

	SEVERE WEATHER		
	Procedure Type: Routine		Department: Refinery
	Document Owner: Manager, EH&S		Document Contact: Emergency Response Coordinator
Document Number: 4000-ZPR-S-MSAFeca-00166	Issue Date: 08/28/2014	Revision Number: 3	Next Review Date: 05/28/2017

Purpose and Scope:	<p>This procedure describes the steps to safely define weather advisories, watches and warnings and describes the notification and response steps to be taken in the event of severe weather.</p> <p>Severe weather advisories, watches and warnings are received via the CVECO radio. Environment Canada categorizes these weather alerts as follows:</p> <ul style="list-style-type: none"> • Weather Advisory • Weather Watch • Tornado Watch • Weather Warning • Wind Warning • Severe Thunderstorm Warning • Tornado Warning
Personal Protective Equipment (PPE) Required:	Normal mandatory PPE for working in process areas required. Additional PPE may be required as per Refinery Standards and applicable Material Safety Data Sheets (MSDS).

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PROCEDURE INSTRUCTIONS			
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<u>NOTE</u>			
<p>A weather advisory means actual or expected weather conditions may cause general inconvenience or concern. An advisory may also be used when conditions show signs of becoming favourable for severe weather when the situation is not definite enough or too far in the future to justify a warning.</p> <p>A weather watch alerts you that conditions are favourable for the development of severe weather. Watch the skies and listen for updated watches and possibly weather warnings.</p>			

1.0	Communicate a Weather Advisory / Watch	1.1	Security: Communicate the weather alert as broadcasted over the CVECO radio to the Shift Supervisor.
		1.2	Shift Supervisor: Monitor weather map. If weather system affects immediate area, instruct Security to initiate Alert Notification signal. Follow Alert Notification signal with a broadcast. Security shall assist with PA announcements as directed by the Shift Supervisor.
		1.3	Field Supervisors and Construction Coordinators: Notify the contractors.

<u>NOTE</u>			
<p>1.) Monitor the storm at the following web site: http://www.sarnia.com/weather/frmain.html. Lightning strike updates and storm cell tracking (via the Detroit weather radar) are accessible through this web site.</p> <p>2.) The Shift Supervisor can also monitor weather updates by calling the 24 hour Sarnia/Lambton local weather recording phone at 519-464-5121.</p>			

		1.4	Shift Supervisor, TA Manager, Maintenance and Construction Managers, Suncor EH&S and Contractor EH&S: Conduct visual monitoring of atmospheric conditions.
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<u>NOTE</u>			
<p>A weather warning alerts you that severe weather is occurring or that hazardous weather is highly probable. Severe thunderstorm or tornado warnings may be issued less than one hour in advance. Other weather warnings may be issued six to twelve hours in advance</p>			

2.0	Communicate a Weather Warning	2.1	Security: Communicate the weather alert as broadcasted over the CVECO radio to the Shift Supervisor.
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		2.2	Shift Supervisor: Instruct Security to initiate Alert Notification signal. Follow Alert Notification signal with a broadcast. Security shall assist with PA announcements as directed by the Shift Supervisor.
		2.3	Field Supervisors and Construction Coordinators: Notify the contractors.
		2.4	Shift Supervisor: Monitor the weather updates.
		2.5	Shift Supervisor, TA Manager, Maintenance and Construction Managers, Suncor EH&S and Contractor EH&S: Conduct visual monitoring of atmospheric conditions.

NOTE

Wind Warning: Expect winds blowing steadily at 60 km/h or more, or winds gusting to 90 km/h or more, for at least one hour. Secure all loose material.

3.0	Communicate a Wind Warning	3.1	Security: Communicate the weather alert as broadcasted over the CVECO radio to the Shift Supervisor.
		3.2	Shift Supervisor: Instruct Security to initiate Alert Notification signal. Follow Alert Notification signal with a broadcast. Security shall assist with PA announcements as directed by the Shift Supervisor.
		3.3	Shift Supervisor: Announce over all radio channels that all work shall be done at grade level due to sustained high winds.
		3.4	Field Supervisors and Construction Coordinators: Notify the contractors.
		3.5	Permit issuers: Inform contractors that all work is to be done at grade level.
		3.6	Contractors' foremen and Contractor EH&S: Confirm all workers are at grade level and notify the permit issuer.
		3.7	Contractors: Ensure all crane booms are retracted and lifting operations suspended.
		3.8	Contractors: Ensure all loose material is secured.

