

CR3 ONSITE GROUND/SURFACE WATER MONITORING QUESTIONNAIRE

Onsite Radiological Effluent/REMP Monitoring Program

Phase I (Near term response)

1. Does the licensee have radioactive groundwater monitoring wells onsite? Yes No
 If YES: How many wells: _____

CR3 does not have dedicated on-site ground water monitoring wells that are monitored for radioactivity. The closest ground water well (supplies well water to site Water Treatment Plant) is 3.6 miles east of the plant on Company property. This well is sampled semi-annually per ODCM requirements. There are also 3 offsite drinking water wells that are sampled quarterly per the ODCM. None of these wells are on site (within the Owner Controlled Area).

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 checked="" type="checkbox"/> |
| (b.) within the Radiologically Restricted Area | <input type="checkbox"/> | <input checked="" 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 checked="" 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 checked="" type="checkbox"/> |
| If Yes – at what MDA | | |

2. If the licensee does NOT have an onsite radioactive groundwater monitoring program:
 (a.) Does the licensee plan to implement a groundwater monitoring program? Yes No

If Yes, when and to what extent

CR3 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. These enhancements may include onsite groundwater monitoring.

(b.) Does the licensee plan to take other measures to assure they can identify radioactive groundwater contamination Yes No

CR3 is evaluating the 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?

While no French drain system exists at CR3, a series of storm drains are in place around the plant. The storm drains route rainwater collected to either the intake canal or the discharge canal.

(a.) is the system analyzed for radionuclides?

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

(c.) for what radionuclides does the licensee monitor

Gamma emitters (gamma Spec)

If Yes - at what MDA

Tritium

If Yes - at what MDA

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?

CR3 has programs and procedures in place to rapidly identify and correct leakage including outdoor areas. Operations personnel monitor plant components, equipment, and structures as part of their normal rounds. Deficiencies, including leaks, are documented in the site Work Request process. All site work requests initiated are reviewed by station management during a daily work management meeting. Health Physics personnel perform dose rate surveys within the Protected area and periodically take smears of areas including around storm drains. Any material that is excavated to be removed from the Protected Area is sampled and analyzed by gamma spectroscopy prior to release.

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

CR3 does not perform pressure testing of buried radwaste lines.

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

Health Physics personnel perform dose rate surveys within the Protected area and periodically take smears of areas including around storm drains. Any material that is excavated to be removed from the Protected Area is sampled and analyzed by gamma spectroscopy prior to release.

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)?

At CR3 the monitored effluent discharge line goes directly into the raw water piping as the raw water exits the seawater room on the way to the discharge canal. This system is inside the owner controlled area.

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

The CR3 normal effluent discharge is inside the Auxiliary building where it mixes with raw seawater and goes underground via the Raw Water system. While no groundwater sampling is performed along the discharge piping pathway, CR3 has programs and procedures in place to identify and correct observed leakage.

If YES,

How frequently is the sampling performed:

No sampling is performed along the discharge pathway.

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

Are they documented in 10 CFR 50.75g file?

CR3 believes, but is currently verifying that there have not been any radioactive spills or leaks outside of buildings/structures.

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

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:
