

MAR 11 1976

PDR

50-263

B. Grimes, Chief
Environmental Evaluation Branch, DOR

METEOROLOGICAL ASSISTANCE - TAR #ORB-2-210 (MONTICELLO)

In response to a request from your branch, we have evaluated the meteorological assumptions (#1 and #10) made by Northern States Power Company in the cask drop analysis for their Monticello plant. Based on the best onsite data which we have, we conclude that NSP's use of the atmospheric conditions described in Regulatory Guide 1.3 will result in conservative X/Q values.

Therefore the following X/Q values, based on Regulatory Guide 1.3, are appropriate for your analysis:

For Stack Releases (assumes 125m release):

Time Period	X/Q (sec/m ³)	
	500m	1609m
0-1/2 hour (fumigation)	2.0×10^{-4}	7.8×10^{-5}
1/2-8 hours	1.4×10^{-5}	9.1×10^{-6}
8-24 hours	1.4×10^{-5}	6.6×10^{-6}
1-4 days	4.0×10^{-6}	1.6×10^{-6}
4-30 days	1.4×10^{-6}	5.0×10^{-7}

For Ground Level Releases:

Time Period	X/Q (sec/m ³)	
	500m	1609m
0-8 hours	7.0×10^{-4}	2.3×10^{-4}
8-24 hours	1.6×10^{-4}	5.3×10^{-5}
1-4 days	5.8×10^{-5}	1.9×10^{-5}
4-30 days	1.4×10^{-5}	3.9×10^{-6}

Original Signed by
E. M. Markee, Jr.

Earl H. Markee, Jr., Leader
Meteorology Section
Hydrology-Meteorology Branch
Division of Site Safety and
Environmental Analysis

cc: See next page

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B. Grimes

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