



ENGINEERING SERVICES
 Solid Waste Division
 Transfer & Landfill Operations Branch

EMERGENCY RESPONSE PLAN
PART 2 SPECIFIC PROCEDURES

PART 2
SPECIFIC EMERGENCIES AND PROCEDURES

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EVACUATION PROCEDURE

Evacuation may be initiated by: pulling of the fire alarm box in one of the buildings or in the garage; two way radio announcement; voice; and/or cell phone calls. Confirmation by radio or phone contact may be used. If the fire alarm is not functional, voice or radios may be used to alert of evacuation in the building areas. Anyone who feels unsafe should pull the fire alarm or contact a supervisor to initiate an evacuation.

- Report to the Muster Station (West of Administration Building) or Alternate Muster Station as defined by the On Site Commander (possible locations include the on-site Contractor's Yard, or the Composting Facility), depending on conditions, for a head count. The Muster Station is indicated on the Emergency Map.

The various work groups, large area, and diversity of tasks require different procedures for staff head count, depending on the work area.

- If you are unable to physically report to the Muster Station, you must contact your Area Evacuation Warden.

The following personnel are the Area Evacuation Wardens. Their responsibility is to conduct a final check of their area to ensure everyone has evacuated, contact on-site personnel, and then assist with the head count.

AREA	WARDEN	ALTERNATE WARDEN	METHOD
Landfill	Sub-Foreman Operator	Superintendent	Radio call + sweep active Landfill and demolition areas
Composting Facility	Sub-Foreman Operator	Superintendent	Radio call + sweep
Administration Building	Admin Office Reception Clerk	Office Manager	Alarm + sweep+ cell phone contact with personnel in field
Shop	Storekeeper/Parts	Working Trades Foreman	Alarm + sweep
RDO	Equipment Operator	Superintendent	Sweep
Technical Building	Technical Office Reception Clerk	Engineer	Alarm + sweep + cell phone contact with personnel in field
Scales, public washroom	Weighmaster	Office Manager	Sweep
Poschner's	Supervisor	Equipment Operator	Phone call

- Superintendent will call 911 to advise of the situation.



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- The Administration Building Warden will take a copy of that day's timesheet, sign in sheet, and Administration Building sign-in book and the Technical Office Warden will take the Technical Building sign-in book to the Muster Station to review the lists with the Area Evacuation Wardens; perform a headcount of the assembled employees, and notify the responding emergency services personnel of any missing employees.
- Eliminate Access for Customers – raise “Closed sign” – send flag person to advise traffic of closure and direct emergency vehicles. Advise traffic whether emergency vehicles will be using the outbound lane for access and, therefore, vehicles should wait before attempting to turn around.
- Provide Access for Emergency Responders and equipment.

Report the incident to the following people by phone in the order shown below (see the Safe Work Procedure Contact List):

- Transfer & Landfill Operations Site Superintendent
- Transfer & Landfill Operations Manager

Who will make additional contacts as appropriate for the situation.

If the facility is to be closed for more than one hour, the Superintendent (or their designate) will:

1. Notify the Vancouver South Transfer Station that the Landfill is temporarily closed.
2. Notify Metro Vancouver Contracted Services.
3. Post the “Closed” sign at the entrance.
4. Post a “Closed” sign at the Vancouver Landfill sign on 64th Street.

Re-Entry

Re-entry to the facility can only be completed with the permission of the On Site Commander who will:

1. Review the site conditions with members of the emergency team, including the Fire commander, if the Fire Department has attended.
2. If appropriate, confirm that the Safety Officer agrees that the site is safe for entry.



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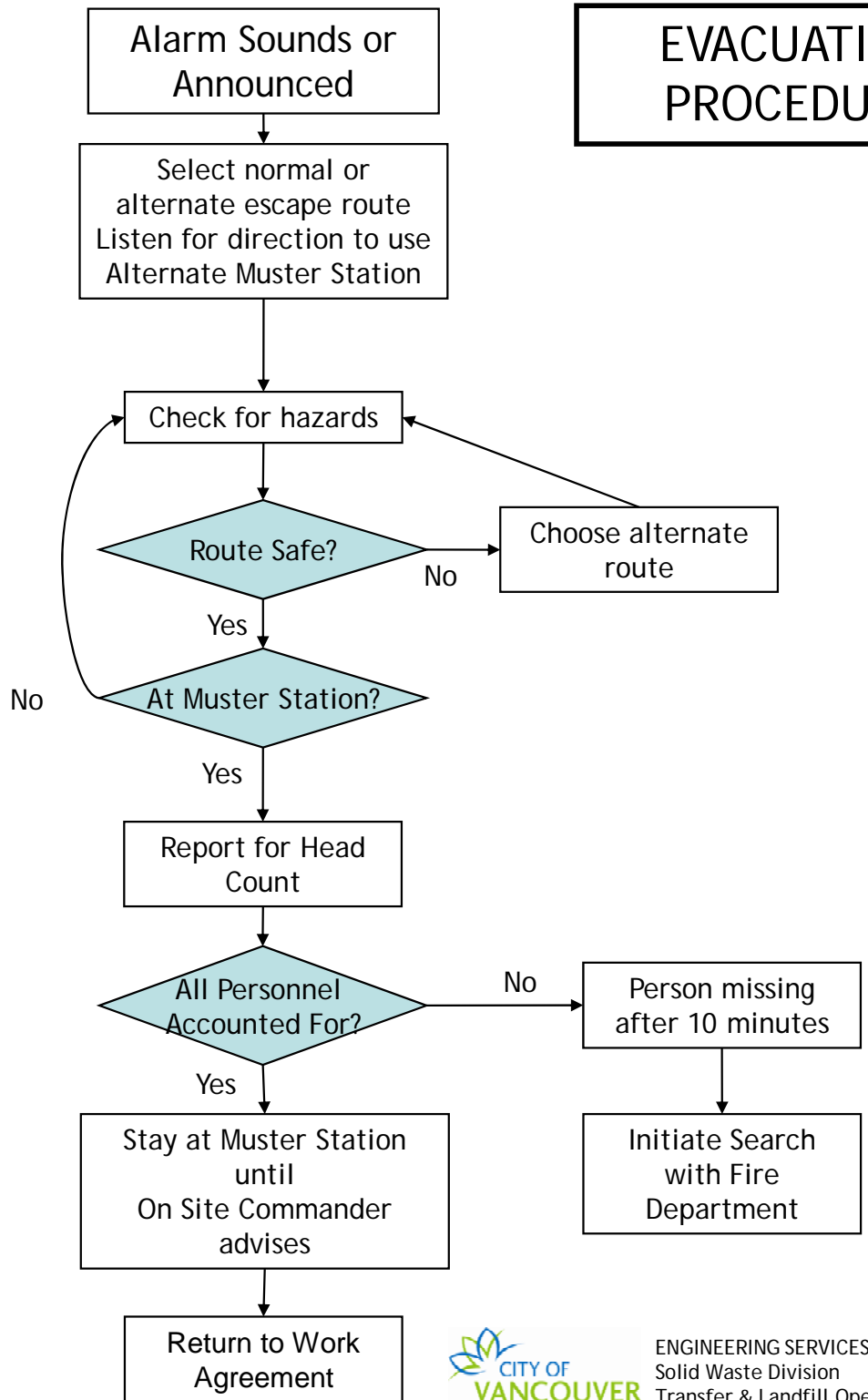
3. Determine if some areas of the facility should not be opened for re-entry and ensure those areas are secured against entry.
4. Review conditions and conclusions with Occupational Health and Safety Committee Representative. Document agreement on re-entry condition in the Incident Log.
5. Discuss concerns with the workers.
6. Formally declare a "Return to Work" status. Note time and any conditions on Incident Log.



