

No: Y15-187

Title: Integrated Safety and Change Control Process

Revision: 08/20/03

To describe the change control process for the Configuration Management (CM) Program at the Y-12 National Security Complex.

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BWXT Y-12, L.L.C.
Management Requirements

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BWXT Y-12
Procedure

Subject: Integrated Safety and Change Control Process

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12/09/03

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Date

1/19/04

Effective Date

Concurrence:

This document has completed the management requirements process.

S. G. Brown /s/ 12/17/03

Requirements Management

This document has been reviewed and determined to not require an ADC or UCNI review in accordance with Y19-203INS. This review does not constitute clearance for public release.

L. T. Reed /s/ 12/09/03

Signature and Date

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REVISION LOG
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Revision Date	Description of Change	Pages Affected
08/20/03	DM/R-02-ET-046 Simplify procedure by combining Part I, Physical Changes & Part II, Document-Only Changes. Revised APPLIES TO section to better define what constitute a change, expand Document-Only Change to Operational Configuration Change to better represent the intended application, and clarified the application to Projects. Revised the Field Change Request (FCR) section to eliminate the requirement for all reviewers of the original Change Request to review the FCR and allow the System Engineer (SE) and Design Authority Representative (DAR) to decide on the required reviewers. Editorial changes have been made throughout the procedure to improve the clarity of the text.	All
08/26/02	DM/R-02-ET-005 Revised procedure to improve flow of action sequence, clarify scope of application of "document only" changes, address review and verification of training impacts, and add prompt to update Equipment Inspection and Scheduler and, if applicable the Master Equipment List databases.	All
02/25/02	DM/R-02-CM-02 Non-Intent/Added clarifying NOTE before step II. B.9 and corrected steps numbering in section II.B.	26, 27, & 28
02/08/02	DM/R-02-CM-01 Non-Intent/Procedure Effectivity Date Change	Cover Page

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REVISION LOG

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Revision Date	Description of Change	Pages Affected
11/15/01	<p>DM/R-01-CM-06</p> <p>Revised the "APPLIES TO" section to include application to:</p> <ul style="list-style-type: none"> • Changes to the technical basis documents for the SSCs included in the Y-12 CM Program. • Changes to those controlled documents whose revision could affect the functional configuration of an SSC included in the Y-12 CM Program during its operation. • Changes to those controlled documents that provide the basis for existing Safety Basis Documents or new Safety Basis Documents per 10CFR830, Subpart B, <i>Safety Basis Requirements</i>. • Changes to existing Safety Basis Documents or new Safety Basis Documents per 10CFR830, Subpart B, <i>Safety Basis Requirements</i>. <p>Added a new Part II, Processing a Document Only Change.</p> <p>Changed terminology throughout procedure from Authorization Basis Documents to Safety Basis Documents.</p> <p>Remove definition for Authorization Basis and added a definition for Safety Basis Documents.</p> <p>Modified definitions for technical basis documents and controlled documents.</p> <p>Added Appendix H, Document Change Request form.</p>	All
08/29/01	On Record	
03/09/01	On Record	
11/08/00	On Record	
11/01/00	On Record	
04/28/00	On Record	
04/29/99	On Record	
03/31/98	On Record	

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PURPOSE

To describe the change control process for the Configuration Management (CM) Program at the Y-12 National Security Complex. The change control process will ensure that physical or operational configuration changes are properly identified, developed, reviewed, approved, implemented, and documented, and it will ensure an Integrated Safety Management approach to change control as defined in Y15-636, *Integrated Safety Management Program*

APPLIES TO

- Physical Configuration Changes and Operational Configuration Changes (see definitions in Appendix A), including changes in processes, activities, and/or documentation associated with structures, systems, and components (SSCs) included in the Y-12 CM Program.
- Installation, startup, and operation of new systems and equipment that will ultimately be in the Y-12 CM Program once installed and operated. This specifically applies to systems and equipment designed, procured and/or constructed outside the boundaries of the facility. See Appendix I for a more detailed discussion of change control application during the design and construction phases versus during the operating phase.

This procedure *does not apply* to the following:

- Design, procurement, fabrication and/or construction of new SSCs where the actual work is done outside the boundaries of the facility in which it will ultimately be installed and operated. In such cases, Y15-005, *Technical Change Control for Projects*, can be used as the governing change control procedure.
- Changes of an editorial or typographical correction nature that do not alter the technical content of a technical basis document;
- Replacement of an SSC with the same manufacturer's exact make and model number SSC;
- Substitute SSCs that have been approved as equivalent per Y15-003, *Equivalency Evaluation Process*.
- Changes to technical procedures processed in accordance with Y15-202, *Technical Procedure Process Control*;
- Changes to Analytical Chemistry Organization procedures processed in accordance with Y/P65-9059, *Analytical Chemistry Organization Procedures*

Deviations to this procedure shall be requested in writing and approved by the CM Functional Area Manager in advance of the deviation. Interpretations of this procedure are the sole responsibility of the CM Functional Area Manager.

