

SMOKE CONTROL FORECAST FOR SUNCOR ISSUED BY TRUE NORTH WEATHER CONSULTING AT 9:00 AM MONDAY JANUARY 17, 2007. FORECAST VALID FOR TODAY AND TUESDAY WITH AN OUTLOOK FOR THE FOLLOWING 3 TO 5 DAYS.

SYNOPSIS

A ridge of high pressure anchored over northern Alberta will maintain a dome of cold air over the burn site today. A sharp temperature inversion near the ground associated the dome of cold air will trap smoke in the lower atmosphere today. As a result poor venting is expected.

On Tuesday, an upper trough moving into the area from the west will spread cloud and milder temperatures across the area. In addition, moderate southerly winds are expected to develop in the afternoon as a strong surface low pressure system moves into the Northwest Territories. This will produce good venting conditions in the afternoon.

WEATHER FORECAST

Today...Sunny and cold. High minus 22.

Tonight...Increasing cloud. Temperature rising to minus 18 by morning.

Tuesday...Cloudy. High zero.

WIND AND VENTING FORECAST

TODAY		TUESDAY		
9 AM	3 PM	9AM	3 PM	
Calm	NE 10	S 10	S 30	<i>Plateau Wind</i>
Calm	Calm	S 15	S 35	<i>Valley Wind</i>
Poor	Poor	Fair	Good	<i>Venting</i>

Comments: none

Wind Information:

- *N=north, S=south, W=west, E=east; Direction refers to where winds blow from.*
- *NW=northwest, SE=southeast etc.*
- *All speeds are kilometers per hour.*

Ventilation Information:

- *“Venting” refers to the “ventilation index”. Pollutant and smoke concentrations are proportional to the product of the depth of the “turbulent mixed layer” and the speed of the wind within this layer. The computed ventilation is then scaled to produce the “ventilation index”- which varies from 0 to 100.*
- *Ventilation index values:*
 - *0-33 “poor”*
 - *34-54 “fair”*
 - *55-100 “good”*

OUTLOOK FOR THE NEXT 3 TO 5 DAYS

Fair to good venting conditions will prevail Wednesday and into Thursday as the region remains in a warmer southerly flow. On Friday a cold front will swing through the burn area bringing a return of a more stable arctic airmass and brisk northerly winds. Poor ventilation is expected Friday.

END