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**EVACUATION
PROCEDURE**



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TEMPORARY FACILITY CLOSURE/DIVERSION

Temporary facility closures occur when a situation has potential to become an emergency or risk to life or equipment, but is not an immediate threat. Diversions are put in place when one area of the Landfill facility is not safe for entry but safe access can be provided for other Landfill areas.

Temporary Closure

- Advise weighmasters that facility will be closing and to stop incoming traffic.
- Post “Closed” sign at entrance and provide flagperson to control and inform traffic.
- Cordon off situation area.
- Create access to allow the situation to be dealt with.
- Determine if certain areas of the facility can be re-opened under the Diversion Procedure

Re-opening of the facility can only be completed with the permission of the On Site Commander.

Diversion

- Cordon off situation area, entrances and exits, and post traffic control at the normal entrance point.
- Advise weighmasters what area of facility will be closing and to advise incoming traffic.
- Assess if certain types of vehicles or loads will not be safe and advise weighmaster to reject those vehicles or loads.
- Create access to allow the situation to be dealt with – this may include traffic control, clearing of a response route, or other measures.



FIRE

If you detect a fire and the flames and smoke appear typical of a fuel, wood, or garbage fire, do the following:

- Alert others in the immediate vicinity of the fire.
- Ensure that the Superintendent is contacted and aware of the situation.
- If the fire or smoke does not pose an immediate threat to your safety, assess if you can safely use available extinguisher(s) or fire hoses to extinguish or control the fire.
- If you are not certain of your ability to fight the fire or the conditions worsen, evacuate the area.
- Select appropriate extinguishing methods for the fuel: water or dirt for wood or refuse, foam or extinguishers for electrical, petroleum products, or chemical fires.
- Using a respirator can help protect from inhaling particulate but must not be used to enter a dangerous atmosphere. Wear eye protection and gloves when fighting a fire.
- Approach the fire from upwind.
- If the fire extinguisher or water does not affect the fire or the fire becomes more intense, stop fighting the fire and EVACUATE the area. Water can be used to protect neighbouring facilities from heat and flames.
- If the fire is in waste material in a vehicle (i.e., a “hot” load); DO NOT risk injury in the attempt to save the vehicle; dump the material on to a rock surface away from combustibles, if possible.
- If emergency services have been advised of the fire and you extinguish the fire before emergency services arrive on site, advise the On Site Commander to call 911 and advise them of the situation. Wet down the material thoroughly to prevent hot spots from reigniting flames.

Landfill Fire

A fire that is not immediately containable, in a bank, in the face, or suspected to be below the surface as indicated by smoke and/or subsidence from below the surface, is considered a landfill fire.



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- Check for landfill gas collection pipes in the vicinity of the area. If pipes are in the area, contact the Landfill Gas Technician to turn off the suction to the header and have the pipes isolated from the collection system.
- All personnel fighting a landfill fire should wear a respirator equipped with organic vapour/HEPA cartridges.
- A personal gas detector should be used in the work area to monitor for low oxygen levels or concentrations of other landfill gases that may be dangerous.
- If the fire is visible, dirt is preferred to water for extinguishing garbage fires.
- The on-site Contractor's trucks can be used to transport water from the pond. An underground fire is typically difficult to extinguish. If in doubt, large volumes of water should be applied using the Contractor's trucks and water truck.
- Monitor the roads around the Landfill for smoke. Persons should be evacuated from any area subject to thick or continuous smoke.
- Place a light plant in the area to provide for overnight fire watch and fire control activities.

Compost Fire

The Composting Facility has water standpipes and hoses, and fire extinguishers are present at the equipment and building. A compost fire is wood based so water is the best extinguisher for these fires. Building or equipment fires in the Composting Facility should be fought as described above.

