



2013 ENVIRONMENTAL IMPACT REPORT

AMBIENT AIR QUALITY

Environment Management Permit 3095

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SUMMARY

Overall ambient air quality at Langdale continued to be good in 2013.

DISCUSSION

Ambient air quality at Langdale for 2013 is compared to previous years in Table 1 and Figures 1-4. The maximum values for each parameter were each within BC Air Quality Objectives and Standards.

The annual average TRS value detected at Langdale Ambient Air Monitoring Station is similar to previous years. The maximum 1 hour TRS continues to trend downwards.

The maximum and average PM₁₀ values in 2013 are consistent with historical data. In 2012 PM_{2.5} data were reported for the first time. The monitor was installed and has been functional since the beginning of December, 2011. We continue to build on our database from PM_{2.5} readings.

Average SO₂ and NO₂ remains relatively unchanged in 2013.

HSPP received seven inquiries/complaints regarding odour during the year. In four of the seven cases there had been DNCG venting within the 24 hour period of the complaint. Investigation into operational conditions around these complaints found ambient air quality was below level A guidelines in all but two of the seven complaints. HSPP recognizes that odour tolerances vary from person to person and continues to work with with the mill's operations and with the public regarding odour issues.

Table 1. Langdale Ambient Air Quality Comparison

	2011	2012	2013	"Good Air Quality"
Annual Average TRS	0.9	1.1	1.0	7
Maximum 1-hour TRS	20.7	14.3	12.6	
Hours TRS > "Good Air Quality"	57	25	34	
Annual Average PM ₁₀	8.5	8.7	9.9	25
Maximum 1-hour PM ₁₀	28.8	23.0	21.7	
Annual Average PM _{2.5}	--	5.5	6.1	
Maximum 1-hour PM _{2.5}	--	20.2	31.0	
Annual Average SO ₂	3.0	4.5	3.1	25
Maximum 1-hour SO ₂	126.5	48.7	77.2	450
Annual Average NO ₂	9.4	9.9	10.1	60
Maximum 1-hour NO ₂	73.6	71.7	70.9	200

All concentrations in ug/m³.

CONCLUSION

Ambient air quality at Langdale remains good.

Figure 1. Langdale TRS

Good Air Quality < 7 ug/m³

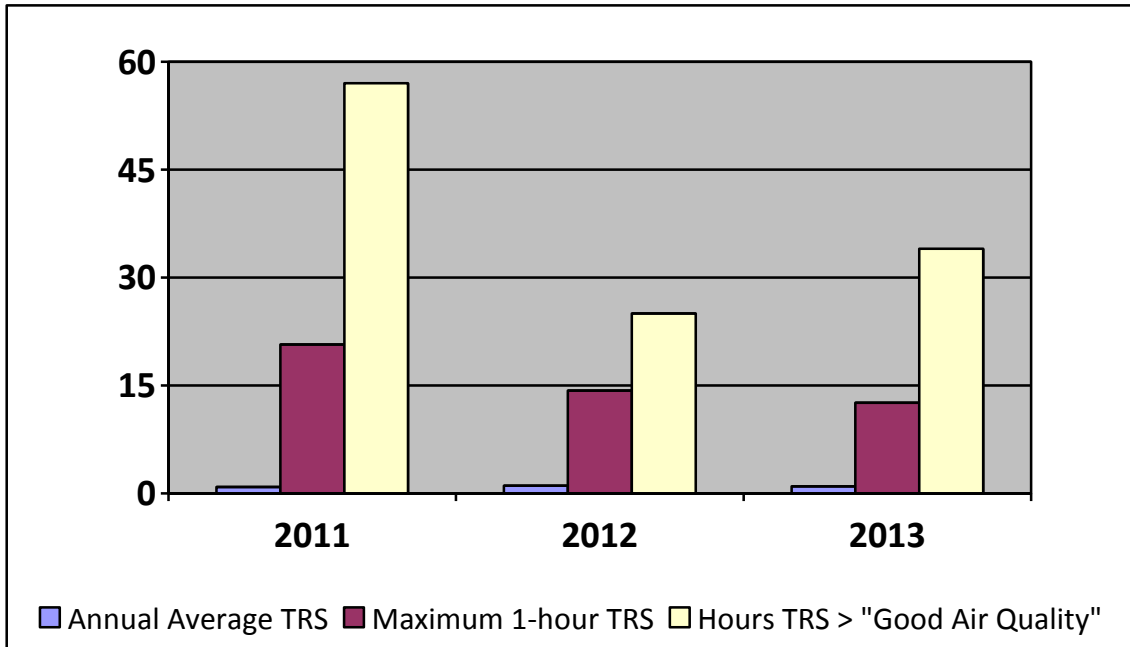


Figure 2A. Langdale PM₁₀ (ug/m³)

