

Comments on "Peach Bottom Atomic Power Station Preliminary Hazards
Summary Report"

Prepared by

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Office of Meteorological Research
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Reference:

1. Part B, Volume I _____ Plant Description and Safeguards Analysis
2. Part B, Volume II _____ Site and Environmental Information

As we have stated previously (our letter of February 4, 1960), the meteorological review for this site is one of the most thorough we have reviewed, and our previous comments are still applicable.

The examination given to existing nearby weather data provides a background of general climatic features. The study of relationships of on-site meteorological parameters to local weather conditions will, as stated, provide a better understanding of site meteorology relative to its surrounds, and may be useful for any future assessment of the local weather pertinent to planned or accidental releases of airborne material. The micrometeorological network is yielding more specific information as to relative dilutions and the local idiosyncrasies of the climate that may be expected. The approach and parameters utilized in the quantitative assessment of the diffusion climate seem quite reasonable.

Again, we reiterate, that a continuing meteorological program will permit utilization of the meteorological environment which can contribute to the economy of operations and environmental safety.

In our review of the meteorology section of Volume II, we note a reference to Table VI on page II-29; however, we were unable to locate this table in the text. Also, our check of the relative dilution factor for Philadelphia, using the same parameters, yielded a value of 2×10^{-8} sec/meter³, a factor of 10 more favorable than that specified on page II-30. This value is also compatible with Figure II-3.

An analysis of Section VI, Radioactive Effluents in Volume I, gave no noble gas production rates, so we were unable to check potential concentrations. We feel that such an analysis should be made, particularly for Argone 41. Also, what is the value setting in the stack for initiating an alarm in the control room (page VI-3)?

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In the discussion of the maximum credible accident it is inferred that there may be no significant immediate release to the environment. However, the fission products (particularly Xe, Kr and the halogens) will have to be disposed of eventually. What methods are contemplated for containment cleanup?

Since this reactor will have gaseous effluents under normal operating conditions, it appears that on-site meteorological data can be advantageously employed to minimize potential public hazards. We presume that further consideration of the incorporation of existing meteorological information into operations and emergency procedures will be made.

Finally, we note that the disposal of the fission traps even after extended (120 day) decay involves the presence of 3.9×10^4 curies of Kr^{85} . Shipping the traps off-site of course removes this factor from the consideration of the Conowingo site but it does create an eventual, and as far as we know, unique waste disposal problem for the recipient.