

ENVIRONMENTAL PROTECTION PROGRAM

1.0 Objective

The objective of this performance assessment is to evaluate the effectiveness of the laboratory's environmental protection program as implemented in the facility. The Facility Representative or Environmental, Safety, and Health Support Specialist reviews policies, procedures, programs and processes implemented at the facility to protect the environment and ensure compliance with DOE, Environmental Protection Agency and New York requirements. The assessment covers programs to protect air quality, surface water, and releases of radioactive materials to the environment. Oversight of requirements from the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) are addressed in performance assessment guide WMA-16.1. Assessment activities may include observations of work in progress, interviews with facility and support staff personnel, walkdowns, and reviews of applicable documents.

2.0 Definitions

Concern - A determination of a programmatic breakdown or widespread problem supported by one or more findings or observations.

Finding - An individual item which does not meet requirements.

Functional Area - A discrete group of related safety and support programs.

Lines of Inquiry - Questions that guide the assessor in planning and conducting the performance assessment.

Observation - A condition or practice that does not provide or promote effective protection of the health and safety of the public or DOE's workers or the environment.

Performance Assessment - An evaluation of a program or functional area to verify laboratory line management effectiveness in ensuring the health and safety of the public and of DOE's workers and in ensuring protection of the environment.

Performance Attributes - Key elements, functions, or activities to be assessed in a particular functional area.

3.0 Requirements

This assessment is performed to fulfill the requirement contained in DOE 5400.1, *General Environmental Protection Program*.

4.0 References

- 4.1 DOE O 231.1, *Environment, Safety and Health Reporting*
- 4.2 DOE O 232.1A, *Occurrence Reporting and Processing of Operations Information*
- 4.3 DOE 5400.1, *General Environmental Protection Program*
- 4.4 DOE 5400.5, *Radiation Protection of the Public and the Environment*
- 4.5 Clean Water Act
- 4.6 Clean Air Act

5.0 Performance Assessment Activities

The assessor reviews pertinent program documentation including policies, procedures, and program plans before beginning the assessment. Appendix A provides a suggested list of documents that the assessor may review during preparation for the assessment.

During the assessment, the assessor evaluates selected performance attributes by developing and using lines of inquiry for each performance attribute. Appendix B provides a listing of suggested performance attributes and lines of inquiry. In applying each line of inquiry, the assessor may complete diverse activities such as reviewing documents, interviewing facility personnel and support staff, observing work activities, and performing walkdowns. The assessor may choose to use existing surveillance guides in completing portions of the assessment. The surveillance guide applicable to the Environmental Protection functional area is ERS 14.2, *Emissions Monitoring*.

The emphasis of this assessment is on the effectiveness of the laboratory's environmental protection program as implemented in a specific facility. In performing this assessment, the assessor must balance review of site-wide programs, facility-specific policies and procedures, and implementation. The following questions provide the general framework that should be used in planning, conducting, and documenting the assessment:

- Does the Environmental Protection Program implemented at the facility encompass all possible sources of air and water pollution?
- Is management commitment to environmental excellence evident?
- Are workers aware of their responsibility to protect the environment and are their actions consistent with this awareness?
- Is appropriate documentation for the environmental protection program prepared and maintained?

APPENDIX A

POSSIBLE DOCUMENTS TO BE REVIEWED

Environmental Protection Policy
Environmental Protection Program Implementation Plan
Long-Range Environmental Protection Plan
Pollution Prevention Awareness Program
Environmental Monitoring Plan
Annual Site Environmental Report
Spill Prevention Control and Countermeasures Plan
Stormwater Pollution Prevention Plan
Facility Environmental Impact Statement
Facility Environmental Assessment
Applicable occurrence reports

APPENDIX B

PERFORMANCE ATTRIBUTES AND LINES OF INQUIRY

PERFORMANCE ATTRIBUTE: I. The laboratory has established and implemented an environmental compliance program that demonstrates management's commitment to environmental excellence.

