

Activity: **Non-Radiological Effluent Monitoring**

1.0 Purpose: This guideline provides a method for evaluating a site's practices for non-radiological effluent monitoring.

2.0 Scope: This guideline has been developed for use in the review and evaluation of the following:

- E Administrative controls
- E Compliance with environmental technical specification requirements
- E Compliance with National Pollutant Discharge Elimination System (NPDES)
- E Effluent sample collection and analysis
- E Record retrievability
- E Compliance with state environmental requirements.

3.0 References:

3.1 Unit specific Technical Specifications

3.2 Site specific NPDES Permit

4.0 Guidelines:

4.1 In preparation for and during the conduct of this surveillance:

- E Obtain and review implementing procedures, instructions and drawings

governing this activity.

- E Prepare a guide or checklist using the selected items from this guideline.
- E Review past surveys, audits, surveillances and other evaluations/assessments.
- E Ensure that checklists include, where applicable actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

NOTE: Refer to Guideline A.1, "General Quality Surveillance Guidance," for specific details on the attributes listed above.

4.2 Determine those schedules and their schedules for the collection of the non-radiological effluent sample as specified in the unit's environmental Technical Specifications and NPDES, for example:

- A. Suspended oils
- B. Oil and grease
- C. Total iron and copper
- D. Total phosphorous
- E. Dissolved oxygen
- F. Fecal coliform
- G. pH

4.3 From the schedule, select one or more sample collection activities and observe the following at the sample collection site:

- A. Sample collection of effluent streams (e.g., run-off collections, basins, tanks, etc.) are in accordance with written procedures, including methodology and location.
- B. Sample and sample container are labeled for tracking purposes.
- C. Sample integrity (e.g., prevention of cross contamination with other samples, sample loss) is maintained during and after sas associated with the sampling equipment and systems.
- D. Training/retraining records and documentation that individuals meet the qualification requirements for the activity performed.

5.0 Other Guidelines for Consideration:

- 5.1 A.1, "General Quality Surveillance Guidance"
- 5.2 C.1, "Laboratory Practices"
- 5.3 G.1, "Radiological Effluent Monitoring"
- 5.4 G.3, "Radiological Environmental Monitoring"