



# Release Reporting

Document Number: <b>FHOP-GL0002A</b>	<b>Procedure</b>	Applies To: <b>Fort Hills</b>
Revision Date: <b>2016/03/16</b> Revision: <b>0</b> Review Cycle: <b>3 years</b>	Document Owner (Title): <b>Tom McWilliams,</b> <b>Director EH&amp;S Fort Hills</b>	

## Summary of Changes

Rev No.	Section Changed	Revisions Made
0	2016/01/18	New Document

**Purpose** To define the requirements for reporting releases (solid, liquid or gas) into the environment.

**Scope** Fort Hills' philosophy is to reduce all releases to zero, or to as low as reasonably achievable. It is understood that limitations exist on certain types of machinery, equipment, or situations that currently preclude achieving a zero release target when applying conventional release thresholds. Accordingly, the release management philosophy accepts current industry practices, practical considerations, and engineering or operational limitations as reasonable risks. Specific situations that are considered to be an IWL that require immediate reporting are:

- An off-site release of any substance.
- Any liquid release to land (>1L) from light vehicles and/or equipment that occur within the Fort Hills lease.
- A release or emergency that is causing or has caused an adverse effect to the environment.
- Any release that meets or exceeds a regulator-established threshold.
- Any substance that is released into an established drainage system, watercourse, groundwater or surface water body
- Any IWL release or near miss/INL that has been identified with a risk (Element 15) Consequence of 3 (C3) or Potential of 5 (C5) or higher requires immediate reporting (see [SUN-00010](#), Incident Management Standard and [SUN-00189](#), Corrective Actions Standard).

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**Roles and Responsibilities**

The following individuals and groups have the following roles and responsibilities:

- |                          |   |
|--------------------------|---|
| <b>Document Owner</b>    | <ul style="list-style-type: none"> <li>• Ensures this document is reviewed according to the required revision cycle.</li> <li>• Ensures the document is updated to accommodate changes to Suncor, provincial, and federal regulation.</li> <li>• Ensures the document is updated to mitigate risks found as the result of an incident.</li> </ul> |
| <b>Document Approver</b> | <ul style="list-style-type: none"> <li>• Ensures this procedure is necessary and that it aligns with management and company direction.</li> </ul>   |

**References**

- [SUN-00010](#), Incident Management Standard
- [SUN-00189](#), Corrective Actions Standard

**Terms, Definitions and Acronyms**

The following terms, definitions and acronyms are used in this procedure:

<b>AER</b>	Alberta Energy Regulator
<b>Controlled Discharge</b>	<p>A planned and regulatory approved release of a solid, liquid or gas into the environment by Fort Hills operational activities.</p> <p>Discharges can include substances and/or water of known quality that has been analyzed to determine aspects of the chemical composition. An example of a discharge includes:</p> <ul style="list-style-type: none"> <li>• Water or wastewater from a surface runoff/retention pond</li> <li>• Water or wastewater from a container or other system including from a treatment plant</li> <li>• Storm or cooling water</li> </ul>
<b>DDS</b>	Digital Data Submission
<b>EH&amp;S</b>	Environmental Health and Safety
<b>Environment</b>	<p>The components of the earth including:</p> <ol style="list-style-type: none"> <li>i. Air, land and water.</li> <li>ii. All layers of the atmosphere.</li> <li>iii. All organic and inorganic matter and living organisms.</li> <li>iv. The interacting natural systems that include components referred to in (i) and (iii).</li> </ol>
<b>Flaring</b>	Combustion of gases to flare system above and beyond the gas used for keeping pilot running; including flaring as a result of a process upset (unplanned).
<b>H<sub>2</sub>S</b>	Hydrogen sulfide

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*Terms, Definitions and Acronyms (Continued)*

<b>INL</b>	Incident No Loss
<b>IWL</b>	Incident With Loss
<b>LOPC</b>	Loss of Primary Containment
<b>PSV</b>	Pressure Safety Valve
<b>Refined Substances</b>	Substances Fort Hills brings to site, including, but not limited to hydrogen peroxide, glycol, caustic, hydrochloric acid and hydraulic fluid.
<b>Release</b>	An unplanned, unintentional or regulatory unauthorized release of a solid, liquid or gas into the environment, or into a location that does not usually contain that material including secondary containment .  Alternate terms for release include: Spill, dispose, spray, mist, inject, inoculate, abandon, deposit, leak, seep, pour, emit, empty, throw, dump, place and exhaust.
<b>Unrefined Substance</b>	Substances that are produced as part of Fort Hills operational activities, such as bitumen, produced water and boiler feed water.
<b>Venting</b>	Unintentional uncontrolled release of uncombusted gas; including release from a PSV, which is also a loss of containment

**Procedure****1. Release Reporting**

**Note 1:** Release reporting requirements must consider both internal and external stakeholders. Release reporting must be escalated through the internal process first. In the event of a release or environmental emergency, Fort Hill Environmental Affairs should be immediately contacted at 1 780 743 6840.

