Department of Energy
Washington, DC 20585

Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
Suite 700
625 Indiana Avenue, N.W.
Washington, D.C. 20004

Dear Mr. Chairman:

The January 1996 deliverables called for in the Department's Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 94-4 are enclosed. A list of the deliverables is provided as Enclosure 1 to this letter.

Competing priorities at the Oak Ridge Plant have required a rescheduling of two 94-4 Commitments. Commitments 3.5 and 5.5 were originally scheduled for February 1996. This schedule for accomplishing these commitments cannot be achieved without severely impacting the higher priority task of completing the resumption of the Disassembly and Assembly mission area on time. Therefore, these Commitments and related Commitments 3.6 and 5.6 have been rescheduled for accomplishment later in the year. Change 4 to the Implementation Plan, detailing this change, is listed as Enclosure 6 on the list of January 1996 Deliverables.

If you have any questions, please contact me or have your staff contact Phil Aiken of my staff at (301) 903-4513.

Sincerely,

for

Thomas P. Seitz
Deputy Assistant Secretary for
Military Application and
Stockpile Management
Defense Programs

Enclosure

cc w/enclosure:
M. Whitaker, US-3.1

Enclosure 1:
List of January 1996 Deliverables.

Enclosure 2:
Commitment 2.3, the Lockheed Martin Energy Services, Inc. (LMES) Corrective Action Plan (CAP) for the Task 2 Assessment (Commitment 2.2).

Enclosure 3:
Commitment 3.3, the LMES CAP for the Task 3 self assessment of its criticality safety program (Commitment 3.2).

Enclosure 4:
Commitment 4.3, the integrated Department and LMES CAP for the Task 4 assessments of the Conduct of Operations Program at Y-12 (Commitment 4.2).

Enclosure 5:
Commitment 7.1, Quarterly Report 4, containing an update of activities occurring between October 1 and December 31, 1995.

Enclosure 6:
Change 4 to the Department of Energy Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 94-4.

LOCKHEED MARTIN ENERGY SYSTEMS, INC.

Post Office Box 2009
Oak Ridge, Tennessee 37831

January 30, 1996

Mr. R. J. Spence
Department of Energy, Oak Ridge Operations
Post Office Box 2001
Oak Ridge, Tennessee 37831

Dear Mr. Spence:

Corrective Action Plan for Task 3.2 Assessment; Defense Nuclear Facilities Safety Board (DNFSB) 94-4

This letter provides the corrective action plan to address the results of the *Lockheed Martin Energy Systems, Inc., Evaluation of the Oak Ridge Y-12 Plant Nuclear Criticality Safety Program (Y/NO-00009)* dated November 1995. The individual corrective action plans addressed in this letter are provided as attachments.

The Task 3.2 Assessment Report identified issues associated with Nuclear Criticality Safety (NCS) Program for the facilities at the Oak Ridge Y-12 Plant. These issues were categorized by the assessment team in the following manner:

Finding - A statement of fact documenting a deviation from an applicable federal law, Department of Energy (DOE) order, standard, safety requirement, approved procedure, or assessment program criteria.

Observation - Any situation, while not in violation of any written procedure or requirement in the judgement of the assessment team member, is worthy of raising to the attention of site management in order to enhance overall performance.

The following methodology was used to address these issues:

* An Assessment Plan was previously developed based on criteria developed by Lockheed Martin Energy Systems (LMES) to satisfy Commitment 3.1 of Task 3 of the *DOE Implementation Plan for DNFSB Recommendation 94-4* issued in February 1995. These criteria were published as *Lockheed Martin Energy Systems Assessment Criteria for the*

Evaluation of the Oak Ridge Y-12 Plant Nuclear Criticality Safety Program (Y/NO-00005) and were grouped under six performance objectives, numbered NCS.1 through NCS.6. Following are the performance objectives along with the associated findings and observations identified during performance of the assessment:

NCS.1 **Organization/Administration:** "The organizations responsible for nuclear criticality safety (NCS) at the site are in place, are adequately staffed. and are functioning in an effective manner."

There are no unresolved issues regarding this performance objective.

NCS.2 **Development of NCS Requirements:** "NCS requirements for site fissionable material operations are established on the basis of industry standards [American National Standards Institute/American Nuclear Society (ANSI/ANS) standards] and any additional requirements of DOE Order 5480.24."

Finding NCS 2-16: Procedure Y70-01-150, Sect. VI.A.4.d, states "Actual fissile storage array dimensions shall not exceed CSA dimehsions by more than 6 inches."

NCS.3 **Implementation of NCS Requirements:** "NCS requirements for site fissionable material operations are adequately implemented through flowdown. NCS training, and configuration management practices."

Finding NCS 3-8: Y-12 has not formally identified this noncompliance nor adequately documented corrective actions to meet this requirement for all applicable Y-12 operations/facilities.

Finding NCS 3-9b and 3-10: The 9720-5 Warehouse postings for array storage areas do not post the Nuclear Criticality Safety Approval (NCSA) limits. The postings list the applicable NCSA number for that array storage area.

Finding NCS 3-10: Procedure Y70-01-150, VI.A.4.g. states "Fissile storage arrays shall be conspicuously posted (if required by CSA)."

Finding NCS 3-15: Supervisor training has not been provided in a programmatic fashion.

Observation 3-2: Contrary to the Operational Safety Requirements (OSR) in Section 5.2.3 of Y/TS-1314 (OSR for 9204-2 and 9204-2E), an Unreviewed Safety Question Determination was not performed for recent revision to Nuclear Criticality Safety Department (NCSD) Procedures Y70-150, 151, and 160. In addition, several clarifications are needed within the OSRs to address ambiguities and provide justification of existing OSRs.

Observation 3-7: When the "Request for Criticality Safety Approval" form is more than one page, the "Criticality Safety Approval"(CSA) is placed on interleaved pages (intermingled with "Request" pages). See Appendix B, Y70-160. The CSA is used as a procedure in many plant areas.

NCS.4 **Assessments:** "Procedures covering both operational NCS compliance and NCS program assessments are in place and are being performed at the site in an effective manner."

There are no unresolved issues regarding this performance objective.

NCS.5 **NCS Incident Reporting, Tracking, Trending, Resolution, and Lessons Learned:** "A program is in place and functioning effectively at the site to handle NCS incident reporting, tracking, trending, resolution, and lessons learned."

There are no unresolved issues regarding this performance objective.

NCS.6 **Criticality Accident Alarm System and Emergency Planning:** "Programs are in place at the site to assure criticality accident alarm (CAA) coverage where it is required by DOE Order 5480.24 and ANSI/ANS-8.3 and to assure proper emergency response in event of a criticality accident."

Finding NCS 6-34: Instructions are not posted as required by American Nuclear Standards Institute (ANSI) 8.3 and by ESS-CS-101 for response to the signals.

Observation 6-1: A clarification to the OSR is needed to provide justification for not requiring a criticality accident alarm system (CAAS).

* The Issues Management Prioritization and Risk Board (IMPRB) met on January 3, 1996, to determine the accountable managers and risk ranking for each finding based on the requirements of Energy Systems Procedure QA-16.1, *Corrective Action Program*, and Y-12 Plant Procedure Y60-160, *Corrective Action Program.*

* Formal root cause analysis was not required for Task 3.2 findings based on the results of the IMPRB risk rankings and the requirements of QA-16.1. Accountable managers were responsible for a determination of the direct cause for each finding as directed by QA-16.1.

* The corrective action plan developed for each finding focuses on addressing the direct cause as determined by the accountable manager. These corrective action plans are provided in Attachment I.

* Observations from the Task 3.2 Assessment Report were not entered into Energy Systems Action Management System (ESAMS). The actions to address these issues are provided in Attachment II.

* Concurrence with the corrective action plans was obtained from each affected Y-12 Site Office (YSO) counterpart prior to formal issuance through this letter.

* The corrective action plan for all findings has been entered into ESAMS for tracking. A potential for revision of scheduled completion dates in ESAMS exists due to possible resource impacts from the fiscal year 1997 budget.

Status reports will be issued to your office on a periodic basis to keep you informed of the progress made torward implementing the corrective actions tied to the Task 3.2 Assessment Report.

Should you need additional information or have questions, please contact Kevin Carroll at 6-2289.

Very truely yours,

T. R. Butz
Y-12 Plant Manager

TRB:bdb

Attachments: As Stated

cc/atts: G. A. Atwood
J. C. Bell
T. R. Butz
K. J. Carroll-RC
V. E. Chase
C. C. Edwards
R. N. Escher
C. M. Eubanks
R. E. Fenstermaker
B. S. Foster
T. F. Gorman
F. P. Gustavson
R. M. Harding
D. K. Hoag (DOE-ORO)
E. L. Hockett
L. B. Jago
N. C. Jessen
D. F. McCarthy
M. K. Morrow
R. K. Roosa
D. L. Wall (DOE-ORO)
P. R. Wasilko
S. R. Wilson
Y-12 Audit Response Center
A. K. Zava

Attachment I
Letter, Butz to Spence
Dated: 01/30/96

LETTER TITLE:

Corrective Action Plan for Task 3.2 Assessment: Defense Nuclear Facilities Safety Board (DNFSB) 94-4

Attachment I

DNFSB RECOMMENDATION 94-4 TASK 3.2 CORRECTIVE ACTION PLAN - FINDINGS

ID#	Finding Description/Corrective Action	Scheduled Comp. Date
NCS 2-16	**Finding:** Procedure Y70-01-150, Sect. VI.A.4.d states "actual fissile storage array dimensions shall not exceed CSA dimensions by more than six inches."	-
	Action 1: Using a team of operations managers, Nuclear Criticality Safety (NCS) managers, procedure managers, and invited Department of Energy (DOE) Site Office personnel, benchmark other NCS programs in the DOE complex (minimum of three).	02/05/96
	Action 2: Prepare trip report from benchmarking trips.	02/05/96
	Action 3: From trip report, develop needed improvement areas and approach. This improvement plan needs to consider at a minimum the following: * Incorporation of divisional-level general criticality safety procedures, such as Y70-01-150, into a site-level document controlled by Nuclear Criticality Safety Department (NCSD).	04/01/96
	Action 4: Develop an implementation plan to execute the improvement plan specifics. Include any phasing of changes and any required retraining/requalification needed. (Note: Specific action assignments will involve tasking of facilities to execute requirements. This Corrective Action Plan will be updated after the completion of Action 4.)	06/01/96
	Action 5: Based on review in Action 3 and implementation plan, draft needed changes to procedures/new procedures to improve the noted area.	02/15/97
	Action 6: Forward copy of site manual/new procedures to DOE Site Office.	03/15/97
	Action 7: Develop a plant group (similar to composition to benchmarking group) to assess effectiveness of implementation plan.	05/15/97
NCS 3-8	**Finding:** Y-12 has not formally identified this noncompliance nor adequately documented corrective actions to meet this requirement for all applicable Y-12 operations/ facilities.	-

	Action 1: Issue joint Y-12 Plant/Nuclear Operations letter invoking the compensatory measure required plantwide for criticality related procedures which do not have Criticality Safety Approval (CSA) limits and conditions included.	05/01/96
	Action 2: Develop implementation plans for upgrading technical procedures per the new Technical Procedures Writer's Guide, Y10-103, including the addition of applicable safety controls for all organizations that have CSAs (Disassembly and Storage Organization).	05/01/96
	Action 3: Develop implementation plans for upgrading technical procedures per the new Technical Procedures Writer's Guide, Y10-103, including the addition of applicable safety controls for all organizations that have CSAs (Quality Organization).	05/01/96
	Action 4: Develop implementation plans for upgrading technical procedures per the new Technical Procedures Writer's Guide, Y10-103, including the addition of applicable safety controls for all organizations that have CSAs (Analytical Services Organization (ASO)).	05/01/96
	Action 5: Develop implementation plans for upgrading technical procedures per the new Technical Procedures Writer's Guide, Y10-103, including the addition of applicable safety controls for all organizations that have CSAs (Waste Management Organization).	05/01/96
	Action 6: Develop implementation plans for upgrading technical procedures per the new Technical Procedures Writer's Guide, Y10-103, including the addition of applicable safety controls for all organizations that have CSAs (Enriched Uranium Operations Organization).	05/01/96
NCS 3-9B, 3-10	**Finding:** The 9720-5 Warehouse postings for array storage areas do not post the Nuclear Criticality Safety Approval (NCSA) limits. The postings list the applicable NCSA number for that array storage area.	-
	Action 1: Using a team of operations managers, NCS managers, procedure managers, and invited DOE Site Office personnel, benchmark other NCS programs in the DOE complex (minimum of three).	02/05/96
	Action 2: Prepare trip report from benchmarking trips.	02/05/96

	Action 3: From trip report, develop needed improvement areas and approach. This improvement plan needs to consider at a minimum the following: *Review use of postings as operators aids. *Requirements of American National Standards Institute (ANSI) 8.1, Section 4.1.4, that postings shall be maintained specifying material identification and all limits that are subjected to procedural control.	04/01/96
	Action 4: Develop an implementation plan to execute the improvement plan specifics. Include any phasing of changes and any required retraining/requalification needed. (Note: Specific action assignments will involve tasking of facilities to execute requirements. This Corrective Action Plan will be updated after the completion of Action 4.)	06/01/96
	Action 5: Based on review in Action 3 and implementation plan, draft needed changes to procedures/new procedures to improve the noted area.	02/15/97
	Action 6: Forward copy of site manual/new procedures to DOE Site Office.	03/15/97
	Action 7: Develop a plant group (similar to composition to benchmarking group) to assess effectiveness of implementation plan.	05/15/97
NCS 3-10	**Finding:** Procedure Y70-01-150, VI.A.4.g. states "Fissile storage arrays shall be conspicuosly posted (if required by CSA)".	-
	Action 1: The NCSD conduct a review of Procedure Y70-01-150 for additional cases where exemptions from regulations are annotated.	03/20/96
	Action 2: Revise Procedure Y70-01-150, Section VI.A.4.g, to remove the text "(if required by CSA)" and any additional areas determined by NCSD review as possible exemptions from regulations.	05/29/96
NCS 3-15	**Finding:** Supervisor training has not been provided in a programmatic fashion.	-
	Action 1: Using a team of operations managers, NCS managers, procedure managers, and invited DOE Site Office personnel, benchmark other NCS programs in the DOE complex (minimum of three).	02/05/96
	Action 2: Prepare trip report from benchmarking trips.	02/05/96

