

MONTICELLO NUCLEAR GENERATING PLANT

OFFSITE DOSE CALCULATION MANUAL

(ODCM)

REV 3

DOCKET NO. 50-263

NORTHERN STATES POWER COMPANY
MINNEAPOLIS, MINNESOTA

ALARA REVIEWED BY:

C. Mathison

DATE:

4/6/83

PREPARED BY:

R. Jacobson

REVIEWED BY:

C. Mathison

OPERATIONS COMMITTEE FINAL REVIEW:

MEETING NO.

1198

DATE:

4/21/83

APPROVED BY:

Fred L. Fey

DATE:

4-21-83

RECORD OF REVISIONS

<u>Revision No.</u>	<u>Date</u>	<u>Reason for Revision</u>
Original	May 2, 1979	-
1	Feb 29, 1980	Incorporation of NRC Staff comments and correction of miscellaneous errors
2	Jul 23, 1982	Incorporation of NRC Staff comments, addition of short term vent dispersion parameters, and addition of Appendices D and E
3	Mar 24, 1983	Change in milk sampling location

LIST OF EFFECTIVE PAGES

<u>Page No.</u>	<u>Revision</u>	<u>Page No.</u>	<u>Revision</u>	<u>Page No.</u>	<u>Revision</u>
1	2	3-18	2	A-5	2
11	1	3-19	2	A-6	1
111	2	3-20	2	A-7	0
1v	0	3-21	2	A-8 thru	
v	3	3-22	0	A-57	0
vi	3	3-23	2	A-58 thru	
1-1	2	3-24	1	A-74	2
2-1	1	3-25	1	B-1 thru	
2-2	2	3-26	1	B-9	0
2-3	1	3-27	1	C-1 thru	
2-4	1	3-28	1	C-9	0
2-4a	1	3-29	2	D-1 thru	
2-4b	1	3-30	2	D-7	2
2-4c	1	3-31	2	E-1 thru	
2-4d	2	3-32	2	E-14	2
2-5	0	3-33	2		
2-6	0	3-34	2		
2-7	2	3-35	2		
2-8	1	3-36	2		
2-9	1	3-37	2		
2-10	1	3-38	2		
2-11	2	3-39	2		
2-12	2	3-40	2		
2-13	0	3-41	2		
3-1	2	3-42	2		
3-2	2	3-43	1		
3-3	2	3-44	1		
3-4	1	3-45	1		
3-5	1	3-46	1		
3-6	1	4-1	0		
3-7	1	4-2	0		
3-8	2	4-3	0		
3-9	2	5-1	1		
3-9a	2	5-2	3		
3-10	1	5-3	2		
3-11	2	5-4	1		
3-12	2	5-5	2		
3-12a	2	5-6	1		
3-13	2	5-7	1		
3-14	2	A-1	2		
3-15	2	A-2	0		
3-16	2	A-3	0		
3-17	2	A-4	0		

TABLE 5.1-1

MONTICELLO NUCLEAR GENERATING PLANT
RADIATION ENVIRONMENTAL MONITORING PROGRAM
SAMPLING LOCATION

<u>Type of Sample</u>	<u>Code</u> *	<u>Collection Site</u>	<u>Location</u>
River Water	M-8 ^c	Upstream of Plant	0.19mi @ 285°/WNW
River Water	M-9	Downstream of Plant	0.19mi @ 62°/ENE
Drinking Water	M-14	City of Minneapolis	36 mi @ 128°/SE
Well Water	M-10 ^c	Kirchenbauer Farm	11.5 mi @ 323°/NW
Well Water	M-11	City of Monticello	3.2 mi @ 128°/SE
Well Water	M-12	Plant Well #1	0.2 mi @ 267°/W
Well Water	M-13	Hartung Residence	0.3 mi @ 214°/SW
Sediment-River	M-8 ^c	Upstream of Plant	0.19mi @ 285°/WNW
Sediment-River	M-9	Downstream of Plant	0.19mi @ 62°/ENE
Sediment-Shoreline	M-15	Montissippi Park	1.6 mi @ 117°/ESE
Periphyton or Macroinvertebrates	M-8 ^c	Upstream of Plant	0.19mi @ 285°/WNW
	M-9	Downstream of Plant	0.19mi @ 62°/ENE
Fish	M-8 ^c	Upstream of Plant	0.19mi @ 285°/WNW
Fish	M-9	Downstream of Plant	0.19mi @ 62°/ENE
Milk	M-10 ^c	Kirchenbauer Farm	11.5 mi @ 323°/NW
Milk	M-18	Olson Farm	2.5 mi @ 24°/NNE
Milk	M-24	Witschen Farm	3.2 mi @ 260°/W
Milk	M-26	Peterson Farm	2.3 mi @ 111°/ESE
Milk	M-28	Hultberg Farm	3.6 mi @ 224°/SW