**Note 2:** Internal reporting is governed through the Incident Notification Hierarchy per FHTP-GL002A, Fort Hills Incident Reporting and Escalation Standard.

**Responsibility****Step****Action**

Employees and Contractors

1.1

Ensure the following information is available at the time of reporting:

- Your name
- Company name
- Approval number (if applicable)
- Your phone number
- Volume and type of substance released (m<sup>3</sup>)
- Duration of release
- Start date and time of release
- End date and time of release
- Location of release (receptor)
- Reason for release

**Note:** Fort Hills EH&S may assist the Area Operations Shift Supervisor with reporting the spill or release to the AER if required.

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*Release Reporting (Continued)*

<b>Responsibility</b>	<b>Step</b>	<b>Action</b>
	1.2	Report all spills and unapproved releases to immediate Supervisor and Area Operations Shift Supervisor. <ul style="list-style-type: none"> <li>• Contact Security or Emergency Services if necessary (780-742-2111).</li> <li>• Contact Fort Hill Environmental Affairs 1 780 743 6840.</li> </ul>
Area Operations Supervisor	1.3	Ensure the safety for yourself and others in the area.
	1.4	Use the information in the following table to determine your next action.

<b>If the release type is ...</b>	<b>Then ...</b>
Spill	Go to major step 2.
Venting	Go to major step 3.
Unplanned flaring	Go to major step 4.
Planned flaring	Go to major step 5.

**2. Spill Reporting**

<b>Responsibility</b>	<b>Step</b>	<b>Action</b>
Area Operations Supervisor	2.1	Instruct the area operator to attempt to stop the source of the release if safe to do so.
	2.2	Use the information in the following table to determine your next action.

<b>If the spill is ...</b>	<b>Then report spill...</b>
Unrefined substance of volume greater than 2m <sup>3</sup>	Immediately to the AER regardless of release location.
Refined substance	Immediately to the AER if quantities exceed threshold values listed in Appendix A.
Outside of active Fort Hills operational areas	Immediately to the AER.

**Note:** Alberta Energy Regulator (AER): 1-800-222-6514.

	2.3	Initiate containment and ensure work request is entered for clean-up.
Area Operations Supervisor	2.4	Take photos immediately of release prior to cleanup and send to EH&S personnel.

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*Spill Reporting (Continued)*

<b>Responsibility</b>	<b>Step</b>	<b>Action</b>
	2.5	Enter an incident into the incident management tool. <b>Note:</b> Enter an incident for all releases whether or not they are reportable.
	2.6	Complete the LOPC data form if applicable.
Fort Hills EH&S	2.7	Provide direction to laborers and ensure that clean-up of spills or releases have been thoroughly completed.
	2.8	Take post clean up pictures when all requirements of the AER are met.
	2.9	Submit to AER a final written release report (Release Report Form or Alleged Contravention Report Form) describing the incident, clean up and measures taken to prevent future incidents.

**3. Venting Reporting**

<b>Responsibility</b>	<b>Step</b>	<b>Action</b>
Area Operations Supervisor	3.1	Instruct the area operator to attempt to stop the source of the release if safe to do so.
	3.2	Immediately report venting to the AER call center at 1-800-222-6514 and record the reference number provided by the operator.
	3.3	Enter the incident into the venting log.
	3.4	Use the information calculated from the venting log to report in the AER DDS. <b>Note:</b> In the comments section include: <ul style="list-style-type: none"> <li>• Description of what happened</li> <li>• Volume and concentration of gas released</li> <li>• Duration of release</li> <li>• The root cause of the incident</li> <li>• Actions taken to prevent reoccurrence</li> <li>• The reference number provided by the AER</li> </ul>
	3.5	Enter an incident into the incident management tool
	3.6	Complete the LOPC data form.
Fort Hills EH&S	3.7	Verify the venting log and DDS entry have been completed.
	3.8	If requested, submit to AER a final written report (Release Report Form or Alleged Contravention Report Form) describing the incident and measures taken to prevent future incidents.

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**4. Unplanned Flare Reporting**

<b>Responsibility</b>	<b>Step</b>	<b>Action</b>
Area Operations Supervisor	4.1	Instruct the area operator to attempt to stop the source of the release if safe to do so.
	4.2	Send email to process engineer to calculate the volume released, duration and estimated NO <sub>x</sub> and/or H <sub>2</sub> S concentration.
	4.3	After information is collected from process engineer, enter details of incident into the flaring log.
	4.4	Complete the AER DDS (within 12 hours). <b>Note:</b> Within the comments section provide a detailed story of what happened.
	4.5	Update the flaring log with the DDS notification number which will prove that the submission took place.
	4.6	Enter an incident into the incident management tool.
	4.7	Complete the LOPC data form.
Fort Hills EHS	4.8	Ensure the flaring log and DDS entry have been completed.

**5. Planned Flare Reporting**

<b>Responsibility</b>	<b>Step</b>	<b>Action</b>
Area Operations Supervisor	5.1	Notify Fort Hills EH&S department at a minimum of 72 hours prior to a planned flaring event. <b>Note:</b> If the EH&S department is not made aware of a planned flaring event prior to it commencing it will be the responsibility of Operations Supervisor to make the phone call regarding late reporting.
	5.2	Send email to process engineer to estimate the volume released, duration and estimated H <sub>2</sub> S concentration of the up and coming planned flaring incident.
Area Operations Supervisor	5.3	Complete the AER DDS prior to the event.
	5.4	Enter all information into the flaring log including the DDS notification number. <b>Note:</b> Notification of outage/turnaround events is required within the AER DDS system.
Fort Hills EHS	5.5	Notify the AER field office of the up and coming planned flaring event at least 48 hours prior via DDS, a courtesy call is advised.

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*Planned Flare Reporting (Continued)*

<b>Responsibility</b>	<b>Step</b>	<b>Action</b>
	5.6	Contact the AER field office after flaring has ceased.
	5.7	Update the AER DDS submission and flaring log.

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**End of Procedure**

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**Appendix A – Environmental Spill Reporting – Part A**

Reportable spill quantities for substances used/produced at Fort Hills:

<b>Substance</b>	<b>Report if amount equals or exceeds:</b>
<b><i>Petroleum and Petroleum Products</i></b>	
Any TDG regulated substance from a vehicle that has been/will be operating off site	Refer to list of TDG classifications in Appendix A – Part B
Any petroleum product from any underground (a) storage tank, (b) piping or (c) sumps.	Any quantity
Fuel additives	200 L
Gas Oil	200 L
Gasoline	200 L
Kerosene/diesel	200 L
Lubricating oils/greases	200 L
Naphtha	200 L
<b><i>Acids and Bases (TDG – Class 8)</i></b>	
Acetic acid	5 L or 5 kg
Calcium hydroxide (lime)	Not regulated (not reportable)
Calcium oxide	5 L or 5 kg
Hydrochloric acid	5 L or 5 kg
Magnesium oxide	Not regulated (not reportable)
Nitric acid	5 L or 5 kg
Phosphoric acid	5 L or 5 kg
Potassium hydroxide (caustic potash)	5 L or 5 kg
Soda ash	Not regulated (not reportable)
Sodium hydroxide (caustic soda/caustic)	5 L or 5 kg
Sulphuric acid	5 L or 5 kg
<b><i>Gaseous Substances</i></b>	
Acetylene	100 L and/or a sustained release of 10 minutes
Ammonia (anhydrous)	Any quantity
Ammonia solutions (<50% ammonia)	Any sustained release of 10 minutes
Ammonia solutions (>50% ammonia)	Any quantity
Butane	100 L and/or a sustained release of 10 minutes
Carbon monoxide	Any sustained release of 10 minutes
Carbonyl sulfide	Any sustained release of 10 minutes
Chlorine	Any sustained release of 10 minutes
Dimethyl ether	100 L and/or a sustained release of 10 minutes
Ethane	100 L and/or a sustained release of 10 minutes
Freon (R22)	10 kg
Freon (AZ50, R507, SUVA 134A)	Any sustained release of 10 minutes
Hydrogen	100 L and/or a sustained release of 10 minutes
Hydrogen chloride	Any sustained release of 10 minutes
Hydrogen sulfide	Any release
Isobutane	100 L and/or a sustained release of 10 minutes
Methane	100 L and/or a sustained release of 10 minutes
Methyl mercaptan	Any sustained release of 10 minutes