- Advise a supervisor and the weigh scales to divert or stop traffic to the Composting Facility until the fire can be contained or controlled.
- Use a hose or water truck to fight the fire. A loader will be required to open the area of the pile that is on fire to allow direct access for fire fighting. The loader should approach the fire from the upwind side to limit smoke and visibility concerns.
- Personnel should set up on the upwind side of the fire and limit time spent in smoky environments. A respirator can be worn to limit the irritating effects of smoke.
- The loader should remove smouldering compost to an impermeable pad to allow heavy water application. Sprinklers should be erected on the extinguished material and left on overnight. An overnight fire watch should be implemented.



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RDO or Hazmat Storage Fire

Assess if the fire is approaching hazardous materials or compressed gas cylinders. If either situation is occurring, apply water to the fire and hazardous materials/cylinders.

- If the fire comes in contact with either cylinders or hazardous materials, leave the water on the materials if possible and EVACUATE the area.
- If a fire is in contact with a compressed gas cylinder(s), fire crews must be at least 50 m from the cylinder and all other personnel and customers should be evacuated a minimum of 500 m.
- If a fire is in contact with hazardous materials, advise the Fire Department of the hazardous materials and provide them with MSDS's if available.

Flare Station Fire or Explosion

The flare station has numerous safety shut offs to minimize the risk of fire or explosion. The fail safe status is a shut down of all blowers, leaving landfill gas within the Landfill itself and in pipes under low pressure. If the flare station is shut down for any length of time, landfill gas will vent to the atmosphere from the Landfill surface, resulting in potential landfill gas collection in depressions on the Landfill surface and odour issues.

If there is a fire at the flare station, only trained personnel with the approval of the On Site Commander may approach the flare station. Entering the flare station fenced area must be in accordance with safe work procedures for the flare station and requires that the air quality be monitored. The first step is to shut down the blowers if safe and possible. Once the fuel has been shut off, the fire can be allowed to self extinguish while monitoring and cooling adjacent facilities with water. Consult with the Fire Department if appropriate.

Equipment or Vehicle Fire

- Assess the nature and location of the fire or smoke.
- If **your safety** appears to be **threatened**, activate the on-board extinguishing system, if equipped, and evacuate the machine as soon as it appears safe to do so.
- If the **machine** is **threatened** and the on-board system is likely to be effective (i.e., not an isolated belly pan fire), activate the on-board extinguishing system, if equipped, and evacuate the machine as soon as it appears safe to do so.
- If the fire or smoke does not pose an immediate threat to your safety, isolate the machine on to rock or asphalt base from other machines or flammable materials. If you can safely fight the fire, advise the Superintendent and with the assistance of a fire team



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member, use fire foam, fire hoses, or available extinguisher(s) to extinguish or control the fire.

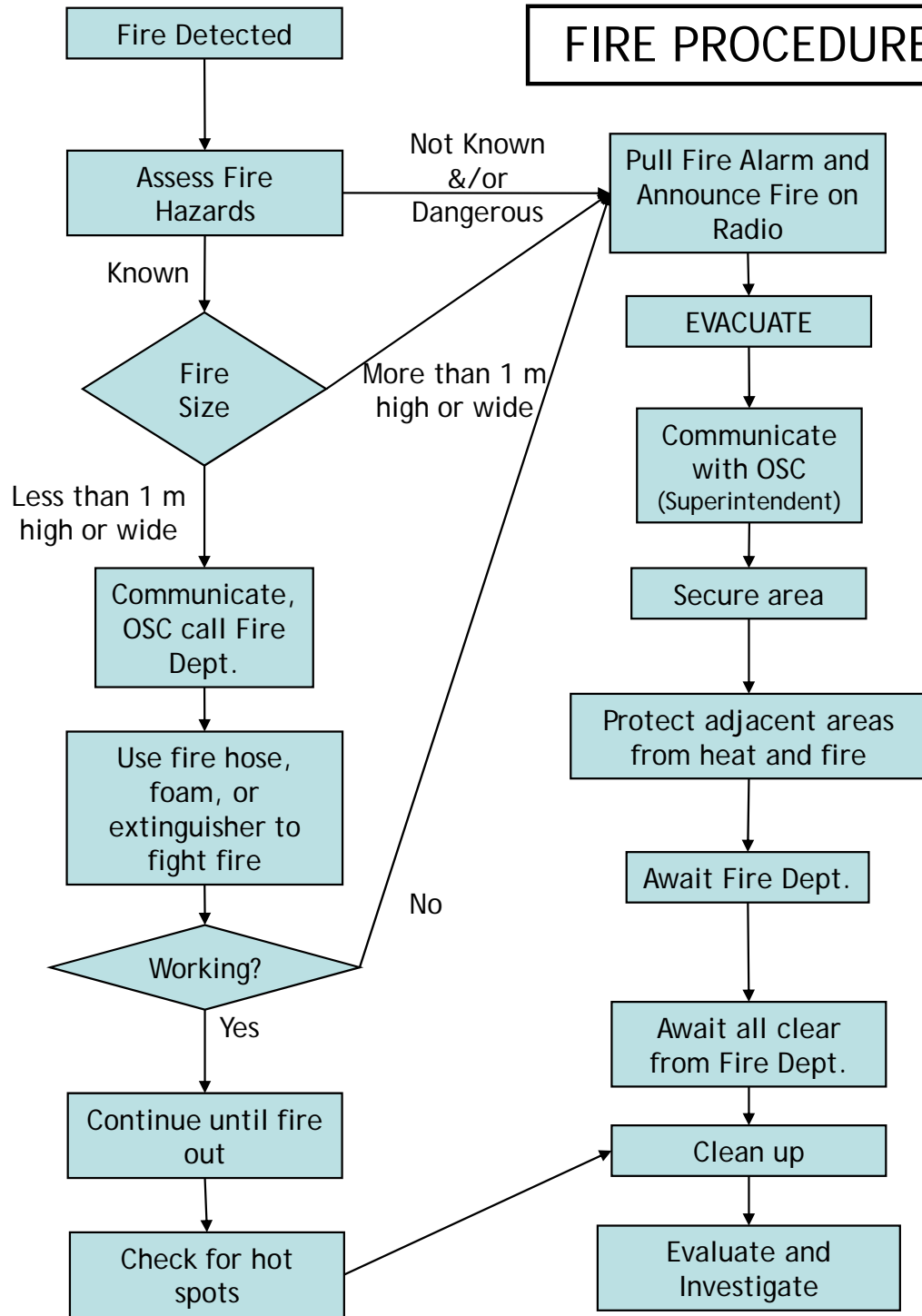
- Communicate the situation to the Superintendent who will dispatch a fire team to attempt to extinguish the fire to protect the machine.



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FIRE PROCEDURE





EXPLOSION

If you are inside a building:

- Immediately take cover under a desk, table, or other shelter that will protect against flying glass and other debris.
- Proceed as for a fire as soon as possible, EVACUATE.
- If unable to remove an injured or trapped person from the building, inform emergency personnel.
- Notify emergency personnel if hazardous materials are involved.
- Do not re-enter the building until instructed to do so by the On Site Commander.

If you are outside:

- Get behind equipment or other obstruction to limit potential for contact with flying debris. Some objects may fall for several seconds after the explosion.
- Proceed as for a fire as soon as possible, EVACUATE. Be aware of the location of the explosion and do not select a route that places you closer to the explosion source.
- Report medical emergencies or hazardous materials incidents to the On Site Commander.



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LANDFILL GAS RELEASE

Landfill gases are under vacuum within the landfill gas pipe network and releases in the Landfill area are only at the pressure of the gas from underground. The pipeline(s) downstream of the blowers is under positive pressure and although large leaks result in an automatic shutdown, small leaks may not be detected.

The most likely means of detecting a landfill gas release are hydrogen sulphide odours, personal gas detector readings, observation of pipes that have lost integrity, or a person down.

If a landfill gas release is detected:

- Do not enter a depression or any low lying area.
- Move to higher elevation and, if the source of the gas leak is known, crosswind or upwind of the source.
- If you have a personal gas detector, monitor the concentrations of gases and do not move into an area of higher dangerous gas concentrations or lower oxygen concentrations.
- If the personal gas detector indicates the concentrations of gases are below the explosive limits as indicated by lack of alarms and odours are no longer apparent, use a cell phone or radio to advise your supervisor of the situation.
- When a personal gas detector indicates that the concentrations of landfill gas are within safe working limits (see table below) set up barricades to prevent entry into the area.

Explosive Gas	Less than 10% LEL
Methane	Less than 1,000 ppm or 0.1% by volume
Oxygen	19.5% to 23.5% ⁽¹⁾
Hydrogen Sulphide	Less than 5 ppm ⁽¹⁾

Supervisor

- Contact the Landfill Gas Technician and staff and advise of the situation.
- Divert all personnel and traffic from the area.



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- Request the Landfill Gas Technician, or other trained staff, turn off the LFG flows in the area of the release.
- Ensure that all personnel entering the area have a personal gas detector, approach the area from upwind, and have a buddy.
- If there is uncertainty about the source, concentrations, or persons have suffered ill effects, call 911 and request a rescue team equipped with self contained breathing apparatus (SCBA).



COMPRESSED GAS CYLINDER RELEASE

This procedure is intended primarily for the RDO where compressed gas cylinders represent significant personnel risks. Most compressed gas cylinders are propane tanks from barbecues with capacities of 10 kg or less.

Explosive gas concentrations from a leaking propane cylinder are most likely to occur within 5 metres of the cylinder.

An emergency with a compressed gas cylinder occurs when it is leaking, has exploded, or appears to be sufficiently damaged that it may leak. Removal of a non-leaking compressed gas cylinder should follow the Compressed Gas Cylinder Safe Work Procedure.

Exploded Compressed Gas Cylinder

- Once exploded, the risks remaining are fires and damage from projectiles.
- Proceed as for FIRE, check occupants for injuries.

Leaking Compressed Gas Cylinder

- Turn off all machinery, equipment and electrical appliances within 10 metres of the cylinder.
- EVACUATE area. Call 9-1-1
- Do not use radios within 10 metres of the cylinder.
- Leaking cylinders typically produce both a hissing sound and a stream of white vapour; when neither is observed, the contents of the cylinder have likely been exhausted. Observation of the conditions should be made from a safe location. Be aware of the possibility that the leak could have frozen over and the cylinder may not yet be empty.
- 10 minutes after the cylinder has stopped releasing, there should be sufficient gas dispersion to prevent ignition.
- If a personal gas detector is available, monitor the area near the cylinder. Areas with concentrations above 20% Lower Explosive Limit (LEL) are unsafe for entry.
- Do not wear a respirator when obtaining explosive gas readings or assessing the area for re-entry as you may be unaware of a dangerous atmosphere indicated by the



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sulphur smell associated with propane that cannot be detected through the respirator cartridge.

Damaged Cylinder

- Damaged cylinders have a greater likelihood of leaking during handling or while in storage.
- Do not operate equipment that could generate a spark while handling damaged cylinders.

If possible and safe, perform a controlled release of any damaged cylinder contents prior to storage.



DRUMS OR VESSELS AT WORKING FACE

The main risks of a drum in the Landfill is that it may contain a hazardous material that would be released upon contact with machines or other refuse.

When a drum or vessel is observed, it must be removed in a safe manner that does not increase the likelihood of rupture of the drum.

