



2013 AIR POLLUTION CONTROL REVIEW REPORT

Environment Management Permit 3095

**HOWE SOUND PULP & PAPER CORPORATION
Port Mellon, B. C.**

By:

**Siew Sim, Environment, B.Sc. Hons.,
Environment Specialist**

January 2014

2013 AIR POLLUTION CONTROL REVIEW REPORT

SUMMARY

Air discharges remained well below permit levels for 2013. With the Power Boiler conversion to bubbling fluidized bed in 2011, particulate emissions from this source have decreased significantly.

DISCUSSION

Air emissions for the past three years are shown in Table 1 and Figures 1 - 6.

The fluidized bed conversion proves to be successful with continued reductions in particulate emissions even with increased green power generation. As power boiler operations are optimized, boiler uptime is improved with less DNCG venting in 2013 than 2012. There was a slight increase in CNCG venting in 2013. We are improving kiln controls in 2014 and look forward improved CNCG incineration uptime.

TRS emission levels from the recovery boiler are still low compared to permit. Installation of the new recovery boiler TRS/SO₂ analyzer in 2012 has given us a more accurate picture of TRS and SO₂ emissions from the boiler with this improved technology. Miscellaneous TRS sources are improved in 2013 over previous years.

Emissions of other parameters were within the long term historical range and permit.

Table 1, AIR EMISSION COMPARISON

		2011	2012	2013	Permit
Total Production (adt)		576,905	575,115	596,410	--
Kraft Production (adut)		393,673	438,365		--
TRS (kg/d)	Recovery Boiler	7.8	9.1	15.8	42.8
	Miscellaneous Sources	7.5	230/14*	6.7	133
PM (kg/d)	Recovery Boiler	534	490	605	1,285
	Power Boiler	116	83	64	1,043
	Smelt Tank	109	94	136	209
	Lime Kiln	29.9	10.4	20.2	149
SO ₂ (kg/d)	Recovery Boiler	56.3	91.8	91.7	--
	Power Boiler	1,155	1,717	1,655	2,722
NO _x (kg/d)	Power Boiler	1,876	2,030	2,060	4,082
CNCG Venting (minutes)		1,073	590	720	--
DNCG Venting (minutes)		114,295	31,614	27,417	--

*High TRS test results for December Kiln. Without December values average 14 kg/d

CONCLUSION

All air emission parameters remain below the permitted levels. Controls continue to operate effectively.

Figure 1. Average Annual TRS Emissions (kg/d)
 Excluding December 2012 Kiln TRS emission Test Results

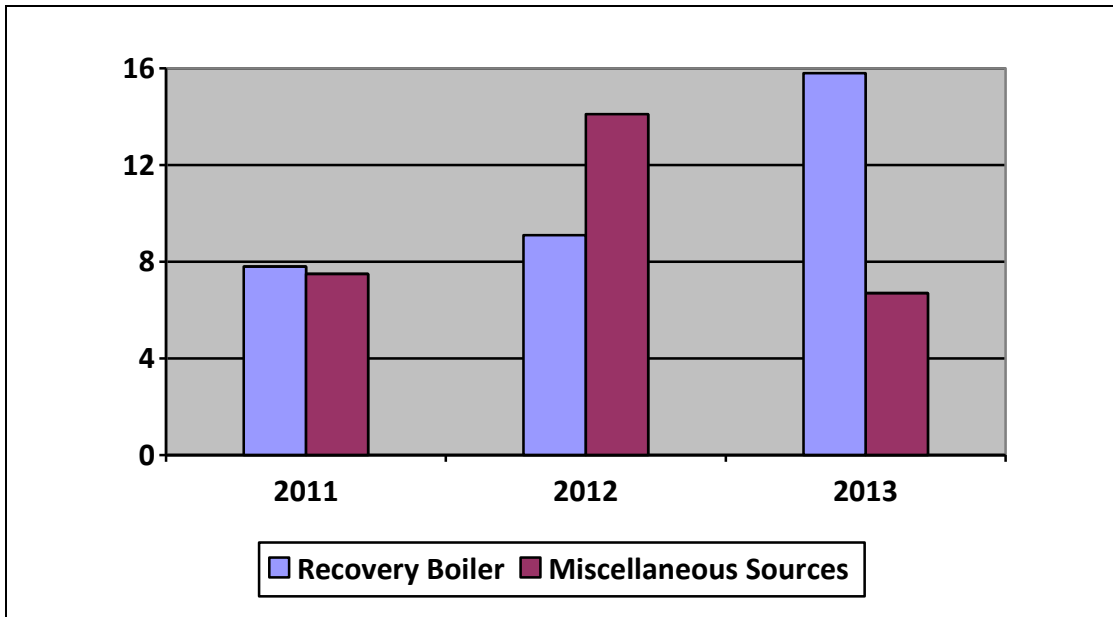


Figure 2. PM Emissions (kg/d)

