evacuation order is underway and that all people on the site shall proceed to the designated muster stations or evacuate the site completely.** • **The IC or Liaison shall advise the equipment operators of a pick-up location for transportation to the evacuation assembly area.** • **Once terminal is deemed clear, command staff are to evacuate as well** • **Upon being advised of the "all clear" order by the IC or Fire Department representative all persons shall resume normal duties**.

TRAINING

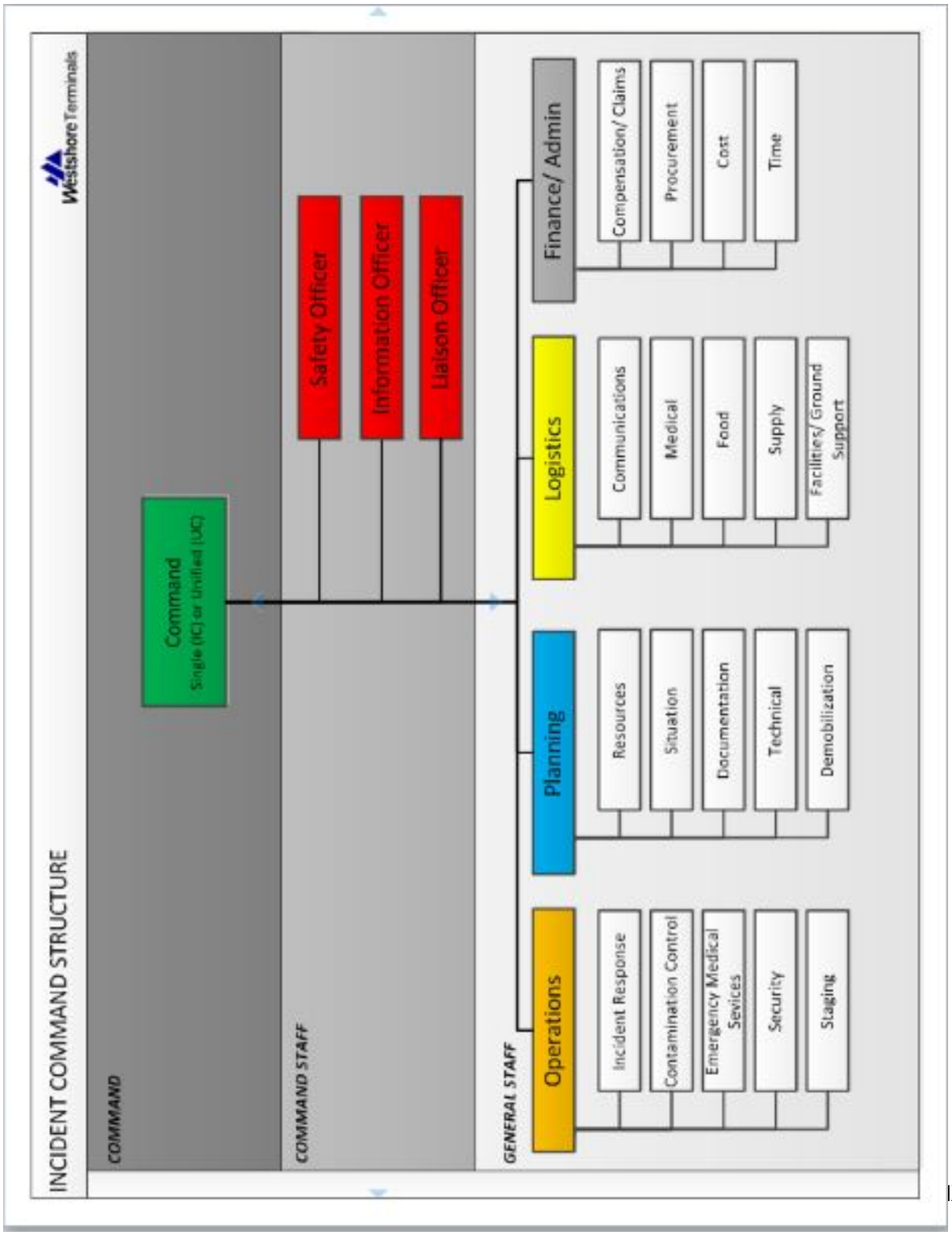
Any employees and contractors must be conversant in the WTLP Emergency Contingency Program. General orientation will be provided by WTLP and emergency specific training/drills will be coordinated.

APPENDICES

A. Emergency Telephone Numbers
B. Incident Command Structure
C. Activation of Incident Command System Organizational Structure Flowchart
D. Incident Briefing Form C-201
E. Muster Stations
F. Emergency Container Contents
G. 200 Person Kit Contents
H. Above Ground Storage Tanks Fire and Spill Response
I. Helicopter Landing Area

EMERGENCY TELEPHONE NUMBERS September 2015		
WESTSHORE OPERATIONS COORDINATOR		**469 604-946-3469**
EMERGENCY SERVICES		**911**
SECURITY GATE		**453 Cell# 604-365-6761**
WESTGUARD SECURITY (24/7 Operations Room)		**904-267-5432**
PORT OF VANCOUVER (24/7 Emergency Line- Gate Activation)		**604-665-9086**
COASTGUARD - Search and Rescue (24/7 Emergency line)		**1-800-567-5111**
NON EMERGENCY		
Delta Police		**604-946-4411**
RCMP (Surrey)		**778-290-3100**
Rail Police (CP- 24/7)		**1-800-716-9132**
Delta Fire Rescue & Emergency Services		**604-946-8541**
Ambulance (Ladner)		**604-946-2633**
Delta Hospital		**604- 946-1121**
Coastguard -*Search and Rescue*		**1-800-567-5111**
WTLP MANAGEMENT		
Glen Dudar	**Vice President & General Manager**	**604-315-6861**
Andrew MacDonell	**Operations Manager**	**604-837-9833**
Nick Guppy	**Ast. Operations Manager**	**604-809-4801**
Peter Prince-Wright	**Electrical Manager**	**604-868-4877**
Joost Van Woerden	**Mechanical Manager**	**778-554-2175**
David Honsberger	**HR Director**	**604-813-0367**
Gavin Wright	**Health & Safety Manager**	**604-803-4537**
Ray Hudon	**Safety Coordinator**	**604-202-4188**
Kris Andersen	**Training & Security**	**780-972-0755**
Greg Andrew	**Engineering & Environmental**	**604-790-3753**
RAILROADS		
BCR Supervisor	**24/7 General line**	**604-940-0716 604-946-9414**
CP Rail	**24/7 General line**	**1-800-795-7851**
CN Rail	**24/7 General line**	**1-800-668-6222**
MARINE RELATED		
Coast Guard	**Search and Rescue 24/7 Emergency line**	**1-800-567-5111**
GCT Deltaport	**Duty Superintendent 24/7 Emergency line**	**604-267-5541**
Port Metro Vancouver	**Operations Centre 24/7 Emergency line**	**604-665-9086**
BC Ferries	**Tsawwassen Terminal**	**604- 943-9331**

	24/7 General line	
Pacific Pilot Authority	**Dispatch Centre** **24/7 General line**	**604-666-6776**
Seaspan Tugs	**Roberts Bank Harbour Despatch**	**604-990-3300**
	Tug – "Hawk"	**604-862-4936** ***VHF Ch76 or 67***
	Tug – "Osprey"	**604-880-1994** ***VHF Ch76 or 67***
	Tug- "Resolution"	**604-219-1072** ***VHF Ch76 or 67***
	Tug- "Cape 10"	**604-220-5958** ***VHF Ch76 or 67***
ENVIRONMENTAL AND FEDERAL		
Marine Pollution	**Canadian Coast Guard 24/7 Emergency**	**1-800-889-8852** ***VHF Ch16***
Dangerous Goods Spill	**CANUTEC 24/7 Emergency line**	**1-613-996-6666**
Air Quality	**Metro Vancouver Air Quality Control**	**604-432-6200**
ESDC- Employment Social Development Canada	**Safety Officer -24/7 Emergency line**	**1-800-641-4049**
Marine Safety/ Security	**Transport Canada 24/7 General line.** **Press 8**	**1-855-859-3123**
Poison Control Centre	**24/7 Emergency line**	**1-800-567-8911**
Provincial Emergency Program	**24/7 Emergency line**	**1-800-663-3456**
Gas Leaks	**Fortis BC 24/7 Emergency line**	**1-800-663-9911**
Fuel Leaks	**Environment Canada Open 0800-1600.** **No emergency number**	**604-664-9100**
BC Hydro	**24/ 7 Emergency Line**	**1 888 769-3766**
Fortis BC	**24/ 7 Emergency Line**	**1-866-436-7847**
Oil & Fuel Spill	**McRae's Environmental Despatch** **24/ 7 Emergency Line** **Tervita Environmental Services** **24/ 7 Emergency Line**	**604-940-6200** **604-594-4410**
Hazardous Spill Hazmat Team	**Quantum Murray 24/ 7 Emergency Line**	**1-877-378-7745**


INCIDENT COMMAND STRUCTURE
Westshore Terminals
COMMAND
Command
Single (IC) or Unified (UC)
COMMAND STAFF
Safety Officer
Information Officer
Liaison Officer
GENERAL STAFF
Operations
Incident Response
Contamination Control
Emergency Medical Sevices
Security
Staging
Planning
Resources
Situation
Documentation
Technical
Demobilization
Logistics
Communications
Medical
Food
Supply
Facilities/ Ground Support
Finance/ Admin
Compensation/ Claims
Procurement
Cost
Time

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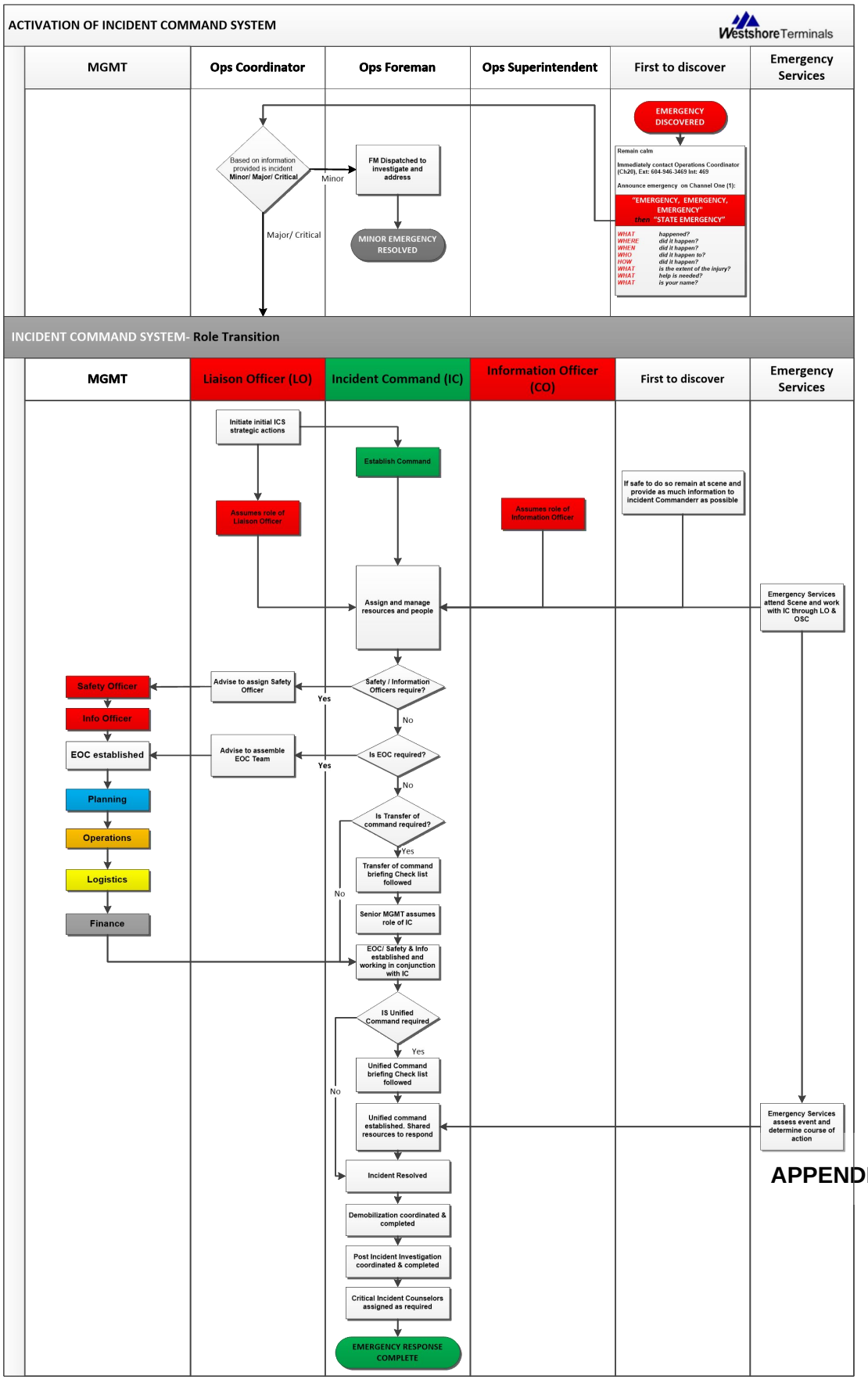

ACTIVATION OF INCIDENT COMMAND SYSTEM
Westshore Terminals
MGMT
Ops Coordinator
Ops Foreman
Ops Superintendent
First to discover
Emergency Services
EMERGENCY DISCOVERED
Remain calm
Immediately contact Operations Coordinator (Ch20), Ext: 604-946-3469 Int: 469
Announce emergency on Channel One (1):
"EMERGENCY, EMERGENCY, EMERGENCY" then "STATE EMERGENCY"
WHAT happened?
WHERE did it happen?
WHEN did it happen?
WHO did it happen to?
HOW did it happen?
WHAT is the extent of the injury?
WHAT help is needed?
WHAT is your name?
Based on information provided is incident Minor/ Major/ Critical
Minor
Major/ Critical
FM Dispatched to investigate and address
MINOR EMERGENCY RESOLVED
INCIDENT COMMAND SYSTEM- Role Transition
MGMT
Liaison Officer (LO)
Incident Command (IC)
Information Officer (CO)
First to discover
Emergency Services
Initiate initial ICS strategic actions
Establish Command
Assumes role of Liaison Officer
Assumes role of Information Officer
If safe to do so remain at scene and provide as much information to incident Commanderr as possible
Assign and manage resources and people
Emergency Services attend Scene and work with IC through LO & OSC
Safety Officer
Info Officer
EOC established
Planning
Operations
Logistics
Finance
Advise to assign Safety Officer
Safety / Information Officers require?
Yes
No
Advise to assemble EOC Team
Is EOC required?
Yes
No
Is Transfer of command required?
Yes
No
Transfer of command briefing Check list followed
Senior MGMT assumes role of IC
EOC/ Safety & Info established and working in conjunction with IC
IS Unified Command required
Yes
No
Unified Command briefing Check list followed
Unified command established. Shared resources to respond
Emergency Services assess event and determine course of action
Incident Resolved
Demobilization coordinated & completed
Post Incident Investigation coordinated & completed
Critical Incident Counselors assigned as required
EMERGENCY RESPONSE COMPLETE

APPENDIX D

INCIDENT BRIEFING (ICS 201)

1. Incident Name:	2. Incident Number:	3. Date/Time Initiated: Date: Date Time: HHMM

4. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, impacted and threatened areas, overflight results, trajectories, impacted shorelines, or other graphics depicting situational status and resource assignment)**:**

5. Situation Summary and Health and Safety Briefing (for briefings or transfer of command)**:** Recognize potential incident Health and Safety Hazards and develop necessary measures (remove hazard, provide personal protective equipment, warn people of the hazard) to protect responders from those hazards.

6. Prepared by:	Name:	Position/Title:	Signature:
ICS 201, Page 1		Date/Time: Date	

1. Incident Name:	2. Incident Number:	3. Date/Time Initiated: Date: Date Time: HHMM

1. Current and Planned Objectives

8. Current and Planned Actions, Strategies, and Tactics:

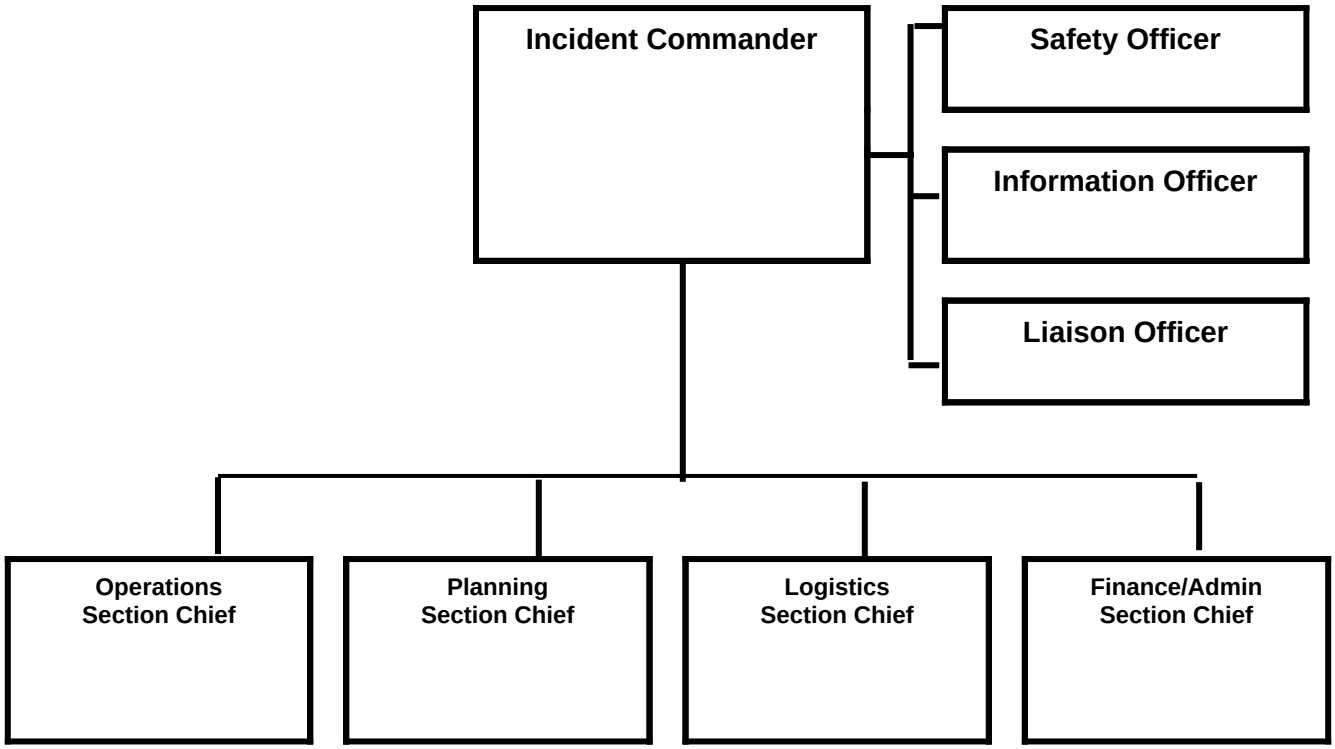
Time:	Actions:
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	
HHMM	

6. Prepared by: Name: Position/Title: Signature: _____

ICS 201, Page 2 Date/Time: Date

1. Incident Name:	2. Incident Number:	3. Date/Time Initiated: Date: Date Time: HHMM

9. Current Organization (fill in additional organization as appropriate)**:**



6. Prepared by:	Name:	Position/Title:	Signature: _____
ICS 201, Page 3		Date/Time: Date	

1. Incident Name:	2. Incident Number:	3. Date/Time Initiated: Date: DateTime: HHMM

10. Resource Summary:

Resource	Resource Identifier	Date/Time Ordered	ETA	Arrived	Notes (location/assignment/status)
				☐	
				☐	
				☐	
				☐	
				☐	
				☐	
				☐	
				☐	
				☐	
				☐	
				☐	

6. Prepared by: Name:	Position/Title:	Signature:
ICS 201, Page 4	Date/Time: Date	

ICS 201

Incident Briefing

Purpose. The Incident Briefing (ICS 201) provides the Incident Commander (and the Command and General Staff) with basic information regarding the incident situation and the resources allocated to the incident. In addition to a briefing document, the ICS 201 also serves as an initial action worksheet. It serves as a permanent record of the initial response to the incident.