- Contact the Superintendent and advise of the situation.
- If the drum does not appear to be leaking, carefully approach the drum and attempt to discern markings indicating the drum contents or the potential hazard.
- Assess the integrity of the drum – look for corrosion, leaks, swelling or bulging.
- If the drum appears damaged, assess the hazards associated with the known or suspected product. If it is unknown or a known hazard, EVACUATE. Request assistance from HazMat Response and/or a Hazardous Waste Contractor.
- If the drum is leaking, refer to the Fuel and Oil, or Chemical Spills Procedures
- If the drum is intact and the product is known to be relatively safe:
 - Manoeuvre the drum in a manner not likely to cause damage to the drum to allow removal of the drum from the area.
 - Protect the drum from impact.
 - Where practical and appropriate slide the drum into an overpack, add absorbent, cap the overpack, and remove the overpack from the Landfill.
 - If additional assistance is required, contact a Hazardous Waste Contractor.



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FUEL AND OIL SPILLS

Any time fuel or oil is spilled, the priorities are as follows;

1. Life safety – protect yourself and others.
2. Assess the situation – can you identify the product, do you know what spilled, what its hazards are, what you can do with the equipment and protective equipment you have? Do you have an MSDS for the product or can you get one from the manufacturer or a database? If the answer is no, you cannot proceed, contact HazMat Response.
3. Contact the Superintendent – advise of situation – do not use radios or other electronic devices in an area where you can smell fuel.
4. Absorbent is located in the Household Hazardous Waste compound – use a spill containment kit if available. The locations of the spill kits and absorbent are marked on the site Emergency Plans.
5. Put on Personal Protective Equipment (PPE) in addition to any other normal PPE:

Personal Protective Equipment				
Type	CSA boots, Work or Rubber	Organic Vapour Respirator	Neoprene or nitrile	Glasses or goggles

6. If safe, stop the source - Turn off a valve, cap the leak, roll the drum so the opening is at the top, etc. if it can be done safely. Attempt to stop the flow.
7. Secure the area – place cones, erect barricades, rope lines, caution tape or other means to prevent unintentional access into spill area. Be aware of the possibility that the spilled product will produce flammable vapours. The secured area should include all areas that smell of fuel.
8. Plan response – control, containment, then clean-up. No action without suitable PPE.
9. Control the release – stop the flow by plugging the leak, turning the container, setting up a method of capturing the spill, pumping out remaining product, etc.
10. Contain the spill – Use the appropriate materials from the Spill Containment Kit to boom the product, block drains, and divert product.



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11. When containment and control have been achieved, clean up spill by removing absorbents, contaminated soil, contaminated water or other contaminated materials. Clean facilities or equipment contaminated by spill and dispose of contaminated materials. For small spills, used absorbent should be placed in the Household Hazardous Waste area pending disposal.

Recovery

12. Conduct an investigation into the cause of the spill, prevention options, and evaluate whether procedures need to be changed.
13. Arrange for transport of waste from spill clean up. Contact a Hazardous Waste Contractor to arrange for removal of waste. Depending on the classification and volume, a Hazardous Waste Manifest may be required. It is the responsibility of both the consignor and the transporter to ensure compliance with requirements of the Hazardous Waste Regulation and TDG. If unsure, contact Environmental Protection or an Environmental Advisor.

Flammable liquid spills of over 100 litres must be reported to the Provincial Emergency Program (PEP) by the On Site Commander. See the Spill Reporting Procedure.



CHEMICAL SPILLS

This procedure is intended to minimize the potential environmental impact of a chemical spill. This procedure is applicable to hazardous releases of unknown liquids, solids, gases, fumes, or smoke from fires.

In the event of a chemical spill, the following measures must be taken;

1. Life safety – Protect yourself and others: if you think the situation is unsafe, (i.e., the volume of material or the observed reaction), EVACUATE the area.

If the area is safe to approach:

2. Alert all personnel in the area by radio or voice.
3. Notify a Superintendent.
4. Assess the situation – do you know what spilled, what its hazards are, what you can do with the equipment and personal protective equipment you have? If the answer is no, you cannot proceed; contact HazMat Response.
5. Put on Personal Protective Equipment (PPE) in addition to any other normal PPE. Check the chemical MSDS for required PPE.
6. Absorbent is located in the Household Hazardous Waste compound – use the materials in the spill containment kit. The locations of the spill kits and absorbent are marked on the site Emergency Plans.
7. If safe, stop the source - Turn off a valve, cap the leak, roll the drum so the opening is at the top, etc. Attempt to stop the flow.
8. Contact the Superintendent – advise of situation.
9. Secure the area – place cones, erect barricades, rope lines, caution tape or other means to prevent unintentional access into spill area. Be aware of the possibility that the spilled product may produce flammable or toxic vapours.
10. Plan response – control, containment, then clean-up. No action without suitable PPE.
11. Control the release – stop the flow by plugging the leak, turning the container, setting up a method of capturing the spill, pumping out remaining product, etc.



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12. Contain the spill – Use the appropriate materials from the Spill Containment Kit to boom the product, block drains, and divert product.
13. When containment and control have been achieved, clean up spill by removing absorbents, contaminated soil, contaminated water or other contaminated materials. Clean facilities or equipment contaminated by spill and dispose of contaminated materials.
14. Conduct an investigation into the cause of the spill, prevention options, and evaluate whether procedures need to be changed.

SUPERINTENDENT:

When informed of a spill, immediately attempt to mitigate the risks by containing and controlling the extent of the spill and preventing discharge to the environment if this can be accomplished safely.

Notify the Landfill Manager as soon as possible.

Phone, or request the Landfill Manager contact, the Hazardous Materials Spills, Environmental Protection Branch if additional information or support is required.

If a quantity of product has entered the drainage system or has been released to air, request the On Site Commander or designate notify PEP. See Spill Reporting section of the Emergency Response Plan.

If all of the required resources are available as per the MSDS for the spilled product, clean-up may commence. If there are any doubts or concerns as to the potential environmental impact or the proper methods of clean-up/disposal, obtain further advice before proceeding with clean up.