	Action 3: From trip report, develop needed improvement areas and approach. This improvement plan needs to consider at a minimum the following: *Review of criticality safety training practices to "provide" training for improvement areas, NCSD, operations managers, operations supervisors, support personnel, front line supervisors, and operators. *Ensure DOE requirements for training are included in program.	04/01/96
	Action 4: Develop an implementation plan to execute the improvement plan specifics. Include any phasing of changes and any required retraining/requalification needed. (Note: Specific action assignments will involve tasking of facilities to execute requirements. This Corrective Action Plan will be updated after the completion of Action 4.)	06/01/96
	Action 5: Based on review in Action 3 and implementation plan, draft needed changes to procedures/new procedures to improve the noted area.	02/15/97
	Action 6: Forward copy of site manual/new procedures to DOE Site Office.	03/15/97
	Action 7: Develop a plant group (similar to composition to benchmarking group) to assess effectiveness of implementation plan.	05/15/97
NCS 6-34	**Finding:** Instructions are not posted as required by ANS 8.3 and ESS-CS-101 for response to the signals.	-
	Action 1: The NCSD shall verify the requirements of ANSI/ANS 8.3 are properly reflected in the central procedure ESS-CS-101 as invoked by Y70-150.	03/20/96
	Action 2: Emergency Management shall ensure adequate instructions exist on the physical requirements for evacuation signs. For example, maximum spacing.	03/20/96
	Action 3: Nuclear Operations facilities shall: a. Ensure facility in compliance with posting requirements stated in paragraphs 1 and 2. b. Ensure postings are controlled in a program such as operator aids. c. Ensure evaluation of posting control is incorporated into internal self-assessment program for the facilities.	08/20/96

	Action 4: Waste Management shall: a. Ensure facility in compliance with posting requirements stated in paragraphs 1 and 2. b. Ensure postings are controlled in a program such as operator aids. c. Ensure evaluation of posting control is incorporated into internal self-assessment program for the facilities.	08/20/96
	Action 5: The ASO shall: a. Ensure facility in compliance with posting requirements stated in paragraphs 1 and 2. b. Ensure postings are controlled in a program such as operator aids. c. Ensure evaluation of posting control is incorporated into internal self-assessment program for the facilities.	08/20/96
	Action 6: Periodically during evacuation drills evaluate effectiveness of evacuation postings.	05/20/96

KJCarroll:bdb
01/30/96

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2009
OAK RIDGE, TENNESSEE 37831

January 30, 1996

Mr. R. J. Spence
Department of Energy, Oak Ridge Operations
Post Office Box 2001
Oak Ridge, Tennessee 37831

Dear Mr. Spence:

Corrective Action Plan for Task 2 Assessment:
Defense Nuclear Facilities Safety Board (DNFSB) 94-4

This letter provides the Corrective Action Plan to address the results of the "Task 2 Assessment Report for the Oak Ridge Y-12 Facility - DNFSB 94-4 (DOE-DP/EH-OR-01)" dated November 29, 1995. The Corrective Action Plan addresses the 12 findings and 3 concerns associated with the Task 2 Assessment Report.

The Task 2 Assessment Report identified issues associated with the site's implementation of Criticality Safety Approvals (CSAs) and Operational Safety Requirements (OSRs). These issues were categorized by the assessment team in the following manner:

Finding — A statement of fact documenting a deviation from an applicable federal law, Department of Energy (DOE) order, standard, safety requirement, approved procedure, or assessment program criteria.

Concern — Any situation while not in violation of any written procedure, in the judgment of the assessment team member, indicates less than optimal performance and could be an indicator of more serious problems.

Observation — Any situation while not in violation of any written procedure or requirement, in the judgment of the assessment team member, is worthy of raising to the attention of site management in order to enhance overall performance.

The following methodology was used to address these issues:

The findings and concerns were grouped into programmatic areas to assist in root cause analysis and Corrective Action Plan development. Related issues were addressed through a common plan to provide programmatic consistency and eliminate duplication of effort. The following is the programmatic grouping (findings are indicated with an "F" and concerns with a "C"):

Nuclear Criticality Safety

F02 Lockheed Martin Energy Systems (LMES) is not performing a formalized root cause analysis for repetitive nuclear criticality safety (NCS) deficiencies.

F11 Postings do not specify limits on control parameters or explicitly identify allowed materials.

F14 The LMES has not explicitly identified associated limits for controlled parameters in criticality safety analyses.

Operations/Nuclear Criticality Safety

F13 Thirty-two identified areas requiring CSAs in the Enriched Uranium Operations Organization do not have CSAs.

F16 Operations for Special Nuclear Material (SNM) Vehicle Transport requiring CSAs are not covered by Class 1 or Class 2 procedures.

F20 The LMES has not performed a CSA requirement for the 9215 machine shop coolant system nor has LMES properly authorized the deviation.

Fire Protection

F07 The LMES has moderation control areas not identified in prefire plans, CSAs, or Nuclear Criticality Safety Approvals (NCSAs).

Lessons Learned

F08 The LMES Lessons Learned Program is deficient in measuring operational performance improvement, program effectiveness, and integrating the program throughout the management chain and across functional areas for nuclear criticality safety.

F15 The LMES has not fully addressed examples of lessons learned from other sites.

Training

F17 Maintenance, radiation control, technical support, and others who may direct or instruct operators do not receive sufficient training on the new and revised CSAs for unattended work in key areas.

C18 Current training has not yet produced a safety culture among workers consistent with DOE Order 5480.19 to prevent criticality safety deficiencies and ensure proper response if deficiencies occur.

Operational Safety Requirements (OSRs)

F06 The OSRs or Technical Safety Requirements (TSRs) have not been approved for Buildings 9720-33 and 9995.

F09 Deficiencies were observed with (1) safety analysis and authorization bases to support safety and other important programs throughout Y-12, (2) clarity of safety basis for newly approved OSRs, (3) quality of OSRs for the Enriched Uranium Operations Organization, and (4) implementation of OSRs with respect to criticality safety.

C04 The OSRs for Buildings 9212 and 9206 should be updated to current DOE requirements prior to resumption of operations in those nuclear facilities.

C05 The LMES has nuclear facilities (e.g., Buildings 9995, 9202/9203, and 9805) which do not have an approved authorization basis.

Through agreement with the DOE Y-12 Site Office (YSO), all findings were analyzed to determine root cause. The root cause analyses were conducted utilizing the TapRoot methodology as the basis for analyzing ten findings. A modified Management Oversight and Risk Tree (MORT) analysis was used for the two findings associated with the Lessons Learned Program. The Energy Systems Quality Organization facilitated the analyses and is incorporating the results into a formal report. Concurrence with the methodology and resultant root cause(s) was obtained from a designated YSO counterpart for each root cause analysis.

The corrective actions developed for each finding focus on addressing the root cause as determined in the formal process delineated above. Actions were also included to correct specific issues noted in the findings and concerns.

Development of the Corrective Action Plan was coordinated with other programmatic initiatives under way at Y-12 (e.g., Task 4 Conduct of Operations Corrective Action Plan, Y-12 Infrastructure Committees, etc.) to address issues on a global basis for related efforts, thereby ensuring consistent programmatic direction. For example, corrective actions for F17 and C18, which involve training issues, were incorporated in the Task 4 Corrective Action Plan. Issues related to NCS that were noted by the Task 4 assessment team were included in the Task 2 Corrective Action Plan.

Concurrence with the corrective action plan for each finding and concern was obtained from a designated YSO counterpart prior to formal issuance of the overall Task 2 Corrective Action Plan enclosed with this letter.

Corrective actions for the findings and concerns are being entered into the Energy Systems Action Management System (ESAMS) for tracking. Observations from the Task 2 Assessment Report are not being entered into ESAMS. The following actions have been taken or planned to address these issues:

Observation 01	The Plan of the Day (POD) meeting does not include representation from all required support organizations. Action: This issue is addressed in the Conduct of Operations Standards section of the 94-4 Task 4 Conduct of Operations Corrective Action Plan.
Observation 03	Existing OSRs do not meet the format and content requirements of DOE Order 5480.22. However, they were still approved by DOE, Oak Ridge Operations. Action: The DOE Order 5480.22 content and format requirements will be fully adhered to after completing an update of the safety analysis documentation. This update is progressing in accordance with the DOE Orders 5480.22 and 5480.23 Implementation Plan. As OSRs are revised, they will comply with 5480.22 as much as the safety basis allows. Improvement in the safety basis documentation is covered by F09 and C05.

Observation 10	Contaminated combustible waste storage in nuclear facilities presents a housekeeping problem and potential safety issues. Action: This issue is part of the Self-Assessment Program in the 94-4 Task 4 Conduct of Operations Corrective Action Plan. This issue is also being addressed as part of the readiness assessment for Disassembly and Assembly.
Observation 12	The root cause identified by LMES in Y/DD-679 is too broad in scope to allow for effective implementation of corrective actions. Action: A root cause analysis is being performed in response to F02. This review will also address Observation 12.
Observation 19	Job-specific criticality safety training programs are compartmentalized, resulting in reduced effectiveness. Action: This issue is addressed as part of the Training Program in Section II of the 94-4 Task 4 Conduct of Operations Corrective Action Plan.
Observation 21	The Occurrence Reporting and Processing System (ORPS) reports place an emphasis on detection of the occurrences of problems instead of the analysis of the causes and chronology or problems. Action: Occurrence Reporting staff will be apprised that the "Description of Occurrence" should include all pertinent background information to the event. Recent events, since this Observation, have included more complete descriptions.

Observation 22 Final ORPS reports are not always submitted within the required 45-day period.

Action: A corrective action plan was developed that covers Observation 22. Overdue occurrence reports are highlighted in weekly memorandums to senior management. As a result of working the corrective action associated with this observation, the percentage of overdue occurrence reports has declined by 40 percent. Work continues to eliminate overdue occurrence reports by February 29, 1996.

Status reports will be given to your office on a periodic basis to keep you informed of the progress we make in implementing the corrective actions tied to the Task 2 Assessment Report. The Corrective Action Plan will be revised as required to reflect updated budgetary guidance, changes in work priority, and resource availability.

Should you need additional information or have questions, please contact Charlene Edwards at 4-1711.

Very truly yours,

T. R. Butz
Y-12 Plant Manager

TRB:pld

Enclosure: As Stated

c/enc: See Page 7

Enclosure
Letter, Butz to Spence
Dated: January 30, 1996

LETTER TITLE:
Corrective Action Plan for Task 2 Assessment: Defense Nuclear Facilities Safety Board (DNFSB) 94-4

c/enc: G. A. Atwood
J. C. Bell
T. R. Butz
K. J. Carroll
V. E. Chase
C. C. Edwards-RC
R. N. Escher
C. M. Eubanks
R. E. Fenstermaker
B. S. Foster
T. F. Gorman
F. P. Gustavson
R. M. Harding
D. K. Hoag, DOE-ORO
E. L. Hockett
R. A. Hummel
L. B. Jago
N. C. Jessen
D. F. McCarthy
L. L. McCauley
M. K. Morrow
R. K. Roosa
D. L. Wall, DOE-ORO
P. R. Wasilko
S. R. Wilson
A. K. Zava

Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-4,
Task 2 Corrective Action Plan

ID #	Finding/Corrective Action Description	Scheduled Completion Date
	NUCLEAR CRITICALITY SAFETY	
02	Finding: LMES is not performing a formalized root cause analysis for repetitive nuclear criticality safety (NCS) deficiencies. This finding is supported by discussion related to the following issues: Issue 1: A formal Root Cause Analysis is not always performed and/or documented for criticality safety deficiencies. This is particularly evident for repetitive or generic deficiencies. This may lead to the identification of incorrect corrective actions. Issue 2: The corrective action procedure utilizes predetermined root cause codes which inherently discourage the use of independent analysis. Issue 3: The principle probable cause identified in the Type-C investigation does not appear to have a corresponding corrective action.	
	Action 1 Using a team of operations managers, NCS managers, procedure managers, and DOE Site Office personnel, benchmark other NCS programs in the DOE complex (minimum of 3).	02/96
	Action 2 Prepare trip report from benchmarking trips.	02/96
	Action 3 From trip report, develop needed improvement areas and approach. This NCS Improvement Plan needs to consider at minimum the following: *Response to incidents and nonconformances, and the proper level of response invoked by procedures.	04/96

F02		*Coordinate with Quality Organization to determine when to perform a root cause analysis for repetitive or generic trends related to NCS or CSA deficiencies. *Development of a proceduralized trending program.	
	Action 4	Incorporate threshold criteria for performing root cause analysis in QA-16.1, Corrective Action Program.	04/96
	Action 5	Develop an implementation plan to execute the NCS Improvement Plan specifics. Include any phasing of changes and any required retraining/requalification needed. (Note: Specific action assignments will involve tasking of facilities to execute requirements. This corrective action plan will be updated after the completion of F02 Action 5.)	06/96
	Action 6	Review and revise root cause procedure to include description of appropriate root cause methods, including TapRoot analysis.	06/96
	Action 7	Conduct a TapRoot analysis of the September 22, 1994, event as noted in the Type-C investigation. Develop corrective action plan based on results of root cause analysis. Review the root cause identified in Y/DD-679.	06/96
	Action 8	Based on the NCS Improvement Plan and as scheduled in the implementation plan, draft needed changes to procedures/new procedures to improve the noted area.	02/97
	Action 9	Forward copy of site manual/new procedures to DOE Site Office.	03/97
	Action 10	Develop a plant group (similar in composition to benchmarking group) to assess effectiveness of implementation plan.	05/97

11	Finding:	Postings do not specify limits on control parameters or explicitly identify allowed materials.	
	Action 1	Using a team of operations managers, NCS managers, procedure managers, and DOE Site Office personnel, benchmark other NCS programs in the DOE complex (minimum of 3).	02/96
	Action 2	Prepare trip report from benchmarking trips.	02/96
	Action 3	From trip report, develop needed improvement areas and approach. This NCS Improvement Plan needs to consider at a minimum the following: *Review use of postings as operators aids. *Requirements of American National Standards Institute (ANSI) 8.1, Section 4.1.4, that postings shall be maintained specifying material identification and all limits that are subjected to procedural control.	04/96
	Action 4	Develop an implementation plan to execute the NCS Improvement Plan specifics. Include any phasing of changes and any required retraining/requalification needed. (Note: Specific action assignments will involve tasking of facilities to execute requirements. This corrective action plan will be updated after the completion of Action 4.)	06/96
	Action 5	Based on the NCS Improvement Plan and as scheduled in the implementation plan, draft needed changes to procedures/new procedures to improve the noted area.	02/97
	Action 6	Provide training to NCSD personnel on revised requirements for NCS postings.	03/97
	Action 7	Forward copy of site manual/new procedures to DOE Site Office.	03/97
	Action 8	Develop a plant group (similar in composition to benchmarking group) to assess effectiveness of implementation plan.	05/97

F14	Finding:	LMES has not explicitly identified associated limits for controlled parameters in criticality safety analyses.	
	Action 1	Using a team of operations managers, NCS managers, procedure managers, and DOE Site Office personnel, benchmark other NCS programs in the DOE complex (minimum of 3).	02/96
	Action 2	Prepare trip report from benchmarking trips.	02/96
	Action 3	From trip report, develop needed improvement areas and approach. This NCS Improvement Plan needs to consider at a minimum the following: *Determine the interpretation of ANSI/American Nuclear Society (ANS)-8.19-1984, Section 8.3, concerning the "explicit" identification of associated limits for controlled parameters in criticality safety analysis. *Ensure requirements are clearly identified from controlled parameters in the criticality safety analyses. *Ensure that these requirements are included in the criticality safety approvals to support the controls identified in the criticality safety analysis. *Identify the explicit controls and requirements relied upon for double contingency in criticality safety analyses. *Process to quickly revise current CSAs, including a method to document the incorporated revisions. *Operations validation and verification of CSA requirements.	04/96
	Action 4	Develop an implementation plan to execute the NCS Improvement Plan specifics. Include any phasing of changes and any required retraining/requalification needed. (Note: Specific action assignments will involve tasking of facilities to execute requirements. This corrective action plan will be updated after the completion of Action 4.)	06/96

4	Action 5	Based on the NCS Improvement Plan and as scheduled in the implementation plan, draft needed changes to procedures/new procedures to improve the noted area.	02/97
	Action 6	Forward copy of site manual/new procedures to DOE Site Office.	03/97
	Action 7	Develop a plant group (similar in composition to benchmarking group) to assess effectiveness of implementation plan.	05/97

F13	**OPERATIONS/NUCLEAR CRITICALITY SAFETY**		
	Finding:	Thirty-two identified areas requiring CSAs in Enriched Uranium Operations do not have CSAs in place.	
	Action 1	Review enriched uranium operations to identify areas requiring CSAs that are missing CSAs per Y70-150.	05/96
	Action 2	Issue CSAs for those dynamic continuing operation areas that are missing CSAs. [Note: Dynamic fissile material activities are defined as those which (1) require operator movement of fissile materials when actions are taken according to the CSA and/or the existing operating procedure, or (2) the processes/systems induce the movement of fissile material without operator intervention, or (3) surveillances and/or inspections are required by the CSA. Dynamic activities may be categorized as dynamic-deferred activities upon evaluation of risk. Static activities are ongoing but the systems/processes are not changing (e.g. fissile material storage arrays).]	08/96
	Action 3	For static continuing operation areas, dynamic-deferred continuing operation areas, and noncontinuing operation areas, formally document the safety basis with peer review (via a "white paper").	10/96
	Action 4	Complete development of the NCS Improvement Plan that is to include the following: *Define the standard for when a criticality safety analysis is needed and how it is obtained. This standard must comply with ANSI 8.1. *Define who is responsible for implementation of the nuclear criticality safety standards, how they are held accountable, and acceptable compensatory actions if compliance with the standards cannot be maintained (e.g. mechanism for deviation without necessarily revising the CSA). *Define how to make modifications to procedures and policies if standard changes are required.	04/96

F16	Finding:	Operations for Special Nuclear Material (SNM) Vehicle Transport requiring CSAs are not covered by Class 1 or Class 2 procedures.	
	Action 1	Procedure Y20-NM-01-09-002 will be replaced by a Y50-series technical procedure which will fully comply with the current revision of Y10-102.	02/96
	Action 2	Complete a critique of the incident(s) which led to F16 and the initial response to the finding. Develop additional corrective actions as required.	3/96
	Note: All fissile material movements are now required to be covered by Class 1 or Class 2 technical procedures per Y10-102.		
F20	Finding:	LMES has not performed a CSA requirement for the Building 9215 machine shop coolant system nor has LMES properly authorized the deviation.	
	Action 1	Walkdown Enriched Uranium Operations continuing operations CSAs to identify deficiencies.	Complete
	Action 2	Correct the deficiencies using approved methods.	10/96
	Action 3	Coordinate with NCSD to perform redline change to CSA-15104.	08/96
	Action 4	Complete development of the NCS Improvement Plan that is to include the following:	04/96
		*Awareness of the NCS Department personnel regarding evaluation and documentation of the NCS issues.	
	Action 5	Perform a review of EUO equipment prior to restart for holdup.	01/98

	FIRE PROTECTION		
F07	Finding:	*Nuclear Criticality Safety Guidelines for Fire Fighting in MAAs* provides only general guidance and appears as a boiler-plate common attachment (or appendix) to all prefire plans.	
	Action 1	Issue a Special Instruction for firefighting in moderation control areas; obtain Nuclear Criticality Safety Department's (NCSD's) technical review and written analysis/approval of the Special Instruction.	02/96
	Action 2	Submit request for additional resources for the review and update of prefire plans. (Note: When resources are allocated, develop a prioritized schedule to update prefire plans and communicate results to the DOE Site Office.)	02/96
	Action 3	Develop a lesson plan from the Special Instruction; obtain NCSD's review/approval of the lesson plan; complete training.	03/96
	Action 4	Review Y50-50-409 and either revise or issue new command media in coordination with the NCSD to match how prefire plans are prepared. Ensure command media has clear and concise steps and includes firefighting requirements for exhaust systems.	06/96
	Action 5	Assist the NCSD as subject-matter experts (SMEs) in firefighting with developing a section to the sitewide NCS Manual/Procedure that provides guidance to implement/comply with DOE 5480.24, Section 7.f requirements. This action supports NCSD's corrective actions for F02.	06/97
	Action 6	Update existing prefire plans and train to updated plans in accordance with the sitewide NCS manual/procedural requirements.	09/97

	LESSONS LEARNED		
F08	Finding:	LMES's lessons learned program is deficient in measuring operational performance improvement and program effectiveness and in integrating the program throughout the management chain and across functional areas for nuclear criticality safety.	
	Action 1	Define line and staff organizations management responsibilities for identifying, evaluating, and sharing lessons learned.	04/96
	Action 2	Identify lessons learned dissemination approaches.	04/96
	Action 3	Reevaluate and reidentify realistic, internal clearinghouse activities to identify lessons learned.	04/96
	Action 4	Revise Lessons Learned Procedure, QA-16.3, to incorporate management, line, and staff responsibilities and dissemination approaches identified in associated action plan actions.	08/96
	Action 5	Communicate responsibilities as defined in procedure revision.	09/96
	Action 6	Review implementation of QA-16.3, Lessons Learned and Alerts Program.	03/97

F15	Finding:	LMES has not fully addressed examples of Lessons Learned from other sites (Rocky Flats B-771, Sequoyah Fuels Corp., Pantex facility, and Los Alamos National Laboratory TA-55 facility). See Appendix F of Task 2 Assessment Plan, Rev. 1, October 1995.	
	Action 1	Review events cited in finding for potential lessons learned and issue lessons learned as applicable.	04/96
	Action 2	Define line and staff organizations management responsibilities for identifying, evaluating, and sharing lessons learned.	04/96
	Action 3	Identify lessons learned dissemination approaches.	04/96
	Action 4	Reevaluate and reidentify realistic, internal clearinghouse activities to identify lessons learned.	04/96
	Action 5	Revise Lessons Learned Procedure, QA-16.3, to incorporate management, line, and staff responsibilities and dissemination approaches identified in associated action plan actions.	08/96
	Action 6	Communicate responsibilities as defined in procedure revision.	09/96
	Action 7	Review implementation of QA-16.3, Lessons Learned and Alerts Program.	03/97
	Note: The 94-4 Task 4 Corrective Action Plan addresses the incorporation of lessons learned into floor-level training.		
	TRAINING		
F17	Finding:	Maintenance, radiation control, technical support, and others who may direct or instruct operators do not receive sufficient training on the new and revised criticality safety approvals for unattended work in key areas. This finding is addressed by the 94-4 Task 4 Corrective Action Plan in Section II.A. Facility specific training will be included in the qualification programs for support personnel.	

C18	Concern:	Current training has not yet produced a safety culture among workers that prevents criticality safety deficiencies and ensures proper response if deficiencies occur.	
	Action 1	Necessary elements for establishing the required safety culture are embodied in the 94-4 Task 4 Corrective Action Plan. Specifically, the Conduct of Operations (CONOPS) Standards, CONOPS Implementation Training (ongoing floor-level training), and the CONOPS Assessments sections of the CONOPS Program and the training of support personnel covered in the "Additional Improvement Areas" sections are responsive to the issue of establishing the required safety culture. (Note: Activities related to resumption of nuclear operations are also under way that directly impact the development of the required safety culture.) Assess the effectiveness of these actions under the Self Assessment Program per the corrective action plan for the 94-4 Task 4 Finding C-2/9204-2E, Management Self Assessment.	02/97
	OPERATIONAL SAFETY REQUIREMENTS (OSRs)		
F06	Finding:	OSRs or Technical Safety Requirements (TSRs) have not been approved (or developed) for Buildings 9720-33 and 9995. None of these buildings have DOE approved Safety Analysis Reports (SARs).	
	Action 1	Review the 1027-92 hazard category for Building 9720-33 and confirm the facility is not a nuclear facility.	02/96
	Action 2	Per the current implementation plan schedule for DOE Orders 5480.22 and 5480.23, submit the Building 9995 SAR.	03/96
	Action 3	Submit a revision to the Implementation Plan for DOE Orders 5480.22 and 5480.23. This revision will describe the process for compiling existing safety analysis documentation for submission as a Y-12 Plant SAR, and it will include the process for future revision to be compliant with 5480.22 and 5480.23.	03/96
	Action 4	Issue to Y-12 Site Office for review the Y-12 Plant Safety Analysis Report (SAR). (Note: The Plant SAR will not be fully compliant with DOE Order 5480.23/22 when issued but will serve as a framework for future improvements.)	09/96

F09	Finding:	Problems exist with (1) safety analyses and authorization bases to support safety and other important programs throughout Y-12, (2) clarity of safety bases for newly approved OSRs, (3) quality of OSRs for enriched uranium operations, and (4) implementation of OSRs with respect to criticality safety. The absence of a systematic analysis and hazards review result in a poorly defined safety envelope. The current system may lead to violations of OSRs and DOE requirements, even if facility safety is not significantly threatened.	
	Action 1	Submit a revision to the Implementation Plan for DOE Orders 5480.22 and 5480.23. This revision will describe the process for compiling existing safety analysis documentation for submission as a Y-12 Plant SAR, and it will include the process for future revision to be compliant with 5480.22 and 5480.23.	03/96
	Action 2	Issue to Y-12 Site Office for review the Y-12 Plant SAR. (Note: The Plant SAR will not be fully compliant with DOE Orders 5480.23/22 when issued but will serve as a framework for future improvements.)	09/96
	Action 3	Submit Basis for Interim Operations (BIOs) for nuclear facilities for review and approval to DOE.	01/96
	Action 4	Upgrade Y-12 Plant SAR to be compliant with 5480.23/22.	12/98
C04	Concern:	OSRs for Buildings 9212 and 9206 should be updated to current DOE requirements prior to resumption of operations in those nuclear facilities.	
	Action 1	Verify that an RFA exists that requires Category II facilities having new OSRs prior to resumption of operations.	01/96

C05	Concern:	LMES has nuclear facilities (e.g., Buildings 9995, 9202/9203, and 9805) which do not have an approved authorization basis (e.g., no SARs, OSRs, or BIOs).	
	Action 1	Submit a revision to the Implementation Plan for DOE Orders 5480.22 and 5480.23. This revision will describe the process for compiling existing safety analysis documentation for submission as a Y-12 Plant SAR, and it will include the process for future revision to be compliant with 5480.22 and 5480.23.	03/96
	Action 2	Issue to Y-12 Site Office for review the Y-12 Plant SAR. (Note: The Plant SAR will not be fully compliant with DOE Orders 5480.23/22 when issued but will serve as a framework for future improvements.)	09/96

LOCKHEED MARTIN ENERGY SYSTEMS

POST OFFICE BOX 2009
OAK RIDGE, TENNESSEE 37831

January 31, 1996

Mr. R. J. Spence
Department of Energy, Oak Ridge Operations
Post Office Box 2001
Oak Ridge, Tennessee 37831

Dear Mr. Spence:

Corrective Action Plan for the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-4 Task 4 Assessment of Conduct of Operations at Y-12

This letter provides response to the DNFSB Recommendation 94-4, "Deficiencies in Criticality Safety at Oak Ridge Y-12 Plant," Assessment Report of Lockheed Martin Energy Systems Conduct of Operations dated November 9, 1995. The issues associated with this assessment report are addressed in the enclosed Task 4 Corrective Action Plan, Y/AD-632.

Through agreement with the Department of Energy-Y-12 Site Office (DOE-YSO), all findings from this assessment were analyzed to determine root cause. The root cause analyses were conducted utilizing the *TapRoot* methodology as the basis for analysis for 25 findings, and a modified *Management Oversight and Risk Tree (MORT)* analysis incorporated for three programmatic management implementation issues. The Energy Systems Quality Organization facilitated each analysis and has incorporated the results into a formal report. Concurrence with the methodology and resultant root cause(s) was obtained from the DOE-YSO counterpart for each analysis performed.

The Task 4 Corrective Action Plan was developed by focusing on addressing the root cause for all findings as the basis for structuring programmatic corrective actions. This process allows the site to concentrate its resources on strengthening the overall Conduct of Operations program rather than concentrating exclusively on correcting the symptomatic deficiencies. The issues associated with the concerns and observations noted in the assessment report were also addressed by the programmatic actions delineated in the Task 4 Corrective Action Plan.

These corrective actions were coordinated with other programmatic initiatives at Y-12 (e.g., DNFSB 94-4Task 2 Criticality Safety Approvals/Operational Safety Requirements corrective action plan, Y-12 infrastructure improvement teams, etc.) in order to adddress issues on a global basis for related efforts, thereby ensuring consistent programmatic direction.

Concurrence with the Task 4 Corrective Action Plan was obtained from each affected DOE-YSO counterpart prior to formal issuance through this letter. Status reports will be provided to your office on a periodic basis to keep you informed of progress towards implementing the corrective actions tied to the Task 4 Assessment Report.

Should you need additional information or have questions, please contact Tom Paul at 6-5561 or Lee Jago at 4-3853.

Sincerely,

F. P. Gustavson
Vice President
Defense and Manufacturing

FPG:BSF: pld

Enclosure: As Stated

c/enc: G. A. Atwood
T. R. Butz
D. E.Christenson, DOE-ORO
C. C. Edwards
R. N. Escher
B. S. Foster
F. P. Gustavson
D. K. Hoag, DOE-ORO
L. B. Jago
L. L. McCauley
M. K. Morrow
T. W. Paul - RC
J. S. Rayside
R. K. Roosa
D. L. Wall, DOE-ORO
A. K. Zava

c: J. C. Bell
D. P. Bryant
K. J. Carroll
V. E. Chase
C. M. Eubanks
R. E. Fenstermaker
J. P. Flynn
T. F. Gorman
R. M. Harding
R. E. Hawthorne
E. L. Hockett
W. H. Hopwood
R. A. Hummel
N. C. Jessen
R. M. Keyser
L. W. Koester
R. L. Sampsel
R. E. Schabot
P. R. Wasilko

Enclosure to Letter
Gustavson to Spence
January 31, 1996

Y-12

OAK RIDGE Y-12 PLANT

Y/AD-632

MARTIN MARIETTA

Lockheed Martin Energy Systems
Corrective Action Plan
for the
Defense Nuclear Facilities Saftey Board (DNFSB)
Recommendation 94-4 Task 4 Assessment
of Conduct of Operations at Y-12

January 30, 1996

Compiled By
T. W. Paul

Oak Ridge Y-12 Plant
Oak Ridge, Tennessee
operated by
LOCKHEED MARTIN ENERGY SYSTEMS
for the
U. S. DEPARTMENT OF ENERGY

MANAGED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

DNFSB RECOMMENDATION 94-4 TASK 4 CORRECTIVE ACTION PLAN
(CONDUCT OF OPERATIONS)

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DNFSB Recommendation 94-4 Task 4 (Conduct of Operation)
Corrective Action Plan

EXECUTIVE SUMMARY

The Task 4 Assessment Report for the Oak Ridge Y-12 Facility - DNFSB 94-4 identified issues associated with the implementation of the site's Conduct of Operations program. These issues were categorized by the assessment team in the following manner:

Finding A statement of fact documenting a deviation from an applicable federal law, Department of Energy (DOE) order, standard, safety requirement, approved procedure, or assessment program criteria.

Concern Any situation while not in violation of any written procedure, in the judgement of the assessment team member, indicates less than optimal performance and could be an indicator of more serious problems.

Observation Any situation while not in violation of any written procedure or requirement, in the judgement of the assessment team member, is worthy of raising to the attention of site management in order to enhance overall performance.

STRATEGY FOR THE DEVELOPMENT OF THE TASK 4 CORRECTIVE ACTION PLAN

Key Strategy 1: Focus on Correction of Programmatic Issues. A programmatic approach was selected as the basis for addressing this assessment report. This strategy allowed each issue to be evaluated as a symptomatic deficiency inherent within a particular functional area. These symptoms were evaluated to determine their relation to the overall programmatic structure required to implement site-level programs. The key elements in this structure were defined as:

1. **Standards** established to define the requirements/expectations of the program;
2. **Tools** required to be in place in order to implement the program;
3. **Training** required to educate employees on all elements of the program;
4. **Implementation** of the program; and
5. **Assessment** process required to measure effectiveness/progress of the program.

Each finding, concern, and observation from the Task 4 Assessment Report was associated to a particular programmatic functional area and then further defined by its relation within the five elements of the programmatic structure defined above. Then, further analysis was conducted to identify the root cause associated with the 28 findings from the assessment report.

The root cause analyses were conducted utilizing the *TapRoot* methodology as the basis for analysis for 25 findings and a modified *Management Oversight and Risk Tree (MORT)* analysis incorporated for three programmatic management implementation issues. The Energy Systems Quality Organization facilitated each analysis and incorporated the results into a formal report. Concurrence with the methodology and resultant root cause(s) was obtained from a designated YSO counterpart for each analysis performed.

Based on the results of the root cause analyses, the key programmatic elements of this corrective action plan are:

> Near-term development and implementation of Conduct of Operations standards in the support and balance-of-plant organizations, particularly where an interface exists with Nuclear Operations;
>
> The establishment of a robust ongoing floor training program that focuses on daily interaction between line management and operators to reinforce technical training and emphasize management expectations and lessons learned; and
>
> The implementation of a management assessment process that ensures expectations are being met and identifies short-comings so that real-time corrections can be made.

A Corrective Action Plan was developed for each programmatic functional area by focusing on addressing the root cause for all findings as the basis for structuring programmatic corrective actions required to fully implement each program. This process allows the site to concentrate its resources on strengthening the overall Conduct of Operations program rather than concentrating exclusively on correcting symptomatic deficiencies.

Recognizing the importance of timely attention to these symptomatic deficiencies, each issue identified in this assessment report was also addressed in terms of actions required to correct the field conditions for each deficiency noted. While these symptomatic corrections are not specifically identified in the Task 4 Corrective Action Plan, they will be addressed through actions submitted within the Energy Systems Action Management System (ESAMS) for closure and tracking. For example, for a finding that cited the wrong procedure revision being used on the floor, the task 4 CAP addresses the need for a document control program. The correction of the field condition (e.g., placing the correct revision on the floor for that specific occurrence) will be included as an action step in the ESAMS corrective action plan for the finding.

In addition, the 19 observations identified in the assessment report were evaluated for applicability to the overall programmatic issues addressed in the relevant functional areas. Many of the observations are addressed by the programmatic actions of the functional areas, with feasibility of incorporation at the discretion of the functional manager responsible for the affected programmatic area.

Key Strategy 2: Phased execution of corrective actions building on improvements made in the resumed facilities. Improvements in Conduct of Operations have been achieved in the nuclear facilities that have been resumed. This CAP builds on lessons learned from the resumption activities, using the disciplined operations experience of line managers and mentors assigned to those areas to develop and execute site-wide improvements. Execution of this plan will be phased over a 2-3 year time frame. Priority for implementation is established in the following manner:

1. Nuclear Operations currently restarted;
2. Nuclear Operations to be restarted;
3. Organizations providing support to Nuclear Operations; and
4. Balance of Plant (BOP) - all other organizations at Y-12.

Key Strategy 3: Integrate corrective actions with other ongoing Y-12 initiatives. Development of the Corrective Action Plans was coordinated with other programmatic initiatives at Y-12 (e.g., Task 2 CSAs/OSRs corrective action plan, Y-12 Infrastructure committees, etc.) in order to address issues on a global basis for related efforts to ensure consistent programmatic direction Concurrence with the individual corrective actions was obtained from a designated YSO counterpart prior to formal issuance of this action plan.

GROUPING OF THE TASK 4 ASSESSMENT FINDINGS AND CONCERNS

The Task 4 CAP is organized into two major sections. Section I includes corrective actions for the Conduct of Operations program improvements necessary to affect long-term culture change at Y-12. Section II includes the corrective actions to address other programmatic improvements necessary to fully address all of the Task 4 issues. Following is a breakdown of the programmatic functional area grouping of the issues identified in the Task 4 Assessment Report:

I. CONDUCT OF OPERATIONS

General Program

Findings	C-1/Supp-1	Program support in the area of Conduct of Operations for other than Nuclear Operations is deficient.
	C-1-1	The Plant Conduct of Operations Matrices of Applicability and Implementation Plan have not yet been developed as required in DOE Order 5480.19
	C-3-1	The corrective actions taken to correct the root cause of the September 1994 CSA incident have not been effective in all nuclear operations areas.

Concerns	C-1-7	Plant Conduct of Operations Manual has not yet been developed.
	C-1/DUO-1	LMES should review Conduct of Operations Chapters 3 and 13 for applicability to all facilities.
	C-1/9204-4-1	Specific responsibilities and actions required to implement Conduct of Operations chapter requirements in facilities have not been fully developed.
	C-1/9204-2E-1	Unique Process and Control Areas should be reviewed for applicability to the facility.

Conduct of Operations - Operations Organization & Administration (Chapter 1)

Findings	C-1-8	Performance goals as required by DOE Order 5480.19 and the Nuclear Operations Conduct of Operations Manual are not currently being maintained as required by the Order and Manual.
	C-2/DUO-1	Four potential CSA violation were found in 9201-5, third floor lay down area.
	C-2/DUO-3	Some electrical controller doors not routinely fastened after maintenance
	C-2/DUO-4	Material conditions in equipment spaces of 9998 and on the roof of 9998 were poor.
	C-2/9720-5-1	Operator rounds in Building 9720-5 do not inspect for correct placement of tags and locks as specified in DOE-STD-1030-92, *Guide to Good Practices for Lockouts and Tagouts*, Section 4.8
Concerns	C-2/DUO-7	Many material deficiencies exist in DUO facilities.
	C-1/EUTO-1	An applicability matrix for 9215 EUTO is not filed in the shift manager's or operations manager's Conduct of Operations Manual.
	C-2/9204-2E-2	Plan of the day meetings are not consistent across the plant.
	C-2/9204-4QE-2	Material conditions exist that affect safety.

Conduct of Operations - Shift Routines & Operating Practices (Chapter 2)

Findings	C-1-5	Nuclear Operations Conduct of Operations Manual chapter on rounds does not incorporate requirement to inspect for correct placement of tags/locks as specified in DOE-STD-1030-92, *Guide to Good Practices for Lockouts and Tagouts*, Section 4.8
	C-2/DUO-5	Daily round sheets were not reviewed weekly as required.
	C-2/DUO-6	Housekeeping in 9201-5 had deteriorated to the point that personnel making rounds were insensitive to safety concerns.
Concerns	C-1-6	General lighting in many facilities is inadequate.
	C-2/EUTO-3	Pre-shift briefings need improvement.
	C-2/EUTO-5	Workers need to record unusual items in the remarks section of the round sheets.

Conduct of Operations - Communications (Chapter 4)

Findings	C-2/EUTO-1	The public address system is not used effectively.
	C-2/EUTO-2	Voice communications are informal and not precise. Repeatbacks are neither used nor required.
Concern	C-1-9(Non-Nuc)	Communications practices are not in conformance with DOE Order 5480.19, Chapter IV.

Conduct of Operations - Lockout/Tagout (Chapter 9)

Findings	C-2/9720-5-1	The Lockout/Tagout system in Building 9720-5 is not being periodically inspected as required by DOE Order 5480.19, Chapter IX.
	C-1/LOTO-1	The Y-12 Lockout/Tagout Program does not meet today's DOE-wide practice in that appropriate verification is not required.
	C-2/LOTO-1	Locking devices used in one LOTO were improperly installed.
Concerns	C-1/LOTO-2	The Lockout/Tagout program does not specify frequency of periodic inspections.

C-2/LOTO-2 Some deficiencies were noted during placement of lockout/tagout.

Conduct of Operations - Logkeeping (Chapter 11)

Finding C-2/DUO-5 Daily round sheets were not reviewed weekly as required.
Comment: Also addressed in ConOps Chapter 2.

Conduct of Operations - Operations Turnover (Chapter 12)

Concern C-2/9204-4QE-1 A support group pre-evolution brief was less than adequate.

Conduct of Operations - Timely Orders (Chapter 15)

Concern C-2/EUTO-4 EUO Timely Order effectiveness needs improvement.

Conduct of Operations - Operations Procedures (Chapter 16)

Concern C-3/PP-1 Implementation of the procedures program does not completely address identified deficiencies.

Conduct of Operations - Ongoing Floor Training

Findings C-2/T&D-1, 8 A comprehensive continuing training program is not in place to implement Conduct of Operations

C-2/T&D-4 Training is not effective in helping operators retain important information.

Concerns C-1/T&D-2 The site lacks infrastructure to support an effective training program.

C-1/T&D-3 The Training Program does not take credit for actual events.

C-2/T&D-3 Training is not formally conducted.

Conduct of Operations - Management Assessments

Finding C-1-2 Line management is not conducting routine Conduct of Operations assessments as required by the Y-12 Plant Management Assessment Program (Y60-028) requirements and DOE Order 5480.19

Concern:	C-2/9204-2E-5	Self-assessment program in 9204-2E lacks management participation and is not performance based.

Conduct of Operations - Drill Program

Concerns	C-2/T&D-5, 6, 7	Drills need improvement

II. ADDITIONAL PROGRAMMATIC IMPROVEMENT AREAS

Training and Qualification Program

Findings	C-1/T&D-1	Qualification process for shift manager and shift technical advisor (STA) is incomplete.
	C-2/T&D-2	Personnel serving as Shift Manager and STA are not formally qualified.
Concerns	C-3/T&D-1	No corrective action plans have been presented to address training deficiencies.

Issues Management

Concern	C-1-3	DOE monthly assessments are not acted upon by management.

Nuclear Criticality Safety Approvals

Concerns	C-2/PP-1	The revision process for CSAs does not contain sufficient documentation and review of changes. **Comment:** This concern is addressed through the Task 2 Corrective Action Plan for CSAs/OSRs. Please see finding F14 in Task 2 for this action plan.
	C-2/PP-2	The CSA validation process is not sufficiently rigorous to ensure facility compliance with assumptions. **Comment:** This concern is addressed through the Task 2 Corrective Action Plan for CSAs/OSRs. Please see finding F14 in Task 2 for this action plan.

Radiological Control

Findings	C-2/DUO-2	A number of radiological control issues were noted (9 issues).
	C-2/Supp-2	Many deficiencies were observed in radiological control practices.
Concern	C-2/Supp-4	Contaminated transport trucks pose an ALARA concern.
	C-2/Supp-3	CAAS surveillance source poses an ALARA concern.

Comment: This concern has been evaluated and determined to pose no ALARA concerns. Formal documentation addressing this issue is being finalized and has received concurrence from the designated YSO counterpart. The resolution of this issue will be formally documented in ESAMS.

Maintenance/Work Control

Finding	C-1/DUO-2	There are no maintenance procedures in place or scheduled to be developed to support operating equipment in 9215/9204-2E.

Occurrence Reporting

Finding	C-1-4	Occurrence reporting does not meet DOE Order 5000.3B requirements.

Fire Protection

Finding	C-2/Supp-1	Fire department records of fire extinguisher inspections LTA
Concern	C-2/Supp-8	Surveillance of dry chemical fire extinguishers may not ensure operability.

Comment: This concern has been evaluated and determined that the operability of dry chemical fire extinguishers is not being compromised. Formal documentation addressing this issue is being finalized and has received concurrence from the designated YSO counterpart. The resolution of this issue will be formally documented in ESAMS.

Accountability

Finding C-2/9204-2E-3 Bi-monthly Material Control & Accountability (MCA) inventories have not been completed for 9204-2E since July 1995.

Comment: This finding has been corrected. The issues resulting in this deficiency were unique to this particular situation and do not have application on a global basis. Formal documentation addressing this issue is being finalized and has received concurrence from the designated YSO counterpart. The resolution of this issue will be formally documented in ESAMS.

A summary of the Task 4 Assessment Report Findings and their associated corrective actions is included as Attachment A to this Corrective Action Plan.

DNFSB RECOMMENDATION 94-4 TASK 4 CORRECTIVE ACTION PLAN
(CONDUCT OF OPERATIONS)

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.	**CONDUCT OF OPERATIONS PROGRAM**				
I.A	**CONOPS Standards**				
I.A.1.a	Site: Submit Site CONOPS Applicability Matrix to DOE	COO Mgr	2/96	draft in review	C-1-1 C-1/DUO-1 C-1-9204-2E-1
I.A.1.b	DSO / DUO (resumed): Submit CONOPS Applicability Matrix to DOE	Resumed Mgr	3/96		C-1-1 C-1-DUO-1 C-1-9204-2E-1
I.A.1.c	EUO (non-resumed): Submit CONOPS Applicability Matrix to DOE	Non-Resumed Mgr	3/96		C-1-1 C-1-DUO-1 C-1-9204-2E-1
I.A.1.d	Support: Submit CONOPS Applicability Matrix to DOE	Plant Mgr	3/96		C-1-1 C-1-DUO-1 C-1-9204-2E-1
I.A.1.e	Balance of Plant: Submit CONOPS Applicability Matrix to DOE	Plant Mgr	6/96		C-1-1 C-1-DUO-1 C-1-9204-2E-1
I.A.2	Approve CONOPS Applicability Matrices	YSO COO Mgr	Delivery + 30 days		F-1.1-2

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.A.3	Issue draft generic roles and responsibilities of operations managers (facility managers), specifically safety and emergency systems, in COO Manual Chapter 1.	COO Mgr	2/96		
I.A.4.a	Issue a Draft Site CONOPS Manual for review and comment. The manual defines the site organization and establish conduct of operations standards. The manual will be supported by new or revised LMES procedures for those chapters requiring procedural discipline in the execution of the standards.	COO Mgr	3/96	Start 1/96	C-1-2 C-1-Supp-1 C-1/DUO-1
I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96		C-1-2 C-1-Supp-1
	Chapter 1 Owner/Tenant Roles & Responsibilities				C-1-6 C-1-10 C-2/DUO-1 C-2/DUO-2 C-2/DUO-3 C-2/DUO-4 C-2/DUO-5 C-2/DUO-6 C-2/DUO-7 C-2/SUPP-1 C-1/LOTO-1 C-1/QE-1 C-2/QE-2 C-2/9720-5-1 C-2/EUTO-1 C-2/EUTO-1 C-1/9204-2E-2 C-1/9204-4-1

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
	Chapter 1 Performance Indicators and trending				C-1-8 C-2/LOTO-2
	Chapter 2 Shift Routines				C-1-5 C-2/DUO-5 C-2/DUO-6 C-2/EUTO-3 C-2/EUTO-5 C-2/9750-5-1
	Chapter 4 Communications				C-2/EUTO-1 C-2/EUTO-2 C-1-9 C-2/QE-3
	Chapter 7 Occurrence Reporting				C-1-4
	Chapter 9 Lockout /Tagout				C-1/LOTO-1 C-1/LOTO-2 C-2/LOTO-1 C-2/LOTO-2 C-2/9750-5-1
	Chapter 10 Independent Verification				C-1/LOTO-1
	Chapter 11 Logkeeping				C-2/DUO-5
	Chapter 12 Operations Turnover				C-2/QE-1
	Chapter 15 Timely Orders				C-2/EUTO-4
	Chapter 16 Operations Procedures				C-3/PP-1
	Chapter 18 Labeling				C-2/DUO-4

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.A.5	Define fire suppression system and Criticality Accident Alarm System ownership for operations managers.	Y-12 Plant Manager	3/96		
I.B	**CONOPS Tools (Programs, Procedures, etc.)**				
I.B.1	Define the specific roles and responsibilities of the site operations managers and area coordinators	Plant Mgr NucOps Mgr	4/96		
I.B.2	Identify the specific zones and facilities at the site to which Operations and area coordinators will be assigned.	Plant Mgr	6/96		
I.B.3	Assign Operations and area coordinators for each Zone/Facility.	Plant Mgr NucOps Mgr	8/96		C-2/DUO-4
I.B.4	Obtain and review examples of CONOPS performance indicators used at other site, such as Rocky Flats, SRS, Pantex.	COO Mgr	2/96		C-1-8
I.B.5	Define performance indicators (PIs) for the site. Establish performance indicators reported to YSO.	COO Mgr	5/96		C-1-8
I.B.6	Approve proposed PIs to be reported to YSO	YSO	6/96		
I.C	**CONOPS Implementation Training**				
I.C.1	Prepare line manager CONOPS implementation training for each chapter of COO Manual.	Mentors Manager (Y-12 Training Mgr)	7/96	Trng Mgr will serve as Mentor Manager also	

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
1.C.2.a	Conduct line manager CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	8/96		C-2/Supp-3 C-1-1 C-1-8 C-3-1 C-2/DUO-4 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3
1.C.2.b	Conduct line manager CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	9/96		C-2/Supp-3 C-3-1 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3
1.C.2.c	Conduct line manager CONOPS implementation training for support organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	9/96		C-2/Supp-3 [C-3-1 C-1/Supp-1 C-2/DUO-1 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3
1.C.2.d	Conduct line manager CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	3/97		C-2/Supp-3 C-3-1 C-1/Supp-1 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3
1.C.3	Prepare operator CONOPS implementation training	Mentors Program Mgr (Y-12 Trng Mgr)	9/96		C-3-1 C-2/9204-2E-3

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
1.C.4.a	Conduct operator CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	10/96		C-2/Supp-3 C-3-1 C-2/DUO-5 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3
1.C.4.b	Conduct operator CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	10/96		C-2/Supp-3 C-3-1 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3
1.C.4.c	Conduct operator CONOPS implementation training for support organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	11/96		C-1/Supp-1 C-2/Supp-3 C-3-1 C-2/LOTO-1 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3
1.C.4.d	Conduct operator CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	6/97		C-1/Supp-1 C-2/Supp-3 C-3-1 C-2/LOTO-1 C-2/EUTO-1 C-2/EUTO-2 C-2/9204-2E-3

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.C.5	**Ongoing Floor Training**				
I.C.5.a	**Ongoing Floor Training Standards**				
I.C.5.a.1	Conduct an initial awareness training session for Y-12 Organization Managers that emphasizes senior management's expectations for conduct of operations.	Deputy V.P. for Defense and Mfg.	3/96		C-3-1
I.C.5.a.2	Develop a Y-12 manager (supervisor) training program geared to COO responsibilities, rigor & formality, attention to issues, manager involvement, goals & motivations, and unity & communication.	Trng Mgr assisted by PEG and Mentors	5/96		C-3-1 C-2/9204-2E-3
I.C.5.a.3	Develop a Standard for the Ongoing Floor Training Program that describes roles and responsibilities, use of lessons learned, and the requirements for implementation of ongoing floor training in nuclear operations and support organizations.	Y-12 Trng Mgr	6/96		C-2/T&D-1 C-2/T&D-4 C-2/T&D-8
I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations, V.P. and Plant Managers	8/96	After completion of all organization applicability matrices	C-3-1 C-2/DUO-1 C-1/Supp-1 C-2/9204-2E-3 C-2/T&D-1 C-2/T&D-4 C-2/T&D-8
I.C.5.b	**Ongoing Floor Training Tools**				
I.C.5.b.1	Develop near-term schedule for delivery of specific topics to a selected Pilot area	NucOps Trng Mgr	8/96		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.C.5.b.2	Develop training guides for 1st month of Pilot training.	NucOps Trng Mgr	9/96		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.C.5.c	**Training on the Ongoing Floor Training Program**				
I.C.5.c.1	Train Pilot area Line Mgrs & Personnel who are responsible for conducting Ongoing Floor Training	NucOps Trng Mgr	10/96		
I.C.5.c.2	Train remaining Line Mgrs & Personnel who are responsible for conducting Ongoing Floor Training	Y-12 Trng Mgr	4/97		C-2/T&D-1 C-2/T&D-4 C-2/T&D-8
I.C.5.d	**Ongoing Floor Training Implementation**				
I.C.5.d.1	Conduct a Ongoing Floor Training Pilot in a selected Nuc Ops Area	NucOps Trng Mgr	10/96		
I.C.5.d.2	Update the Ongoing Floor Training Program, based upon Pilot results	NucOps Trng Mgr	3/97		
I.C.5.d.3	Transition Ongoing Floor Training implementation to all Y-12 areas to remaining NucOps and support organizations.	Y-12 Trng Mgr	6/97		C-1/Supp-1 C-2/DUO-1 C-2/T&D-1 C-2/T&D-4 C-2/T&D-8
I.C.5.e	**Ongoing Floor Training Assessment**				
I.C.5.e.1	Develop an assessment checklist to evaluate the effectiveness of ongoing training to be included in the ongoing CONOPS Assessment program	Y-12 Trng Mgr	10/96		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.D	**CONOPS Implementation**				
I.D.1	Cancel obsolete site-level CONOPS procedures that are superseded by the Site CONOPS Manual. These old procedures are actually standards whose contents will be "rolled in" as requirements to the manual.	COO Mgr	5/96		
I.D.2	Revise any existing site-level CONOPS procedures that will be retained to achieve consistency with CONOPS Manual	COO Mgr	8/96		
I.D.3	Implement COO in the organizations in accordance with the approved Requests for Approval (RFAs)	COO Mgr			
I.D.3.1	Implement RFA # 137 (RSS)	Org Mgr	4/96		
I.D.3.2	Implement RFA # 147 (DUO)	Org Mgr	3/96		C-2/DUO-1
I.D.3.3	Implement RFA # 160 (D&A)	Org Mgr	12/96		
I.D.3.4.a	Approve RFA # 162 (EUO)	DOE COO Mgr	2/96	YSO has the RFA for approval	
I.D.3.4.b	Implement RFA # 162 (EUO)	EUO Org Mgr	11/96		
I.D.3.5.a	Prepare/Submit RFA for QE (supersede COO implementation as defined by the current Standards & Controls Management Plan)	QE Org Mgr	7/96		
I.D.3.5.b	Approve RFA for QE	DOE COO Mgr	8/96		
I.D.3.5.c	Implement RFA for QE	QE Org Mgr	1/97		
I.D.3.6.a	Revise RFA # 161 (Support Organizations)	Plant Mgr	5/96		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.D.3.6.b	Approve RFA # 161 (Support Organizations)	DOE COO Mgr	6/96		
I.D.3.6.c	Implement RFA # 161 (Support Organizations)	Plant Mgr	10/97		
I.D.3.7.a	Revise RFA #163 (BoP)	Plant Mgr	10/96		
I.D.3.7.b	Approve RFA #163 (BoP)	DOE COO Mgr	11/96		
I.D.3.7.c	Implement RFA #163 (BoP)	Plant Mgr	12/97		
I.D.3.8.a	Revise RFA # 164 (Sitewide)	COO Mgr	3/96		
I.D.3.8.b	Approve RFA # 164 (Sitewide)	DOE COO Mgr	4/96		
I.D.3.8.c	Implement RFA # 164 (Sitewide)	COO Mgr	12/97		
I.D.3.9	Cancel RFA # 85 (superseded by RFA 164)	COO Mgr	3/96		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.E	**CONOPS Assessments** **Nuclear Operations has implemented an assessment program in DSO that is performed by the Nuclear Operations Mentors. In addition, a pilot program has been implemented in EUO. This section of the Plan builds on the Lessons Learned from the mentors' program and the EUO pilot to establish a robust assessment program throughout nuclear operations, support, and balance of plant organizations.**				
I.E.1	**CONOPS Assessment Program Standards**				
I.E.1.a	Develop standards for a site-wide CONOPS assessment program (based on SRS Management Self-Assessment Program, including lessons learned from the DSO and the EUO assessment programs).	Y-12 COO Manager assisted by Nuc Ops Mentors	6/96		C-1-2 C-3-1 C-2/9204-2E-3 C-2/9204-2E-5
I.E.1.b	Develop performance indicators (PIs) for measuring COO implementation progress and establish periodicity for evaluating results.	COO Mgr	6/96		C-3-1 C-2/9204-2E-3 C-2/9204-2E-5
I.E.1.c	Conduct independent assessment to evaluate the level of COO implementation in NucOps including support organizations.	LMES Performance Evaluation Group (PEG)	11/96		C-3-1 C-2/9204-2E-3 C-2/9204-2E-5
I.E.1.d	94-4 Task 4 Team re-assess COO in conjunction with PEG assessment.	DP-24 94-4 Task 4 Coordinator	11/96		DOE Item
I.E.1.e	Revise COO CAP based upon the results of the independent assessments.	COO Mgr	1/97		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.E.1.f	Conduct site-wide independent assessment to evaluate the level of COO implementation.	Y-12 Qulity Systems Manager	2/98		C-3-1 C-2/9204-2E-3
I.E.1.g	Revise COO CAP based upon the results of the independent assessments.	COO Mgr	3/98		
I.E.2	**CONOPS Assessment Tools**				
I.E.2.a	Revise Y60-028 to incorporate assessment requirements for 5480.19 and to incorporate the new Standard.	Quality Organization Mgr.	9/96		C-1-2 C-2/9204-2E-3
I.E.2.b	Develop generic cards or checklists for use during management assessments. As appropriate, assessment should include: - Elements of 5480.19 - Housekeeping - Compliance with CSAs - Facility Condition - Inspection of Locks and tags for proper placement - deficient equipment tags in place - Rad Con Compliance	COO Mgr assisted by SMEs	9/96		C-2-DUO-7 C-2/9204-2E-5
I.E.3	**CONOPS Assessment Training**				
I.E.3.a	Develop training for revised Y60-028.	Quality Org. Manager assisted by Y-12 Training Manager	12/96		
I.E.3.b	Implement training for revised Y60-028 for Organization Managers, Functional managers, Shift Managers, STAs, etc.	Y-12 Trng Manager assisted by Mentors	3/97		C-1-2 C-2/9204-2E-5
I.E.3.c	Develop training for line management on performance based assessment techniques	Y-12 Trng Manager assisted by Mentors	8/96		C-3-1

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
I.E.3.d	Train nuclear operations and support line management on performance based assessment techniques.	Y-12 Trng Manager assisted by Mentors	10/96		C-3-1 C-2/DUO-1 C-2/9204-2E-3 C-2/9204-2E-5
I.E.4	**CONOPS Assessment Implementation**				
I.E.4.a	Submit assessment plans and schedules for Nuclear Operations and Support Organizations per revised Y60-028.	Y-12 Org Mgrs	5/97		C-1-2
I.E.4.b	Organizations complete initial conduct of operations assessments in resumed NUCOPS organizations.	Y-12 Org Mgrs	12/96	Based on their resumed status, perform interim assessments in RSS in 4/96 and DUO in 3/96	C-1-2 C-2/9204-2E-5
I.E.4.c	Organizations complete initial conduct of operations assessments in non-resumed NUCOPS organizations.	Y-12 Org Mgrs	11/96		C-1-2
I.E.4.d	Organizations complete initial conduct of operations assessments in support organizations.	Y-12 Org Mgrs	6/97		C-1-2
I.E.4.e	Organizations complete initial conduct of operations assessments in BOP organizations.	Y-12 Org Mgrs	9/97		C-1-2
I.E.4.f	Complete an independent assessment of compliance with Y60-028.	Quality Organization Manager	12/97		C-1-2
I.E.4.g	Revise Y60-028 and guidance based on independent assessment results.	Quality Organization Manager	2/98		C-1-2