Preparation. The briefing form is prepared by the Incident Commander for presentation to the incoming Incident Commander along with a more detailed oral briefing.

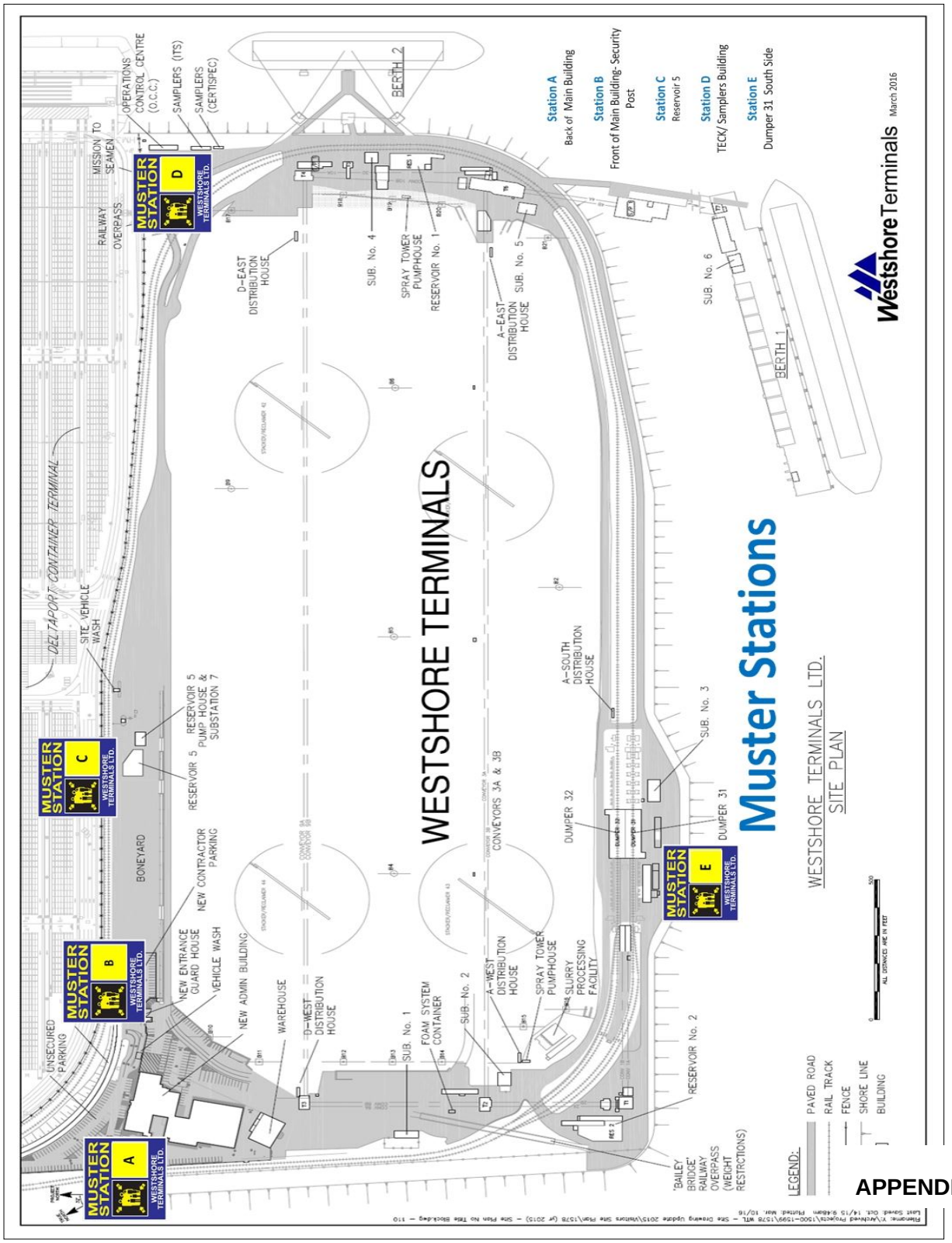
Distribution. Ideally, the ICS 201 is duplicated and distributed before the initial briefing of the Command and General Staff or other responders as appropriate. The "Map/Sketch" and "Current and Planned Actions, Strategies, and Tactics" sections (pages 1–2) of the briefing form are given to the Situation Unit, while the "Current Organization" and "Resource Summary" sections (pages 3–4) are given to the Resources Unit.

Notes:

- The ICS 201 can serve as part of the initial Incident Action Plan (IAP).
- If additional pages are needed for any form page, use a blank ICS 201 and repaginate as needed.

Block Number	Block Title	Instructions
1	**Incident Name**	Enter the name assigned to the incident.
2	**Incident Number**	Enter the number assigned to the incident.
3	**Date/Time Initiated** • Date, Time	Enter date initiated (month/day/year) and time initiated (using the 24-hour clock).
4	**Map/Sketch** (include sketch, showing the total area of operations, the incident site/area, impacted and threatened areas, overflight results, trajectories, impacted shorelines, or other graphics depicting situational status and resource assignment)	Show perimeter and other graphics depicting situational status, resource assignments, incident facilities, and other special information on a map/sketch or with attached maps. Utilize commonly accepted ICS map symbols. North should be at the top of page unless noted otherwise.
5	**Situation Summary and Health and Safety Briefing (**for briefings or transfer of command): Recognize potential incident Health and Safety Hazards and develop necessary measures (remove hazard, provide personal protective equipment, warn people of the hazard) to protect responders from those hazards.	Self-explanatory.

Block Number	Block Title	Instructions
6	**Prepared by** • Name • Position/Title • Signature • Date/Time	Enter the name, ICS position/title, and signature of the person preparing the form. Enter date (month/day/year) and time prepared (24-hour clock).
7	**Current and Planned Objectives**	Enter the objectives used on the incident and note any specific problem areas.
8	**Current and Planned Actions, Strategies, and Tactics** • Time • Actions	Enter the current and planned actions, strategies, and tactics and time they may or did occur to attain the objectives. If additional pages are needed, use a blank sheet or another ICS 201 (Page 2), and adjust page numbers accordingly.
9	**Current Organization** (fill in additional organization as appropriate) • Incident Commander(s) • Liaison Officer • Safety Officer • Information Officer • Planning Section Chief • Operations Section Chief • Finance/Administration Section Chief • Logistics Section Chief	• Enter on the organization chart the names of the individuals assigned to each position. • Modify the chart as necessary, and add any lines/spaces needed for Command Staff Assistants, Agency Representatives, and the organization of each of the General Staff Sections. • If Unified Command is being used, split the Incident Commander box. • Indicate agency for each of the Incident Commanders listed if Unified Command is being used.
10	**Resource Summary**	Enter the following information about the resources allocated to the incident. If additional pages are needed, use a blank sheet or another ICS 201 (Page 4), and adjust page numbers accordingly.
	• Resource	Enter the number and appropriate category, kind, or type of resource ordered.
	• Resource Identifier	Enter the relevant agency designator and/or resource designator (if any).
	• Date/Time Ordered	Enter the date (month/day/year) and time (24-hour clock) the resource was ordered.
	• ETA	Enter the estimated time of arrival (ETA) to the incident (use 24-hour clock).
	• Arrived	Enter an “X” or a checkmark upon arrival to the incident.
	• Notes (location/ assignment/status)	Enter notes such as the assigned location of the resource and/or the actual assignment and status.



EMERGENCY CONTAINER CONTENTS

APPENDIX F

LAST INSPECTED: 01/06/2016 **Seal #**

	Item	Qty	U. M.	Location
	Chainsaw c/w 2 qts chain oil, Stihl 021	1	ea	
	First Aid Kit - WCB Approved Prepackaged No. 1	1	ea	
	First Aid Kit - WCB Approved Prepackaged No. 3	1	ea	
	Slings - synthetic- nylon - 5000 lbs 12=	4	ea	
	Tarps 20 X 30ft - polyethylene with grommets	2	ea	
	Tarps 8 X 10ft - polyethylene with grommets	2	ea	
	Work gloves - leather palms	12	pr	
	Work gloves - regular cotton type	24	pr	
	Block and tackle	2	ea	
1.	Bunji cords - 3ft	6	ea	
2.	Cutting Knife - Carton opener (Olfa style)	2	ea	
3.	Electricians tape - 1 Box	10	ea	
4.	Goggles - safety	12	ea	
5.	Hose nozzle - Garden	1	ea	
6.	Hydrant wrench	2	ea	
7.	Universal scissors - WIS 1 ONLY	2	ea	
8.	Light - Bulbs 110v - (50w - for trouble-light)	12	ea	
9.	Light - Trouble type - 110v	4	ea	
10.	5-Gallon plastic containers collapsible-empty (4.2 fl oz)	4	ea	
11.	Axe - Fireman's 6 lb	1	ea	
12.	Blankets	50	ea	
13.	Bolt cutters	1	ea	
14.	Broom - corn bristle	2	ea	
15.	Come-along	1	ea	
16.	Gasoline 2 gals in a secure can (for chainsaw)	1	ea	
17.	Gen Set, Honda Ser# QC02-2341891	1	ea	
18.	Hammer - sledge 12# - 36in handle - Elgin	1	ea	
19.	Hand saw	1	ea	
20.	Hand-panel pump	1	ea	
21.	Megaphone - Requires 8 AA cells	1	ea	
22.	Pick - c/w handle - Elgin	2	ea	
23.	Rope - load carrying - nylon 1/2in (5950 lb) 40=	250	ft	
24.	Rope - Mountain quality hemp 5/8 in (4400 lb)	200	ft	
25.	Rope - Twine 1/4in light duty nylon string	1200	ft	
26.	Shovels - round point - 48 in handle	2	ea	

