

GUIDELINE	PERFORMANCE	EXCEPTIONS
<p>1) Events Requiring Investigation</p> <p>a) Establish criteria for when to perform an investigation</p> <p>b) List specific events requiring investigation</p> <p>c) Establish criteria for a "near miss" situation</p> <p>d) The following events require investigation:</p> <p>i) Violation of design limits</p> <p>ii) Unusual, abnormal, or unexplained performance or safety conditions</p> <p>iii) Improper positioning of safety system features</p> <p>iv) Unexplained shutdown</p> <p>v) Violation of a procedure or human error which could have serious implications</p> <p>vi) Failure of equipment with safety implications</p> <p>vii) Exceeding radiological or toxic substance limits</p> <p>viii) Actual or attempted sabotage</p> <p>ix) Review committee deems an investigation is necessary</p> <p>x) Loss of Special Nuclear Material</p> <p>xi) Occurrence of repetitive problem</p>	<p>1) Events Requiring Investigation</p> <p>a) Criteria for when to perform an investigation are given in OPM 10.1, "Procedure for Reporting Off-Normal, Unusual or Emergency Occurrences"</p> <p>b) Events requiring investigation at the C-AD, in accordance with DOE Orders, are given in OPM 10.1</p> <p>c) Criteria for a near miss are given in OPM 10.1</p> <p>d) OPM 10.1 establishes the following as events requiring investigation:</p> <p>i) Violation of design limits</p> <p>ii) Unusual, abnormal or unexplained performance or safety conditions</p> <p>iii) Improper positioning of safety system features</p> <p>iv) Unexplained shutdown</p> <p>v) Violation of a procedure or human error which could have serious implications</p> <p>vi) Failure of equipment with safety implications</p> <p>vii) Exceeding radiological or toxic substance limits</p> <p>viii) Actual or attempted sabotage</p> <p>ix) Whenever a review committee deems an investigation is necessary</p> <p>x) Loss of Special Nuclear Material</p> <p>xi) Occurrence of repetitive problem</p>	<p>1) Events Requiring Investigation</p> <p>None</p>

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2) Investigation Responsibility a) Manager has ultimate responsibility for consistency and thoroughness of event investigation	2) Investigation Responsibility a) The C-AD Department Chairman is named the C-AD Facility Manager and has the ultimate responsibility to conduct a consistent and thorough investigation, see OPM 10.1 "Procedure for Reporting an Emergency, Unusual or Off-Normal Occurrence"	2) Investigation Responsibility None
3) Investigator Qualification a) Investigators should be knowledgeable with no vested interest or bias b) Investigators should be trained	3) Investigator Qualification a) BNL staff members from the ESH and Q Directorate are available to assist the C-AD subject matter experts in investigations. This team approach helps ensure an unbiased investigation. b) Trained investigators are appointed to investigation committees	3) Investigator Qualification None
4) Information to be Gathered a) Collect the following information as soon as possible: i) Initial condition of facility ii) Statements of operators and other personnel iii) Logs and computer printouts iv) Other pertinent documents	4) Information to be Gathered a) The initial actions by the Operations Coordinator or Supervisor are to take any actions necessary to make the area safe without endangering the health and safety of themselves or other personnel. Initial information collection requirements include: i) A record of date and time of the event, date and time of all notifications and initial condition of the facility ii) A record based on operator statements regarding a step by step sequence of events leading to the incident if known. iii) Logs and computer printouts that are retrievable after an event. iv) Pertinent documents that are preserved in logbooks or binders for future reference.	4) Information to be Gathered None

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<p>5) Event Investigation</p> <p>a) Depending on their significance the format should include:</p> <p>i) Event Reconstruction</p> <ol style="list-style-type: none"> (1) Develop chronological list (2) Include list of personnel involved <p>ii) Event Analysis and Evaluation</p> <ol style="list-style-type: none"> (1) Determine the response of equipment and personnel (2) Compare actual and expected responses (3) Determine adequacy of procedures and factors effecting performance (4) Compare event with prior events (5) Perform analysis to determine any detrimental effects that have occurred <p>iii) Root-Cause Determination</p> <ol style="list-style-type: none"> (1) Define casual factors that, if corrected, would preclude recurrence <p>iv) Corrective Action Determination</p> <ol style="list-style-type: none"> (1) Determine actions (2) Assign responsibility to implement the corrective actions. (3) Obtain final approval by Facility Manager. Can Include: <ol style="list-style-type: none"> (a) Changes in procedures (b) Training (c) Design Modifications (d) Change in administrative controls 	<p>5) Event Investigation</p> <p>a) The standard methods in Occurrence Reporting and Processing System (ORPS) Subject Area are used</p> <p>i) These standard methods include event reconstruction</p> <p>ii) These standard methods include event analysis and evaluation</p> <p>iii) These standard methods include root cause determination</p> <p>iv) These standard methods include corrective action. Responsibilities to implement the corrective actions are formally assigned and approved by the Facility Manager, who is the C-AD Chair.</p>	<p>5) Event Investigation None.</p>

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<p>6) Investigative Report</p> <p>a) Report should include:</p> <ul style="list-style-type: none"> i) Description of the event ii) Impact of the event iii) Root causes of the event iv) Lessons learned from the event v) Proposed corrective actions vi) Any positive aspects of the event (correct actions taken or planned) <p>b) The report should have the appropriate reviews and approvals</p>	<p>6) Investigative Report</p> <p>a) The C-AD uses the DOE ORPS reporting system and the requirements for critiques in SBMS. Critiques are used for all events including those not meeting the ORPs thresholds for reporting to DOE. All corrective actions are tracked in the C-AD ATS. The format for reports follows requirements in the SBMS Subject Areas on Occurrences and Critiques. The ORPs format includes the topics listed in this Conduct of Operations guideline.</p> <p>b) ORPs reports and critiques require appropriate reviews and sign-offs as indicated in SBMS</p>	<p>6) Investigative Report</p> <p>None</p>
<p>7) Event Training</p> <p>a) Provide a mechanism to train personnel on aspects of the event in a timely fashion</p>	<p>7) Event Training</p> <p>a) Corrective actions requiring training are tracked by the C-AD ATS and are closed out during the first available training evolution, if practical. For corrective actions requiring immediate implementation, changes to procedures and appropriate training are performed prior to restart of the effected facility. Department personnel are informed on events through facility specific training and weekly meetings with C-AD Divisions. Relevant "lessons Learned" information is provided to C-AD personnel via the C-AD Lessons Learned Coordinator.</p>	<p>7) Event Training</p> <p>None</p>
<p>8) Event Trending</p> <p>a) Track patterns of deficiencies, such as operator errors and inadequate procedures.</p> <p>b) Keep a summary of all events for review.</p>	<p>8) Event Trending</p> <p>a) The C-AD trends events and occurrence reports as part of its Performance Indicator Program. Annually, events and occurrence report experience is reviewed with C-AD and BNL management at the Environmental Management and Self Assessment Review.</p> <p>b) Archival ORPS reports and critiques may be found at C-AD Critiques and C-AD ORPs Reports</p>	<p>8) Event Trending</p> <p>None</p>

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9) Sabotage a) There should be an immediate investigation to: i) Ensure operability of safety systems ii) Decide if facility should be shutdown b) Minimize any impact of discovered sabotage and determine future actions	9) Sabotage a) OPM 10.1 "Procedure for Reporting an Emergency, Unusual or Off-Normal Occurrence," requires an investigation in the event of a credible sabotage threat b) Operators are trained to minimize the impacts of events including sabotage. BNL Safeguards and Security Division are notified of any suspected or actual sabotage event as soon as it is discovered.	9) Sabotage None