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.	**ADDITIONAL IMPROVEMENT AREAS**				
II.A	**Training Program**				C-1-T&D-1 C-1-T&D-2 C-2-T&D-2 C-2-T&D-3 C-2-T&D-5 C-2-T&D-6 C-2-T&D-7 C-3-T&D-1
II.A.1	**Training Program Standards**				
II.A.1.a	Assign/Hire a Y-12 site Training Manager	Deputy Vice President for Defense and Mfg.	3/96		C-2-T&D-1 C-2-T&D-4 C-2-T&D-8
II.A.1.b	Develop and publish aTraining Manual that defines sitewide training roles, responsibilities, and standards to supplement Y90 series procedures.	Trng Mgr	12/96		
II.A.2	**Training Program Tools**				
II.A.2.a	Develop/Upgrade Qualification Programs for qualified positions (except EUO) including facility specific training/organization.	Trng Mgr assisted by Org. Managers	9/96	TIM, R5 required completion in 12/95. Assessment in progress.	
II.A.3	**Training Program Training**				
II.A.3.a	Train Nuclear Operations and Support Organization Line Management on Training Manual.	Trng Mgr	1/97		C-1/T&D-2
II.A.3.b	Train Organization Training Managers on Training Manual.	Trng Mgr	3/97		C-1/T&D-2

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.A.4	**Training Program Implementation**				
II.A.4.a	Qualify personnel per TIM, R5	Org Mgrs	12/96	TIM, R5 required completion in 12/95. Assessment in progress.	
II.A.4.b	Establish a Training Work Group (TWG) to track and execute the TIM commitments and enhance consistency across the site for training implementation	Trng Mgr	1/96	Complete	
II.A.5	**Training Program Assessment**				
II.A.5.a	Develop and execute training program assessments including programmatic and compliance and training effectiveness.	Trng Mgr	6/97	Assessments will begin 2/96; and will be ongoing.	
II.A.5.b	Execute adherence based training assessments, including student feedback and management oversight.	Org Trng Mgrs	6/97		
II.B	**Drill Program**				
II.B.1	**Drill Program Standards**				
II.B.1.a	Hire an experienced Drill Program Manager	Nuc Ops Mgr	11/95	Complete 11/95	
II.B.1.b	Develop a Drill Program Plan for DSO facilities for CY 1996.	Drill Program Manager	3/96		
II.B.1.c	Drill Program Procedure for Nuclear Operations (per .20a). [NOTE: BoP is covered by Site Emergency Preparedness Procedures.]	Nuc Ops Procedures Mgr.	4/96		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.B.2	**Drill Program Tools**				
II.B.2.a	Develop an initial set of Drill Guides for DSO facillities	Drill Prog. Mgr.	2/96	Complete for 3 DSO facilities. This is an ongoing process; guides are developed as necessary to support facility activities.	
II.B.2.b	Commence development of Drill Program Tools in remaining Nuclear Operations facilities. Tools may include: guides, a list of the types and categories of drills, drill scenarios, and simulation devices	Org Mgrs	3/97		
II.B.3	**Drill Program Training**				
II.B.3.a	Train DSO personnel and DSO drill coordinators on conduct of drills.	Drill Pgm Manager	1/96	Complete	
II.B.3.b	Train remaining Nuc Ops Organization and Facility Drill Coordinators on conduct of drills.	Nuc Ops Trng Mgr	1/97		
II.B.3.b	Train Nuc Ops and Support personnel on conduct of drills.	Nuc Ops Trng Mgr	2/97		
II.B.4	**Drill Program Implementation**				
II.B.4.a	Commence drills in DSO based on the DSO drill schedule of 2 per week.	DSO Manager	1/96	Complete. Approximately 50 drills have been executed to date.	
II.B.4.a	Commence drills in all Nuc Ops facilities per schedules defined in facility drill programs	Ops Mgrs	5/97		

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.B.5	**Drill Program Assessment**				
II.B.5.a	Commence observation of the execution of drills in DSO and provide feedback to facility and line managers. Use lessons learned through observation to improve drill guides and other implementation tools.	Org Mgr assisted by Drill Pgm Manager	1/96	Complete; this is a continuous process that is built into the Drill Program.	
II.C	**Issues Management**				
II.C.1	**Issues Management Standards**				
II.C.1.a	Establish an Issues Manager for the Y-12 LMES Organization	Vice President for Defense and Manufacturing	12/95	Complete	C-3-DUO
II.C.1.b	Establish process to assign responsibility for distribution and follow-up of DOE Monthly Assessment Report with the YSO.	Vice President for Defense and Manufacturing	12/95	Complete	C-3-DUO
II.C.2	**Issues Management Tools**				
II.C.2.a	Revise LMES Corrective Action Planning procedures to prohibit the development of an action plan as the only action of a CAP task	LMES Corrective Actions Manager	3/96		F-2.4-1
II.C.2.b	Revise the CAP for the DOE RA finding in RSS MG3-2 to comply with the revised LMES Corrective Action Planning procedures.	DSO Manager	1/96	Complete	F-2.4-1
II.C.2.c	Review/Approve the CAP for the DOE RA finding in RSS MG3-2.	YSO	3/96		F-2.4-1

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.C.3	**Issues Management Training**				
II.C.3.a	Provide a briefing to Y-12 organization managers that outlines the process for responding to the DOE Monthly Assessment Report and emphasizes the importance of understanding the programmatic issues and addressing the issueswith follow-up.	Y-12 Issues Manager	4/96		C-1-3
II.C.3.b	Provide a briefing to line and facility managers that outlines the process for responding to the DOE Monthly Assessment Report and emphasizes the importance of understanding the programmatic issues and addressing the issueswith follow-up.	Org. Managers	6/96		C-1-3
II.C.4	**Issues Management Implementation - No new action**				
II.C.5	**Issues Management Assessment**				
II.C.5.a	Evaluate effectiveness of the corrective action process at Y-12, including the issues prioritization process.	Y-12 Issues Manager	8/96		C-1-3
II.C.5.b	Revise corrective action process and procedures as needed based on above assessment.	Y-12 Issues Manager	12/96		C-1-3

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.D	**RADIOLOGICAL CONTROL** [Note: This section of the Plan is formatted around the root causes identified for the Rad Con deficencies.]				
II.D.1	**Root Cause: Management System; Standards, Policies, or Administrative Controls Not Used.**				
II.D.1.a	Establish and implement general requirements for the use of anti-contamination clothing.	RADCON Mgr	12/95	Completed 12/7/95, implemented via Y70-124 and Y70-122.	C-2/SUPP-2 C-2 QE-5
II.D.1.b	Develop a Required Reading for the Y-12 Plant that consist of recent plant wide RadCon deficiencies.	RADCON Mgr	02/96		C-2 SUPP-2 C-2 DUO-2
II.D.1.c	Incorporate RadCon deficiencies II.D.1.b into Radiological Worker II training.	LMES Trng Mgr	06/96		C-2 SUPP-2 C-2 DUO-2
II.D.1.d	Develop Required Reading for RadCon Department personnel that consists of recent deficiencies in radiological control practices.	RADCON Mgr	02/96		C-2 SUPP-2 C-2 DUO-2 C-2 SUPP-5
II.D.1.e	Incorporate RadCon deficiencies contained in Required Readings II.D.1.b and II.D.1.d into the Radiological Control Technician (RCT) Continuing Training Program.	RADCON Mgr	03/96		C-2 SUPP-2 C-2 DUO-2 C-2 SUPP-5
II.D.1.f	Conduct refresher Radiological Worker II training for all radiological workers.	LMES Trng Mgr	12/97		C-2 SUPP-2 C-2 DUO-2

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.D.2	**Root Cause: Management System; Standards, Policies, or Administrative Controls (SPAC) Less Than Adequate; No SPAC**				
II.D.2.a	Obtain representative samples of vegetation from outdoor contamination areas and analyze for contamination.	RADCON Mgr	04/96		C-2 DUO-2
II.D.2.b	Issue appropriate recommendation to line organizations after obtaining sample results.	RADCON Mgr	05/96		C-2 DUO-2
II.D.2.c	RadCon Manager will make formal presentation to senior management concerning status of uncontained outdoor radioactive storage area. Based on their direction, risks, and available funds, a remediation/mitigation plan will be developed.	RADCON Mgr	07/96		C-2 DUO-2
II.D.2.d	Revise and implement procedure Y60-66-RC-600, "Radiological Control Surveillance Program".	RADCON Mgr	12/95	Completed 12/01/95	C-2 DUO-2 C-2 SUPP-2
II.D.3	**Root Cause: Management System; Corrective Action Not Yet Implemented**				
II.D.3.a	Hire additional Radiological Control Technicians to meet RadCon requirements.	RADCON Mgr	09/96		C-2 DUO-2
II.D.3.b	Relocate key managers responsible for oversight of RadCon program implementation to the protected area to improve RadCon/Line Organization interaction.	Deputy Mgr for Health, Safety, Environment & Accoutability Org.	06/96		C-2 DUO-2 C-2 SUPP-2

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.E	**Maintenance**				
II.E.1	**Maintenance Standards - No New Actions**				
II.E.2	**Maintenance Tools**				
II.E.2.a	Publish "Guideline to Good Practices for Y-12 Maintenance" for maintenance groups, implementing DOE 4330.4B ch-2, and applicable chapters of DOE 5480.19.	Maintenance Mgr	3/96	draft in review	C-1-DUO-2 C-2-DUO-3 C-2-QE-1
II.E.2.b	Review FMO data to identify additional Performance Indicators needed for implementation of CONOPS. (II.F.2.c)	Maintenance Mgr	7/96		
II.E.2.c	Update Maintenance Performance Indicators to include COO elements. (II.F.2.b)	Maintenance Mgr	8/96		
II.E.2.d	Revise work control procedures as needed to fully implement Guidelines to Good Practices For Y-12 Maintenance.	Maintenance Mgr	12/96	ongoing	C-1-DUO-2 C-2-DUO-3 C-2-QE-1
II.E.3	**Maintenance Training**				
II.E.3.a	Develop lesson plan for each element of "Guidelines to Good Practices for Y-12 Maintenance".	Maintenance Mgr	6/96	working	C-1-DUO-2 C-2-QE-1
II.E.3.b	Conduct training on the elements of "Guidelines to Good Practices for Y-12 Maintenance".	Maintenance Mgr	12/96		C-1-DUO-2 C-2-DUO-3 C-2-QE-1

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.E.4	**Maintenance Implementation**				
II.E.4.a	Complete the Preventive Maintenance Program improvement project. The project validates PM requirements, eliminating low value maintenance and reducing overdue backlog.	Maintenance Mgr	6/96	ongoing	C-1/DUO-2
II.E.5	**Maintenance Assessment**				
II.E.5.a	Assess the implementation of Guidelines to Good Practices For Y-12 Maintenance to identify areas of noncompliance.	Maintenance Mgr	3/97		C-1-DUO-2 C-2-DUO-3 C-2-QE-1
II.E.5.b	Resolve resulting issues (II.E.5.a)	Maintenance Mgr	Asmnt rpt + 1 month		C-1-DUO-2 C-2-QE-1
II.F	**Occurrence Reporting Program**				
II.F.1	**Occurrence Reporting Standards**				
II.F.1.a	Revise Procedure Y60-161 to include all of the categorization criteria listed in DOE 232.1.	OR Mgr	1/96		C-1-4
II.F.1.b	Disseminate to the Facility Managers/Designees a memorandum which discusses the importance of reporting through the DOE 232.1 system items which are collectively significant.	OR Mgr	2/96		C-1-4
II.F.1.c	DOE approve revised procedure Y10-161	YSO	3/96		F-3.2.2
II.F.2	**Occurrence Reporting Tools - no new action**				

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.F.3	**Occurrence Reporting Training**				
II.F.3.a	Conduct an awareness session for Facility Managers or their designees to the DOE 232.1 Categorization Criteria.	OR Mgr	2/96		C-1-4
II.F.4	**Occurrence Reporting Implementation - no new action**				
II.F.5	**Occurrence Reporting Assessment**				
II.F.5.a	Conduct a surveillance to assess compliance with procedural categorization requirements of Y60-161.	OR Mgr	7/96		C-1-4
II.G	**Fire Protection**				
II.G.1	**Fire Protection Standards**				
II.G.1.a	Develop a procedure for fire extinguisher inspection to be in compliance with NFPA standards.	Fire Chief	3/97		C-2/SUPP-1
II.G.1.b	Develop and implement command media or procedure to document that fire extinguishers will be controlled at Y-12 through the Fire Protection Program.	Fire Chief	9/96		C-2/SUPP-1
II.G.2	**Fire Protection Tools**				
II.G.2.a	Develop a bar code system into a new fire inspection and maintenance information system for identifying and locating fire extinguishers.	Fire Chief	3/97		C-2/SUPP-1

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.G.2.b	Develop and implement command media or procedure (to include a records checklist) for monthly visual inspection of fire extinguishers for Building Managers.	Fire Chief	9/96		C-2/SUPP-1
II.G.2.c	Procure necessary equipment (bar code readers, etc.) to support program improvements	Fire Chief	2/97		C-2/SUPP-1
II.G.2.d	Develop required reading for fire extinguishers education at Y-12.	Fire Chief	3/97		C-2/SUPP-1
II.G.3	**Fire Protection Training**				
II.G.3.a	Train Fire Personnel to revised procedure for annual maintenance of fire extinguishers.	Fire Chief	5/97		C-2/SUPP-1
II.G.3.b	Train Facility Managers on revised procedure for monthly visual inspection of fire extinguishers.	Fire Chief	5/97		C-2/SUPP-1
II.G.4	**Fire Protection Implementation**				
II.G.4.a	Implement bar code ID system.	Fire Chief	9/97		C-2/SUPP-1
II.G.4.b	Commence scheduled surveillances of fire extinguishers	Org Mgrs	6/97		C-2/SUPP-1
II.G.5	**Fire Protection Assessment**				
II.G.5.a	Assess effectiveness of monthly surveillances.	Fire Chief	12/97		C-2/SUPP-1
II.G.5.b	Resolve resulting issues. (II.H.5.b)	Fire Chief	1/98		C-2/SUPP-1

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.H	**Configuration Management (CM)** This section is organized differently from the above. The section is based on the draft CM Plan Y/ES-110. Not all CM Plan elements are included in this CAP.				
II.H.1	Establish a Configuration Management Program Team (CMPT) to oversee and direct installation of configuration management for the Y-12 Plant.	Vice President for Defense and Manufacturing	3/96		
II.H.2	Develop a general schedule for the activities contained within the CM program Plan, Y/ES-110.	CM Program Team	4/96		
II.H.3	Develop guidance for performing ongoing assessments of CM processes.	CM Program Manager	7/96		
II.I	**Document Control**				
II.I.1	**Document Control Standards - no new action**				
II.I.2	**Document Control Tools**				
II.I.2.a	Revise procedure Y10-102 to incorporate Lessons Learned from experience during resumption of NucOps, including concerns identified during the 94-4 Task 4 Assessment	NucOps Procedures Mgr	1/96		C-3-1
II.I.3	**Document Control Training**				
II.I.3.a	Identify appropriate personnel to receive training on revised procedures Y10-102 and Y10-103.	NucOps Procedures Mgr	3/96		C-3-1
II.I.3.b	Implement training on revised procedures Y10-102 and Y10-103.	NucOps Procedures Mgr	4/96		C-3-1

CAP ID #	Description	Responsibility	Due Date	Status	Assessment ID #
II.I.4	**Document Control Implementation**				
II.I.4.a	Pilot a Document Control process in EUO based upon the requirements of Y10-189.	EUO Resumption Mgr	10/96		
II.I.4.b	Evaluate results of EUO Pilot; Resolve resulting issues	NucOps Procedures Mgr	7/97		C-3-1
II.I.4.c	Implement Y10-189 in remaining NucOps, support, balance of plant areas	COO Mgr	3/98		C-3-1
II.I.5	**Document Control Assessment**				
II.I.5.a	Incorporate assessment elements for document control intoConOps management assessment tools for the EUO Pilot (I.E.2)	COO Mgr	10/96		
II.I.5.b	Incorporate assessment elements for document control intoConOps management assessment tools for remaining NucOps, support, balance of plant areas (I.E.2)	COO Mgr	3/98		

KEY TO TASK 4 CAP ELEMENTS

CAP ID - The Action Number as reported to DOE in a work-breakdown structure format (requested by DOE-HQ). This number will be included in the ESAMS Action Description so that a direct correlation will be maintained between the ESAMS Action ID (random number) and the WBS.