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**OTHER
DOCUMENTS
NEEDED**

- Y13-002PD, *Project Management Program Description*;
- Y15-003, *Equivalency Evaluation Process*;
- Y15-005, *Technical Change Control for Projects*
- Y15-101, *Records Management*;
- Y15-189, *Document Change Notice*;
- Y15-202, *Technical Procedure Process Control*;
- Y15-636, *Integrated Safety Management Program*;
- Y40-137, *Y-12 Emergency Management Hazards Assessment Process*;
- Y60-301, *Control of Nonconforming Items (and Services)*;
- Y74-803, *Change Evaluation/Major Change Determination*;
- Y74-809, *Unreviewed Safety Question Determinations*;
- Y80-101INS, *Software Management Instruction*;
- Y/P65-9059, *Analytical Chemistry Organization Procedures and*
- 10CFR830, Subpart B, *Safety Basis Requirements*.

WHAT TO DO

NOTE 1: Definitions of terms used in this procedure are contained in Appendix A, Definitions.

NOTE 2: Any employee may identify the need for a change. To avoid unnecessary expenditure of resources, informal concurrence with the need for the change should be obtained from appropriate supervision, SE, and DAR before initiating a formal Change Request.

NOTE 3: Appendix A provides the definition of a Major Modification. Coordinate with Facility Safety Engineering to determine whether the change constitutes a Major Modification requiring additional activities and documentation.

A. Initiating a Change Request

NOTE 1: A Change Request should not be initiated until the scope of the change is clearly identified.

NOTE 2: If the Change Request is being initiated as the result of an as-found (discovery) condition, then evaluate to determine whether the documentation must be changed or the physical configuration must be changed and process the Change Request accordingly.

Originator/SE

1. Obtain a copy of the Change Request form, Appendix B (Form UCN-20803) [<http://www-internal.y12.doe.gov/forms/UCN-20803.doc>] from Just-In-Time (JIT) Forms.

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A. Initiating a Change Request (cont.)

- Originator/SE**
2. Print name, badge number, phone number, and the date the Change Request was initiated in section 1, blocks 2-5, of the Change Request form.
 3. Enter a brief descriptive, unclassified, title that summarizes the scope of the requested change in section 2, block 7, of the Change Request form.
 4. Enter the building number(s) of the building(s) affected by the change. If multiple buildings within a building complex are affected, enter only the building complex number in section 2, block 8, of the Change Request form.
- NOTE:** The unique equipment identifier (UNID) requested in section 2, block 10, of the Change Request form refers to the identifier of the SSCs affected by the change. When multiple SSCs are affected by the change, only the highest common descriptor (e.g., for multiple components in the same system, the designators up to the system level) should be entered. When SSCs from multiple systems are affected, multiple system designators should be entered in this block.
5. Enter the SSC name, UNID, and System Designator / SSC grade, if applicable, in section 2, blocks 9-11, of the Change Request form. Otherwise mark these blocks N/A.
- Provide a description of the change and document if a physical or operation configuration change in section 2, block 12, of the Change Request form. Include specific activities, events, requirements, or documents that identified the need for the change.
- SE and DAR**
7. Ensure that the description provided is complete and accurate and provides sufficient detail to allow a clear understanding of the requested change. Attach additional information as required.
- SE**
8. Concur with the need for change by completing Section 3, Blocks 13–15 of the Change Request form.
 9. Obtain concurrence with the need for the change from the DAR by having the DAR complete section 3, blocks 16-18 of the Change Request form.
- DAR**
10. Provide concurrence with the need for the change by completing section 3, blocks 16-18 of the Change Request form.

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A. Initiating a Change Request (cont.)

11. Obtain a copy of Record of Technical Basis Reconstitution Decision (TBRD), Appendix C (UCN-21282) [<http://www-internal.y12.doe.gov/forms/UCN-21282.doc>] from Just-in-Time (JIT) Forms and complete to document technical evaluation of reconstitution requirements necessary to support technical adequacy of modification.
- SE** 12. Request OM/SO authorization to proceed with processing the Change Request.
- OM/SO** 13. IF in agreement with the need for the change, THEN mark the box “YES” in section 3, block 19, and complete section 3, blocks 20–22, of the Change Request form approving continued processing of the change.
14. IF not in agreement with the need for the change, THEN mark the box “NO” in section 3, block 19, provide the reason and complete section 3, blocks 20-22 of the Change Request form, advise the SE and the Originator of the disapproval, and exit this procedure.
- SE** 15. Obtain a unique Change Request number from the Change Administrator (CA) and enter it in section 1, block 6, of the Change Request form.
- SE and DAR** 16. Complete section 4, blocks 23–25, of the Change Request form to record the existing technical basis documents affected by the change or any new technical basis documents that will be produced to support operation of the SSC or facility after the proposed change is implemented. If a new technical basis document is to be produced, then enter N/A in block 25.

Any of the technical basis documents identified in this step that are required to support evaluation of the change or performance of the safety and technical review are to be provided as interim/draft revisions (see step A.18).

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A. Initiating a Change Request (cont.)

The technical basis documents may include, but are not limited to, the following:

- Safety Basis Documents and their supporting documents;
- Hazard Material Identification Document;
- Fire Hazard Analyses;
- operation, maintenance, and surveillance procedures;
- design drawings;
- design analyses and calculations;
- equipment data sheets and specifications;
- configuration control equipment data sheets;
- training modules and lesson plans;
- vendor technical information;
- environmental permits;
- safeguards and security plans and approval documentation;
- nuclear criticality safety documents;
- structures, systems, and equipment lists;
- grading worksheet packages

SE and OM/SO 17. Determine the technical basis documents required to be issued or updated prior to the SSC's return to service and indicate these documents in section 4, block 28, of the Change Request form.