2 x 100 PERSON KIT CONTENTS

Food & Water

34 packs- 200 – 400 Calorie Food Bars (packaged 6 or 9 bars per sealed package)

300 – Water Pouches (4.2 oz)

3 – Collapsible 8L Water Containers

3 – Water Purification Tablets (50 count bottle)

Light & Communication

3 – Dynamo AM/FM Radio Flashlights

3 – Cell Phone Adapter Sets for Dynamo Flashlight Radios

6 – Flashlights (with AA Batteries)

50 – 8 Hour Light sticks

Shelter & Warmth

100 – Emergency Blankets

50 – Emergency Rain Ponchos

6 – Tube Tents

3 – Duct Tape (10 yard rolls)

3 – 6×8′ Tarps

3 – Plastic Sheets

3 – Waterproof Matches (box of 50)

6 – Candles (boxes of 6)

Survival Tools

9 – Signal Whistles

3 – Pry Bars

3 – Multi-tool Knives

6 – Work Gloves (pairs)

3 – Emergency Preparedness Guides

Sanitation

3 – 5 Gallon Buckets

3 – Honey Bucket Toilet Seats

15 – Toilet Chemicals

15 – Toilet Liners

3 – Biohazard Bags

3 – Toilet Paper Rolls

6 – 2 oz Hand Disinfectant

3 – 1 gallon Zip Lock Bags

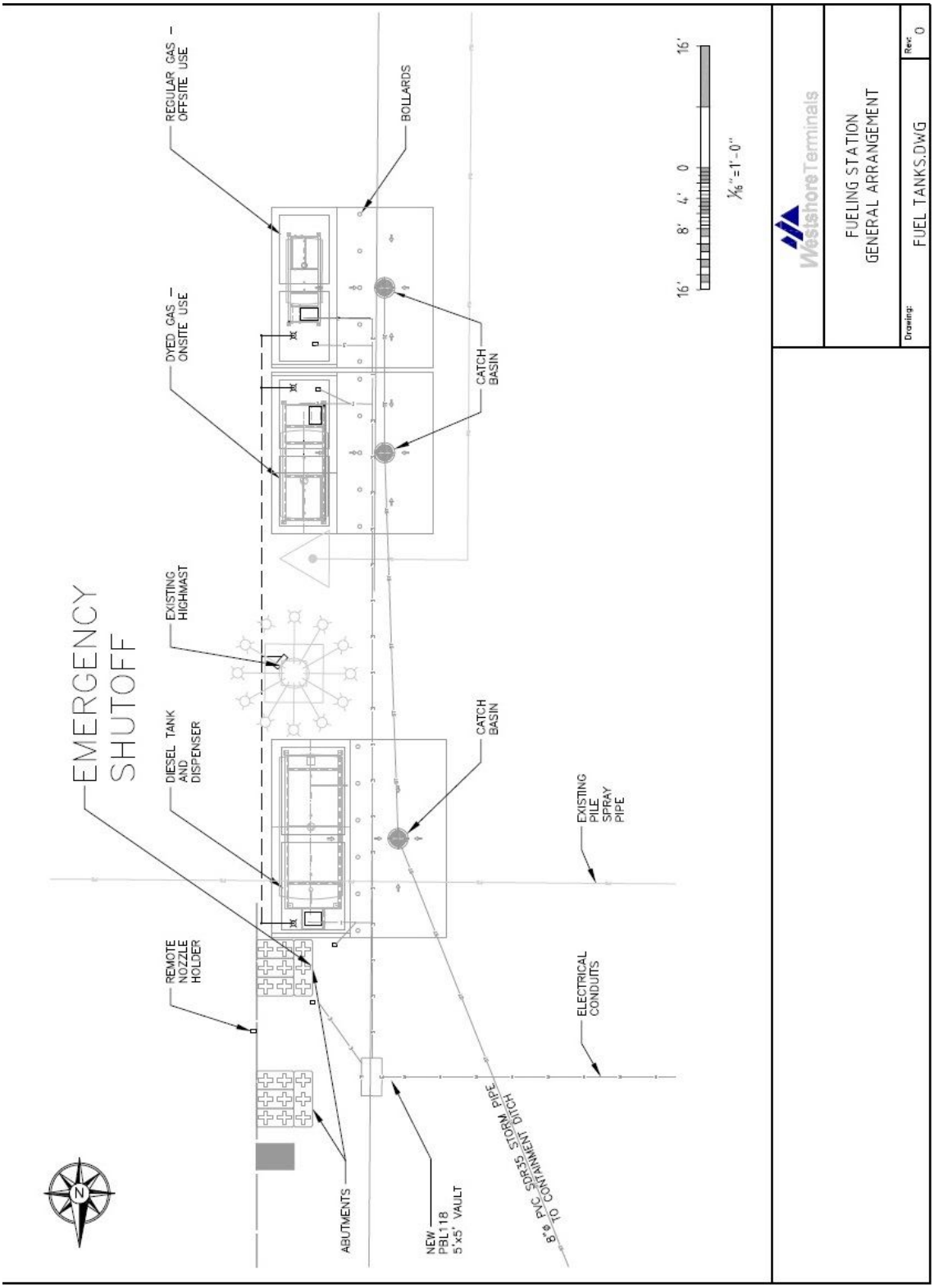
3 – Gloves (pairs)

First Aid

3 – 165 Pc First Aid Kits

100 – N95 Masks

ABOVE GROUND STORAGE TANKS- FIRE AND SPILL RESPONSE



If required shut off all dispensers with emergency shut-off button

EMERGENCY SHUT-OFF- Located between all tanks at west end of site

FUEL TANK

SPILL RUN-OFF AREA- Any surface fuel spill will run towards and be contained at Pump 658 chamber by Transfer 3 – Ensure PUMP is turned off and electrically isolated.

SPILL RESPONSE EQUIPMENT

A Spill Kit containing 50m of absorbent booms is located at the fuel tanks. In addition the following spill response equipment is available at the Warehouse.

TYPE	SIZE	QUANTITY AVAILABLE	STORAGE	STOCK NUMBER
Personal Protection Equipment	Raingear, Goggles, face shield, glasses, gloves, boots, etc..	Stock quantities	Warehouse	#
Shovels	48" - round head 48" - square head	Stock quantities	Warehouse	W22858010 W22858020
Brooms	corn	Stock quantities	Warehouse	W22441015
Green Garbage Bags	24 X 22 35 X 50	Stock quantities	Warehouse	W22440510 W22440520
Floor Dry Absorbent	Clay type material	Stock quantities	Warehouse	W22023000
Boom, Oil Absorbent	4' X 20'	2 per bag x 2	Warehouse	W22301010
Pad, Oil Absorbent	17" X 19"	100 per bag x 3	Warehouse	W22301050
Sock, Oil Absorbent	8" X 10'	4 per bag x 2	Warehouse	W22301090
Cardboard	36" X 6'	Stock quantities	Cat Shop	#

Above Ground Storage Tank Information

Above Ground Storage Tank	Dyed Gasoline Tank	Diesel Tank	Regular Gas Tank
Capacity of Tank	10,000 litres	28,000 litres	2,000 litres
Year of Installation	2016	2016	2016
Type of Storage Tank	Steel – double walled		
Type of piping	Steel		
Corrosion Protection Provided	Epoxy & Polyurethane Coating		
Type of Pumps	Suction	Submersible	Suction
Type of Leak Detection	Vacuum	Vacuum	Vacuum
Type and Capacity of Secondary Containment	Steel Wall – 100%		
Type of Overfill Protection	Float Valve	Float Valve	Float Valve
Manufacturer of Tank	Regal	Regal	Regal

Tank & Dispenser Identification

Diesel Tank (28,000L Capacity)	
	
Dyed Gasoline Tank- On site vehicles (10,000L Capacity)	
	
Gasoline Tank- Off site vehicles (2,000L Capacity)	
	

Diesel MSDS

Esso Imperial Oil

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: (see Section 16 for Synonyms) **DIESEL RAIL CP BRITT**
Product Description: Hydrocarbons and Additives
MSDS Number: 11474

Intended Use: Fuel

COMPANY IDENTIFICATION

Supplier: **Imperial Oil Products Division**
240 4th Avenue
Calgary, ALBERTA. T2P 3M9 Canada

24 Hour Environmental / Health Emergency Telephone	1-866-232-9563
Transportation Emergency Phone Number	1-866-232-9563
Product Technical Information	1-800-268-3183
Supplier General Contact	1-800-567-3776

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	Concentration*	Acute Toxicity
FUEL OIL NO. 2	68476-30-2	> 99 %	None

Hazardous Constituent(s) Contained in Complex Substance(s)

Name	CAS#	Concentration*	Acute Toxicity
NAPHTHALENE	91-20-3	< 1%	Dermal Lethality: LD50 > 2500 mg/kg (Rat); Inhalation Lethality: LC50 > 0.4 mg/l (Rat); Oral Lethality: LD50 622 mg/kg (Mouse)

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 3 HAZARDS IDENTIFICATION

This material is considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

PHYSICAL/CHEMICAL EFFECTS

Combustible. In use, may form flammable/explosive vapour-air mixture. Material can release vapours that readily form flammable mixtures. Vapour accumulation could flash and/or explode if ignited. Material can accumulate static charges which may cause an ignition.

HEALTH EFFECTS

Irritating to skin. If swallowed, may be aspirated and cause lung damage. Under conditions of poor personal

hygiene and prolonged repeated contact, some polycyclic aromatic compounds (PACs) have been suspected as a cause of skin cancer in humans. May be irritating to the eyes, nose, throat, and lungs. High-pressure injection under skin may cause serious damage.