Good Air Quality < 25 ug/m³

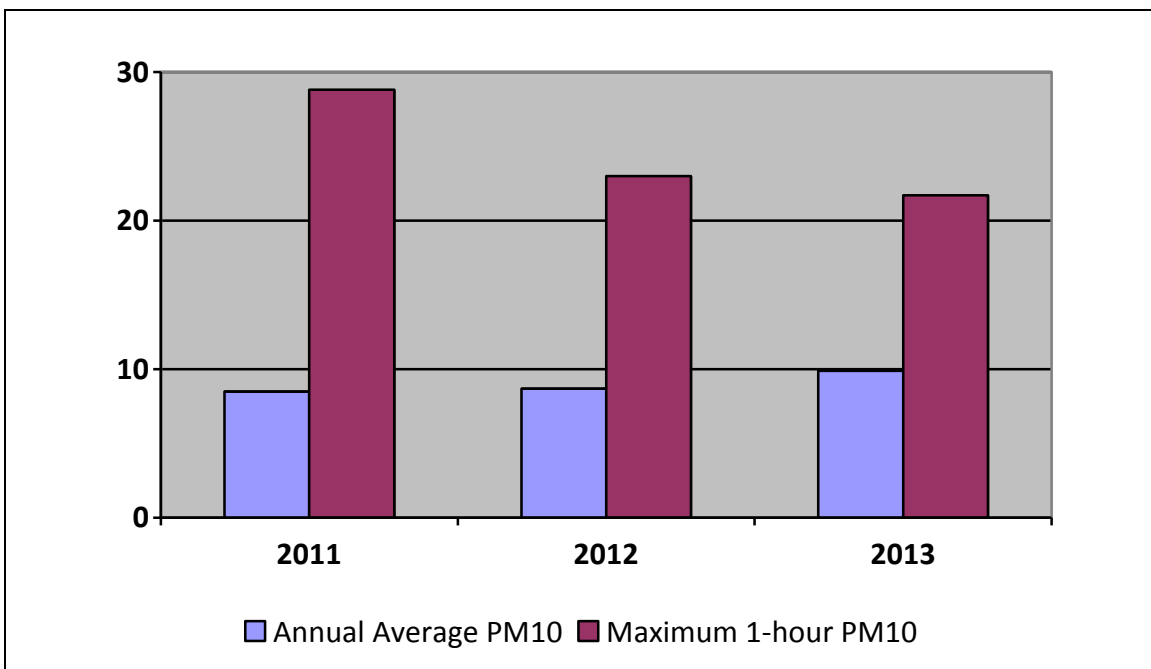
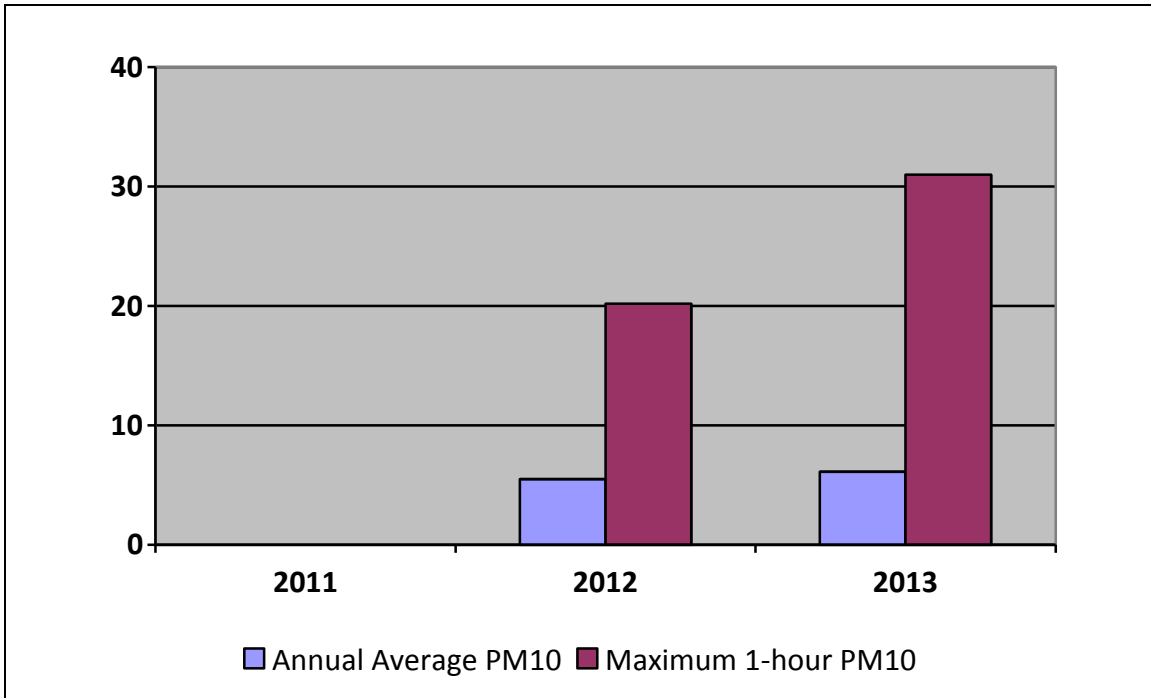


