

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: _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

RNP does not have dedicated on-site radioactive groundwater monitoring wells. RNP monitors the discharge from the site deep-well pumps used for plant makeup for tritium gamma and emitting isotopes. The deep-well pumps deliver water from an aquifer located beneath the RNP site. RNP also monitors an artesian well located just off-site (located at the base of the Lake Robinson Dam) for tritium and gamma emitting isotopes.

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 type="checkbox"/> | <input type="checkbox"/> |
| (b.) within the Radiologically Restricted Area | <input type="checkbox"/> | <input type="checkbox"/> |
| (c.) within the owner-controlled area | <input type="checkbox"/> | <input type="checkbox"/> |
| (d.) at what frequency does the licensee sample/analyze the wells | _____ | |
| (e.) for what radionuclides does the licensee monitor | | |
| Gamma emitters (gamma Spec) | <input type="checkbox"/> | <input type="checkbox"/> |
| If Yes – at what MDA | _____ | |
| Tritium | <input type="checkbox"/> | <input type="checkbox"/> |
| If Yes – at what MDA | _____ | |
| Gross Beta | <input type="checkbox"/> | <input type="checkbox"/> |
| If Yes – at what MDA | _____ | |
| Other: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| If Yes – at what MDA | _____ | |

- | | | |
|--|--------------------------|--------------------------|
| 2. If the licensee does NOT have an onsite radioactive groundwater monitoring program: | <input type="checkbox"/> | <input type="checkbox"/> |
| (a.) Does the licensee plan to implement a groundwater monitoring program? | <input type="checkbox"/> | <input type="checkbox"/> |

RNP is working with the industry and other stakeholders to identify enhancements to our existing controls to further minimize or prevent unidentified groundwater radioactive contamination incidents.

If Yes, when and to what extent

RNP is evaluating site specific risks, plant history, current monitoring practices, and monitoring options to determine the optimal monitoring program.

- | | | |
|--|--------------------------|--------------------------|
| (b.) Does the licensee plan to take other measures to assure they can identify radioactive groundwater contamination | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|

RNP is evaluating site specific risks, plant history, current monitoring practices, and monitoring options to determine the optimal monitoring program.

- 3. Does the licensee have a french drain system surrounding the main reactor facility and auxiliary structures?

RNP does not have a French drain system surrounding the reactor or reactor auxiliary buildings. There is a French drain beneath the Environmental and Radiation Control (E&RC) building. This French drain system discharges to the plant storm drain system. The storm drain system that surrounds the plant drains to a retention pond where it is collected and analyzed to liquid effluent lower limits of detection. This retention pond system is addressed in RNP's Off-Site Dose Calculation Manual (ODCM).

- (a.) is the system analyzed for radionuclides?

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

The retention ponds are sampled per the ODCM on a weekly basis.

- (c.) for what radionuclides does the licensee monitor

Gamma emitters (gamma Spec)

If Yes – at what MDA

The retention ponds are analyzed for gamma emitters to the lower limits of detection required by the RNP Off-Site Dose Calculation manual for liquid effluents.

Tritium

If Yes – at what MDA

The retention ponds are also analyzed for tritium to the lower limit of detection required by the RNP Off-Site Dose Calculation manual for liquid effluents.

Gross Beta

If Yes – at what MDA

- 4. Does the licensee have a surveillance program to periodically:
 - (a.) walkdown outside areas around the site to look for potential leaks and spills?

RNP has programs and procedures in place to identify and correct leakage including outdoor areas. Operations personnel monitor plant components, equipment, and structures as part of their routine rounds. Deficiencies, including leaks, are identified and corrected through the site Work Request process and/or the Corrective Action Program (as appropriate).

- (b.) pressurize buried radwaste lines to evaluate structural integrity and evaluate potential for leaks and spills?

RNP performs no generic pressure testing of buried liquid radwaste lines.

- 5. Does the licensee perform any other onsite monitoring (e.g. soil sampling) to identify unexpected radioactive releases

RNP performs quarterly sampling and analysis of the deep well pump effluent used for plant makeup for tritium and gamma emitting isotopes. RNP also performs quarterly sampling and analysis of an artesian well located just downstream of the Lake Robinson dam. These samples are analyzed to meet the environmental lower limits of detection for water as described in RNP Off-Site Dose Calculation Manual.

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)?

Yes No

RNP radioactive liquid discharge lines are within licensee owned areas.

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.

Yes No

As noted above, RNP has programs and procedures in place to identify and correct observed leakage. There is no sampling performed along the RNP liquid discharge piping.

If YES,

How frequently is the sampling performed:

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?

Yes No

Yes No

Are they documented in 10 CFR 50.75g file?

Yes No

RNP believes, but is currently verifying that, historical leaks have been documented in the 10 CFR 50.75(g) file.

(b.) Has the licensee identified onsite radioactive groundwater contamination?

Yes No

If YES:

➤ When was it identified - IF known:

Dates: _____

LER/Abnormal Event Report/Condition Report Nos:
_____ (If available)

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

➤ Has the contamination moved outside the Restricted Area or the owner-controlled area

9. Comments:

