

RECORD OF COMMUNICATION

x TELEPHONE CALL      MEETING      CONFERENCE CALL      OTHER

INFORMATION COPIES TO: Warren, Mick, Gary Blais, Dan deRoeck

TO: D. Wilson

FROM: Mick Daye Region VII

DATE: 6/2/99

TIME:

SUBJ: Power Plant Replacement Boiler

SUMMARY OF COMMUNICATION:

The boiler for the plant, which was built in 1969, exploded several months ago and the plant is now replacing it. The new boiler is different capacity than the old. It also has scrubber controls, and thus the stack parameters will be different. The old stack is 600 feet and is grandfathered GEP. The source wants to use the old stack for their emissions but to model it at 500 feet, which is apparently formula GEP, for a nearby 200 foot high building (also new). The inside diameter at the top of the stack is 16 feet but when the source modeled at GEP, they used a 21 foot diameter. Region 7 suspects that the stack is tapered and 21 feet is the diameter at 500 feet. The modeled SO<sub>2</sub> 3-hour impact is just under the significance level of 25 ug/m<sup>3</sup>. Thus they do not need to do a refined impact analysis.

Issue 1. Is it necessary to model at GEP or can they be grandfathered?

C/h Comment: Because they are changing the boiler size it may not qualify for grandfathering. Or it may be that they just decided to go ahead and model at GEP because their impacts were below the significance level anyway. If they decide they want to grandfather and model at 600 feet, we need more details.

Issue 2. For modeling at GEP should they use the 21 foot diameter, assuming that is the diameter at 500 foot level. Or, should they model with a 16 foot diameter?

C/H Comment. It really doesn't make any difference as long as they use the correct volumetric flow rate and temperature, as these are the only parameters that enter into buoyant plume rise calculations.

Issue 3: When modeling with ISC3 for shut down of the old boiler, can they use negative emissions?

C/H Comment: Yes, but make sure that they are an appropriate estimate of actual emissions for increment calculation purposes. It probably is not appropriate to use max allowable for this purpose. See e.g. attached copy of Region VIII's June 1 1999 letter to ND

FOLLOW UP ANTICIPATED: Region VII will check on stack parameters and on the method used to estimate the negative emissions

MODEL CLEARINGHOUSE RECORDS INFORMATION:

SOURCE NAME: Unknown

LOCATION: Region VII

SOURCE TYPE: PP

POLLUTANTS: SO<sub>2</sub>

REGULATION(S) INVOLVED: PSD

MET. DATA BASES (ON/OFF-SITE): Off

MODEL(S) USED: ISC3