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<b>Substance</b>	<b>Report if amount equals or exceeds:</b>
Nitrogen (compressed)	100 L and/or a sustained release of 10 minutes
Propane	100 L and/or a sustained release of 10 minutes
Sulphur dioxide (from unapproved sources)	Any sustained release of 10 minutes
Sulphur dioxide (from approved sources)	See AENV approval 80105
Sulphur hexafluoride	100 L and/or a sustained release of 10 minutes
<b>Miscellaneous Organic Substances</b>	
Acetaldehyde	200 L
Acetone	200 L
Antifoam	200 L
Ballast Oil (no PCB)	25 L or 25 kg
Ballast Oil (PCBs present or content unknown)	Any quantity
Citrikleen	5 L or 5 kg
Chloroform	5 L or 5 kg
Cyclohexane	200 L
Cyclohexylamine	5 L or 5 kg
Demulsifiers	200 L
Diethanolamines	5 L or 5 kg
Diethylene Glycol	200 L
Dimethyl Sulfide	200 L
Ethylbenzene	200 L
Ethylene Glycol	200 L
Formaldehyde Solution (>25%)	5 L
Hexane	200 L
Methanol	200 L
Mercaptan	200 L
Neutralizing amine	5 L or 5 kg
Oxygen scavenger	5 L or 5 kg
PCBs [PCB]>50 mg/L	Any quantity
Pentane (n-Pentane)	200 L
Propylene glycol	200 L
Sludge conditioner	200 L
Toluene	200 L
Transformer oil (no PCBs)	25 L or 25 kg
Transformer oil (PCB present or content unknown)	Any quantity
Vinylidene chloride	200 L
Xylene	200 L
<b>Miscellaneous Inorganic Substances</b>	
Aluminum sulfate (Alum)	5 L or 5 kg
Brine	2,000 L
Carbon disulfide	200 L
Catacarb 100H (corrosion inhibitor)	5 L or 5 kg
Catacarb 400H	5 L or 5 kg
Disodium phosphate	1 kg
Fly ash slurry	100 L
Gypsum slurry	4,500 L
Hydrogen fluoride	5 L or 5 kg
Mercury	Any quantity

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<b>Substance</b>	<b>Report if amount equals or exceeds:</b>
Sulphur	25 kg
Polyaluminum chloride (PAX, NIAD)	5 L or 5 kg
Potassium permanganate	5 L or 5 kg
Powerhouse ash	5 L or 5 kg
Sodium hypochlorite	5 L or 5 kg
Sodium nitrate	5 L or 5 kg
<b>Waste Products</b>	
Sewage	25 kg
Waste oil	25 L or 25 kg
Other hazardous liquid or solid wastes	Dependent on TDG classification of waste ( see Appendix I – Part B)
<b>Water</b>	
Condensate (steam)	2,000 L
Utility water (Pond B or PEW)	2,000 L
Groundwater (saline, i.e. >4,000 mg/L TDS)	2,000 L
Raw/Utility Water /Firewater	10,000 L
Sour water	2,000 L
<b>Ozone Depleters</b>	10 kg

**Appendix A – TDG Reporting Thresholds – Part B**

TDG classifications for spill reporting

<b>Substance</b>	<b>Class/Division</b>	<b>Report if amount equals or exceeds</b>
Explosives	1	Any quantity that could pose a danger to public safety or 50 kg
Gases	2	Any quantity that could pose a danger to public safety or any sustained release of 10 minutes or more
Flammable liquids	3	200 L
Flammable solids	4	25 kg
Oxidizing substances	5.1	50 kg or 50 L
Organic peroxides	5.2	1 kg or 1 L
Toxic substances	6.1	5 kg or 5 L
Infectious substances	6.2	Any quantity that could pose a danger to public safety or 1 kg or 1 L
Radioactive materials	7	Any quantity that could pose a danger to public safety. An emission level greater than the emission level established in section 20 of the <i>Packaging and Transport of Nuclear Substances Regulations</i>
Corrosives	8	5 kg or 5 L
Miscellaneous Products, Substances or Organisms	9	25 kg or 25 L

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The following individuals have approved and signed this document.

UserName: Sheri Romick (sromick)

Title: Mgr Environment & Regulatory

Date: Thursday, 17 March 2016, 08:54 AM Mountain Time

Meaning: Approver 1 Signed

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