Figure 2B. Langdale PM_{2.5} (ug/m³)
Good Air Quality < 25 ug/m³



Note: No data for 2011. New installation Dec 2011

Figure 3. Langdale SO₂ (ug/m³)
Good Air Quality < 25 ug/m³

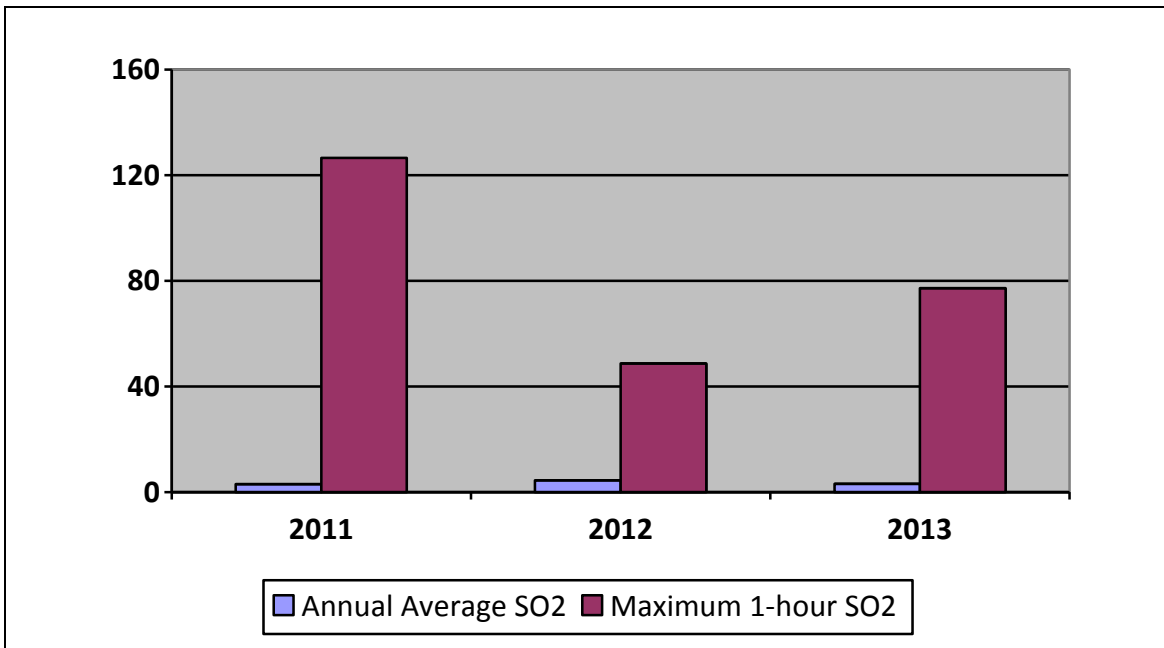


Figure 4. Langdale NO₂ (ug/m³)

Good Air Quality < 60 ug/m³

