

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

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BT: Proposed Method for Selecting Model
in Intermediate Terrain

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The protocol for the Indiana County, Pennsylvania model evaluation study is now being developed. One aspect of that protocol is the specification of the reference model for receptors on terrain which is above stack top elevation but below plume height (intermediate terrain). Region III has specified the following procedure to the company (Penelec) and its consultant (TRC).

At each receptor above stack top elevation the plume height for each source for each hour will be determined. If the receptor is below plume height, the concentration for that source for that hour at that receptor will be specified as the greater of the concentration estimated with MPTER and the concentration estimated with RTDM (default). It is therefore possible that total concentration estimates for 3 and 24-hour periods will be compounded composites of MPTER and RTDM hourly estimates which may vary according to the sources.

TRC has indicated that they are prepared to provide this estimate. It is our understanding that this is the intent of the Modeling Guidelines.

In general, the model evaluation scoring will be comparing concentrations at the upper end of the distribution. We think it is most reasonable to make the model evaluation comparisons with the reference model estimates as they would be made if the reference model is the "winner" of the evaluation comparison