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NOTE

Severe Thunderstorm Warning: A severe storm has developed, producing one or more of the following conditions: heavy rain, damaging winds, hail of at least 20mm in diameter or intense lighting. Severe thunderstorms may also produce tornadoes. The storms expected motion and developments will be given in the warning. If you are in the area specified, take shelter indoors.

4.0	Communicate a Severe Thunderstorm Warning in the Surrounding Area and Storm Tracking Towards Refinery	4.1	Security: Communicate the weather alert as broadcasted over the CVECO radio to the Shift Supervisor.
		4.2	Shift Supervisor: Instruct Security to initiate Alert Notification signal. Follow Alert Notification signal with a broadcast. Security shall assist with PA announcements as directed by the Shift Supervisor.
		4.3	Shift Supervisor: Announce over all radio channels that all work shall be done at grade level due to a severe thunderstorm warning with lightning in the surrounding area.
		4.4	Field Supervisors and Construction Coordinators: Notify all contractors.
		4.5	Permit issuers: Inform contractors to remove all workers from towers and confined spaces. All work is to be done at grade level.
		4.6	Contractors' foremen and Contractor EH&S: Confirm all workers are at grade level and notify the permit issuer.
		4.7	Contractors: Ensure all crane booms are retracted and lifting operations suspended and notify the permit issuer.
5.0	Communicate a Severe Thunderstorm Warning in Immediate Area	5.1	Security: Communicate the weather alert as broadcasted over the CVECO radio (or if lightning is observed in the immediate area) to the Shift Supervisor.
		5.2	Shift Supervisor: Instruct Security to initiate Alert Notification signal. Follow Alert Notification signal with a broadcast. Security shall assist with PA announcements as directed by the Shift Supervisor.

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		5.3	Shift Supervisor: Announce over all radio channels that all Units are to be cleared due to a severe thunderstorm with intense lightning in the immediate area.
		5.4	Field Supervisors and Construction Coordinators: Notify the contractors.
		5.5	Permit Issuers: Instruct contractors to leave Units and reside in trailers until the storm passes.
		5.6	Contractors: Return permits to permit issuer and confirm that workers are leaving the unit.
		5.7	Permit Issuers: Notify the Shift Supervisor that all workers are off the Unit.

NOTE

If the Unit Visitor Log indicates visitors are in the Unit, Suncor EHS and Operations shall walk through the Units sounding an air horn to ensure Units are clear.

NOTE

Tornado Warning: One or more tornadoes are occurring in the area specified. The expected motion, development and duration will be given in the warning. If you are in the path of a tornado, take emergency precautions immediately. If you are near the area specified in the warning, be alert for the development of additional tornadoes or severe thunderstorms.

6.0	Communicate a Tornado Warning in the Immediate Area and Tracking Toward the Refinery	6.1	Security: Communicate the weather alert as broadcasted over the CVECO radio to the Shift Supervisor.
		6.2	Shift Supervisor: Instruct Security to initiate Emergency Alarm. Follow Emergency Alarm with a broadcast. "Attention all Units, Tornado in Immediate Area, all personnel must evacuate the Units and take shelter". Security shall assist with PA announcements as directed by the Shift Supervisor.
7.0	Return to Work after Stoppage	7.1	Shift Supervisor, TA Manager, Maintenance and Construction Managers, Suncor EH&S and Contractor EH&S: Decide together when everyone can return to work.

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CHANGES / UPDATES

Are any changes/updates required? YES NO

Changes/updates required may be written within the procedure itself or in this section.

All comments **MUST** include operator name and review date (mm/dd/yy).

Name:

Date:

END OF PROCEDURE

REVISION LOG

Date (MM/DD/YYYY)	Revision	Section	Comments	Editor (Name)
10/06/2010	1	<i>General Document</i> 1.2, 2.2, 3.2, 4.2, 5.1,5.2 6.1, 6.2, 7.1	Updated old position title from OPC to OSL. Converted procedure into new procedure template. Editorial changes.	
		All	Updated format and placed into a Work Practice Template as per PSM spreadsheet, but content was NOT altered.	
08/21/2013	2	Header	Converted Work Practice into a Procedure Template. Changed Document Owner & Contact but NO Content Changed.	L. Lebert
08/28/2014	3	All	Updated OSL position title to Shift Supervisor	D. Allen



The following individuals have approved and signed this document.

UserName: Peter Lynch (plynch)

Title: Mgr EH&S Sarnia

Date: Friday, 29 August 2014, 11:42 AM Mountain Time

Meaning:

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