

To K, Morton
Copies To W.A. Moore; A. Hall
From L.J. Connell
Subject Stack Test 78-8

Date May 17, 1978

Ref.

Results of roaster stack emissions sampled on May 9/78 are as follows;

Baghouse Inlet Temp.	220°F
Baghouse Pressure during Test	1.3 in H ₂ O
Status of Shaking cycle during test	100% shaking cycle
Ambient Temp.	-6° C
Dry Gas Volume sampled	1.654 scm
Moisture Content	5.24%
Stack Gas Temp.	169°F
Stack Gas Velocity	2.59 scm/sec.
Stack Gas Volume	743.1 scm/min.
As. to Filter and Probe	9.73 mg/scm
As. to Particulate Emission Rate	10.41 kg/day
As. to Impingers	3.48 mg/scm
As. Vapour Emission Rate	3.72 kg/day
Total Particulate Weight	<u>265.6 mg/scm</u>
Particulate Emission Rate	284.2 kg/day
Total As Weight	<u>13.21 mg/scm</u>
Total As Emission Rate	14.13 kg/day
% Isokinetic	93.93 %
Baghouse Total As Removal efficiency	99.85 %
Baghouse Particulate As Removal	99.89 %
Baghouse Total Particulate Removal efficiency	97.99 %

Test 78-8 was conducted while bags were being changed in one of the baghouse compartments. As a result the shaking cycle had been reset to shake the bags continuously to minimize gas concentrations in the compartment being maintained. Baghouse efficiency would be expected to be very low during this period.

Inspection of the main roaster off gas flue between the baghouse and stack has turned up a fairly large hole (2" x 8") which will be patched during the May 20-25th shutdown. The tramp air entering the flue at this point is stirring up the buildup inside the flue and is believed to be a partial reason for the higher particulate emission rates measured during recent testing as compared to previous years.