SE and DAR 18. Obtain from Engineering and others, the documents required for the implementation of the change and any technical basis documents required for evaluation of the change and performance of the safety and technical reviews.

These documents can be in the form of new drawings/documents or interim/draft revisions of existing drawings/documents.

SE 19. Ensure the design or other technical basis documents (see step A.16) required for evaluation of the change and performance of the safety and technical review are made available to the safety and technical reviewers. These documents can be referenced, summarized, or included in the Change Request package (i.e., the Change Request form and supporting documentation).

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A. Initiating a Change Request (cont.)

20. Obtain a copy of the Emergency Management Hazard Assessment (EMHA) Change Request Evaluation form, Appendix E (Form UCN-20979), [<http://www-internal.y12.doe.gov/forms/UCN-20979.doc>] from JIT Forms.

SE and DAR

21. Complete, sign, date, and include the EMHA Change Request Evaluation form with the Change Request package.

B. Obtaining Safety and Technical Reviews

SE

1. Obtain a copy of the Safety and Technical Review form, Appendix F (Form UCN-20805) [<http://www-internal.y12.doe.gov/forms/UCN-20805.doc>] from JIT Forms.
2. Complete section 1, blocks 2 and 3, of the Safety and Technical Review form and mark section 1, block 5, of the form N/A.

NOTE 1: Appendix D, Guidance on Determining Required Safety and Technical Reviews, should be used to identify the areas/disciplines that should review the Change Request package.

NOTE 2: The appropriate DAR(s) (i.e., facility DAR & System DAR) are required to perform Safety and Technical Review of the Change Request package.

NOTE 3: The system engineer(s) for systems interfacing with and/or impacted by the change are required to perform Safety and Technical Review of the Change Request package. Examples are Large Geometry Exclusion Area (LGEA) system engineer for requested changes within or involving a LGEA, HVAC system engineer for changes that impact the exhaust system serving the SSC being changed, facility engineer for changes that involve interface with the walls/floor/ceiling/etc., container engineer for process or activity changes that involve use of new/revised containers, and storage engineer for changes that impact the type, amount, or location of material stored in the facility.

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B. Obtaining Safety and Technical Reviews (cont.)

SE and DAR

3. IF the design reviews performed during the execution of the design process fulfill the requirements of the safety and technical reviews, THEN enter the area/discipline and reviewers name in section 2, blocks 6 and 7 and indicate additional safety and technical review are not required in section 2, block 8, of the Safety and Technical Review form and GO TO step B.16.

OR

IF the design reviews performed during the execution of the design process, do not fulfill the requirements of the safety and technical reviews, THEN identify and enter the area/discipline and reviewers name in section 2, blocks 6 and 7, of the Safety and Technical Review form

SE

4. Obtain review of the Change Request package by each of the identified Safety and Technical Reviewers.

The Change Request package at this time should consist of the partially completed Change Request form, the partially completed Safety and Technical Review form, the completed EMHA Change Request Evaluation form, and any information required to describe, document, and evaluate the proposed change .

Safety and Technical Reviewers

5. Review the Change Request package for safety and technical adequacy.
6. Verify that the change will, as a minimum, be:
- operable, maintainable, and constructible;
 - safe;
 - consistent with limits, margins, and other physical, functional, and performance requirements included in Safety Basis documents or technical basis documents;
 - capable of correcting problems or deficiencies without introducing new or additional problems or deficiencies; and
 - in compliance with applicable codes and standards, Industrial Safety requirements, Occupational Safety and Health Act regulations, environmental regulations and permits, Emergency Management Plans, and Safeguards and Security Plans.

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B. Obtaining Safety and Technical Reviews (cont.)

NOTE: The Safety and Technical reviews may be performed by telecon unless the change is complex, in which case the Change Request source documentation should be reviewed. When a review(s) is performed by telecon, the receiving party must document the review as “per telecon (sign name)” on the Safety and Technical Review form.

7. Document the safety and technical review comments in section 2, block 8 of the Safety and Technical Review form (add attachments if needed). If the review is documented on a fax or e-mail message, attach a copy of the fax or e-mail message.

When a change as described in the Change Request package is acceptable (i.e., reviewer has no comments), then indicate the change is “acceptable as documented.” DO NOT enter “no comments.”

- | | |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SE/DAR | 8. Document the comment resolution in section 2, block 8, of the Safety and Technical Review form (add attachments if needed). |
| SE | 9. IF the change involves nuclear criticality safety (NCS) or an SSC credited for NCS, THEN submit the Change Request package to Nuclear Criticality Safety (NCS) for completion of an NCS Change Request Evaluation form. |
| NCS | 10. Obtain a copy of the NCS Change Request Evaluation form, Appendix G (Form UCN-20804) [http://www-internal.y12.doe.gov/forms/UCN-20804.doc], from JIT Forms. |
| | 11. Complete the NCS Change Request Evaluation form and provide it to the SE for inclusion in the Change Request package. |
| SE | 12. Add any other technical basis documents identified by the safety and technical reviewers or during the NCS review to section 4, of the Change Request form. |
| Safety and Technical Reviewers | 13. Initial section 2, block 9 and enter the date in section 2, block 10, of the Safety and Technical Review form to indicate the Change Request is acceptable as documented or comments have been resolved. |

If comment resolution is not acceptable, provide a detailed explanation and attach to the Safety and Technical Review form.

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B. Obtaining Safety and Technical Reviews (cont.)

NOTE: The information provided in section 3 of the Safety and Technical Review form (i.e., review results and summary) should include a summary of the alternatives considered, any concerns, and any other items relevant to the proposed change. Recommendations provided should identify the best solution for the change, and the recommendations should be based on comments and resolutions. A recommendation for rejection should provide the basis and one for additional study or review should provide a plan and schedule for the follow-on work.

- | | |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SE and DAR | 14. Complete section 3 of the Safety and Technical Review form. |
| SE | 15. Print name and badge number, sign and date section 4, blocks 11–13, of the Safety and Technical Review form indicating the reviews are complete and comments have been resolved. |
| DAR | 16. Print name and badge number, sign and date section 4, blocks 14–16, of the Safety and Technical Review form indicating the reviews were performed by the appropriate technical disciplines, the reviews are complete, and comments have been resolved. |
| SE | 17. Complete block 1 of the Safety and Technical Review form to indicate the total number of pages (including any supporting attachments) and enter in section 1, block 4, the date all reviews were completed. Include the completed Safety and Technical Review form with the Change Request package. |
| | 18. Complete section 5, block 29, of the Change Request form indicating the date all safety and technical reviews were completed and documented. |

C. Obtaining Unreviewed Safety Question Determination/Change Evaluation

NOTE 1: The Change Request package with Change Request form completed through Section 5, block 29 and Safety and Technical Review form, as a minimum, must be available to the Unreviewed Safety Question Determination (USQD) screen/USQD or Change Evaluation preparer.

NOTE 2: Section C applies to ALL facilities impacted by the proposed change. IF proposed change impacts multiple facilities/Safety Basis Documents then a USQD screen/USQD, or a Change Evaluation must be completed for each facility and the document number listed in Section 5, Block 30.

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C. Obtaining Unreviewed Safety Question Determination/Change Evaluation (cont.)

- SE**
1. IF the change does not require a USQD screen/USQD, as defined in Y74-809, or a Change Evaluation, as defined in Y74-803, THEN indicate that no USQD screen/USQD or Change Evaluation was required in section 5, block 30 and print name and badge number, sign and date blocks 31-33 of the Change Request form and GO TO section D.
- SE**
2. Implement the USQD process per Y74-809, *Unreviewed Safety Question Determinations*, or the Change Evaluation process per Y74-803, *Change Evaluation/Major Change Determination*.
 3. Ensure the USQD screen/USQD or Change Evaluation addresses the implementation of the change including associated document changes, the final installed configuration, operations, and any impacts on adjacent facilities or systems.
 4. Enter the USQD screen/USQD or Change Evaluation number(s) in section 5, block 30, of the Change Request form and include copies of the USQD screen(s)/USQD(s) or Change Evaluation(s) with the Change Request package.
 5. IF the change is a USQ or a Major Change, THEN coordinate with the OM/SO to (1) cancel the Change Request or (2) cancel the Change Request and prepare a new request that would not be a USQ or a Major Change, or (3) obtain National Nuclear Security Administration Y-12 Site Office (NNSA YSO) approval.
 6. IF the decision is to cancel the Change Request, THEN have the CA update the status of the Change Request to reflect the cancellation and close out the Change Request package per section G.
 7. IF the decision is to cancel the current Change Request and prepare a new one that would not be a USQ or a Major Change, THEN perform the actions in step C.6 to cancel the current Change Request and initiate a new Change Request.

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C. Obtaining Unreviewed Safety Question Determination/Change Evaluation (cont.)

8. IF the decision is to proceed with processing of the Change Request and OM/SO approval is granted, THEN initiate action to obtain NNSA YSO approval in accordance with Y74-809, *Unreviewed Safety Question Determinations*.

DO NOT proceed with the proposed change until NNSA YSO approval is obtained.

9. Print name, badge number, sign and date section 5, blocks 31–33, of the Change Request form indicating the Safety and Technical Reviews, the USQD screen/USQD or Change Evaluation, if required are complete, and the change is ready for authorization to implement.

D. Obtaining Authorization to Implement a Change Request

SE

1. IF the change involves the safety function(s) of a Grade 1 or 2 nuclear SSC or a Grade 3 non-nuclear safety significant SSC or the complexity of the change is deemed to warrant Operational Safety Board(s) (OSB) review, THEN indicate in section 6, block 34, of the Change Request form that OSB review of the recommendations resulting from the safety and technical reviews is required and GO TO step D.3.
2. IF it is deemed no OSB review is necessary, THEN indicate this in section 6, block 34, of the Change Request form.
3. Ensure that the Change Request package now includes the following:
- a partially completed Change Request form (Appendix B);
 - EMHA Change Request Evaluation form (Appendix E)
 - Safety and Technical Review form (Appendix F);
 - NCS Change Request Evaluation form (Appendix G), if required;
 - USQD screen/USQD or Change Evaluation, if applicable;
 - Documents required to describe, document, and evaluate the proposed change
 -

NOTE: The OSB chairperson is typically the OM/SO but may be another knowledgeable person designated in the OSB charter such as the shift manager or other representative of the OSB.

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D. Obtaining Authorization to Implement a Change Request (cont'd)

4. IF the Change Request package requires OSB review , THEN obtain this review and have the OSB chairperson document the OSBs recommendation in section 6, blocks 35–37, of the Change Request form. Otherwise mark these blocks N/A.
- SE**
5. IF the Change Request is recommended for rejection, THEN obtain and attach a basis for the rejection to the Change Request package.
- Attaching a copy of OSB meeting minutes detailing the rejection is recommended.
6. Obtain OM/SO decision on authorizing implementation of the Change Request.
- OM/SO**
7. Based on the reviews and recommendations, decide on authorizing implementation of the Change Request.
8. IF implementation is authorized, THEN mark the box “YES” in section 7, block 38 of the Change Request form, complete section 7, blocks 39-41, and provide the Change Request package to the SE to initiate implementation.

OR

IF implementation is not authorized, THEN mark the box “NO” in section 7, block 38 of the Change Request form, provide the reason, complete section 7, blocks 39-41, and notify the SE to cancel and closeout the Change Request package per section G.

E. Implementing a Change Request

- SE**
1. IF implementation is authorized, THEN have the CA update the status of the Change Request package.
- NOTE:** The interim/draft revisions of the technical basis documents that reflect the changed physical configuration must not be issued effective until the change has been field implemented and verified.
2. Notify the owners of the technical basis documents listed in section 4 of the Change Request form of the pending need to issue or update the documents to support returning the SSC to service and/or closeout of the Change Request package per section G.

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E. Implementing a Change Request (cont.)

NOTE 1: Change Request packages for physical configuration changes need to be implemented in the same sequence as they are authorized for implementation. If the Change Request packages are implemented in any other sequence, then their associated safety and technical reviews, USQD screen/USQD, and Change Evaluation, if applicable, and OSB reviews need to be revisited to ensure that these reviews are still valid. For example, if one were to have two Change Requests A and B, the reviews for Change Request B take into account the physical configuration after implementation of Change Request A. However, if Change Request B is implemented before Change Request A, then Change Request B reviews could be invalidated.

NOTE 2: Before any Change Request package that has been authorized for implementation can be cancelled and closed out, the OM/SO must concur with the cancellation.

NOTE 3: For Change Request packages for physical configuration changes that are only partially implemented, the safety and technical reviews, USQD screen/USQD, or Change Evaluation, if applicable, and OSB reviews must be revisited and/or repeated for the partial implementation before the SSC is returned to service. Failure to do this could result in an unanalyzed condition or in documentation that does not reflect the as-built physical configuration. The Change Request package and attachments must be revised to reflect the partial implementation before closeout.

SE

4. Initiate implementation of the OM/SO authorized Change Request package. This may be conducted by developing a formal implementation plan for complex changes.
5. For physical configuration changes, obtain and enter the applicable Maintenance Job Request, Construction Task Authorization, or Service Subcontract Number in section 7, block 42, of the Change Request form. For operational configuration changes, mark this block N/A.
6. Obtain a review of training impact from the appropriate organization training manager or designee and when completed check the verified box in section 8, block 43 of the Change Request form.
7. Complete section 8, block 44 of the Change Request form to indicate whether changes to training material are required. Training material requiring changes should be listed in section 4. If NO changes to training material are required, attach an E-mail from the organization training manager or other evidence that NO changes are required.

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E. Implementing a Change Request (cont.)

- Maintenance or Construction Organization**
8. WHEN there is a need for a field change to an authorized Change Request package for a physical configuration change identified during implementation, THEN coordinate with the SE the processing of a Field Change Request (FCR) according to the instructions provided in section F.

F. Processing a Field Change Request

NOTE: To maintain continuity of work, the SE may authorize proceeding with a field change pending approval of an FCR per this section. This authorization is to be based on a field review and verification that the field change will not invalidate the approved design and is within the bounds of the USQD screen(s)/USQD(s) or Change Evaluation(s), if applicable. However, an FCR must still be processed according to instructions provided in this section and approved before the SSC is tested and returned to service.

- SE**
1. Conduct a field review of the requested field change to verify that the change will not invalidate the approved design and verify that the change is within the bounds of the USQD screen/USQD or Change Evaluation, (if applicable) originally completed as part of the Change Request package.
 2. Based on the results of the field review and verification activities, either authorize proceeding with the requested field change and initiate processing of a FCR or stop field work pending initiation and approval of an FCR.
 3. Obtain a copy of the FCR form (Appendix H, Form UCN-20808) [<http://www-internal.y12.doe.gov/forms/UCN-20808.doc>] from JIT Forms.
 4. Obtain a unique FCR number from the CA and enter it in section 1, block 6 of the FCR form.
- SE**
5. Complete the remaining blocks in section 1 of the FCR.
- SE and DAR**
6. Ensure that the description provided in section 1, blocks 7, of the FCR form is complete and accurate and provides sufficient detail to allow a clear understanding of the requested change. Attach additional information as required.
- DAR**
6. Review the Record of Technical Basis Reconstitution Decision form originally completed as part of the original Change Request package and determine if a new or revised form needs to be completed as a result of the FCR. Assess any impacts from the proposed FCR. Revise or replace the TBDR as necessary/appropriate.

