RECORD OF COMMUNICATION

x___TELEPHONE CALL ___MEETING ___CONFERENCE CALL ___OTHER

INFORMATION COPIES TO: Russ Dan Gary John Rob

TO: D. Wilson
FROM: R. Wilson
DATE: 11/17/93
TIME:
SUBJ: AK Proposed Seafood Processing Plant

SUMMARY OF COMMUNICATION:
Source is already existing but apparently needs to go back and get a PSD permit. It is located on Onalaska Island. A nearby building is located up a slope from the stack but is within 5L. Dames and Moore, the consultant to the source, has asked the State for permission not to include the elevation of the terrain in the building height input to ISCLT.
Issue: What is our guidance in that regard? Apparently D&M thinks that the ISC Users guide indicates that the terrain needs to be input.
C/H Comment: There does not seem to be definitive information on this issue in the ISC2 Users' Guide. However, in the Guideline for
Determining Good Engineering Stack, the definition of H and Hg in Equation 1 on page 6 indicates that these heights are "measured from the ground level elevation at the base of the stack." Since we have always recommended that if a stack is less than GEP it should be modeled for downwash, it follows that the building height dimensions input to ISC should be above stack base. Thus the height of the terrain where the building is located should be included in its overall height for purposes of input to ISC.

From a pure technical standpoint it seems that inputting the height of the terrain is also the right thing to do. This is especially true since the terrain continues to rise beyond the building. (There may be terrain induced downwash.) If the source wants to take some other position, e.g. not to include the terrain height, they always have the option to conduct a fluid modeling exercise. Or, in any case, the State may require a fluid modeling study.
FOLLOWUP ANTICIPATED:
none

MODEL CLEARINGHOUSE RECORDS INFORMATION:
SOURCE NAME: Westward Seafood
LOCATION: Onalaska Is., AK
SOURCE TYPE: Power Boiler
POLLUTANTS: NO2
REGULATION(S) INVOLVED: PSD
MET. DATA BASES (ON/OFF-SITE): ON
MODEL(S) USED: ISCLT