

CONDUCT OF OPERATIONS PROGRAM

1.0 Objective

The objective of this performance assessment is to evaluate the effectiveness of the laboratory's conduct of operations program as implemented at the facility. The Facility Representative or Environmental, Safety, and Health Support Specialist evaluates implementation of site-wide policies, procedures, and programs with particular emphasis on how these site-wide efforts are applied at the facility. In conducting this assessment, the Facility Representative or Environmental, Safety, and Health Support Specialist observes work activities, interviews personnel, performs walkdowns, and reviews documents and records.

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 References

- 3.1 DOE O 151.1, *Comprehensive to Emergency Management System*
- 3.2 DOE O 232.1A, *Occurrence Reporting and Processing of Operations Information*
- 3.3 DOE 5480.19, *Conduct of Operations Requirements for DOE Facilities*

- 3.4 DOE 5700.6C, *Quality Assurance*

3.5 ANSI/ASME NQA-1, *Quality Assurance Program Requirements for Nuclear Facilities*

3.6 10 CFR 830.120, *Quality Assurance Requirements for DOE Nuclear Facilities*

4.0 Performance Assessment Activities

The assessor reviews selected program documentation before beginning the assessment. Suggested documents to be reviewed are listed in Appendix A. During the assessment, the assessor evaluates selected performance attributes through developing and evaluating lines of inquiry for each performance attribute. The performance attributes to be evaluated and suggested lines of inquiry are listed in Appendix B. The assessor evaluates how effectively the facility has met the performance attributes through the review of facility records, interviews of facility personnel, observation of facility activities and walkdowns of the facility. The Conduct of Operations Programs encompass a broad range of activities for control operations. The intent of this assessment is not to provide a comprehensive evaluation for every activity or area within the broad umbrella of the Conduct of Operations Programs. However, it is equally impossible to evaluate the effectiveness of the overall Conduct of Operations Program without examining performance in some of the specific activities and areas of Conduct of Operations. The assessor may more closely examine the implementation and effectiveness of particular aspects of the Conduct of Operations Programs through the use of surveillance guides related to those particular programs. Appendix C provides a list of surveillance guides pertinent to Conduct of Operations.

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

- Does the laboratory's site-wide Conduct of Operations Program provide an effective basis for safe and reliable facility operation?
- Has the facility effectively implemented the site-wide programs?
- Are routine activities in the facility consistent with the overall program and are they performed so that safe and reliable facility operation is maintained?

APPENDIX A
SUGGESTED DOCUMENTS TO BE REVIEWED

DOE 5480.19 Implementation Plan
Site/Facility Conduct of Operations Program manual/procedure
Site/Facility Issues Management Program
Site/Facility self-assessment/oversight program
Facility planning and budgeting documentation
Operations organizational structure/staffing plans/current staffing
TSR/LCO staffing requirements
Facility procedure for use of procedures
Site/Facility procedures for reporting abnormal occurrences, events, and
deficiencies
Facility programs/procedures implementing various aspects of the overall
Conduct of Operations Program

APPENDIX B

PERFORMANCE ATTRIBUTES AND LINES OF INQUIRY

PERFORMANCE ATTRIBUTE: I. Management Systems have been established and implemented to provide long-term assurance of effective programs that support conduct of operations implementation and continued evaluation and improvement.

LINES OF INQUIRY:

1. Are the operations organizational structures, roles, responsibilities, and accountabilities for accomplishing program objectives clearly defined, understood, and implemented?
2. Has a process been established and implemented to identify, screen, prioritize, and correct issues?
3. Has an effective operations oversight program been established and implemented that incorporates self-assessments, appraisals, lesson learned, and root cause analysis?
4. Has a formal planning and budgeting process been established and implemented that prioritizes all program activities and integrates them with the site-wide planning and budgeting process?
5. Have systems been established to routinely and as needed report information on the conduct of operations program to higher levels of management? Do mechanisms exist to effectively share information across organizational and functional boundaries?
6. Is an effective process implemented to review, identify, communicate, and implement requirements as well as corrective actions from periodic assessments?
7. Are staffing levels sufficient for implementation of the conduct of operations program?
8. Do operations personnel possess appropriate education, experience, and training to perform their assigned duties?
9. Has a program been implemented to identify and periodically re-assess, measure, trend, and report conduct of operations program performance indicators?

APPENDIX B

PERFORMANCE ATTRIBUTES AND LINES OF INQUIRY

PERFORMANCE ATTRIBUTE: II. A conduct of operations program has been established to implement DOE 5480.19, *Conduct of Operations Requirements for DOE Facilities*.

LINES OF INQUIRY:

1. Have implementation plans been developed, approved, and implemented for DOE 5480.19?
2. Does the implementation plan and schedule support safe operation until full compliance is achieved?
3. Are deviations from requirements identified by the laboratory and evaluated and approved by the responsible DOE office? Do deviations represent undue risk to worker or public health and safety?
4. Have procedures and guidance documents been developed, issued and implemented in accordance with plan and schedule requirements?
5. Do workers demonstrate an awareness of applicable procedure and guidance document requirements?

