

NRC Oversight of Environmental Programs at Power Reactor Licensees

- Applicable Regulations
- Licensee Programs
- Oversight Activities
- Info Resources

Applicable Regulations

- 10 Code of Federal Regulations (CFR) Part 20, App. B
Limits on Effluent Concentration at Point of Discharge
- 10 CFR Part 50, App. I
Design Criteria for Plant Systems to Limit Doses to the Public
- 40 CFR 190
EPA Limits for Doses to the Public

Licensee Programs

Effluent Management Program

- Liquid and Gaseous Effluents Released in a Controlled Manner
- Radiation Detectors Used to Evaluate Each Release
- Results Compiled in an Annual Report to the NRC

Radiological Environmental Monitoring Program (REMP)

- Variety of Environmental Samples Collected (e.g. air, water, sediment, fish, milk, etc.)
- Supplements Effluent Management Program
- Results Compiled in an Annual Report to the NRC

NRC Oversight Activities

- Onsite Inspection Every Two Years
- Inspection of Effluent and REMP Programs
- Results Published in Inspection Reports
- Excerpt from REMP Inspection Procedure:

Observe the collection and preparation of two to four environmental samples from different environmental media (e.g., ground and surface water, milk, vegetation, sediment, and soil) as available. Verify that environmental sampling is representative of the release pathways as specified in the ODCM and that sampling techniques are in accordance with procedures.

Info Resources

NRC Website, www.nrc.gov:

Fact Sheet on Environmental Monitoring at Nuclear Power Plants:

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/env-monitoring.html>

Effluent and REMP Reports:

<http://www.nrc.gov/reactors/operating/ops-experience/tritium/plant-info.html>

Inspection Procedures (71124.06 and 71124.07):

<http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/>

Inspection Reports (For Vogtle 2013004, 2011002):

http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/listofrpts_body.html

Vogtle Offsite Dose Calculation Manual (ODCM):

<http://pbadupws.nrc.gov/docs/ML0732/ML073240588.pdf>

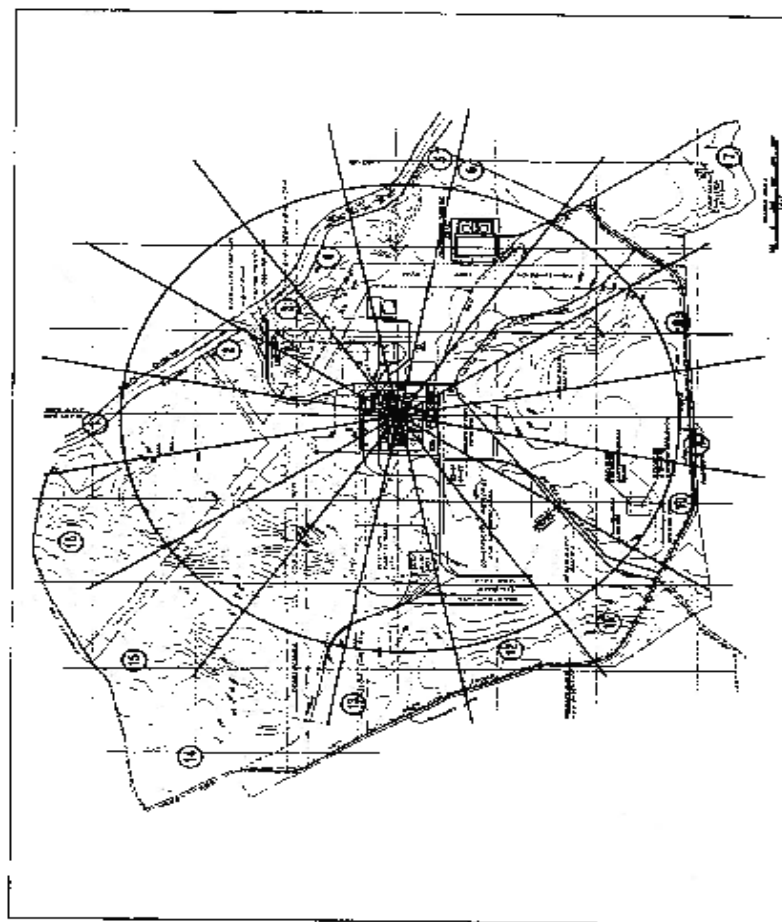


Figure 4-1. Terrestrial Stations Near Site Boundary

Table 4-4. Radiological Environmental Monitoring Locations

Location Number	Descriptive Location	Direction	Distance (miles)	Sample Type ¹⁾
1	River Bank	N	1.1	D
2	River Bank	NNE	0.8	D
3	Discharge Area	NE	0.6	A
3	River Bank	NE	0.7	D
4	River Bank	ENE	0.8	D
5	River Bank	E	1.0	D
6	Plant Wilson	ESE	1.1	D
7	Simulator Building	SE	1.7	D,V,A
8	River Road	SSE	1.1	D
9	River Road	S	1.1	D
10	Met Tower	SSW	0.9	A
10	River Road	SSW	1.1	D
11	River Road	SW	1.2	D
12	River Road	WSW	1.2	D,A
13	River Road	W	1.3	D
14	River Road	WNW	1.8	D
15	Hancock Landing Road	NW	1.5	D,V
16	Hancock Landing Road	NNW	1.4	D,A
17	Savannah River Site, River Road	N	5.4	D
18	Savannah River Site, D Area	NNE	5.0	D
19	Savannah River Site, Road A.13	NE	4.6	D
20	Savannah River Site, Road A.13.1	ENE	4.8	D
21	Savannah River Site, Road A.17	E	5.3	D
22	River Bank Downstream of Buxton Landing	ESE	5.2	D
23	River Road	SE	4.6	D
24	Chance Road	SSE	4.9	D
25	Chance Road near Highway 23	S	5.2	D
26	Highway 23 and Ebenezer Church Rd.	SSW	4.8	D