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F. Processing a Field Change Request (cont)

- SE** 7. Obtain from Engineering and others, the documents required for implementation of the change and interim/draft copies of technical basis documents needed to support the safety and technical review process.
- The documents required for implementation of the change can be in the form of new design drawings/documents, interim drawings, or drafts of existing documents.
8. Ensure the design or other technical basis documents (see step A.16) required for evaluation of the change and performance of the safety and technical review are made available to the safety and technical reviewers. These documents can be referenced, summarized, or included in the FCR package.
- SE and DAR** 9. Review the EMHA Change Request Evaluation form originally completed as part of the Change Request package and determine if a new or revised form needs to be completed. Revise or complete a new form as appropriate.
- SE** 10. Initiate a new Safety and Technical Review form by completing section 1—blocks 2, 3, and 5—of the form.
- NOTE 1:** Appendix D, Guidance on Determining Required Safety and Technical Reviews, should be used to identify the areas/disciplines that should review the FCR.
- NOTE 2:** The appropriate DAR(s) (i.e., facility DAR & System DAR) are required to perform Safety and Technical Review of the FCR.
- NOTE 3:** The system engineer(s) for interfacing with and/or impacted by the change are required to perform Safety and Technical Review of the FCR package. Examples are Large Geometry Exclusion Area (LGEA) system engineer for requested field changes within or involving a LGEA, HVAC system engineer for changes that impact the exhaust system serving the SSC being changed, facility engineer for changes that involve interface with the walls/floor/ceiling/etc., container engineer for process or activity changes that involve use of new/revised containers, and storage engineer for changes that impact the type, amount, or location of material stored in the facility.
- SE and DAR** 11. Enter the identified areas/disciplines and reviewers in section 2, blocks 6 and 7, of the Safety and Technical Review form.

Subject: Integrated Safety and Change Control Process

F. Processing a Field Change Request (cont.)

- SE** 12. Obtain a review of the FCR by each of the Safety and Technical reviewers.

The FCR at this time should consist of the partially completed FCR form; the partially completed new Safety and Technical Review form; the new or revised EMHA Change Request Evaluation form, if applicable; and any information required to describe, document, and evaluate the proposed field change such as markups or interim/draft revisions.

NOTE: When a review(s) is performed by telecon, the receiving party must document the review as “per telecon (sign name)” on the Safety and Technical Review form.

13. Document the safety and technical review comments in section 2, block 8 of the Safety and Technical Review form (add attachments if needed). If the review is documented on a fax or e-mail message, attach a copy of the fax or e-mail message.

When a change as described in the FCR is acceptable (i.e., reviewer has no comments), then indicate the change is “acceptable as documented.” DO NOT enter “no comments.”

14. Identify to the SE, any other technical basis documents required to be issued or updated and not already listed in section 4 of the Change Request form.

- SE/DAR** 15. Document the comment resolution in section 2, block 8, of the Safety and Technical Review form (add attachments if needed).

16. IF a new or revised NCS Change Request Evaluation form (Appendix G) is required, THEN have NCS revise the form or complete a new one and include with the FCR.

NOTE: Additions or revisions to the technical basis documents listed in section 4 of the Change Request form do not require resigning of the Change Request form by the SE and OM/SO.

- SE** 17. Add any other technical basis documents identified during the Safety and Technical Review or NCS review to section 4 of the Change Request form in accordance with steps A.16 & 17.

Subject: Integrated Safety and Change Control Process

F. Processing a Field Change Request (cont.)**Safety and
Technical
Reviewers**

18. Initial section 2, block 9 and enter the date in section 2, block 10, of the Safety and Technical Review form to indicate the FCR is acceptable as documented or comments have been resolved.

If comment resolution is not acceptable, provide a detailed explanation and attach to the Safety and Technical Review form.

SE and DAR

19. Complete section 3 of the Safety and Technical Review form.

SE

20. Complete section 4, blocks 11–13, of the Safety and Technical Review form indicating the reviews are complete and comment have been resolved.

DAR

21. Complete section 4, blocks 14–16, of the Safety and Technical Review form indicating the reviews were performed by the appropriate technical disciplines, the reviews are complete, and comments have been resolved.

SE

22. Complete block 1 of the Safety and Technical Review form to indicate the total number of pages (including any supporting attachments) and enter in section 1, block 4, the date all reviews were completed. Include the completed Safety and Technical Review form with the FCR.

SE

23. Complete section 2, block 8, of the FCR form indicating the date all safety and technical reviews were completed and documented.
24. IF a new or revised USQD screen/USQD or Change Evaluation is required, THEN enter the applicable number in section 2, block 9, of the FCR form and attach a copy of the new or revised USQD screen/USQD or Change Evaluation to the Field Change Request package. Otherwise mark this block “Not Required”.
25. Complete section 2, blocks 10–12, of the FCR form.
26. IF OSB review of the safety and technical review is required, THEN mark the “YES” box in section 3, block 13, of the FCR form. Otherwise mark this block “NO” and GO TO step F.29.
27. IF OSB review of the safety and technical reviews is required, THEN obtain this review and have the OSB chairperson document the OSBs recommendation in section 3, blocks 14–16, of the FCR form. Otherwise mark these blocks “N/A”.

