

RECORD OF COMMUNICATION

  x   TELEPHONE CALL           MEETING           CONFERENCE CALL           OTHER

INFORMATION COPIES TO:    Dan Jim Dean

TO:        D. Doll  
FROM:      B. Johnson  
DATE:      9/17/96, 9/20/96  
TIME:  
SUBJ:      TVA-Alabama

SUMMARY OF COMMUNICATION:

Issues:

In determining GEP, how are cooling towers handled? Are they considered as the nearby structures contributing to potential downwash? Are they excluded because of their "aerodynamic???" design. Should one consider them as some rectangular-like structure? I know that the GEP TSD does not address calculating GEP for these structures without a fluid modeling demonstration. And that the wind structure may not be as great as that around block-like structures.

As for flares, should they be modeled as other emission points in a SIP or PSD demonstration. For the GEP stack height demonstrations, they were excluded from the regulation and GEP analyses. However, the SCREEN user guide does address them.

The reason for the concern is that a TVA nuclear plant that was supposed to be built is going to be converted to a coal-fired facility. Alabama DEM wanted to know how to handle the cooling tower(s) and flares in any downwash assessments should it (and it most likely will) trigger PSD.

C/H Comments:

1. Although we are unsure about PSD, for SIP's flares are normally modeled. Region IV plans to go ahead and require that they be modeled.
2. For modeling the effects of downwash from cooling towers, they could use BPIP or some other similar program to obtain structure dimensions for input to the model (e.g., ISC3). For GEP purposes, they need to be fluid modeled.

FOLLOWUP ANTICIPATED:

None anticipated.

MODEL CLEARINGHOUSE RECORDS INFORMATION:

SOURCE NAME:    TVA

LOCATION: AL  
SOURCE TYPE: PP  
POLLUTANTS: SO2  
REGULATION(S) INVOLVED: PSD  
MET. DATA BASES (ON/OFF-SITE): On  
MODEL(S) USED: ISC3, SCREEN