

ONSITE GROUND/SURFACE WATER MONITORING QUESTIONNAIRE

Onsite Radiological Effluent/REMP Monitoring Program

Phase I (Near term response)

| | Yes | No |
|---|---|-------------------------------------|
| 1. Does the licensee have radioactive groundwater monitoring wells onsite? If YES: How many wells: <u>20</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Where are they located (e.g., distributed around/throughout the site, in a particular region of the site and/or near particular buildings/structures, etc.) | | |
| (a.) within the Protected Area | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b.) within the Radiologically Restricted Area | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (c.) within the owner-controlled area | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (d.) at what frequency does the licensee sample/analyze the wells | <u>One well is sampled quarterly, all others discontinued because activity was consistently <MDA</u> | |
| (e.) for what radionuclides does the licensee monitor | | |
| Gamma emitters (gamma Spec) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If Yes – at what MDA | <hr/> | |
| Tritium | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If Yes – at what MDA | <u>from 3.66E-6 to 9.00E-6 uCi/ml</u> | |
| Gross Beta | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If Yes – at what MDA | <u>from 1.36E-6 to 4.7E-6 uCi/ml</u> | |
| Other: _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If Yes – at what MDA | <hr/> | |
| 2. If the licensee does NOT have an onsite radioactive groundwater monitoring program: | N/A | |
| (a.) Does the licensee plan to implement a groundwater monitoring program? If Yes, when and to what extent: <u>N/A</u> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b.) Does the licensee plan to take other measures to assure they can identify radioactive groundwater contamination | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Does the licensee have a french drain system surrounding the main reactor facility and auxiliary structures ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

(a.) is the system analyzed for radionuclides?

(b.) at what frequency does the licensee sample/analyze the wells N/A

(c.) for what radionuclides does the licensee monitor

Gamma emitters (gamma Spec)

If Yes – at what MDA N/A

Tritium

If Yes – at what MDA N/A

Gross Beta

If Yes – at what MDA N/A

- | | Yes | No |
|---|-------------------------------------|-------------------------------------|
| 4. Does the licensee have a surveillance program to periodically : | | |
| (a.) walkdown outside areas around the site to look for potential leaks and spills? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b.) pressurize buried radwaste lines to evaluate structural integrity and evaluate potential for leaks and spills? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Does the licensee perform any other onsite monitoring (e.g. soil sampling) to identify unexpected radioactive releases | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Does the licensee's radioactive liquid discharge line traverse any non-licensee owned areas (e.g., it is on a right-of-way surrounded by private properties)? *The circulating water discharge line passes under a public beach (in the owner controlled area) prior to discharging to the Atlantic Ocean | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. If the licensee has a discharge pipe that runs underground or any underground piping that carries radioactive liquids, does the licensee perform monitoring along the discharge pathway to identify potential leakage. | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If YES, | | |
| How frequently is the sampling performed: <u>N/A</u> | | |

Phase II (Longer Term Response)

8. Historical Onsite Radioactive Contamination:
- (a.) Does the licensee have any history of radioactive spills and/or leaks outside of buildings/structures?
- Are they documented in 10 CFR 50.75g file?
- (b.) Has the licensee identified onsite radioactive groundwater contamination?

If YES:



When was it identified - IF known:

Dates: On July 6, 1993, monitoring wells in the vicinity of the Unit 1 Refueling Water Tank were sampled and indications were found of tritium and other gamma emitting solids

LER/Abnormal Event Report/Condition Report Nos:

____1993 Annual Effluent Report, Attachment B____

- To what extent - IF known [square footage, estimated ground depth of the contamination, estimated quantity (volume / concentration), etc.]

____Analysis indicated 55,000 gallons with approximately 6.5 Ci of tritium and 0.037 Ci of gamma emitting solids were released to the ground water table which is 14 feet below ground surface____

- Has the contamination moved outside the Restricted Area or the owner-controlled area? #
- # In 1993, all of the radioactive monitoring wells were located within the Restricted Area boundary. In 1999, the Restricted Area boundary was moved, resulting in some of the monitoring wells no longer residing within the Restricted Area boundary. After the boundary change, radioactivity was detected in two of the radioactive monitoring wells located outside of the Restricted Area boundary. No radioactivity has been detected in monitoring well samples outside of the Restricted Area since July 2001. No radioactivity has been detected outside the Owner Controlled Area.*

9. Comments: ____Changes to the current program are currently under review and consideration. CR 2006-5288 was written to evaluate operating experience from several nuclear stations with tritium plumes.____