

Method to Calculate Monthly AOX Performance
(Relative to the AOX Standard in Section 2 of the Pulp Mill and Pulp and Paper Mill
Liquid Effluent Control Regulation, B.C. Reg 470/90
as amended and deposited on July 5, 2002)

This method only applies to the calculation of AOX in the amended *Pulp Mill and Pulp and Paper Mill Liquid Effluent Regulation*. This method does not apply to any other calculations in the regulation or any permits.

A. Determine Bleached Pulp Reference Production and Effluent Flow

1. Determine the bleached pulp reference production rate (P) in ADt/d.

Using the methodology described in sections 12 and 13 of the federal *Pulp and Paper Effluent Regulations* SOR/92-269 and using the same 12-month time period that was used to determine the federal reference production rate, determine the bleached pulp reference rate in air-dried tonnes per day. (The federal regulation can be found at: <http://laws.justice.gc.ca/en/F-14/SOR-92-269/text.html>)

2. Determine the effluent flow (F) in cubic metres per day.

For each day that AOX is measured, determine the actual total effluent flow in cubic metres per day at a location which is representative of the flow from which the AOX sample is collected. If, for any reason, the daily effluent flow is not recorded on the day the AOX sample was taken, the effluent flow (F) should be the daily effluent flow from the closest prior day with recorded effluent flow data.

B. Monthly Determination of AOX Monthly Average

1. Calculate the Daily AOX value (AOX) in kg of AOX/ADt.

For each day that AOX was measured, calculate the AOX discharge rate using the following formula:

$$AOX_{(kg/ADt)} = AOX \text{ Conc.}_{(mg/L)} \times F_{(m^3/d)} / P_{(ADt/d)} / 1000_{(mg/kg-m^3/L)}$$

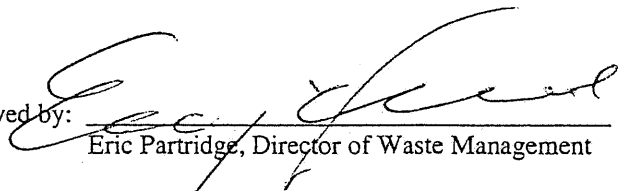
Where: F = the actual total effluent flow as defined in A.2. above.

P = the bleached pulp reference production rate defined in A.1. above

2. Calculate the Monthly Average AOX Value (AOX_m) in kg of AOX/ADt

For each month, sum the daily AOX values and divide by the number of samples in that month. Report the value to one significant number. Hence, as an example, a calculated value of 0.349 would be reported as 0.3 and calculated values of 0.350 or 0.351 would be reported as 0.4.

Approved by:


Eric Partridge, Director of Waste Management

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Date