LINES OF INQUIRY:

1. Do policy statements (either site-wide or facility-specific) provide a clear commitment to environmental excellence?
2. Does the environmental policy statement clearly place priority on protection of the environment above production?
3. Are line management's responsibilities for ensuring compliance with environmental regulations clearly defined in charters, mission and function statements, or other pertinent documents?
4. Are roles and responsibilities of support organizations regarding environmental compliance clearly defined?
5. Are specific responsibilities for environmental compliance identified in job descriptions, performance standards and performance appraisals for facility manager, supervisors, and workers?
6. Do line management and support staff personnel responsible for ensuring environmental compliance understand their roles and responsibilities?
7. Are personnel held accountable for achieving environmental excellence through the performance appraisal process?
8. Has management established goals relating to environmental performance?
9. Are operations and support staff knowledgeable regarding environmental performance goals?
10. Are performance indicators tracked to monitor progress towards achieving environmental performance goals?

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PERFORMANCE ATTRIBUTE: II. Management has committed sufficient budgetary and staff resources to support environmental protection programs.

LINES OF INQUIRY:

1. Does the process for preparing the laboratory's operating budget include provisions for establishing funding for environmental protection programs?
2. Have adequate provisions been made in the facility's operating budget for environmental compliance?
3. Are sufficient staff resources committed to the environmental protection program?
4. Have qualification standards been established for personnel with responsibility for implementing environmental protection programs?
5. Do current personnel meet established qualification standards?
6. Do personnel whose actions may affect compliance with environmental regulations receive appropriate training on environmental protection?
7. Do all levels of personnel from operators to managers undergo some level of environmental awareness training?
8. Do personnel responsible for environmental protection programs participate in ongoing re-training programs to maintain a continuing understanding of changes in environmental requirements?

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PERFORMANCE ATTRIBUTE: III. Management has established an effective self-assessment program to promote continuous improvement in environmental protection.

LINES OF INQUIRY:

1. Has line management established and implemented a program to perform periodic self-assessments of the effectiveness of environmental protection programs at the laboratory?
2. Do self-assessments cover all significant elements of the environmental protection program?
3. Are findings of deficiencies or potential areas for improvement documented and reported to management?
4. Does management perform a timely review of deficiencies or potential areas for improvement and assign appropriate priority for initiating corrective actions?
5. Are planned corrective or improvement actions tracked until implemented?
6. Does line management conduct routine walkthroughs of assigned facilities to verify effective implementation of environmental protection programs?

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PERFORMANCE ATTRIBUTE: IV. The laboratory has implemented effective programs to monitor actual and potential releases of airborne emissions.

LINES OF INQUIRY:

1. Has an environmental monitoring plan been prepared, approved by DOE, and implemented for the laboratory?
2. Does the environmental monitoring plan address environmental surveillance for all possible release points for significant pollutants or hazardous materials?
3. Are environmental surveillance activities specified in the plan being implemented effectively?
4. Is the environmental monitoring plan reviewed annually and updated as needed to maintain its currency?
5. Are systems and equipment used to monitor potential or actual airborne releases of pollutants or hazardous materials operable?
6. Have effective administrative control system been established to periodically verify operability of systems and equipment used to monitor releases of pollutants or hazardous materials?
7. Are instruments used to monitor releases of pollutants or hazardous materials calibrated periodically?
8. Does documentation substantiate that representative samples are obtained?
9. Are appropriate actions initiated in accordance with established administrative requirements if monitoring or surveillance equipment becomes inoperable?
10. Are monitoring, sampling, and laboratory analysis activities completed in accordance with approved procedures?
11. If a state or federal permit governs actual or potential airborne release of pollutants or hazardous materials at the facility, have all requirements of the permit been implemented?

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PERFORMANCE ATTRIBUTE: V. The laboratory has implemented effective programs to monitor and control releases to surface water from the facility.

LINES OF INQUIRY:

1. Has an effective program been established to monitor planned releases of effluents from the laboratory?
2. Does the program encompass all liquid effluent point source and non-point source discharges to surface water or storm sewer systems?
3. Is the laboratory operating in accordance with requirements of applicable discharge permits?
4. Does the environmental surveillance program provide for periodic monitoring of wastewater and storm water collection systems?
5. Have applicable provisions been made to treat wastewater and stormwater before release to the surface water environment?
6. Have commitments regarding wastewater and/or stormwater management contained in Environmental Impact Statements, Environmental Assessments or other official documents been fully implemented?
7. Has a program been established to manage storage of oils, fuels, petroleum products, hazardous materials and hazardous waste to prevent or minimize damage to the surface water environment?
8. Have adequate provision been made to contain possible spills of oil, fuel, petroleum products, hazardous materials, and hazardous wastes and prevent the spills from reaching surface waters?
9. Are required tank inspections and integrity tests completed to verify that tanks are intact and leakage is not occurring?
10. Are tank high-level alarms installed and operable to reduce the risk of tank overflows?
11. Has the laboratory developed a Spill Prevention Control and Countermeasures Plan, a Stormwater Pollution Prevention Plan, and an Oil Response Plan and have these plans been maintained adequately?

