

WAM

STACK TESTING

Meeting: Ray Capowski & Bob Martin
Mill Lab 3:00-4:10 p.m. May 19, 1977

Over coffee discussed stack sampling techniques. Capowski stands by his results which caused all the publicity on the arsenic scare.

His method more sophisticated than Giant's - has \$10,000 worth of equipment while ours is only \$700 - \$800.

Measurements using isokinetic flow - they have pitot tube that gives stack velocities at time of sampling. Enables them to do quick calculation re ΔP and then adjust instrument to ensure that sample taken under isokinetic conditions (ie matter of adjusting valve on pump to calculated position). Giant method involves taking stack velocities in A.M. - calculating ΔP 's, then going up again to get samples. In meantime conditions could change causing discrepancies of 50% or more.

Feels his method more accurate.

His testing has shown that 5% of our As emission is in gaseous form (rest is particulate). Campbell Red Lake has much higher percentage vapour loss - but this could reflect better particulate control.

Efficiency of the Campbell system is 99.9% - Ray estimates ours at 95% or less.

Campbell is releasing only 11 lbs. As_2O_3 per day - which would be equivalent of about 35 lbs/day at Giant. Our emission is 175 lbs +.

Dickenson set up is poor - two baghouses in tandem - one hot & one cold. The cold unit has exit temp. of 325° + so most of As getting out as vapour. They are pumping up stack about 1500 lbs per day.

Kew Addison has no collection system & exhausts to air about 200-300 lbs/day.

Ray can't understand why Yellowknife gets all the publicity when problem is ten times worse in Ontario. He is sick of the political aspects up here.

Mentioned that Task Force on Air Emissions will be meeting in Yellowknife towards end of July. Wondered if L.S. Price could be on it. Said yes, thought he could make it.

DJE:jc

