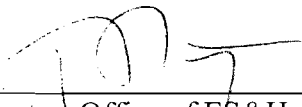



<p>U.S. Department of Energy</p> <p>Office of Independent Oversight</p> <p>Criteria Review and Approval Document</p>	<p>Subject: Specific Administrative Controls Implementation Inspection Criteria, Approach, and Lines of Inquiry</p> <p></p> <hr/> <p>Director, Office of ES&H Evaluations</p> <p>Date: 12/14/07</p> <p></p> <hr/> <p>Criteria Lead, Specific Administrative Controls</p> <p>Date: 12/14/2007</p>	<p>HS: HSS CRAD 64-32</p> <p>Rev: 0</p> <p>Eff. Date: 12/14/2007</p> <p>Page 1 of 4</p>
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1.0 PURPOSE

Within the Office of Independent Oversight, the Office of Environment, Safety and Health (ES&H) Evaluations' mission is to assess the effectiveness of those environment, safety, and health systems and practices used by field organizations in implementing Integrated Safety Management and to provide clear, concise, and independent evaluations of performance in protecting our workers, the public, and the environment from the hazards associated with Department of Energy (DOE) activities and sites. A key to success is the rigor and comprehensiveness of our process; and as with any process, we continually strive to improve and provide additional value and insight to field operations. Integral to this is our commitment to enhance our program. Therefore, we have revised our Inspection Criteria, Approach, and Lines of Inquiry for internal use and also we are making them available for use by DOE line and contractor assessment personnel in developing and implementing effective DOE oversight and contractor self-assessment and corrective action processes on this WEB page.

2.0 APPLICABILITY

The following Inspection Criteria document is approved for use by the Office of ES&H Evaluations.

3.0 FEEDBACK

Comments and suggestions for improvements on these Inspection Criteria, Approach, and Lines of Inquiry can be directed to the Director of the Office of ES&H Evaluations on (301) 903-5392.

Specific Administrative Controls Implementation Inspection Criteria, Approach, and Lines of Inquiry

Introduction: The DOE has set expectations for implementing Administrative Controls (ACs) that are selected to provide preventive and/or mitigative functions for specific potential accident scenarios, and which also have safety importance equivalent to engineered controls that would be classified as safety class or safety significant if engineered controls were available and selected. This class of AC is designated as Specific Administrative Controls (SACs). The following provides an overview of the typical activities that will be performed to collect information that will be used to evaluate SAC implementation as an integral part of the review of the core functions and implementation of integrated safety management, and the review of the functionality and operability of selected structures, systems, and components (SSCs) that are essential to safe operation of nuclear facilities.

Inspection Criteria:

- Within the scope of the review, administrative controls identified in the Documented Safety Analysis (DSA) to prevent or mitigate accident scenarios that provides a safety function that would be classified as safety significant or safety class if provided by an SSC have been appropriately designated as SACs.
- Technical, functional, and performance requirements for SACs are specified in (or referenced in) the facility authorization basis documents. Safety/authorization basis documents identify and describe the SAC safety functions, and these criteria are translated into design calculations and procedures.
- SACs are designed using sound engineering/scientific principles (e.g., defense in depth, conservative design margins, human factors engineering) and appropriate standards, including DOE-STD-3009 Chg. Notice 3 and DOE-STD-1186-2004.
- SACs, commensurate with the importance of the safety functions performed, are designed that they can perform their safety functions when called upon and satisfies 10 CFR 830.120, Subpart A.
- The adequacy of SACs are verified or validated by individuals or groups other than those who performed the work. Verification and validation work is completed before approval and implementation of the SAC.
- Changes to SAC requirements, documents, and instrumentation and controls and support equipment are designed, reviewed, approved, implemented, tested, and documented.
- Surveillance and testing procedures of the SAC demonstrates that the SAC is capable of accomplishing its safety functions and continues to meet applicable SAC requirements and performance criteria.
- Instrumentation and controls, and measurement and test support equipment used for SAC implementation are calibrated and maintained.

- Engineering management organizational structures and systems are instituted that provide assurance that the abilities of SACs to fully and reliably perform their safety functions will be maintained over the life of the facility.

Review Activity:

- Review surveillance and/or testing procedures, and the supporting DSA technical safety requirements (TSRs) and bases for selected SACs and a sample of the surveillance results, including a walkthrough of selected surveillance procedures with appropriate facility personnel (e.g., test technicians, engineers, operations personnel).
- Verify, by walkdown or other means, that installed instrumentation and control and support equipment used to support SAC implementation will function under accident/event conditions.
- Review contractor assessment activity schedules and assessment results for independent, management, and other self-assessments and external reviews/inspections (including DOE Site Office) of facility authorization basis implementation.

Lines of Inquiry:

- Within the scope of the review, does the DSA provide the basis for safety requirements and functions of selected SACs, which is consistent with the logic and assumptions presented in the hazard and accident analyses?
- Does the DSA identify the appropriate performance criteria necessary to provide reasonable assurance that selected SAC functional requirements will be met?
- Do authorization basis documents identify and describe the selected SAC safety functions?
- Do the bases for TSRs for selected SACs appropriately reflect assumptions of facility configuration and human performance of safety functions, operational parameters, and key programmatic elements?
- Is the safety classification of the selected SAC commensurate with the level of consequence to the affected receptors, consistent with DOE Standards DOE-STD-3009 and DOE STD-1186-2004?
- Has the design bases and design assumptions identified in the safety analysis been appropriately translated into design calculations and procedures?
- Are personnel knowledgeable, trained, and able to satisfactorily perform the surveillance test for selected SACs?
- Does the procedure cite applicable safety requirements?
- Are limits, precautions, system and test prerequisite conditions, data required, and acceptance criteria and independent verification elements included in surveillance procedures for SACs?
- Are appropriate data recording provisions included or referenced and used to record surveillance results?
- Does the surveillance procedure include provisions for listing discrepancies?
- Does the surveillance procedure require timely notification to facility management about any discrepancy that could impact performance of the SAC and/or facility operability?

- Did appropriate personnel (e.g., operations, system engineering, etc.) review the test results and take appropriate action?
- Is there a clear linkage between the test acceptance criteria and the safety documentation, and are the acceptance criteria capable of confirming that safety requirements are satisfied?
- Was the test equipment used for the surveillance calibrated?
- Have rigorous assessments of SAC developmental processes and their implementation been performed by the contractor and DOE site office and appropriate corrective actions implemented, where appropriate?