TABLE 5.1-1 (continued)

MONTICELLO NUCLEAR GENERATING PLANT
RADIATION ENVIRONMENTAL MONITORING PROGRAM
SAMPLING LOCATIONS

<u>Type of Sample</u>	<u>Code</u> *	<u>Collection Site</u>	<u>Location</u>
Cultivated Crops (Leafy Green Veg) (Corn) (Potatoes)	M-10 ^C	Kirchenbauer Farm	11.5 mi @ 323°/NW
	M-27 ^C	Hageman Residence	1.4 mi @ 131°/SE
	M-10 ^C	Kirchenbauer Farm	11.5 mi @ 323°/NW
	M-13 ^C	Olson Farm	2.5 mi @ 24°/NNE
	M-10 ^C	Kirchenbauer Farm	11.5 mi @ 323°/NW
	M-21 ^C	Ewing Farm	4.9 mi @ 115°/ESE
Particulates and Radioiodine (air)	M-1 ^C	Air Station M-1	11.1 mi @ 306°/NW
Particulates and Radioiodine (air)	M-2	Air Station M-2	0.8 mi @ 23°/NNE
Particulates and Radioiodine (air)	M-3	Air Station M-3	0.5 mi @ 181°/S
Particulates and Radioiodine (air)	M-4	Air Station M-4	0.9 mi @ 150°/SSE
Particulates and Radioiodines (air)	M-5	Air Station M-5	2.7 mi @ 136°/SE
Direct Radiation (TLD)	M01A	North Boundary Rd.	0.7 mi @ 353°/N
Direct Radiation (TLD)	M02A	North Boundary Rd.	0.8 mi @ 23°/NNE
Direct Radiation (TLD)	M03A	North Boundary Rd.	1.0 mi @ 43°/NE
Direct Radiation (TLD)	M04A	Biology Station Rd.	0.7 mi @ 92°/E
Direct Radiation (TLD)	M05A	Biology Station Rd.	0.6 mi @ 112°/ESE
Direct Radiation (TLD)	M06A	Biology Station Rd.	0.6 mi @ 133°/SE
Direct Radiation (TLD)	M07A	County Rd. 75	0.5 mi @ 158°/SSE
Direct Radiation (TLD)	M08A	County Rd. 75	0.5 mi @ 183°/S
Direct Radiation (TLD)	M09A	County Rd. 75	0.4 mi @ 203°/SSW
Direct Radiation (TLD)	M10A	County Rd. 75	0.3 mi @ 225°/SW
Direct Radiation (TLD)	M11A	County Rd. 75	0.4 mi @ 250°/WSW
Direct Radiation (TLD)	M12A	County Rd. 75	0.7 mi @ 273°/W
Direct Radiation (TLD)	M13A	North Boundary Rd.	1.1 mi @ 317°/NW
Direct Radiation (TLD)	M14A	North Boundary Rd.	0.8 mi @ 338°/NNW

Monticello Nuclear Generating Plant

Process Control Program (PCP) Manual
Paragraph 2.8.1 and Attachment A Changes

In accordance with the Monticello Technical Specification, Section 6.5.D, Process Control Program (PCP), the following changes to the Monticello PCP are reported:

- A. Paragraph 2.8.1 was revised to incorporate NRC Staff requirements contained in a letter dated February 8, 1983 from Mr Domenic B Vassallo, Chief, Operating Reactors Branch #2, Division of Licensing, NRC. This change requires test solidification for all cases. No exceptions are allowed in the PCP.
- B. Appendix A is revised to incorporate revisions K through M to the Chem-Nuclear Systems, Incorporated (CNSI) Process Control Program for CNSI Cement Solidification Units. Cure time for CNSI cement / solidification was increased and an alternative method of insitu solidification was added to the CNSI document.

These changes do not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes for the following reasons:

- A. The revision to paragraph 2.8.1 increases the scope of test solidification.
- B. The formulation has not changed, only the curing time prior to capping. The curing time has been increased. Therefore, the conformance of the product to existing criteria has not been reduced.

Plant procedures do not permit use of the insitu solidification method described in Appendix A at this time.

These changes were reviewed and found acceptable by the Monticello Operations Committee on February 24, 1983, March 17, 1983, and June 23, 1983.

Instructions for Entering Revisions 1-3 to the Monticello ODCM

- 1. Remove existing cover page and pages i, ii, 7 and 15. Replace with attached revised pages.
- *2. Remove Appendix A sheets 1, 2, 3, 8, 13, 16, 17 and 20. Replace with attached revised pages.
- 3. Use PCP page i and Appendix A, sheet 1, to page check your manual if desired.

* Proprietary Information given limited distribution.