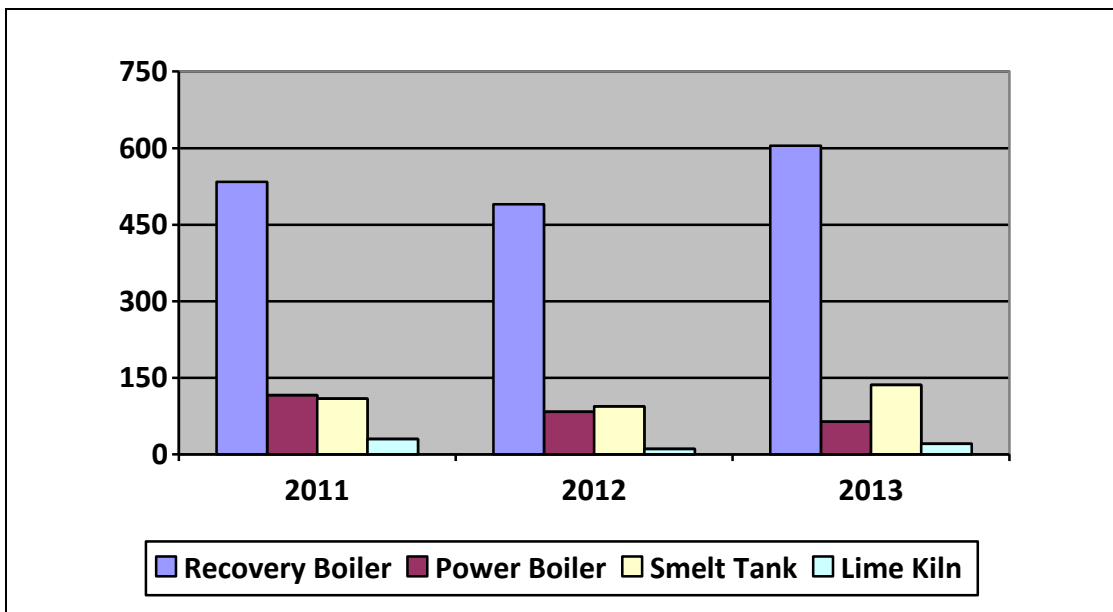


Figure 3. SO₂ Emissions (kg/d)

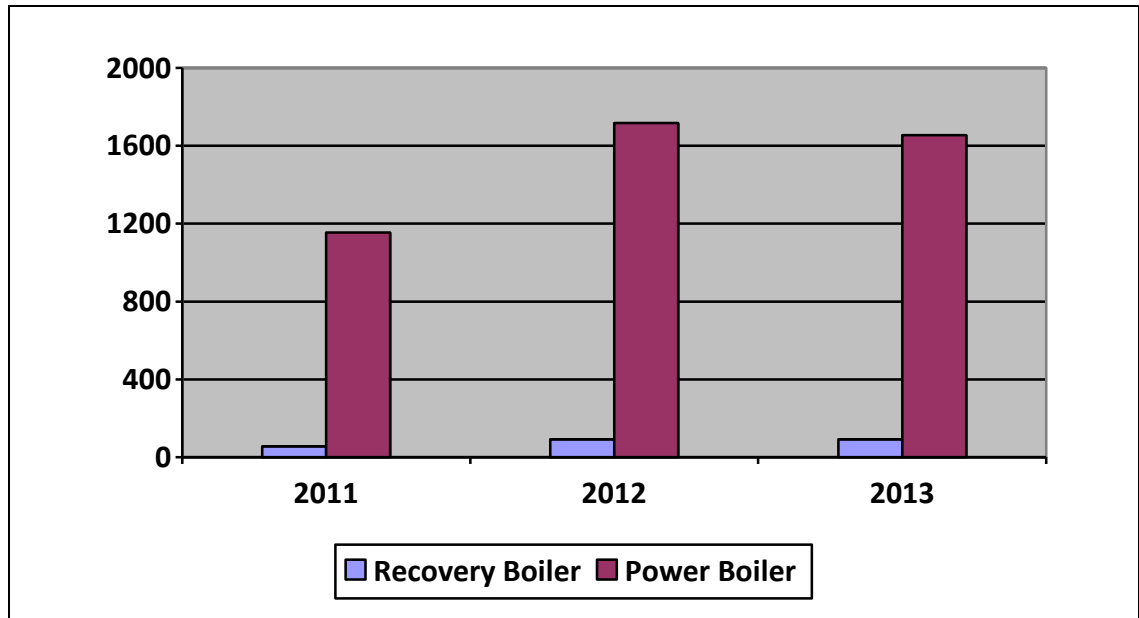


Figure 4. NO_x Emissions (kg/d)