DESCRIPTION - Description of the Action to be taken. Actions should be closeable.

RESPONSIBILITY - Manager who is responsible to complete the Action and close it using the Y-12 corrective action management process.

DUE - Due date for Action closure.

STATUS - Status of Action.

ACTION FOR FINDING NUMBER - This field provides a correlation between the Findings and Concerns listed in the Task 4 Report and the planned corrective actions.
Within the major functional areas of the CAP (e.g., Conduct of Operations, Radiological Control, Fire Protection, etc.) The corrective actions are organized in the following fashion:

```
X      Functional Area

X.1    Program Standards   <<<==============
                                            |
X.2    Program Tools                        |
                                   Lessons Learned
X.3    Program Training                     |
                                            |
X.4    Program Assessments  >>>==============
```

" Four potential CSA violations were found in 9201-5, third floor lay down area." (C-2/DUO-1)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
	Chapter 16 Operations Procedures			
1.C.2.c	Conduct line manager CONOPS implementation training for support organizations.	Mentors Program Mgr	9/96	
I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices
I.C.5.d.3	Transition Ongoing Floor Training implementation to all Y-12 areas to remaining NucOps and support organizations.	Y-12 Trng Mgr	6/97	
I.D.3.2	Implement RFA # 147 (DUO)	Org Mgr	3/96	
I.E.3.d	Train nuclear operations and support line management on performance based assessment techniques.	Y-12 Trng Manager assisted by Mentors	10/96	

"Fire Department records of fire extinguishers are less than adequate." (C-2/Support-1)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
II.G	**Fire Protection**			
II.G.1	**Fire Protection Standards**			
II.G.1.a	Develop a procedure for fire extinguisher inspection to be in compliance with NFPA standards.	Fire Chief	3/97	
II.G.1.b	Develop and implement command media or procedure to document that fire extinguishers will be controlled at Y-12 through the Fire Protection Program.	Fire Chief	9/96	
II.G.2	**Fire Protection Tools**			
II.G.2.a	Develop a bar code system into a new fire inspection and maintenance information system for identifying and locating fire extinguishers.	Fire Chief	3/97	
II.G.2.b	Develop and implement command media or procedure (to include a records checklist) for monthly visual inspection of fire extinguishers for Building Managers.	Fire Chief	9/96	

II.G.2.c	Procure necessary equipment (bar code readers, etc.) to support program improvements	Fire Chief	2/97	
II.G.2.d	Develop required reading for fire extinguishers education at Y-12.	Fire Chief	3/97	
II.G.3	**Fire Protection Training**			
II.G.3.a	Train Fire Personnel to revised procedure for annual maintenance of fire extinguishers.	Fire Chief	5/97	
II.G.3.b	Train Facility Managers on revised procedure for monthly visual inspection of fire extinguishers.	Fire Chief	5/97	
II.G.4	**Fire Protection Implementation**			
II.G.4.a	Implement bar code ID system.	Fire Chief	9/97	
II.G.4.b	Commence scheduled surveillances of fire extinguishers	Org Mgrs	6/97	
II.G.5	**Fire Protection Assessment**			
II.G.5.a	Assess effectiveness of monthly surveillances.	Fire Chief	12/97	
II.G.5.b	Resolve resulting issues. (II.H.5.b)	Fire Chief	1/98	

"Bi-monthly inventories have not been completed for 9204-2E since July 1995." (C-2/9204-2E-3)

I.C.5.a.2	Develop a Y-12 manager (supervisor) training program geared to COO responsibilities, rigor &formality, attention to issues, manager involvement, goals & motivations, and unity & communication.	Trng Mgr assisted by PEG and Mentors	5/96	
I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices
1.C.3	Prepare operator CONOPS implementation training	Mentors Program Mgr	9/96	
1.C.4.a	Conduct operator CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	10/96	
1.C.4.b	Conduct operator CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr	10/96	
1.C.4.c	Conduct operator CONOPS implementation training for support organizations.	Mentors Program Mgr	11/96	
1.C.4.d	Conduct operator CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	6/97	

I.C.5.a.1	Develop a Y-12 manager (supervisor) training program geared to COO responsibilities, rigor &formality, attention to issues, manager involvement, goals & motivations, and unity & communication.	Trng Mgr assisted by PEG and Mentors	5/96	
I.C.5.a.3	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices
I.E.1.a	Develop standards for a site-wide CONOPS assessment program (based on SRS Management Self-Assessment Program, including lessons learned from the DSO and the EUO assessment programs)..	Y-12 COO Manager assisted by Nuc Ops Mentors	6/96	
I.E.1.b	Develop performance indicators (PIs) for measuring COO implementation progress and establish periodicity for evaluating results.	COO Mgr	6/96	
I.E.1.c	Conduct independent assessment to evaluate the level of COO implementation in NucOps including support organizations.	LMES Performance Evaluation Group (PEG)	11/96	
I.E.1.f	Conduct sitewide independent assessment to evaluate the level of COO implementation.	Y-12 Qulity Systems Manager	2/98	
I.E.3.d	Train nuclear operations and support line management on performance based assessment techniques.	Y-12 Trng Manager assisted by Mentors	10/96	

"The self-assessment program in 9204-2E lacks management participation and is not performance based." (C-2/9204-2E-5)

E.1.a	Develop standards for a site-wide CONOPS assessment program (based on SRS Management Self-Assessment Program, including lessons learned from the DSO and the EUO assessment programs)..	Y-12 COO Manager assisted by Nuc Ops Mentors	6/96	
E.1.b	Develop performance indicators (PIs) for measuring COO implementation progress and establish periodicity for evaluating results.	COO Mgr	6/96	
E.1.c	Conduct independent assessment to evaluate the level of COO implementation in NucOps including support organizations.	LMES Performance Evaluation Group (PEG)	11/96	
E.2.b	Develop generic cards or checklists for use during management assessments. As appropriate, assessment should include: - Elements of 5480.19 - Housekeeping - Compliance with CSAs - Facility Condition - Inspection of Locks and tags for proper placement - deficient equipment tags in place - Rad Con Compliance	COO Mgr assisted by SMEs	9/96	

I.E.3.b	Implement training for revised Y60-028 for Organization Managers, Functional managers, Shift Managers, STAs, etc.	Y-12 Trng Manager assisted by Mentors	3/97	
I.E.3.d	Train nuclear operations and support line management on performance based assessment techniques.	Y-12 Trng Manager assisted by Mentors	10/96	
I.E.4.b	Organizations complete initial conduct of operations assessments in resumed NUCOPS organizations.	Y-12 Org Mgrs	12/96	

"There are no maintenance procedures in place or scheduled to be developed to support operations or equipment in 9215/9204-2E." (C-1/DUO-2)

II.E.2.a	Publish "Guideline to Good Practices for Y-12 Maintenance" for maintenance groups, implementing DOE 4330.4B ch-2, and applicable chapters of DOE 5480.19.	Maintenance Mgr	3/96	draft in review
II.E.2.d	Revise work control procedures as needed to fully implement Guidelines to Good Practices For Y-12 Maintenance.	Maintenance Mgr	12/96	ongoing
II.E.3.a	Develop lesson plan for each element of "Guidelines to Good Practices for Y-12 Maintenance" .	Maintenance Mgr	6/96	working

II.E.3.b	Conduct training on the elements of "Guidelines to Good Practices for Y-12 Maintenance" .	Maintenance Mgr	12/96	
II.E.5.a	Assess the implementation of Guidelines to Good Practices For Y-12 Maintenance to identify areas of noncompliance.	Maintenance Mgr	3/97	
II.E.5.b	Resolve resulting issues (II.E.5.a)	Maintenance Mgr	Asmnt rpt + 1 month	

"A number of radiological control deficiencies were noted." (C-2/DUO-2)

II.D.1.b	Develop a Required Reading for the Y-12 Plant that consist of recent plant wide RadCon deficiencies.	RADCON Mgr	02/96	
II.D.1.c	Incorporate RadCon deficiencies II.D.1.b into Radiological Worker II training.	LMES Trng Mgr	06/96	
II.D.1.d	Develop Required Reading for RadCon Department personnel that consists of recent deficiencies in radiological control practices.	RADCON Mgr	02/96	
II.D.1.e	Incorporate RadCon deficiencies contained in Required Readings II.D.1.b and II.D.1.d into the Radiological Control Technician (RCT) Continuing Training Program.	RADCON Mgr	03/96	

II.D.1.f	Conduct refresher Radiological Worker II training for all radiological workers.	LMES Trng Mgr	12/97	
II.D.2.a	Obtain representative samples of vegetation from outdoor contamination areas and analyze for contamination.	RADCON Mgr	04/96	
II.D.2.b	Issue appropriate recommendation top line organizations after obtaining sample results.	RADCON Mgr	05/96	
II.D.2.c	RadCon Manager will make formal presentation to senior management concerning status of uncontained outdoor radioactive storage area. Based on their direction, risks, and available funds, a remediation/mitigation plan will be developed.	RADCON Mgr	07/96	
II.D.2.d	Revise and implement procedure Y60-66-RC-600, "Radiological Control Surveillance Program".	RADCON Mgr	12/95	Completed 12/01/95
II.D.3.a	Hire additional Radiological Control Technicians to meet RadCon requirements.	RADCON Mgr	09/96	
II.D.3.b	Relocate key managers responsible for oversight of RadCon program implementation to the protected area to improve RadCon/Line Organization interaction.	ES&H Mgr	06/96	

"Many deficiencies were observed in radiological control practices." (C-2/Supp-2)

II.D.1.a	Establish and implement general requirements for the use of anti-contamination clothing.	RADCON Mgr	12/95	Completed 12/7/95, implemented via Y70-124 and Y70-122.
II.D.1.b	Develop a Required Reading for the Y-12 Plant that consist of recent plant wide RadCon deficiencies.	RADCON Mgr	02/96	
II.D.1.c	Incorporate RadCon deficiencies II.D.1.b into Radiological Worker II training.	LMES Trng Mgr	06/96	
II.D.1.d	Develop Required Reading for RadCon Department personnel that consists of recent deficiencies in radiological control practices.	RADCON Mgr	02/96	
II.D.1.e	Incorporate RadCon deficiencies contained in Required Readings II.D.1.b and II.D.1.d into the Radiological Control Technician (RCT) Continuing Training Program.	RADCON Mgr	03/96	
II.D.1.f	Conduct refresher Radiological Worker II training for all radiological workers.	LMES Trng Mgr	12/97	
II.D.2.d	Revise and implement procedure Y60-66-RC-600, "Radiological Control Surveillance Program".	RADCON Mgr	12/95	Completed 12/01/95

II.D.3.b	Relocate key managers responsible for oversight of RadCon program implementation to the protected area to improve RadCon/Line Organization interaction.	ES&H Mgr	06/96	

"Shift manager and shift technical advisor qualification process is not documented." (C-1/T&D-1)

II.A	**Training Program**			
II.A.1	**Training Program Standards**			
II.A.1.a	Assign a site training coordinator or Training Manager	Deputy Vice President for Defense and Mfg.	4/96	
II.A.1.b	Develop and publish a Training Manual that defines sitewide training roles, responsibilities, and requirements.	Trng Mgr	12/96	
II.A.2	**Training Program Tools**			
II.A.2.a	Develop/Upgrade Qualification Programs for qualified positions (non-Nuclear Operations and Support) including facility specific training/organization.	Trng Mgr assisted by Org. Managers	9/97	
II.A.3	**Training Program Training**			

II.A.3.a	Brief Nuclear Operations and Support Organization Line Management on Training Program	Trng Mgr	2/97	
II.A.3.b	Train Organization Training Managers on Training Program	Trng Mgr	4/97	
II.A.4	**Training Program Implementation**			
II.A.4.a	Qualify NucOps Personnel (excluding EUO) for minimum staffing per the Facility Safety Analysis Reports.	Org Mgrs	5/96	
II.A.4.b	Establish a Training Work Group (TWG) to track and execute the TIM commitments and enhance consistency across the site for training implementation	Trng Mgr	1/96	Complete
II.A.5	**Training Program Assessment**			
II.A.5.a	Develop and Execute Training Program Assessments including programmatic and compliance and training effectiveness.	Trng Mgr	6/97	
II.A.5.b	Execute training activity assessments including student feedback and management oversight.	Org Trng Mgrs	6/97	

"Personnel serving as shift manager and shift technical advisor are not formally qualified." (C-2/T&D-2)

II.A	**Training Program**			
II.A.1	**Training Program Standards**			
II.A.1.a	Assign a site training coordinator or Training Manager	Deputy Vice President for Defense and Mfg.	4/96	
II.A.1.b	Develop and publish a Training Manual that defines sitewide training roles, responsibilities, and requirements.	Trng Mgr	12/96	
II.A.2	**Training Program Tools**			
II.A.2.a	Develop/Upgrade Qualification Programs for qualified positions (non-Nuclear Operations and Support) including facility specific training/organization.	Trng Mgr assisted by Org. Managers	9/97	
II.A.3	**Training Program Training**			
II.A.3.a	Brief Nuclear Operations and Support Organization Line Management on Training Program	Trng Mgr	2/97	
II.A.3.b	Train Organization Training Managers on Training Program	Trng Mgr	4/97	

II.A.4	**Training Program Implementation**			
II.A.4.a	Qualify NucOps Personnel (excluding EUO) for minimum staffing per the Facility Safety Analysis Reports.	Org Mgrs	5/96	
II.A.4.b	Establish a Training Work Group (TWG) to track and execute the TIM commitments and enhance consistency across the site for training implementation	Trng Mgr	1/96	Complete
II.A.5	**Training Program Assessment**			
II.A.5.a	Develop and Execute Training Program Assessments including programmatic and compliance and training effectiveness.	Trng Mgr	6/97	
II.A.5.b	Execute training activity assessments including student feedback and management oversight.	Org Trng Mgrs	6/97	