Target Organs: Skin |

NFPA Hazard ID:	Health:	1	Flammability:	2	Reactivity: 0
HMIS Hazard ID:	Health:	1	Flammability:	2	Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 4 FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Remove contaminated clothing. Dry wipe exposed skin and cleanse with waterless hand cleaner and follow by washing thoroughly with soap and water. For those providing assistance, avoid further skin contact to yourself or others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated articles that cannot be laundered. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

PRE-EXISTING MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE

Contains hydrocarbon solvent/petroleum hydrocarbons; skin contact may aggravate an existing dermatitis.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO_2) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Combustible. Vapour is flammable and heavier than air. Vapour may travel across the ground and reach remote ignition sources, causing a flashback fire danger. Static discharge: material can accumulate static charges which may cause an incendiary electrical discharge. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Smoke, Fume, Aldehydes, Sulphur oxides, Incomplete combustion products, Oxides of carbon

FLAMMABILITY PROPERTIES

Flash Point [Method]: >40°C (104°F) [ASTM D-93]
Flammable Limits (Approximate volume % in air): LEL: 0.7 UEL: 6.5
Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

SPILL MANAGEMENT

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Eliminate sources of ignition. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid breathing mists or vapour. Avoid contact with skin. Do not siphon by mouth. It is dangerous and/or unlawful to put petrol into unapproved containers. Do not fill container while it is in or on a vehicle. Static electricity may ignite vapour and cause fire. Place container on ground when filling and keep nozzle in contact with container. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

STORAGE

The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Substance Name	Form	Limit/Standard			Note	Source
FUEL OIL NO. 2	Stable Aerosol.	TWA	5 mg/m3			Supplier
FUEL OIL NO. 2	Vapour.	TWA	200 mg/m3			Supplier
FUEL OIL NO. 2 [total hydrocarb, vapor&aerosol]	Inhalable fraction and vapour	TWA	100 mg/m3		Skin	ACGIH
NAPHTHALENE		STEL	15 ppm		Skin	ACGIH
NAPHTHALENE		TWA	10 ppm		Skin	ACGIH

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If prolonged or repeated contact is likely, chemical-resistant gloves are recommended. If contact with forearms is likely, wear gauntlet-style gloves.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practise good housekeeping.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION

Physical State: Liquid
Colour: Clear (May Be Dyed)
Odour: Petroleum/Solvent
Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15.5 °C): 0.82 - 0.9
Flash Point [Method]: >40°C (104°F) [ASTM D-93]
Flammable Limits (Approximate volume % in air): LEL: 0.7 UEL: 6.5
Autoignition Temperature: N/D
Boiling Point / Range: 150°C (302°F) - 370°C (698°F)
Vapour Density (Air = 1): 4 at 101 kPa
Vapour Pressure: [N/D at 20°C] | 4 kPa (30 mm Hg) at 38°C
Evaporation Rate (n-butyl acetate = 1): < 1
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): N/D
Solubility in Water: Negligible
Viscosity: 1.3 cSt (1.3 mm2/sec) at 40°C - 11 cSt (11 mm2/sec) at 40°C
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/A
Pour Point: -4°C (25°F) - -39°C (-38°F)

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity (Rat): LC50 > 5000 mg/m3	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components.
Ingestion	
Toxicity (Rat): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Skin	

Toxicity (Rabbit): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: Data available.	Moderately irritating to skin with prolonged exposure.
Eye	
Irritation (Rabbit): Data available.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.

CHRONIC/OTHER EFFECTS

For the product itself:

Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Diesel fuel: Carcinogenic in animal tests. Caused mutations in-vitro. Repeated dermal exposures to high concentrations in test animals resulted in reduced litter size and litter weight, and increased fetal resorptions at maternally toxic doses. Dermal exposure to high concentrations resulted in severe skin irritation with weight loss and some mortality. Inhalation exposure to high concentrations resulted in respiratory tract irritation, lung changes/infiltration/accumulation, and reduction in lung function.

Contains:

NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.

Additional information is available by request.

CMR Status:

Chemical Name	CAS Number	List Citations
FUEL OIL NO. 2	68476-30-2	4
NAPHTHALENE	91-20-3	3, 4

--REGULATORY LISTS SEARCHED--

1 = IARC 1
2 = IARC 2A
3 = IARC 2B
4 = ACGIH ALL
5 = ACGIH A1
6 = ACGIH A2

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

MOBILITY

More volatile component -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

High molecular wt. component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Hydrocarbon component -- Expected to be inherently biodegradable

Atmospheric Oxidation:
More volatile component -- Expected to degrade rapidly in air

BIOACCUMULATION POTENTIAL
Hydrocarbon component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

LAND (TDG)

Proper Shipping Name: FUEL OIL
Hazard Class & Division: 3
UN Number: 1202
Packing Group: III

LAND (DOT)

Proper Shipping Name: HEATING OIL, LIGHT
Hazard Class & Division: 3
ID Number: 1202
Packing Group: III
ERG Number: 128
Label(s): 3
Transport Document Name: UN1202, HEATING OIL, LIGHT, 3, PG III

Footnote: The flash point of this material is greater than 38°C/100°F. Regulatory

classification of this material varies. DOT: Flammable liquid or combustible liquid. OSHA: Combustible liquid. IATA/IMO: Flammable liquid.

SEA (IMDG)

Proper Shipping Name: HEATING OIL, LIGHT
Hazard Class & Division: 3
EMS Number: F-E, S-E
UN Number: 1202
Packing Group: III
Label(s): 3
Transport Document Name:

AIR (IATA)

Proper Shipping Name: HEATING OIL, LIGHT
Hazard Class & Division: 3
UN Number: 1202
Packing Group: III
Label(s) / Mark(s): 3
Transport Document Name:

SECTION 15 REGULATORY INFORMATION

WHMIS Classification: Class B, Division 3: Combustible Liquids Class D, Division 2, Subdivision B: Toxic Material

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations.

CEPA: All components of this material are either on the Canadian Domestic Substances List (DSL), exempt, or have been notified under CEPA.

Complies with the following national/regional chemical inventory requirements: DSL, TSCA

The Following Ingredients are Cited on the Lists Below:

Chemical Name	CAS Number	List Citations
NAPHTHALENE	91-20-3	5, 6

--REGULATORY LISTS SEARCHED--

1 = TSCA 4
2 = TSCA 5a2
3 = TSCA 5e
4 = TSCA 6
5 = TSCA 12b
6 = NPRI

Esso Imperial Oil

SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:

Section 11: Inhalation Irritation Test Data was modified.

SYNONYMS: ULTRA LOW SULPHUR DIESEL, DIESEL MARINE, DIESEL LOW SULPHUR RAIL, DIESEL LOW SULPHUR, DIESEL LOW SULPHUR DYED, DIESEL NAVAL 3GP-15 DYED, DIESEL NAVAL 3GP-11, DIESEL MARINE GAS OIL, DIESEL REGULAR SULPHUR, DIESEL NAVAL 3GP-11 DYED, DIESEL REGULAR SULPHUR RAIL, DIESEL REGULAR SULPHUR DYED, DIESEL REGULAR SULPHUR RAIL #3, ESSO DIESEL FUEL, DIESEL REGULAR SULPHUR RAIL DYED, ESSO HEATING OIL, FURNACE FUEL DYED, FURNACE FUEL, ISO 8217 DMA, ISO 8217 DMB, NO. 2 FUEL OIL, REGULAR SULPHUR DIESEL FUEL, DIESEL MARINE DYED, DIESEL MARINE GAS OIL INTERNATIONAL, DIESEL MARINE GAS OIL DYED, DIESEL FUEL, AUTOMOTIVE (ON-ROAD) DIESEL FUEL, FURNACE LOW S DYED, FURNACE LOW S, DIESEL MARINE - NLA DYED, DIESEL LOW SULPHUR RAIL DYED

PRECAUTIONARY LABEL TEXT:

WHMIS Classification: Class B, Division 3: Combustible Liquids Class D, Division 2, Subdivision B: Toxic Material

HEALTH HAZARDS

Irritating to skin. If swallowed, may be aspirated and cause lung damage.

Target Organs: Skin |

PHYSICAL HAZARDS

In use, may form flammable/explosive vapour-air mixture. Combustible. Material can accumulate static charges which may cause an ignition.

PRECAUTIONS

Avoid contact with skin. Do not siphon by mouth. Use proper bonding and/or earthing procedures.However, bonding and earthing may not eliminate the hazard from static accumulation.

FIRST AID

Eye: Flush thoroughly with water. If irritation occurs, get medical assistance.

Oral: Seek immediate medical attention. Do not induce vomiting.

Skin: Remove contaminated clothing. Dry wipe exposed skin and cleanse with waterless hand cleaner and follow by washing thoroughly with soap and water. For those providing assistance, avoid further skin contact to yourself or others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated articles that cannot be laundered. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

FIRE FIGHTING MEDIA

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

SPILL/LEAK

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewer, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Eliminate sources of ignition. Remove from the surface by skimming or with suitable absorbents. Report spills as required to appropriate authorities. Seek the advice of a specialist before using dispersants.

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DGN: 5009461 (1004214)

Prepared by: Imperial Oil Limited, IH and Product Safety

Gasoline MSDS

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Product Name: GASOLINE UNLEADED WITH ETHANOL (GASOHOL)
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SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: (see Section 16 for Synonyms) **GASOLINE UNLEADED WITH ETHANOL (GASOHOL)**
Product Description: Hydrocarbons and Additives
Product Code: 12443
Intended Use: Fuel

COMPANY IDENTIFICATION

Supplier: **Canada Imperial Oil Limited, An Affiliate of Exxon Mobil Corporation**
P.O. Box 2480, Station M
Calgary, ALBERTA. T2P 3M9 Canada

24 Hour Health Emergency	1-866-232-9563
Transportation Emergency Phone	1-866-232-9563
Supplier General Contact	1-800-567-3776

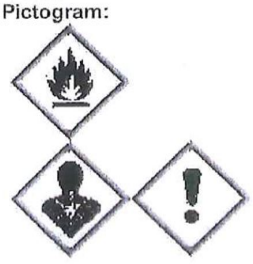
SECTION 2 HAZARDS IDENTIFICATION

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

CLASSIFICATION:

Flammable liquid: Category 1.
Skin irritation: Category 2. Germ Cell Mutagen: Category 1B. Carcinogen: Category 1A. Specific target organ toxicant (central nervous system): Category 3. Specific target organ toxicant (respiratory irritant): Category 3. Aspiration toxicant: Category 1.