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ASBESTOS RELEASE

Typical asbestos management and upset conditions are covered by the Safe Work Procedure, "Asbestos Management". If an incident becomes an emergency, the following additional practices should be considered.

Personal Protective Equipment (PPE)

Personal Protective Equipment						
Type	Disposable coveralls	HEPA Respirator	Rubber Boots or Work Boots with Covers	Neoprene or nitrile	Emergency Shower	Glasses or goggles

The two most important factors to consider when working with asbestos are to ensure that all breathing is through a HEPA filter to filter out asbestos particles and that no fibres remain with the responder after the response. Disposable coveralls (with hood) and washable rubber boots or boot covers allow most fibres to be washed off or removed. A shower or other wash facility is required to wash off any particles.

The following practices should be used in an asbestos emergency:

1. Cordon off the area downwind of the asbestos release. The minimum distance for an exclusion zone should be 30 m from the release point. Other conditions may warrant significantly greater exclusion zones.
2. Set up a decontamination area with boot wash, shower, asbestos disposal bags, and change area for all workers involved in an asbestos response.
3. Apply a steady water mist to areas of exposed asbestos.
4. Use compost or dirt to cover exposed asbestos.
5. If equipment is used to move the asbestos, the operator must be within a closed cab, all ventilation fans shall be turned off, the operator must wear a respirator, and all equipment must be washed in an area where the wash water can flow into an area where it can be covered immediately after.
6. Inspect all surfaces of equipment that may have been in contact with asbestos. Immediately after washing, asbestos may not be visible, but once dry particles of material may be visible and warrant repeated washing.
7. Where widespread contamination is suspected, an air sampling program will be required to ensure the area is safe for entry without respiratory protection.



LEACHATE RELEASE

Leachate can be released due to a power outage preventing the leachate from pumping to the sewer system or from changes in conditions to the ditch system, including loss of water from the outer ditch or a breach in the ditch systems.

A power outage automatically activates the emergency generator that supplies power to the major facilities including the sewer pumps. During an extended power outage, the generator could run out of fuel and the pumps would not operate. Unless corrected, the leachate could overflow to the outer ditch.

Power or Pump Failure

If the power or pumps have failed and cannot be readily restored, the back-up pumping system can be initiated. This pumps leachate from the ditch to the Western 40 Hectare area and into the low lying area east of the Composting Facility.

Other options for leachate pumping include:

- rental pump units
- vacuum trucks – City owned and/or Contractor

Leachate Loss of Containment

If leachate has overflowed to the outer perimeter ditch:

- Assign a person trained in the operation of water quality monitoring instruments and water sampling to assess the water conditions in the outer perimeter ditch.
- Check the pH and conductivity of the water to record field conditions. Obtain samples of the water for laboratory analysis at the breach as well as upstream and downstream if possible.
- Pump the outer ditch water to the Landfill or leachate collection system.
- Use soil, sandbags, or other methods, to contain the leachate in the affected area of the outer ditch and facilitate pumping.

Emergency and upset conditions must be reported to the BC Ministry of Environment Regional Office (not PEP) and should be reported to Metro Vancouver Policy and Planning and Delta Environment.

If a breach of the inner and outer ditches has occurred and leachate is flowing beyond the ditches:

- Report the situation to BC MoE.



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- Build soil berms to contain the leachate.
- Use portable pumps to pump the leachate back onto the Landfill.
- Call in City or contracted vacuum trucks.
- Conduct sampling as indicated above.



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WORKING ALONE PERSON NOT RESPONDING PROCEDURE

When a person fails to respond to a working alone call-back, the supervisors are responsible for effecting a response to locate and check on the person. This procedure is also applicable for persons who have not reported in from field work.

Personal Protective Equipment (PPE)

Personal Protective Equipment						
Type	CSA boots	Hi-vis vest	Cell Phone	Personal Gas Detector	Escape (5 or 10 min) SCBA	2 Way Radio

SafetyLine Emergency Call Back Procedures for Non-Responding Users

1. If the user does not call in to the system at the end of the check in period (usually 60 minutes), SafetyLine will call the user at their cell phone number. The user will be asked to confirm their status.
2. If the user does not respond, SafetyLine will phone again in five minutes.
3. If the user still does not respond, SafetyLine will call the Landfill Office callout list (see below), report the emergency, and Landfill staff will respond to the emergency. Staff will acknowledge the emergency using their password and are then responsible for resolving the situation.

Landfill callout list

Office #1 – Landfill
Office #2 – Landfill
Landfill Supervisors
Manager

Landfill SafetyLine Callout Acknowledgement

1. When you receive a call from SafetyLine, a recording giving you the company number (51), your user ID and the ID of the person in an emergency will be played to you. The victim may also have recorded their last location and this will be played to you. The SafetyLine Administrator on-line system can be used to check the status of the person and hear the recording at <http://sa.ts.bc.ca/safetyline/dLogIn.asp>.
2. SafetyLine will ask you to acknowledge that you will be taking responsibility for the emergency by entering an emergency code and #.
3. The emergency code will be your password (last four digits of your telephone/cell number).
4. You will then be asked to record a voice message and then press #. Your voice message can contain any information regarding your taking over the responsibility of the emergency.



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5. If you are unable to respond to the emergency in a timely fashion, do not enter the emergency code. The SafetyLine system will call the next number on the call list.
6. Once you have taken responsibility for the emergency, all SafetyLine call outs will stop. It is at this point you need to contact the Superintendent or On Site Commander to activate the emergency response procedures.

Person Not Responding Callout Response

1. Advise the On Site Commander that a person has not reported in to the SafetyLine Call Back system. Advise who is responding and what is immediately known about the situation.
2. Contact the victim's supervisor to determine their planned work location, vehicle, and schedule.
3. If the victim's vehicle was equipped with a radio or they may be carrying a radio, attempt contact by radio.

