

CROFTON AIRSHED CITIZENS GROUP

www.croftonair.org

April 4, 2006

Ministry of Environment
Vancouver Island Regional Office
2080-A Labieux Rd
Nanaimo BC
V9T 6J9

Attention: Bernard Bintner

Re: Permit PA-01902 Amendment

We have now had an opportunity to review the 2nd proposed draft for the air permit for the Crofton mill as circulated to the Community Advisory Forum.

Upon close examination and analysis of the draft, we find that there have been some significant improvements in terms of TRS levels, the inclusion of ClO₂ emissions from the bleach plant, and the levels and monitoring for dioxins and furans being made explicit in the permit. However, while this represents some inroads towards a more appropriate permit for a facility such as the Crofton mill, a majority of the concerns that were circulated in response to the first draft of October 18, 2005 remain unaddressed.

While it is noted that the ministry intention is towards an iterative process for the permit that would see a more regular updating, this does not provide a rationale for the absolute exclusion of these issues from the current permit. It remains of utmost concern to Crofton airshed citizens that the permit address the following issues:

1. Exclusion of Many Substances of Concern

Of great concern is the absence of known hazardous substances. In the draft, while ClO₂ and dioxins and furans appear, there is no mention of the myriad other substances of concern. As noted in previous comments and below, there are a range of substances of concern emitted from the mill that have been noted in other independent sources. Many of these are regulated substances in other pulp mills. Is there any rationale for leaving these substances unregulated in the case of the Crofton mill?

The air emissions inventory for the Jacques Whitford study on the Crofton mill included 106 compounds that are reported to the National Pollution Release Inventory. That study arrived at 4 substances of special concern, none of which are reflected in the mill permit (HCl, NO_x, SO₂, H₂S)

A survey of other facilities demonstrates the widespread inclusion of more comprehensive parameters for similar facilities. These examples are nowhere near exhaustive.

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|--|---------------------|
| • Sulfur Dioxide | Howe Sound |
| • Nitrogen Oxides | Howe Sound |
| • Chlorine and Chlorine Dioxide from Bleach Plant | Howe Sound |
| • Opacity | Kimberly Clarke, WA |
| • CO | Kimberly Clarke, WA |
| • VOC | Kimberly Clarke, WA |
| • Methanol | Kimberly Clarke, WA |
| • Total Chlorinated HAP (Hazardous Air Pollutants) | Boise Cascade, WA |
| • Chloroform | Boise Cascade, WA |
| • Total HAP | Boise Cascade, WA |

Other parameters (not exhaustive) would include the following included in California standards for wood fired power boilers:

- Total Metals
- Lead
- Formaldehyde
- PCBs
- Poly Aromatic Hydrocarbons
- Volatile Organic Compounds

Other substances emitted in quantities that may be of concern (according to the 2004 Jacques Whitford study)

- Ammonia
- Acetaldehyde
- Biphenyl
- Chlorine
- Propionaldehyde
- Tetrachloroethylene
- Dichloromethane
- Chloromethane
- Cumene
- Nickel
- Mercury

Of paramount concern is the Chlorinated HAP's that arise as a direct result of the use of salty hog fuel. VOC's are also of high priority and are commonly included in permits for pulp mills and we would high recommend their inclusion here. Further, PM 2.5 is emerging as a health risk class of its own. While the Total Particulate Matter may have been reduced, there are no limits on PM 2.5 output.

2. Lack of Future Improvement

The current permit includes a clause subjecting the disposal of sludge by incineration to environmental review at the discretion of the regional manager. We have not received any answer on whether this was ever done or what the results were if so. The clause has, nonetheless, disappeared from the proposed permit and it is simply assumed that sludge is fuel for the power boiler. Even in the recently issued Elk Falls mill permit there is a requirement to investigate alternatives. The Crofton permit should include at least this level of undertaking on the mill's part to remove sludge from the power boilers.

There are, in other BC mill permits, clauses that look to future improvements. The proposed draft includes nothing of this nature. The permit should be forward-looking with an eye to future progress. Examples follow:

Howe Sound –

“The Permittee shall submit to the Regional Waste Manager the results of the dioxin/furan monitoring program conducted by the Pulp and Paper Research Institute of Canada Based on the results of the study or other information, the Regional Waste Manager may require additional monitoring and/or pollution control measures to be taken.”

Elk Falls –

Permittee must undertake investigations for reducing the content of NaCl from wood waste for the power boiler, and for the removal of primary and secondary effluent treatment sludge in fuel mix of power boiler. Permittee must undertake investigations for reducing the discharge of metals from emissions of power boiler.

3. Monitoring Regime

There are cases in the proposed draft where the monitoring for substances has decreased in frequency quite inexplicably. While it is understood that there are continuous ambient air monitoring stations, the monitoring directly of specific sources within the mill should not be reduced for a number of reasons – most remarkably the lack of confidence in the placement of the ambient air stations.

Specifically:

- monitoring for sulphur dioxide from recovery boilers goes from 'monthly or semicontinuous' to quarterly;
- TRS monitoring from lime kilns goes from monthly to quarterly.

We look forward to your response to these details and an outline of the process that will be followed to integrate comments into the amended permit prior to approval.

Rob Wiltzen
Crofton Community Advisory Forum, Environment Sector
Crofton Airshed Citizens Group

App. Comparison Spread Sheet of Regulatory Limits between Current and Proposed Permits

Cc: Honourable Barry Penner, Minister of Environment
Randy Alexander, Regional Manager of Environmental Protection, Ministry of Environment
Warren McCormick, Meteorologist, Ministry of Environment
Russell J. Horner, Catalyst Paper, President and Chief Executive Officer
Lyn Brown, Catalyst Paper, Vice-President, Corporate Affairs and Social Responsibility
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Carol Donnelly, Resident
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Comparison between Current and Proposed Air Emissions Permit for Crofton Mill

Facility	Current Permit	Proposed Draft 1	Proposed Draft 2
#3 Recovery Boiler			
max discharge	3290 m3/min	4400 m3/min	4400 m3/min
Total PM	230 mg/m3	135 mg/m3	135 mg/m3
TRS	9.2 mg/m3	9.2 mg/m3	5.0 mg/m3
#4 Recovery Boiler			
max discharge	4960 m3/min	7000 m3/min when #3 & #4 operating; 9000 m3/min when #3 shut down	7000 m3/min when #3 & #4 operating; 9000 m3/min when #3 shut down
Total PM	230 mg/m3	135 mg/m3 ; (max)	135 mg/m3 ; (max)
TRS	9.2 mg/m3	165 mg/m3 when #3 shut down 9.2 mg/m3 (TRS as H2S)? (avg. daily)	165 mg/m3 when #3 shut down 5.0 mg/m3 (TRS as H2S) 6.0 mg/m3 when #3 shut down
#4 Power Boiler			
max discharge	4210 m3/min	7000 m3/min	7000 m3/min
Fuel	sludge subject to evaluation	no condition for sludge	no condition for sludge
PM	230 mg/m3 (salt free)	180 mg/m3 max; 165 mg/m3 rolling avg of previous 4 consecutive stack tests	180 mg/m3 max; 165 mg/m3 rolling avg of previous 4 consecutive stack tests
TCDD & TCDF			500 pg/m3 TEQ
#5 Power Boiler			
max discharge	2850 m3/min	2850 m3/min	2850 m3/min
PM	165 mg/3 @ 12% CO2	limit disappeared	limit disappeared
Fuel		Oil, Nat gas	Oil, Nat gas
#1 & 2 Lime Kilns			
max discharge	6520 m3/min for lime kilns #1,2, dissolving tanks #1,2,3,4, misc TRS Sources through stacks identified as 1,2a, 4, 5a, 8,9,10,13,17,18,19,20	6520 m3/min for lime kilns 1,2; recovery dissolving tank #3,4; TRS Emergency Stack; B Seal Tank Vent; Brown Stock Washer Hood A, B; A foam Tank Vent and Seal Tanks Vent	6520 m3/min for lime kilns 1,2; recovery dissolving tank #3,4; TRS Emergency Stack; B Seal Tank Vent; Brown Stock Washer Hood A, B; A foam Tank Vent and Seal Tanks Vent
Total PM	230 mg/m3 for lime kilns 1,2	150 mg/m3 for lime kilns 1,2	150 mg/m3 for lime kilns 1,2
dissolving tanks #1,2	0.4 kg/ADUt		
dissolving tanks #3,4	0.2 kg/ADUt	0.2 kg/ADUt/day	0.2 kg/ADUt/day
TRS	0.225 kg/ADUt	0.225 kg/ADUt/day all sources	0.225 kg/ADUt/day all sources
Kraft pulp machines, TMP Pulp Machines, Newspring Machines, Maintenance shops, Lab Ventilation, Fume Hoods, Storage Tank Vents			
max discharge	21,800 m3/min	"Max authorized rate of discharge is indeterminate."	21,800 m3/min
Bleach and Chemical Plants			
discharges are typical of emissions from the bleaching of pulp and manufacture of bleaching chemicals	"3030 m3/min	60 m3/s = 3600 m3/min	60 m3/s = 3600 m3/min 10 ppm daily avg
ClO2			
Secondary Effluent Treatment Sludge			
	The disposal of secondary treatment sludges by incineration is subject to an evaluation by MOE. Based on the results of this evaluation, the Mgr may request an alternate disposal method	Clause disappeared, sludge named as fuel	Clause disappeared, sludge named as fuel