APPENDIX B

PERFORMANCE ATTRIBUTES AND LINES OF INQUIRY

PERFORMANCE ATTRIBUTE: III. Conduct of operations program elements and activities are implemented or performed in a manner that supports safe and reliable operations.

LINES OF INQUIRY:

1. Does the manner in which operations are directed ensure that a high level of ES&H performance in facility operations is achieved through effective implementation and control of operations activities that have the potential to impact worker safety and health, the environment, and public welfare?
2. Do operating practices ensure that performance of personnel meets the expectations of facility management for the protection of worker safety and health, the environment, and public welfare?
3. Are control area activities conducted in such a manner as to achieve safe and reliable facility operations?
4. Are highly reliable communication systems in place in the facility?
5. Is on-the-job training conducted such that the trainee satisfactorily completes all of the required training objectives? Is this training carefully supervised and controlled to avoid mistakes in operations by unqualified personnel?
6. Does the program for the investigation of abnormal events ensure that facility events are thoroughly investigated to assess the impact of the event on facility operations, worker safety and health, the environment, and public welfare? Do investigations determine the root cause of the event, ascertain whether the event is reportable, and identify corrective actions to prevent recurrence of the event?
7. Do systems in place for the notification of DOE and other agencies of abnormal events ensure timely notification and thus maximize facility responsibility to public health and safety concerns?
8. Do operating practices ensure that the facility configuration is consistent with design requirements and that the on-duty personnel know the status of equipment and systems?

9. When there is the potential for equipment damage or injury during equipment operations, servicing, maintenance, or modification activities due to inadvertent activation of equipment, does the facility lockout/tagout program protect personnel from injury, protect equipment from damage, maintain the operability of plant systems, and maintain the integrity of the physical boundaries of plant systems?
10. Does the independent verification program ensure correct facility operation and the correct position of components such as valves, switches, and circuit breakers?
11. Do facility operating records contain a narrative log that presents a timely, detailed, accurate history of facility operations, including environment, safety, and health events or functions?
12. Are systems in place to ensure that duty position turnovers provide oncoming operators with an accurate picture of facility status, including environment, safety, and health activities that have occurred, are in process or are planned?
13. Does operations monitoring of facility chemistry or unique processes ensure the proper maintenance of parameters and thus the protection of worker safety and health, the environment, and the public welfare?
14. Is a required reading file established and used in a manner that ensures that appropriate individuals are made aware of important information that is related to job assignments, including information on worker safety and health, the environment, and the public welfare?
15. Is a management system established to communicate short-term information and administrative instructions ("operator orders") to facility personnel, including information related to potential impacts on worker safety and health, the environment, and public welfare?
16. Are written procedures provided on the operation of systems and equipment and management of ES&H activities during normal and postulated abnormal and emergency conditions, and do they include direction as to how the facility is to be operated within its design bases?
17. Is an operator aid program established to ensure that operator aids are posted and that they are current, correct, and useful?
18. Is an equipment-labeling program, which conforms to national standards established and maintained to ensure that facility personnel are able to properly identify facility systems and equipment?

APPENDIX B

PERFORMANCE ATTRIBUTES AND LINES OF INQUIRY

PERFORMANCE ATTRIBUTE: IV. Operator knowledge and performance support safe and reliable operation of the equipment and systems for which they are responsible.

LINES OF INQUIRY:

1. Are operations personnel qualified for their assigned duties?
2. Do supervisors consider qualification status when assigning personnel to duties?
3. Do operators follow procedures? Are they aware of facility policy regarding procedure use?
4. Do operators know the current status of the facility and systems? Do operators understand the requirements for changing system and facility status?
5. Are operators attentive to their duties and do they carry out those duties in a professional manner?
6. Do operators meticulously observe safe work practices?
7. Do supervisors monitor operator proficiency and performance, giving instruction where necessary?

APPENDIX C

CONDUCT OF OPERATIONS SURVEILLANCE GUIDES

OPS 9.1	Operations Organization and Administration
OPS 9.2	Shift Routines and Operating Practices
OPS 9.3	Control Area Activities
OPS 9.4	Communications
OPS 9.5	Control of On-Shift Training
OPS 9.6	Investigation of Abnormal Events
OPS 9.7	Notifications
OPS 9.8	Control of Equipment and System Status
OPS 9.9	Lockouts and Tagouts
OPS 9.10	Independent Verification
OPS 9.11	Logkeeping
OPS 9.12	Operations Turnover
OPS 9.13	Operations Aspects of Facility Chemistry and Unique Processes
OPS 9.14	Required Reading
OPS 9.15	Timely Orders to Operators
OPS 9.16	Operations Procedures
OPS 9.17	Control of Procedures and Operator Aids
OPS 9.18	Equipment and Piping Labeling