"Continuing training is not being conducted in accordance with Chapter 12 of the Nuclear Operations Conduct of Operations manual." (C-2/T&D-1)

II.A.1.a	Assign a site training coordinator or Training Manager	Deputy Vice President for Defense and Mfg.	4/96	
I.C.5.a.3	Develop a Standard for the Ongoing Floor Training Program.that describes roles and responsibilities, use of lessons learned, and the requirements for implementation of ongoing floor training in nuclear operations and support organizations.	Y-12 Trng Mgr	6/96	
I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices
I.C.5.c.2	Train remaining Line Mgrs & Personnel who are responsible for conducting Ongoing Floor Training	Y-12 Trng Mgr	4/97	
I.C.5.d.3	Transition Ongoing Floor Training implementation to all Y-12 areas to remaining NucOps and support organizations.	Y-12 Trng Mgr	6/97	

"Training is not effective in helping operators retain important information." (C-2/T&D-4)

II.A.1.a	Assign a site training coordinator or Training Manager	Deputy Vice President for Defense and Mfg.	4/96	
I.C.5.a.3	Develop a Standard for the Ongoing Floor Training Program.that describes roles and responsibilities, use of lessons learned, and the requirements for implementation of ongoing floor training in nuclear operations and support organizations.	Y-12 Trng Mgr	6/96	
I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices
I.C.5.c.2	Train remaining Line Mgrs & Personnel who are responsible for conducting Ongoing Floor Training	Y-12 Trng Mgr	4/97	
I.C.5.d.3	Transition Ongoing Floor Training implementation to all Y-12 areas to remaining NucOps and support organizations.	Y-12 Trng Mgr	6/97	

"Continuing Training is not being conducted in accordance with the Nuclear Operations Conduct of Operations manual." (C-2/T&D-8)

II.A.1.a	Assign a site training coordinator or Training Manager	Deputy Vice President for Defense and Mfg.	4/96	
I.C.5.a.3	Develop a Standard for the Ongoing Floor Training Program.that describes roles and responsibilities, use of lessons learned, and the requirements for implementation of ongoing floor training in nuclear operations and support organizations.	Y-12 Trng Mgr	6/96	
I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices
I.C.5.c.2	Train remaining Line Mgrs & Personnel who are responsible for conducting Ongoing Floor Training	Y-12 Trng Mgr	4/97	
I.C.5.d.3	Transition Ongoing Floor Training implementation to all Y-12 areas to remaining NucOps and support organizations.	Y-12 Trng Mgr	6/97	

"Occurrence reporting does not meet DOE Order 5000.3B requirements." (C-1-4)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
II.F.1.a	Revise Procedure Y60-161 to include all of the categorization criteria listed in DOE 232.1	OR Mgr	1/96	
II.F.1.b	Disseminate to the Facility Managers/Designees a memorandum which discusses the importance of reporting through the DOE 232.1 system items which are collectively significant.	OR Mgr	2/96	
II.F.3.a	Conduct an awareness session for Facility Managers or their designees to the DOE 232.1 Categorization Criteria..	OR Mgr	2/96	
II.F.5.a	Conduct a surveillance to assess compliance with procedural categorization requirements of Y60-161.	OR Mgr	7/96	

"The corrective actions taken to correct the root causes of the September 1994 CSA incident have not been effective in all nuclear operations areas." (C-3-1)

1.C.3	Prepare operator CONOPS implementation training	Mentors Program Mgr (Y-12 Trng Mgr)	9/96	
1.C.4.a	Conduct operator CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	10/96	
1.C.4.b	Conduct operator CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr (Y-12 Trng Mgr)	10/96	
1.C.4.c	Conduct operator CONOPS implementation training for support organizations.	Mentors Program Mgr	11/96	
1.C.4.d	Conduct operator CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	6/97	
I.C.5.a.1	Conduct an initial awareness training session for Y-12 Organization Managers that emphasizes senior management's expectations for conduct of operations.	Deputy V.P. for Defense and Mfg.	3/96	
I.C.5.a.2	Develop a Y-12 manager (supervisor) training program geared to COO responsibilities, rigor &formality, attention to issues, manager involvement, goals & motivations, and unity & communication.	Trng Mgr assisted by PEG and Mentors	5/96	

I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices
I.E.1.a	Develop standards for a site-wide CONOPS assessment program (based on SRS Management Self-Assessment Program, including lessons learned from the DSO and the EUO assessment programs)..	Y-12 COO Manager assisted by Nuc Ops Mentors	6/96	
I.E.1.b	Develop performance indicators (PIs) for measuring COO implementation progress and establish periodicity for evaluating results.	COO Mgr	6/96	
I.E.1.c	Conduct independent assessment to evaluate the level of COO implementation in NucOps including support organizations.	LMES Performance Evaluation Group (PEG)	11/96	
I.E.1.f	Conduct sitewide independent assessment to evaluate the level of COO implementation.	Y-12 Qulity Systems Manager	2/98	
I.E.3.c	Develop training for line management on performance based assessment techniques	Y-12 Trng Manager assisted by Mentors	8/96	
I.E.3.d	Train nuclear operations and support line management on performance based assessment techniques.	Y-12 Trng Manager assisted by Mentors	10/96	

II.I.2.a	Revise procedure Y10-102 to incorporate Lessons Learned from experience during resumption of NucOps, including concerns identified during the 94-4 Task 4 Assessment	NucOps Procedures Mgr	1/96	
II.I.3.a	Identify appropriate personnel to receive training on revised procedures Y10-102 and Y10-103.	NucOps Procedures Mgr	3/96	
II.I.3.b	Implement training on revised procedures Y10-102 and Y10-103.	NucOps Procedures Mgr	4/96	
II.I.4.b	Evaluate results of EUO Pilot; Resolve resulting issues	NucOps Procedures Mgr	7/97	
II.I.4.c	Implement Y10-189 in remaining NucOps, support, balance of plant areas	COO Mgr	3/98	

"Conduct of Operations performance for support group personnel not assigned to Nuclear Operations is deficient." (C-1/Supp-1)

I.A.4.a	Issue a Draft Site CONOPS Manual for review and comment. The manual define the site organization and establish conduct of operations standards. The manual will be supported by new or revised LMES procedures for those chapters requiring procedural discipline in the execution of the standards.	COO Mgr	3/96	Start 1/96
I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
1.C.2.c	Conduct line manager CONOPS implementation training for support organizations.	Mentors Program Mgr	9/96	
1.C.2.d	Conduct line manager CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	3/97	
1.C.4.c	Conduct operator CONOPS implementation training for support organizations.	Mentors Program Mgr	11/96	
1.C.4.d	Conduct operator CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	6/97	
I.C.5.a.4	Commence ongoing training for Nuclear Ops and Support Line Mgrs on principles of COO and COO implementation in their facilities.	Y-12 Nuclear Operations and Plant Managers	8/96	After completion of all organization applicability matrices

I.C.5.d.3	Transition Ongoing Floor Training implementation to all Y-12 areas to remaining NucOps and support organizations.	Y-12 Trng Mgr	6/97	

"The Plant Conduct of Operations Matrices of Applicability and Implementation Plan has not yet been developed as required by DOE Order 5480.19." (C-1-1)

I.A.1.a	Site: Submit Site CONOPS Applicability Matrix to DOE	COO Mgr	2/96	draft in review
I.A.1.b	DSO / DUO (resumed): Submit CONOPS Applicability Matrix to DOE	Resumed Mgr	3/96	
I.A.1.c	EUO (non-resumed): Submit CONOPS Applicability Matrix to DOE	Non-Resumed Mgr	3/96	
I.A.1.d	Support: Submit CONOPS Applicability Matrix to DOE	Plant Mgr	3/96	
I.A.1.e	Balance of Plant: Submit CONOPS Applicability Matrix to DOE	Plant Mgr	6/96	

"The Nuclear Operations Conduct of Operations Manual chapter on rounds does not incorporate the requirements to inspect for correct placement of tags and locks." (C-1-5)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 2 Shift Routines			

"Line management is not conducting routine Conduct of Operations assessments as required by the Y-12 Plant Management Assessment Program (Y60-028) requirements and DOE Order 5480.19." (C-1-2)

I.A.4.a	Issue a Draft Site CONOPS Manual for review and comment. The manual define the site organization and establish conduct of operations standards. The manual will be supported by new or revised LMES procedures for those chapters requiring procedural discipline in the execution of the standards.	COO Mgr	3/96	Start 1/96
I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
I.E.1.a	Develop standards for a site-wide CONOPS assessment program (based on SRS Management Self-Assessment Program, including lessons learned from the DSO and the EUO assessment programs)..	Y-12 COO Manager assisted by Nuc Ops Mentors	6/96	

I.E.2.a	Revise Y60-028 to incorporate assessment requirements for 5480.19 and to incorporate the new Standard.	Quality Organization Mgr.	9/96	
I.E.2.b	Develop generic cards or checklists for use during management assessments. As appropriate, assessment should include: - Elements of 5480.19 - Housekeeping - Compliance with CSAs - Facility Condition - Inspection of Locks and tags for proper placement - deficient equipment tags in place - Rad Con Compliance	COO Mgr assisted by SMEs	9/96	
I.E.3.b	Implement training for revised Y60-028 for Organization Managers, Functional managers, Shift Managers, STAs, etc.	Y-12 Trng Manager assisted by Mentors	3/97	
I.E.4.a	Submit assessment plans and schedules for Nuclear Operations and Support Organizations per revised Y60-028.	Y-12 Org Mgrs	5/97	
I.E.4.b	Organizations complete initial conduct of operations assessments in resumed NUCOPS organizations.	Y-12 Org Mgrs	12/96	

I.E.4.c	Organizations complete initial conduct of operations assessments in non-resumed NUCOPS organizations.	Y-12 Org Mgrs	11/96	
I.E.4.d	Organizations complete initial conduct of operations assessments in support organizations.	Y-12 Org Mgrs	6/97	
I.E.4.e	Organizations complete initial conduct of operations assessments in BOP organizations.	Y-12 Org Mgrs	9/97	
I.E.4.f	Complete an independent assessment of compliance with Y60-028.	Quality Organization Manager	12/97	
I.E.4.g	Revise Y60-028 and guidance based on independent assessment results.	Quality Organization Manager	2/98	

"Performance goals as required by DOE Order 5480.19 and the Nuclear Operations Conduct of Operations Manual are not currently being maintained." (C-1-8)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 11 Logkeeping			
I.B.4	Obtain and review examples of CONOPS performance indicators used at other site, such as Rocky Flats, SRS, Pantex.	COO Mgr	2/96	
I.B.5	Define performance indicators (PIs) for the site. Establish performance indicators reported to YSO.	COO Mgr	5/96	

1.C.2.a	Conduct line manager CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	8/96	

"Housekeeping in 9201-5 has deteriorated to the point that personnel making rounds were insensitive to safety concerns." (C-2/DUO-6)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
	Chapter 2 Shift Routines			

"The lockout/tagout system in building 9720-5 is not periodically inspected as required by DOE Order 5480.19, Chapter IX." (C-2/9720-5-1)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
	Chapter 2 Shift Routines			
	Chapter 9 Lockout /Tagout			

"Some electrical controller doors are not routinely fastened after maintenance." (C-2/DUO-3)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
II.E.2.a	Publish "Guideline to Good Practices for Y-12 Maintenance" for maintenance groups, implementing DOE 4330.4B ch-2, and applicable chapters of DOE 5480.19.	Maintenance Mgr	3/96	draft in review
II.E.2.d	Revise work control procedures as needed to fully implement Guidelines to Good Practices For Y-12 Maintenance.	Maintenance Mgr	12/96	ongoing
II.E.3.a	Develop lesson plan for each element of "Guidelines to Good Practices for Y-12 Maintenance" .	Maintenance Mgr	6/96	working
II.E.3.b	Conduct training on the elements of "Guidelines to Good Practices for Y-12 Maintenance" .	Maintenance Mgr	12/96	
II.E.5.a	Assess the implementation of Guidelines to Good Practices For Y-12 Maintenance to identify areas of noncompliance.	Maintenance Mgr	3/97	

"Material conditions in the equipment spaces of 9998 and on the roof of 9998 were poor." (C-2/DUO-4)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
I.B.3	Assign Operations and area coordinators for each Zone/Facility.	Plant Mgr NucOps Mgr	8/96	
1.C.2.a	Conduct line manager CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	8/96	

"Daily round sheets were not reviewed weekly as required." (C-2/DUO-5)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
	Chapter 2 Shift Routines			
	Chapter 11 Logkeeping			

1.C.4.a	Conduct operator CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	10/96	

"The public address system is not used effectively." (C-2/EUTO-1)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 1 Owner/Tenant Roles & Responsibilities			
	Chapter 4 Communications			
1.C.2.a	Conduct line manager CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	8/96	
1.C.2.b	Conduct line manager CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr	9/96	
1.C.2.c	Conduct line manager CONOPS implementation training for support organizations.	Mentors Program Mgr	9/96	
1.C.2.d	Conduct line manager CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	3/97	

1.C.4.a	Conduct operator CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	10/96	
1.C.4.b	Conduct operator CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr	10/96	
1.C.4.c	Conduct operator CONOPS implementation training for support organizations.	Mentors Program Mgr	11/96	
1.C.4.d	Conduct operator CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	6/97	

"Voice communications are informal and not precise." (C-2/EUTO-2)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 4 Communications			
1.C.2.a	Conduct line manager CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	8/96	
1.C.2.b	Conduct line manager CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr	9/96	

1.C.2.c	Conduct line manager CONOPS implementation training for support organizations.	Mentors Program Mgr	9/96	
1.C.2.d	Conduct line manager CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	3/97	
1.C.4.a	Conduct operator CONOPS implementation training for resumed Nuclear operations organizations.	Mentors Program Mgr	10/96	
1.C.4.b	Conduct operator CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr	10/96	
1.C.4.c	Conduct operator CONOPS implementation training for support organizations.	Mentors Program Mgr	11/96	
1.C.4.d	Conduct operator CONOPS implementation training for balance of plant organizations.	Mentors Program Mgr	6/97	

"Locking devices used in one lockout/tagout were improperly installed." (C-2/LOTO-1)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 9 Lockout /Tagout			
1.C.2.b	Conduct line manager CONOPS implementation training for non-resumed Nuclear operations organizations.	Mentors Program Mgr	9/96	
1.C.4.c	Conduct operator CONOPS implementation training for support organizations.	Mentors Program Mgr	11/96	

"The Y-12 LO/TO Program does not meet today's DOE-wide pratice in that appropriate verification is not required." (C-1/LOTO-1)

I.A.4.b	Approve and Issue Site CONOPS Manual.	Vice President for Defense and Mfg.	5/96	
	Chapter 10 Independent verification			