LABEL:
Pictogram:



Signal Word: Danger

Hazard Statements:
H224: Extremely flammable liquid and vapor. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H335: May cause respiratory irritation. H336: May cause drowsiness or dizziness. H340: May cause genetic defects. H350: May cause cancer.

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Precautionary Statements:
P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P103: Read label before use.P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking. P233: Keep container tightly closed. P240: Ground / bond container and receiving equipment. P241: Use explosion-proof electrical, ventilating, and lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P264: Wash skin thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment.P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308 + P313: IF exposed or concerned: Get medical advice/ attention. P331: Do NOT induce vomiting. P332 + P313: If skin irritation occurs: Get medical advice/ attention. P362 + P364: Take off contaminated clothing and wash it before reuse. P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish. P391: Collect spillage.P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.P501: Dispose of contents and container in accordance with local regulations.

Contains: GASOLINE; TOLUENE; XYLENES

Other hazard information:

HAZARD NOT OTHERWISE CLASSIFIED (HNOC): None as defined under 29 CFR 1910.1200.

PHYSICAL / CHEMICAL HAZARDS
Material can accumulate static charges which may cause an ignition. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited.

HEALTH HAZARDS
High-pressure injection under skin may cause serious damage. May be irritating to the eyes, nose, throat, and lungs. May cause central nervous system depression. Exposure to benzene is associated with cancer (acute myeloid leukemia and myelodysplastic syndrome), damage to the blood-producing system, and serious blood disorders (see Section 11).

ENVIRONMENTAL HAZARDS
Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

NFPA Hazard ID:	Health:	2	Flammability:	3	Reactivity:	0
HMIS Hazard ID:	Health:	2*	Flammability:	3	Reactivity:	0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

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Product Name: GASOLINE UNLEADED WITH ETHANOL (GASOHOL)
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Hazardous Substance(s) or Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Hazard Codes
ETHYL ALCOHOL	64-17-5	0 - 10%	H225, H319(2A)
GASOLINE	86290-81-5	89 - 100%	H224, H304, H336, H340(1B), H350(1B), H361(D), H315, H401, H411
METHYL-TERT-BUTYL ETHER	1634-04-4	0 - 1%	H225, H303, H305, H315

Hazardous Constituent(s) Contained in Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Hazard Codes
BENZENE	71-43-2	0 - 1.5%	H225, H303, H304, H340(1B), H350(1A), H315, H319(2A), H372, H401
CUMENE	98-82-8	0 - 1%	H226, H304, H335, H351, H401, H411
CYCLOHEXANE	110-82-7	0 - 1.5%	H225, H304, H336, H315, H400(M factor 1), H410(M factor 1)
ETHYL BENZENE	100-41-4	0 - 3.5%	H225, H332, H351
N-HEXANE	110-54-3	0 - 5%	H225, H304, H336, H361(F), H315, H373, H401, H411
NAPHTHALENE	91-20-3	0 - 1%	H302, H351, H400(M factor 1), H410(M factor 1)
TOLUENE	108-88-3	0 - 20%	H225, H304, H336, H361(D), H315, H373, H401, H412
XYLENES	1330-20-7	0 - 20%	H226, H304, H312, H332, H335, H315, H320(2B), H373, H401

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

NOTE: The concentration of the components shown above may vary substantially. In certain countries, benzene content may be limited to lower levels. Oxygenates such as tertiary-amyl-methyl ether, ethanol, di-isopropyl ether, and ethyl-tertiary-butyl ether may be present. Because of volatility considerations, gasoline vapor may have concentrations of components very different from those of liquid gasoline. The major components of gasoline vapor are: butane, isobutane, pentane, and isopentane. The reportable component percentages, shown in the composition/information on ingredients section, are based on API's evaluation of a typical gasoline mixture. Motor gasoline is considered a mixture by EPA under the Toxic Substances Control Act (TSCA). The refinery streams used to blend motor gasoline are all on the TSCA Chemical Substances Inventory.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

SECTION 4 FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. This light hydrocarbon material, or a component, may be associated with cardiac sensitization following very high exposures (well above occupational exposure limits) or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine. Administration of such substances should be avoided.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Extremely Flammable. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Sulfur oxides, Aldehydes, Oxides of carbon, Incomplete combustion products, Smoke, Fume

FLAMMABILITY PROPERTIES

Flash Point [Method]: -40°C (-40°F) [ASTM D-92]

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Flammable Limits (Approximate volume % in air): LEL: 1.5 UEL: 7.6
Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for organic vapor and, when applicable, H2S, or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

SPILL MANAGEMENT

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Water Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Do not confine in area of spill. Advise occupants and shipping in downwind areas of fire and explosion hazard and warn them to stay clear. Allow liquid to evaporate from the surface. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid breathing mists or vapors. Avoid all personal contact. Prevent exposure to ignition sources, for example use non-sparking tools and explosion-proof equipment. Potentially toxic/irritating fumes/vapors may be evolved from heated or agitated material. Do not siphon by mouth. Use only with adequate ventilation. Do not use as a cleaning solvent or other non-motor fuel uses. For use as a motor fuel only. It is dangerous and/or unlawful to put fuel into unapproved containers. Do not fill container while it is in or on a vehicle. Static electricity may ignite vapors and cause fire. Place container on ground when filling and keep nozzle in contact with container. Do not use electronic devices (including but not limited to cellular phones, computers, calculators, pagers or other electronic devices, etc.) in or around any fueling operation or storage area unless the devices are certified intrinsically safe by an approved national testing agency and to the safety standards required by national and/or local laws and regulations. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

STORAGE

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be grounded and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit / Standard			NOTE	Source
BENZENE		OSHA Action level	0.5 ppm		N/A	OSHA Sp.Reg.
BENZENE		STEL	5 ppm		N/A	OSHA Sp.Reg.
BENZENE		TWA	1 ppm		N/A	OSHA Sp.Reg.
BENZENE		STEL	1 ppm		N/A	ExxonMobil
BENZENE		TWA	0.5 ppm		N/A	ExxonMobil
BENZENE		STEL	2.5 ppm		Skin	ACGIH
BENZENE		TWA	0.5 ppm		Skin	ACGIH
CUMENE		TWA	245 mg/m3	50 ppm	Skin	OSHA Z1
CUMENE		TWA	50 ppm		N/A	ACGIH

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CYCLOHEXANE		TWA	1050 mg/m3	300 ppm	N/A	OSHA Z1
CYCLOHEXANE		TWA	100 ppm		N/A	ACGIH
ETHYL ALCOHOL		TWA	1900 mg/m3	1000 ppm	N/A	OSHA Z1
ETHYL ALCOHOL		STEL	1000 ppm		N/A	ACGIH
ETHYL BENZENE		TWA	435 mg/m3	100 ppm	N/A	OSHA Z1
ETHYL BENZENE		TWA	20 ppm		N/A	ACGIH
GASOLINE		STEL	200 ppm		N/A	ExxonMobil
GASOLINE		TWA	100 ppm		N/A	ExxonMobil
GASOLINE		STEL	500 ppm		N/A	ACGIH
GASOLINE		TWA	300 ppm		N/A	ACGIH
METHYL-TERT-BUTYL ETHER		TWA	50 ppm		N/A	ACGIH
N-HEXANE		TWA	1800 mg/m3	500 ppm	N/A	OSHA Z1
N-HEXANE		TWA	50 ppm		Skin	ACGIH
NAPHTHALENE		TWA	50 mg/m3	10 ppm	N/A	OSHA Z1
NAPHTHALENE		TWA	10 ppm		Skin	ACGIH
TOLUENE		Ceiling	300 ppm		N/A	OSHA Z2
TOLUENE		Maximum concentration	500 ppm		N/A	OSHA Z2
TOLUENE		TWA	200 ppm		N/A	OSHA Z2
TOLUENE		TWA	20 ppm		N/A	ACGIH
XYLENES		TWA	435 mg/m3	100 ppm	N/A	OSHA Z1
XYLENES		STEL	150 ppm		N/A	ACGIH
XYLENES		TWA	100 ppm		N/A	ACGIH

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Biological limits

Substance	Specimen	Sampling Time	Limit	Determinant	Source
BENZENE	Creatinine in urine	End of shift	500 ug/g	t,t-Muconic acid	ACGIH BELs (BEIs)
BENZENE	Creatinine in urine	End of shift	25 ug/g	S-Phenylmercapturic acid	ACGIH BELs (BEIs)
ETHYL BENZENE	Creatinine in urine	End of shift	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	ACGIH BELs (BEIs)
N-HEXANE	Urine	End of shift at end of work wk	0.4 mg/l	2,5-Hexanedion, without hydrolysis	ACGIH BELs (BEIs)
NAPHTHALENE	No Biological Specimen provided	End of shift	Not Assigned	1-Naphthol, with hydrolysis + 2-Naphthol, with hydrolysis	ACGIH BELs (BEIs)
TOLUENE	Blood	Prior to last shift of work wk	0.02 mg/l	Toluene	ACGIH BELs (BEIs)
TOLUENE	Creatinine in urine	End of shift	0.3 mg/g	o-Cresol, with hydrolysis	ACGIH BELs (BEIs)
TOLUENE	Urine	End of shift	0.03 mg/l	Toluene	ACGIH BELs (BEIs)
XYLENES	Creatinine in urine	End of shift	1.5 g/g	Methylhippuric acids	ACGIH BELs (BEIs)

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ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Use explosion-proof ventilation equipment to stay below exposure limits.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

Chemical/oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION

Physical State: Liquid
Color: Clear (May Be Dyed)
Odor: Petroleum/Solvent
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 °C): 0.74
Flammability (Solid, Gas): N/A
Flash Point [Method]: -40°C (-40°F) [ASTM D-92]
Flammable Limits (Approximate volume % in air): LEL: 1.5 UEL: 7.6
Autoignition Temperature: N/D
Boiling Point / Range: > 20°C (68°F) - 225°C (437°F)
Decomposition Temperature: N/D
Vapor Density (Air = 1): 4 at 101 kPa
Vapor Pressure: 45 kPa (337.5 mm Hg) at 20 C - 74 kPa (555 mm Hg) at 20 °C
Evaporation Rate (n-butyl acetate = 1): > 10
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): > 3
Solubility in Water: Appreciable
Viscosity: <1 cSt (1 mm2/sec) at 40 °C | 0.8 cSt (0.8 mm2/sec) at 20°C
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/A
Pour Point: < -60°C (-76°F)

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: See sub-sections below.