The potential presence of landfill gas in any part of the Landfill and in buildings at the Landfill, indicates a significant hazard that can lead to multiple victims.

Every call out for a non-responsive person working alone shall be considered an emergency.

The person who has not responded is considered a "victim".

If a victim has collapsed during the call back period, they will have been down for a minimum of 10 minutes before rescue personnel could have reached them. NEVER approach a person who is down, including those who appear to have succumbed from other causes (e.g., appear to have drowned), unless you have a personal gas detector and/or respiratory protection equipment as dangerous gases may have been responsible for their inability to free themselves.

There are a minimum of two persons required for a response: a Primary Responder and a Communications Responder (Back Up).

Primary Responder Role and Responsibilities

Never endanger yourself or any other person when attempting a rescue. If you are not comfortable or do not understand the situation, call 911 and request a Rescue Team. Advise both the 911 operator and the Rescue Team that arrives that toxic gases may be present.

1. If available, take a personal gas detector and an Escape SCBA.
2. Observe the wind direction and plan to approach their work area from the upwind direction, if possible.



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3. When the victim is located, stop, assess the situation and proceed with care.
4. The rescuer shall assess the victim and situation while the Communications Responder remains at a safe distance with immediate access to communications equipment and remaining in full contact with the Primary Responder. The Communications Responder is responsible for communicating the status to the On Site Commander.
5. Assess the victim from a safe distance (upwind of both the victim and areas where gas hazards may be present).
6. Attempt to communicate with the victim from a safe distance
7. If the victim is not able to communicate or is unconscious, do not approach them unless you have a personal gas detector and approach from the upwind direction. Call 911 and request assistance, advise them that toxic gases may be present.
8. If the safe working limits are exceeded as indicated by an alarm on the personal gas detector, you can only attempt a rescue if an escape SCBA is used – you cannot hold your breath in a hydrogen sulphide environment. An escape SCBA only has sufficient air for 5 or 10 minutes of normal breathing and as little as 2 minutes when persons are excited or working strenuously.
9. If you do not have appropriate equipment or training, contact 911 and request a Rescue Team. Advise both the 911 operator and the Rescue Team that arrives that toxic gases may be present.
10. If a victim is suspected to be in a building that may contain landfill gas, or in a confined space, do not attempt to enter without a personal gas detector and an escape SCBA.
11. If the victim is conscious and able to communicate, the rescuer may calmly and carefully approach them if it is safe to do so.
12. Assess the victim's condition, call for medical or other assistance as needed, and communicate with the Supervisor and/or Landfill office to advise of the status.

Communications Responder (Back Up) Role and Responsibilities

The Communications Responder is safety support only and not a rescuer. The Communications Responder shall:

1. Find a safe viewpoint both upwind and uphill of the response area but do not approach an area where persons are down or not responsive.



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2. Maintain communications with the Primary Responder. Monitor the Primary Responder's actions and voice for indications of stress or loss of function.
3. Call 911 for assistance if the Primary Responder is overcome by toxic gas or otherwise disabled. Advise both the 911 operator and the Rescue Team that arrives that toxic gases may be present.
4. Communicate with the On Site Commander on the conditions and situation.



BIOMEDICAL SPILLS

If a biomedical spill occurs at the Landfill, cordon off the area and advise the Superintendent. A biomedical or hazardous waste contractor will be required to clean up the spill. For biomedical spills in areas of the facility with paved or other hard surfaces, use the following procedure that is based on: City of Vancouver Safe Operating Procedures: Cleaning up Blood and Body Fluids from 2005 Blood Borne Pathogen Exposure Control Plan (Effective Date: May 2005). This is guidance that may need to be adapted to the situation.

Purpose and Scope

This Safe Operating Procedure has been developed to ensure the safe performance of **cleaning up blood and body fluids**.

Risk Assessment

The risk of exposure to blood borne pathogens from the task of Cleaning up Blood and Body Fluids is LOW because clean up is under a controlled environment, there does not need to be any physical contact with blood or body fluid, and it is a rare task for employees.

Tools/Equipment/Materials Required

The following tools, equipment and materials are required to perform this Safe Operating Procedure:

- Disposable gloves: latex, vinyl or nitrile
- Eye protection
- Plastic bags
- Bucket
- Disinfectant solution choices:
 - Buckeye quat cleaner, dilute to 60 ml per 1 liter (1000 ml) or 8oz per 1 gallon
 - 10% bleach - 9 parts water and 1 part household bleach
- Paper towels

**EMERGENCY RESPONSE PLAN****PART 2 SPECIFIC PROCEDURES****PROCEDURE**

If at any time during the performance of this work something outside of the normal occurs, contact your supervisor for further instructions.

Small Spill On Hard Surfaces

1. Ensure all equipment is close to the spill and barricade area.
2. Put on gloves and eye protection
3. Pick up sharps, if present, with tool and discard in sharps container.
4. Mix fresh solution of cleaner and water in bucket or spray bottle
5. Drip or spray disinfectant on and around spill. Start outside and work to centre of spill
6. Wait 10 minutes and then soak up spill with paper towel. Pick up all visible signs of the spilled material.
7. Place soiled paper towels in plastic bag. Place plastic bag in another plastic and bag tie close
8. Spray again, and let surface air dry.
9. Remove PPE and wash hands thoroughly
10. Disinfect eye protection with spray disinfectant. Allow to air dry.

Major Spill On Hard Surfaces

1. Place wet floor signs around spill area.
2. Ensure all equipment is close to the spill.
3. Put on gloves and eye protection
4. Mix disinfectant in appropriate bucket.
5. Put on shoe covers and protective apron if blood or body fluid is widely dispersed
6. Pick up sharps, if present, with tool and discard in sharps container
7. Dip mop head in disinfectant. DO NOT wring out.
8. DO NOT TOUCH mop to spill. Drip disinfectant over spill.