12. Have provisions been made to ensure the quality of data collected from effluent sampling, monitoring, and analysis?
13. Are systems and equipment used to monitor effluents operable?
14. Have effective administrative control systems been established to periodically verify operability of systems and equipment used to monitor effluents?
15. Are instruments used to monitor effluents periodically calibrated?

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PERFORMANCE ATTRIBUTE: VI. The laboratory has established and implemented an effective environmental radiation protection program.

LINES OF INQUIRY:

1. Has a formal radiological effluent monitoring and environmental surveillance program been implemented at the laboratory?
2. Does the radiological effluent monitoring and environmental surveillance program encompass all potential pathways that may permit release of radionuclides to the environment?
3. Are changes in facility design or operations reviewed to determine if they will necessitate revisions in the radiological effluent monitoring or environmental surveillance program?
4. Are rigorous procedures established for collecting samples and performing laboratory analyses?
5. Are appropriate quality assurance practices implemented to ensure quality in measurement and analysis results?
6. Has the laboratory implemented an environmental ALARA program to reduce, minimize, or eliminate releases of radiological effluents?
7. Are specific, measurable goals established for the laboratory's environmental ALARA program?
8. Is the ALARA process applied to all activities that might result in radiation doses to the public or the environment?
9. Are sufficient records maintained to identify and characterize releases of radioactive materials to the environment and their fate in the environment?
10. Are monitoring systems that are used for tracking releases of radioactive materials to the environment operable?
11. Have effective administrative control systems been established to periodically verify operability of systems and equipment used to monitor releases of radioactive materials to the environment?

12. Are alarms provided on continuous monitors to signal the need for corrective actions to prevent exposure of members of the public to radiation from exceeding limits?
13. Are monitors used for tracking releases of radioactive materials periodically calibrated?

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PERFORMANCE ATTRIBUTE: VII. The laboratory has prepared and implemented required program plans to comply with DOE environmental protection requirements.

LINES OF INQUIRY:

1. Has an environmental protection program implementation plan been prepared in accordance with DOE 5400.1 for the laboratory?
2. Is the implementation plan updated at least annually?
3. Are long-range environmental objectives and programs or projects at the laboratory addressed in a long-range environmental protection plan that meets the requirements of DOE 5400.1?
4. Has a Pollution Prevention Awareness Program been developed and implemented at the laboratory?
5. Is the pollution prevention awareness program reviewed annually and updated at least every three years?
6. Has an environmental monitoring plan meeting the requirements of DOE 5400.1 been prepared for and implemented at the laboratory?
7. Is the environmental monitoring plan reviewed annually and updated at least every three years?

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PERFORMANCE ATTRIBUTE: VIII. The laboratory has implemented programs, policies and procedures to generate required reports and provide timely notifications of abnormal releases of pollutants, hazardous materials, or radioactive substances.

LINES OF INQUIRY:

1. Do laboratory procedures implement DOE requirements in DOE O 232.1A, DOE 5484.1 and the DOE 5500 series of orders to provide timely notification to DOE of significant non-routine releases of pollutants or hazardous substances?
2. Has the laboratory consistently provided timely initial reports of potentially significant environmental releases in accordance with the procedures?
3. Have all potentially significant spills or releases of pollutants or hazardous materials been reported to DOE?
4. Have required follow-up reports been prepared and submitted to DOE?
5. Were local, state, and Federal agencies notified of environmental releases within the required time-frames in accordance with existing procedures?
6. Has the laboratory prepared or provided input to an annual site environmental report?
7. Has the laboratory prepared and submitted radioactive effluent and on-site discharge data reports to the Waste Information Systems Branch at the Idaho National Engineering Laboratory?