Subject: Integrated Safety and Change Control Process

F. Processing a Field Change Request (cont.)

28. If the FCR is recommended for rejection, then attach a basis for the rejection. (Attaching a copy of OSB meeting minutes detailing the rejection is recommended.)

OM/SO

29. Based on the reviews and recommendations, decide whether or not to approve the FCR.

30. IF the decision is to approve, THEN mark the box "YES" in section 4, block 17, of the FCR form, complete section 4, blocks 18-20 and provide the FCR to the SE to initiate implementation.

OR

IF the decision is not to approve, THEN mark the box "NO" in section 4, block 17, of the FCR form, and provide the reason, complete section 4, blocks 18-20, and notify the SE to cancel the FCR..

SE

31. IF the FCR is approved, THEN have the CA update the status of the FCR; include the FCR with the Change Request package for subsequent closeout; and initiate implementation of the approved FCR with the Maintenance or Construction organization (as appropriate).

G. Verifying and Closing Out a Change Request**SE**

1. After the change has been implemented, assemble the completed Change Request package.

2. Ensure the Change Request package includes the following:

- partially completed Change Request form (Appendix B);
- EMHA Change Request Evaluation form (Appendix E)
- Safety and Technical Review forms (Appendix F);
- NCS Change Request Evaluation form (Appendix G), if required;
- USQD screen/USQD or Change Evaluation, if applicable (a copy only);
- Documents required to describe, document, and evaluate the change; and
-
- FCR(s) (Appendix H) and attachments, if applicable.

Subject: Integrated Safety and Change Control Process

G. Verifying and Closing Out a Change Request (cont.)

NOTE: For physical configuration changes, the technical basis documents identified in section 4 of the Change Request form may be issued or updated later provided that these documents are NOT required for: 1) returning the SSC to service, 2) to support required training, or 3) to support testing and field walkdown activities.

SE

3. For physical configuration changes, document in section 4, blocks 26 and 27 and in section 10, block 57, of the Change Request form:
 - Verification that the affected technical basis documents required for returning the SSC to service have a DCN per Y15-189 issued against them **OR**
 - Verification that the technical basis documents required for returning the SSC to service have been issued or updated in accordance with the procedure governing development/revision of the document(s).

NOTE: For operational configuration changes, the documents listed in section 4 of the Change Request form must be issued or updated prior to verification and closeout of the Change Request package per one of the following:

- Issuance of a DCN per Y15-189, **OR**
 - Development or revision to the document(s) in accordance with the procedure(s) governing development or revision of the document(s).
4. For operational configuration changes, document in Section 4, blocks 26 and 27 of the Change Request form:
 - Verification that the affected technical basis documents have a DCN per Y15-189 issued against them, **OR**
 - Verification that the document(s) have been issued or updated in accordance with the procedure(s) governing development/revision of the document(s).

Mark section 10, block 57 of the Change request form N/A.

NOTE: Some portions of the field walkdown for physical configuration changes may need to be conducted during implementation of the Change Request due to later inaccessibility (e.g., buried pipe).

5. Coordinate the performance of a field walkdown for physical configuration changes to verify that the Change Request package—including the documents required for implementation of the change and any approved FCRs—was implemented as approved and document this verification in section 10, block 56, of the Change Request form. For operational configuration changes, mark this block N/A.

Subject: Integrated Safety and Change Control Process

G. Verifying and Closing Out a Change Request (cont.)

- | | |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SE and DAR | 6. Document verification that all required testing has been completed and that the acceptance criteria have been met in section 9, blocks 45–53, of the Change Request form. Otherwise mark these blocks N/A. |
| SE | 7. Document verification that all required training has been completed in section 10, block 54 and record the Training Module number OR indicate that a shift procedure review was conducted in section 10, Block 55, of the Change Request form. If training was not required mark these blocks N/A. |
| SE and DAR | 8. Resolve any deficiencies noted during the test verification and field walkdown activities. |
| SE | 9. Update the Equipment and Inspection Scheduler (EIS) and, if applicable the Master Equipment List (MEL) database, as required. |
| | 10. Based on the field walkdown, test and training verification, and review of the Change Request package complete section 10, blocks 58–61, of the Change Request form to indicate that the Change Request implementation is complete. |
| | 11. Obtain authorization for returning the SSC to service or agreement implementation is complete by having section 11, blocks 62–64, of the Change Request form completed by the OM/SO. |
| OM/SO | 12. If system returned to service with documentation pending revision record date in Section 11, Block 65 and notify the Change Administrator to initiate the 90 day clock for documentation completion otherwise mark this block N/A. |
| SE | 12. IF all affected technical basis documents for physical configuration changes were NOT issued or updated prior to returning the SSC to service, THEN obtain verification that the remaining technical basis documents have a DCN per Y15-189 issued against them OR have been issued or updated in accordance with the procedure governing development/revision of the document. Document this verification in section 4, blocks 26 and 27, of the Change Request form. |
| | 13. Provide the completed Change Request package to the CA. |

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G. Verifying and Closing Out a Change Request (cont.)

NOTE: The complete Change Request package is the sum total of all the different forms completed and all accompanying supporting documentation.