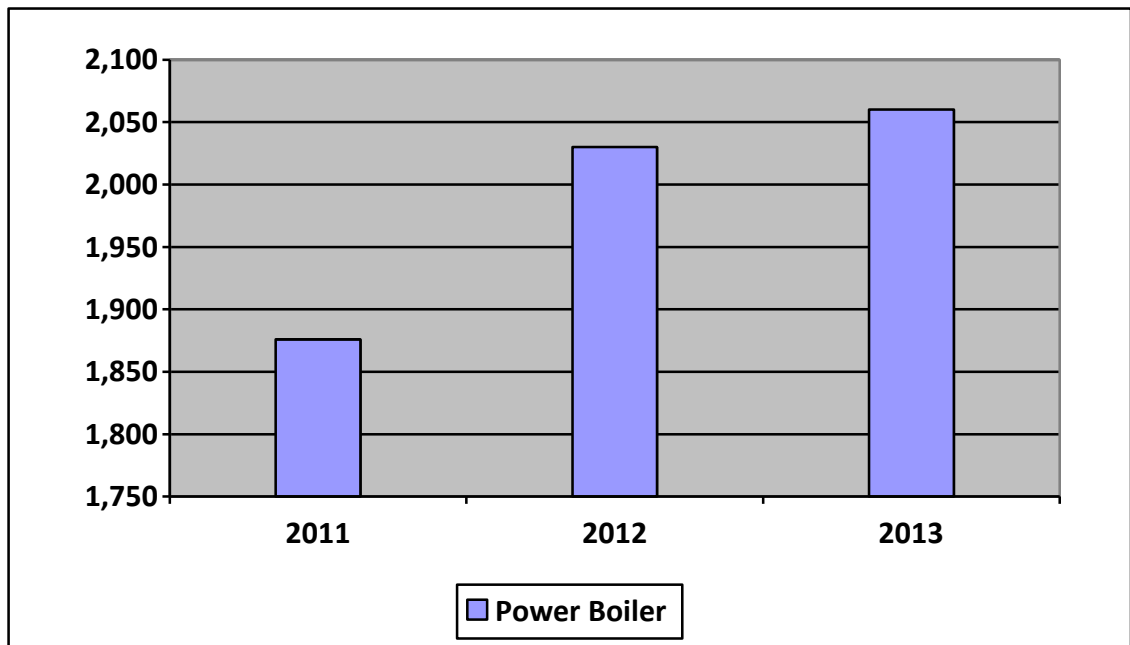


Figure 5. CNCG Venting

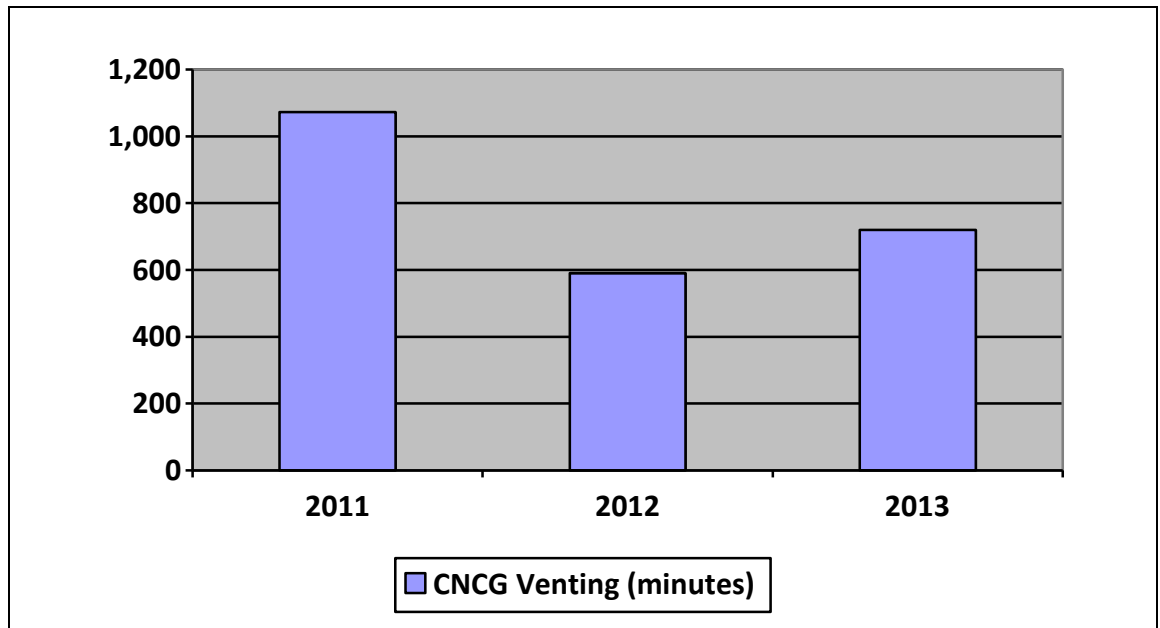


Figure 6. DNCG Venting