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NOTE: COMPLETELY COVER SPILL. AVOID SPLASHING.

9. WAIT 10 minutes. Increase time if heavily soiled. Keep spill area wet.
10. Return mop head to disinfectant. Wring out
11. Thoroughly, mop up spill.
12. Rewet and wring mop head as needed.
13. Paper towels may be used to soak up disinfectant.
14. Leave mop head in the disinfectant solution for at least 10 minutes.
15. Wring out mop head and allow to air dry.
16. Discard solution in custodial sink
17. If paper towel is used, discard in double plastic bags.
18. Remove PPE and wash hands thoroughly

Disposal of Grossly Contaminated Materials

If materials are dripping with blood they are grossly contaminated and must be discarded as biohazardous waste. Special containers and biohazardous waste disposal are available from the Biohazardous Waste Contractor or contaminated items can be double bagged in plastic bags and then contained in a cardboard box. The box must be well labelled as BIOHAZARDOUS WASTE and call the Biohazardous Waste Contractor to dispose of the container as soon as possible.

EMERGENCY PROCEDURES In the event of a serious medical emergency, dial 9-1-1.

In the event of difficulties on the job that may pose a safety hazard, contact the Superintendent for further instructions.

Skin Contact

Wash your skin for 10 minutes with soap and warm water, report incident in first aid book.

If there is contact with mucous membranes or open cut, follow Responding to Blood and Body Fluid Exposure Incident



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MEDICAL EMERGENCIES

Assess the situation for the root cause of the medical emergency. If a danger exists, do not proceed until your safety and those of other persons is secured.

Call 9-1-1.

Advise a supervisor.

Person Down

If a person has collapsed in a confined space, in any area of the Landfill, or in areas where landfill gas piping is present, do not enter the confined space or area without a personal gas detector and/or escape SCBA to protect your life.

Never attempt a rescue operation alone, if you are overcome, you will not have time to call for help.

Approach the person from upwind with a personal gas detector operating continuously.

The concentration of gases must be within the following limits to permit entry.:

Explosive Gas	Less than 10% LEL
Methane	Less than 1,000 ppm or 0.1% by volume
Oxygen	19.5% to 23.5% ⁽¹⁾
Hydrogen Sulphide	Less than 5 ppm ⁽¹⁾

If these limits are not met, do not approach the area and request a fire department rescue crew effect the rescue.

Person Injured

Call for First Aid and provide immediate care until directed to do otherwise by the First Aid Attendant or On Site Commander.

If a person is in a confined space or a location that is difficult to access, a first aid attendant should only enter if the situation can be confirmed to be safe.

For entry into an RDO bin, a ladder is available as described in the RDO Safe Work Procedure. If there is no garbage in the bin, the bin may be accessed through the swing door if safe to do so.



VEHICLE ACCIDENTS

Vehicle Accidents typically relate to vehicle impact with another object or a vehicle being unable to move (e.g., driving off road or tipping)

- Check for unsafe conditions – either the condition that resulted in the accident or the present situation.
- If a person is in the vehicle, check on their condition and safety. If injured, proceed as for MEDICAL EMERGENCIES.
- Check for fuel, oil, or other leaks. If leaking, proceed as for FUEL SPILLS.
- If safe to continue operations, barricade off the area, remove refuse from the vehicle if necessary.
- Except in situations where other facilities are at risk, Landfill equipment should not be used for towing or righting customer vehicles.



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RIOTS/CIVIL DISTURBANCE

If a riot or civil disturbance should occur outside a building you are in, stay inside and protect yourself.

Call 9-1-1 if police or emergency services do not appear to be present.

Follow instructions you are given by the Police or On Site Commander.



BOMB THREAT

Bomb threats are normally received over the telephone. A person receiving such a call should remain calm and proceed as follows:

- **Listen very carefully** to what the caller says.
- Try to write down exactly what the caller says.
- Is the caller male or female?
- Listen for an accent, speech defect, type of voice, or other distinguishing characteristics.
- Listen for background noises such as motor running, music (what kind), traffic, voices.
- Ask the caller for the **exact location** of the bomb.
- Ask the caller **when** it will explode.
- Ask the caller what the bomb **looks like**.
- Ask the caller **why** he or she placed the bomb.
- Do not hang up your telephone. The call might be traceable if the line is kept open. Check for a caller ID on your telephone.
- After the caller hangs up, do the following:
 - ☆ From another phone, call 9-1-1.
 - ☆ Contact the Superintendent.
 - ☆ Remain available to meet emergency responders.
- **Do not handle or touch anything that should not be there.**



EARTHQUAKE

During an earthquake, it is very important to remain calm. Then proceed as follows:

- Drop under a table, inside a vehicle, or anything that protects you from falling objects. Move away from windows, overhead fixtures, filing cabinets, bookcases or anything else that could fall.
- Cover your head.
- Hold onto your cover until you feel it is safe to come out.
- If possible, assist any physically limited persons to find shelter.

If OUTSIDE:

- Stay outside, in an open area away from buildings, trees, power lines and roads.
- Remain in a vehicle if it provides protection.

After the motion stops, continue to remain calm and:

- Check yourself for injuries. Seek first aid, if needed.
- Do not attempt to move seriously injured victims unless they are in immediate danger. A victim in danger who is suspected of having a back or neck injury should be immobilized as much as possible and moved to a safe location. Seek assistance from first aid. If not in danger, do not attempt to move a victim, but help them remain calm until help arrives.
- Check for safety hazards such as fire, electrical hazards, gas leaks, or water hazards.
- EVACUATE and report hazards to the On Site Commander at the Muster Station.
- Co-operate, keep informed and help clean up. Keep telephones and roads open for emergency use. Do not use unless for emergencies.
- Be prepared for aftershocks.
- Be prepared to assume emergency response assignments as required by the City of Vancouver.