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.

MATERIALS TO AVOID: Halogens, Strong Acids, Alkalies, Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: (Rat) 4 hour(s) Data available.	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 403
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or

	lungs.
Ingestion	
Acute Toxicity: Data available.	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 401
Skin	
Acute Toxicity: Data available.	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 402
Skin Corrosion/Irritation: Data available.	Irritating to the skin. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 404
Eye	
Serious Eye Damage/Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405
Sensitization	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: Data available.	Not expected to be a skin sensitizer. Based on chemical structure (polymers). Test(s) equivalent or similar to OECD Guideline 406
Aspiration: Data available.	May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: Data available.	Caused genetic effects in laboratory animals, but the relevance to humans is uncertain. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471 475 476
Carcinogenicity: Data available.	Caused cancer from prolonged, high exposure. Based on human epidemiology studies. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 451
Reproductive Toxicity: Data available.	Not expected to be a reproductive toxicant. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 416 421
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	May cause drowsiness or dizziness. May be irritating to the respiratory tract.
Repeated Exposure: Data available.	Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 410 412 453

TOXICITY FOR SUBSTANCES

NAME	ACUTE TOXICITY
ETHYL BENZENE	Inhalation Lethality: 4 hour(s) LC50 17.8 mg/l (Vapor) (Rat); Oral Lethality: LD50 3.5 g/kg (Rat)
METHYL-TERT-BUTYL ETHER	Oral Lethality: LD50 4000 mg/kg (Rat)
NAPHTHALENE	Inhalation Lethality: 4 hour(s) LC50 > 0.4 mg/l (Max attainable vapor conc.) (Rat); Oral Lethality: LD50 533 mg/kg (Mouse)

OTHER INFORMATION

For the product itself:

Laboratory animal studies have shown that prolonged and repeated inhalation exposure to light hydrocarbon vapors in the same boiling range as this product can produce adverse kidney effects in male rats. However, these effects were not observed in similar studies with female rats, male and female mice, or in limited studies with other animal species. Additionally, in a number of human studies, there was no clinical evidence of such effects at normal occupational levels.

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In 1991, The U.S. EPA determined that the male rat kidney is not useful for assessing human risk.
Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.
Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Very high exposure (confined spaces / abuse) to light hydrocarbons may result in abnormal heart rhythm (arrhythmias). Concurrent high stress levels and/or co-exposure to high levels of hydrocarbons (above occupational exposure limits), and to heart-stimulating substances like epinephrine, nasal decongestants, asthma drugs, or cardiovascular drugs may initiate arrhythmias.

Contains:

BENZENE: Caused cancer (acute myeloid leukemia and myelodysplastic syndrome), damage to the blood-producing system, and serious blood disorders in human studies. Caused genetic effects and effects on the immune system in laboratory animal and some human studies. Caused toxicity to the fetus and cancer in laboratory animal studies.
CUMENE: Repeated inhalation exposure of cumene vapor produced damage in the kidney of male rats only. These effects are believed to be species specific and are not relevant to humans.
ETHANOL: Prolonged or repeated exposure to high concentrations of ethanol vapor or overexposure by ingestion may produce adverse effects to brain, kidney, liver, and reproductive organs, birth defects in offspring, and developmental toxicity in offspring.
Gasoline unleaded: Caused cancer in animal tests. Chronic inhalation studies resulted in liver tumors in female mice and kidney tumors in male rats. Neither result considered significant for human health risk assessment by the United States EPA and others. Did not cause mutations In Vitro or In Vivo. Negative in inhalation developmental studies and reproductive tox studies.Inhalation of high concentrations in animals resulted in reversible central nervous system depression, but no persistent toxic effect on the nervous system. Non-sensitizing in test animals. Caused nerve damage in humans from abusive use (sniffing).
Methyl tertiary butyl ether (MTBE): Carcinogenic in animal tests. Inhalation exposure to high concentrations resulted in higher than expected mortality in male mice due to urinary tract obstructions and female mice displayed benign liver tumors. Inhalation exposure to high concentrations resulted in higher than expected mortality in male rats due to progressive kidney damage as well as increased benign and malignant kidney tumors, and benign testicular tumors. Did not cause mutations In Vitro or In vivo. Rabbits exposed to high vapor concentrations did not have any offspring with adverse developmental effects. Mice exposed to high vapor concentrations (maternally toxic) had offspring with embryo/fetal toxicity and birth defects. Rats exposed to high vapor concentrations did not display any treatment-related effects in a two generation reproduction study.The significance of the animal findings at high exposures are not believed to be directly related to potential human health hazards in the workplace.
NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.
N-HEXANE: Prolonged and/or repeated exposures to n-Hexane can cause progressive and potentially irreversible damage to the peripheral nervous system (e.g. fingers, feet, arms, legs, etc.). Simultaneous exposure to Methyl Ethyl Ketone (MEK) or Methyl Isobutyl Ketone (MIBK) and n-Hexane can potentiate the risk of adverse effects from n-Hexane on the peripheral nervous system. n-Hexane has been shown to cause testicular damage at high doses in male rats. The relevance of this effect for humans is unknown.
TOLUENE : Concentrated, prolonged or deliberate inhalation may cause brain and nervous system damage. Prolonged and repeated exposure of pregnant animals (> 1500 ppm) have been reported to cause adverse fetal developmental effects.
ETHYLBENZENE: Caused cancer in laboratory animal studies. The relevance of these findings to humans is uncertain.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations

NAPHTHALENE	91-20-3	2, 5
CUMENE	98-82-8	5
GASOLINE	86290-81-5	5
ETHYL BENZENE	100-41-4	5
BENZENE	71-43-2	1, 3, 6

--REGULATORY LISTS SEARCHED--

1 = NTP CARC
2 = NTP SUS
3 = IARC 1
4 = IARC 2A
5 = IARC 2B
6 = OSHA CARC

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

MOBILITY

More volatile component -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

Less volatile component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Majority of components -- Expected to be inherently biodegradable

Atmospheric Oxidation:

More volatile component -- Expected to degrade rapidly in air

BIOACCUMULATION POTENTIAL

Majority of components -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

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REGULATORY DISPOSAL INFORMATION

RCRA Information: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP). Potential RCRA characteristics: IGNITABILITY. TCLP (BENZENE)

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

LAND (DOT)

Proper Shipping Name: GASOLINE
Hazard Class & Division: 3
ID Number: 1203
Packing Group: II
ERG Number: 128
Label(s): 3
Transport Document Name: UN1203, GASOLINE, 3, PG II

LAND (TDG)

Proper Shipping Name: GASOLINE
Hazard Class & Division: 3
UN Number: 1203
Packing Group: II
Marine Pollutant: Yes
Special Provisions: 17

Footnote: Marine Pollutant designation is applicable only if shipped over water.

SEA (IMDG)

Proper Shipping Name: MOTOR SPIRIT or GASOLINE or PETROL
Hazard Class & Division: 3
EMS Number: F-E, S-E
UN Number: 1203
Packing Group: II
Marine Pollutant: No
Label(s): 3
Transport Document Name: UN1203, MOTOR SPIRIT or GASOLINE or PETROL, 3, PG II, (-40°C c.c.)

AIR (IATA)

Proper Shipping Name: MOTOR SPIRIT or GASOLINE or PETROL
Hazard Class & Division: 3
UN Number: 1203

ExxonMobil

Product Name: GASOLINE UNLEADED WITH ETHANOL (GASOHOL)
Revision Date: 17 Mar 2015

Packing Group: II
Label(s) / Mark(s): 3
Transport Document Name: UN1203, GASOLINE, 3, PG II

SECTION 15 REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, KECI, PICCS, TSCA

EPCRA SECTION 302: This material contains no extremely hazardous substances.

CERCLA: This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Contact local authorities to determine if other reporting requirements apply.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: Fire. Immediate Health. Delayed Health.

SARA (313) TOXIC RELEASE INVENTORY:

Chemical Name	CAS Number	Typical Value
XYLENES	1330-20-7	0 - 20%
ETHYL BENZENE	100-41-4	0 - 3.5%
BENZENE	71-43-2	0 - 1.5%
N-HEXANE	110-54-3	0 - 5%
TOLUENE	108-88-3	0 - 20%
METHYL-TERT-BUTYL ETHER	1634-04-4	0 - 1%
NAPHTHALENE	91-20-3	0 - 1%
CYCLOHEXANE	110-82-7	0 - 1.5%
CUMENE	98-82-8	0 - 1%

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
BENZENE	71-43-2	1, 2, 4, 10, 11, 13, 15, 16, 17, 18, 19
CUMENE	98-82-8	1, 4, 10, 13, 16, 17, 18, 19
CYCLOHEXANE	110-82-7	1, 4, 13, 16, 17, 18, 19
ETHYL ALCOHOL	64-17-5	1, 4, 13, 16, 17, 18
ETHYL BENZENE	100-41-4	1, 4, 10, 13, 16, 17, 18, 19
GASOLINE	86290-81-5	1, 18
METHYL-TERT-BUTYL ETHER	1634-04-4	1, 16, 17, 18, 19
N-HEXANE	110-54-3	1, 4, 13, 16, 17, 18, 19
NAPHTHALENE	91-20-3	1, 4, 10, 13, 16, 17, 18, 19
TOLUENE	108-88-3	1, 4, 11, 13, 15, 16, 17, 18, 19
XYLENES	1330-20-7	1, 4, 13, 15, 16, 17, 18, 19

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--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16 OTHER INFORMATION

This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights. This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm. Chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm are created by the combustion of this product.

N/D = Not determined, N/A = Not applicable

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):
H224: Extremely flammable liquid and vapor; Flammable Liquid, Cat 1
H225: Highly flammable liquid and vapor; Flammable Liquid, Cat 2
H226: Flammable liquid and vapor; Flammable Liquid, Cat 3
H302: Harmful if swallowed; Acute Tox Oral, Cat 4
H303: May be harmful if swallowed; Acute Tox Oral, Cat 5
H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1
H305: May be harmful if swallowed and enters airways; Aspiration, Cat 2
H312: Harmful in contact with skin; Acute Tox Dermal, Cat 4
H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A
H320(2B): Causes eye irritation; Serious Eye Damage/Irr, Cat 2B
H332: Harmful if inhaled; Acute Tox Inh, Cat 4
H335: May cause respiratory irritation; Target Organ Single, Resp Irr
H336: May cause drowsiness or dizziness; Target Organ Single, Narcotic
H340(1B): May cause genetic defects; Germ Cell Mutagenicity, Cat 1B
H350(1A): May cause cancer; Carcinogenicity, Cat 1A
H350(1B): May cause cancer; Carcinogenicity, Cat 1B
H351: Suspected of causing cancer; GHS Carcinogenicity, Cat 2
H361(D): Suspected of damaging the unborn child; Repro Tox, Cat 2 (Develop)
H361(F): Suspected of damaging fertility; Repro Tox, Cat 2 (Fertility)
H372: Causes damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 1
H373: May cause damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 2
H400: Very toxic to aquatic life; Acute Env Tox, Cat 1
H401: Toxic to aquatic life; Acute Env Tox, Cat 2
H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1
H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2
H412: Harmful to aquatic life with long lasting effects; Chronic Env Tox, Cat 3

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

ExxonMobil

Product Name: GASOLINE UNLEADED WITH ETHANOL (GASOHOL)
Revision Date: 17 Mar 2015

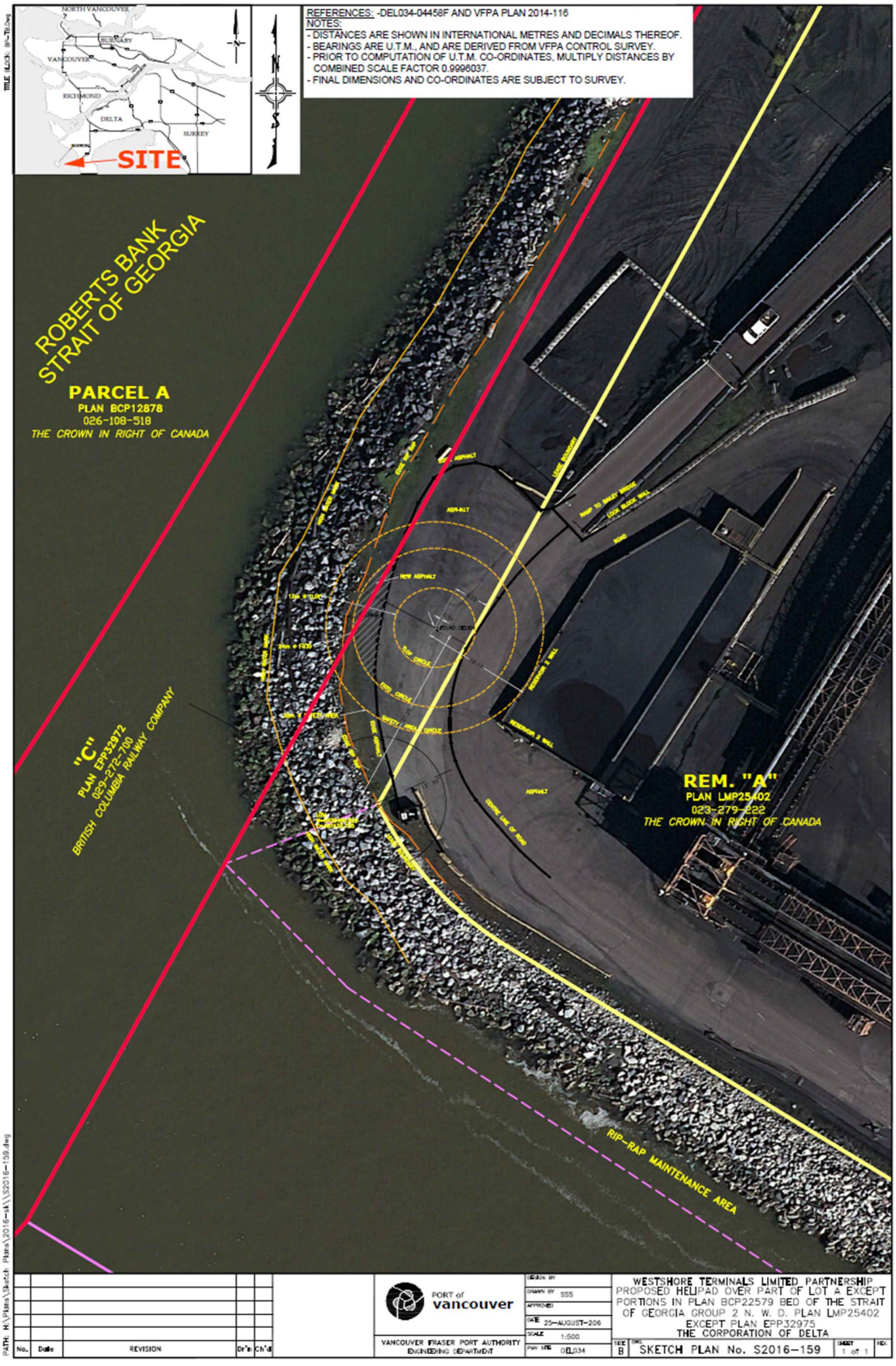
Updates made in accordance with implementation of GHS requirements.

SYNONYMS: GASOLINE REGULAR UNLEADED RUL87 WITH ETHANOL, GASOLINE REGULAR UNLEADED RUL87 DCA DYED WITH ETHANOL, GASOLINE REGULAR UNLEADED RUL87 LDCA WITH ETHANOL, GASOLINE MIDGRADE UNLEADED MUL89 LDCA WITH ETHANOL, GASOLINE MIDGRADE UNLEADED MUL89 DCA WITH ETHANOL, GASOLINE REGULAR UNLEADED RUL87 LDCA DYED WITH ETHANOL, GASOLINE REGULAR UNLEADED RUL87 DCA WITH ETHANOL, EXXON MIDGRADE GASOLINE WITH ETHANOL, EXXON PREMIUM GASOLINE WITH ETHANOL, EXXON REGULAR GASOLINE WITH ETHANOL, OXYGENATED AUTOMOTIVE GASOLINE CONTAINING ETHANOL, GASOLINE REGULAR UNLEADED RUL87 DYED WITH ETHANOL, ESSO EXTRA GASOLINE WITH ETHANOL, ESSO MIDGRADE GASOLINE WITH ETHANOL, ESSO PREMIUM GASOLINE WITH ETHANOL, ESSO SUPREME GASOLINE WITH ETHANOL, ESSO SUPER-PREMIUM GASOLINE WITH ETHANOL, ESSO SUPREME+ GASOLINE WITH ETHANOL, GASOLINE PREMIUM UNLEADED PUL91 DCA WITH ETHANOL, GASOLINE SUPER PREMIUM UNLEADED PUL91 DCA WITH ETHANOL, ESSO REGULAR GASOLINE WITH ETHANOL

Internal Use Only
MHC: 1A, 0, 0, 0, 4, 1 PPEC: CF

DGN: 5010467 (1013577)

Helicopter Landing Area




SITE NORTH
TRUE NORTH
WESTSHORE
INITIAL EMERGENCY contact numbers
1 Roberts Bank, Delta, V4M 4G5
Call 911
POV 24/7 Operations
VACS gates open
604-665-9086
Westguard Security (GCT) 24/7-
Escort emergency vehicles to WTLP
604-267-5432
Westshore Security
Site gates open
Int. 453 (604-365-6761)
Call Westshore 1st Aid
Attend scene
Int. 414 (604-946-3414)
LEGEND
FIRST AID STATION
BB# BIG BERTHA # (HIGH SPRAY TOWERS)
MUSTER STATION (WESTSHORE)
VHAW VALVE HOUSE A WEST
MUSTER STATION (DELTAPORT)
S/R # STACKER RECLAIMER #
DESIGNATED HELIPAD
FH FIRE HYDRANT
FC FIRE CABINET
DELTAPORT
EMERGENCY CONTACTS
TPC TERMINAL PLANNING CENTER 24 HR (604)-267-5537
TERMINAL MANAGER (604)-267-5471
MANAGER SAFETY AND SECURITY (604)-267-5411
EMERGENCY SERVICES 911
BCR (604)-940-0625
CPR 1-800-716-9132
SEASPAN (604)-990-3111
GCT (604)-267-5400
WESTSHORE
DELTAPORT
MAIN ENTRANCE SECURITY GATE
POD 3
POD 4
POD 5
MS1
MS2
MS3
MS4
MS5
MS6
MS7
NOTE: LOCATIONS TO BE ESTABLISHED IN CASE OF EMERGENCY
ICS FACILITIES
WESTSHORE BERTH 1
WESTSHORE BERTH 2
DELTAPORT BERTH 1
DELTAPORT BERTH 2
DELTAPORT BERTH 3
Consultant:
Omni ENGINEERING INC.
#206 - 3680 EAST HASTINGS STREET
VANCOUVER, BC V5K 2A9
PH: 604 - 298 - 0508
FAX: 604 - 298 - 0536
Client:
Westshore Terminals LP
Date: 2017/05/30
Scale: 1:2000
Design By: DS 2017-05-30
Drawn By: JA 2017-05-30
Drafting Chk: DS 2017-05-30
Design Chk: DS 2017-05-30
Acad File: 2305-001
Project: WTL & DP EMERGENCY SITE MAP
Drawing Title: ROBERTS BANK SUPERPORT INFRASTRUCTURE LOCATIONS
Updated: 2017-05-30
Drawing Number: 2305-001
Revision Number: P1