



# Portable Source Risk Assessment Summary

<b>Facility Name:</b>	Elder Demo	<b>Source Type:</b>	Portable	
<b>Source Description:</b>	Air Curtain Incinerator			
<b>Toxics Emissions Units</b>				
<b>Name</b>	<b>Description</b>	<b>Max. Hourly Throughput<sup>1</sup></b>	<b>Max. Daily Throughput<sup>1</sup></b>	<b>Max. Annual Throughput<sup>1</sup></b>
Air Curtain Incinerator	Carbonator	15 tons/hr	120 tons/dy	25,000 tons/yr
Diesel Engine	Perkins Engines Co Ltd 173 bhp	5.5 gal/hr	44.0 gal/dy	9,166 gal/yr
<b>Risk Assessment</b>				
<b>Level</b>	<b>Model Used</b>	<b>Meteorology</b>	<b>EF Moisture:</b>	
2	ACI Risk Assessment Tool (ODEQ)	Max Impact Representative	100% dry	
<b>Risk Results</b>				
<b>Assessment</b>	<b>Cancer x 10<sup>-6</sup> <sup>2</sup></b>	<b>Chronic HI<sup>2</sup></b>	<b>Acute HI</b>	
Risk	10.4	1.4	1.4	
<b>Uncertainty Discussion:</b>				
<p>There is limited information regarding the emissions of toxic air contaminants from air curtain incinerators. DEQ used the best available information at the time of the risk assessment. While DEQ expects emissions to be lower than those estimated, further source testing would confirm that assumption. For that reason, risk may be overestimated or underestimated. DEQ also used residential risk values when calculating cancer and noncancer chronic risk values, which may overestimate risk based on the actual exposure scenarios where the ACI is operated.</p>				
<b>Supporting Information:</b>	ODEQ Air Curtain Incinerator Tool Documentation (attached)			
<b>Permit Conditions – PSEL and Source Risk Limits</b>				
<b>Plant Site Emission Limits (PSELs)</b>				
A location throughput limit of 16,000 tons/year is the maximum combined throughput limit for all operation sites within a 12-month period.				
<b>CAO Source Risk Limits</b>				
<b>Location Limits</b>				
The portable source will be restricted from operating at a new location within <b>1,600 meters (1.0 mile)</b> from a previous location at which the facility operated within last 12 months. This limit will ensure that total cancer or noncancer chronic risk will not exceed the TLAER Risk Action Level at any location. The portable source may return to a previous location within 12 months, but must track the cumulative material burned and remain below the location throughout limits listed in the table below.				
<b>Throughput Limits</b>				
The portable source will be restricted from operating above the TLAER Risk Action Levels, which requires limiting daily and annual throughput based on the distance from the portable source to the nearest exposure location.				

<sup>1</sup> Based on company estimate

<sup>2</sup> Based on residential exposure

### Throughput Limit Table

The throughput limitations shown in the table are reflective of both the PSEs and CAO Source Risk Limits. The CAO Source Risk Limits account for throughput limits below 16,000 tons/year, at which point the PSEL is shown.

Distance (m)	Daily Throughput Limit (tons/day)	Location Throughput Limit (tons/year)
< 150	No operation permitted	
150	24	2,460
160	25	2,796
180	28	3,483
200	31	4,201
225	35	5,127
250	39	6,095
300	48	8,128
350	56	10,856
400	64	13,653
450	73	16,000 (PSEL)
500	82	
600	100	
700	118	
800	135	
900	152	
1000	167	
1200	195	
1400	220	
1600	243	
1800	264	
2000	285	
2200	305	
2400	324	
2600	343	
2800	No Limit	

\*Limit is based on Criteria Pollutant PSEL. The location throughput limit of 16,000 tons/year is the maximum combined throughput limit for all operation sites within a 12-month period.