- CA**
- 14 Enter the total number of pages in the Change Request package in block 1 of the Change Request form. Ensure that all pages making up the package are sequentially numbered and in the format of page X of X.
 15. Verify that the Change Request package is complete and ready for closeout, and complete section 12, blocks 66 and 67, of the Change Request form.
 16. Submit the Change Request package to the applicable Document Management Center as a record in accordance with Y15-101, *Records Management*.

RECORDS The completed Change Request package generated as a result of executing this procedure is maintained in accordance with BWXT Y-12 records management practices and established retention and disposition schedules.

SOURCE DOCUMENTS The following S/RIDs constitute the requirements documents for this procedure: 8087, 8088, 8098, 8100, 8105, 8106, 8108, 8109, 8110, 8147, 9019, 9480, 9665, 9666, 9859, and 9860.

- APPENDICES**
- A. Definitions
 - B. Change Request form
 - C. Record of Technical Basis Reconstitution Decision
 - D. Emergency Management Hazards Assessment Change Evaluation form
 - E. Safety and Technical Review form
 - F. Guidance on Determining Required Safety and Technical Reviews
 - G. Nuclear Criticality Safety Change Request Evaluation form
 - H. Field Change Request form
 - H Change Control Application

Subject: Integrated Safety and Change Control Process

APPENDIX A

Definitions

(Page 1 of 3)

Change Administrator—A person assigned the responsibility by the OM/SO for maintaining a unique numbering system for Change Request packages, for tracking the status of all in-process Change Requests packages, and for timely closeout of Change Request packages.

Controlled Document—Any document for which status is kept current by the issuer in order to assure that holders or users of the document have available the most up to date version for their actions. Controlled documents are placed in a control & tracking system, maintained in an up-to-date status, and protected to ensure integrity of the information contained in the document.

Design Authority Representative—An individual assigned by Engineering to represent the Design Authority for establishing and maintaining the technical basis of a facility or system.

Implementing Documents—The documents that define the design/technical requirements for implementation of a change to a structure, system, or component. These documents may include drawings, specifications, construction specifications, or other technical documents. These documents contain the information needed to procure, fabricate, assemble, construct, install, and test the changed structure, system, or component.

Document Change Notice— A process for review and approval of a revision of a technical basis document when the actual document will not be immediately revised.

Document Management Center—A designated location established to ensure the process of document control occurs within an organization.

Document Owner—The individual or organization responsible for the technical content of a technical basis or controlled document and for authorizing the document to be revised, superseded, or cancelled.

Large Geometry Exclusion Area—A designated area or facility where the inadvertent collection of fissile material solution in equipment and containers with unfavorable geometry is typically prevented by limiting the volume of equipment and containers to no larger than four liters, controlling geometry, and/or providing engineering controls (e.g., drain holes in equipment, etc.). At present, LGEAs exist only in Buildings 9206, 9212, and 9818.

Major Modification—A change involving a USQ that would result in a substantial revision to the existing safety basis for a facility. A recommendation to DOE for considering a change as a major modification is coordinated through the Facility Safety Engineering Manager.

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APPENDIX A
Definitions
(Page 2 of 3)

Operations Manager/System Owner—The individual who owns and is responsible for the operation of a facility or system within the defined safety envelope.

Operational Configuration Changes—changes to the operational aspects of SSCs included in the Y-12 Configuration Management Program that do not require physical work in the field. These changes include, but are not limited to, the following:

- Changes to the configuration as reflected in approved technical basis documents;
- Changes to documents that provide the basis for existing Safety Basis Documents or new Safety Basis Documents per 10CFR830, Subpart B, *Safety Basis Requirements* (e.g., Fire Hazard Analysis);
- Changes to existing Safety Basis Documents or new Safety Basis Documents per 10CFR830, Subpart B, *Safety Basis Requirements* that are approved;
- Changes for improvement in the safety, performance, reliability, or efficiency of an SSC or process;
- Changes in the operating mode(s) or alignment of an SSC not previously included in an approved technical procedure;
- Changes as a result of SSC malfunction or obsolescence;
- As-found (discovery) conditions for which a document must be revised to reflect the physical configuration.

Operational Safety Board—A multidisciplinary team chartered for a specific organization, facility, or system to provide technical and safety direction, guidance, and oversight support to the line manager or system owner for safe execution of work.

Physical Configuration Changes—changes to the physical aspects of structures, systems, and components (SSCs) included in the Y-12 Configuration Management Program. These changes include, but are not limited to, the following:

- Physical changes, including the addition or removal of an SSC or when an SSC is being abandoned in place;
- As-found (discovery) conditions for which the physical configuration must be changed to reflect the documentation, including, but not limited to, the existing or new Safety Basis Documents;
- Non-conformances related to the physical configuration being dispositioned either “use as is” or “repair to usable condition” (e.g., to other than original specification) when determined appropriate by the System Engineer and Design Authority Representative per Y60-301, *Control of Nonconforming Items (and Services)*; and/or
- Changes to process-related computer hardware or software.

Safety Basis Documents—The safety analysis and hazard control documents that contain the information relied upon by DOE to conclude that a facility can be operated safely in a manner that adequately protects workers, the public, and the environment.

Subject: Integrated Safety and Change Control Process

APPENDIX A

Definitions

(Page 3 of 3)

Safety and Technical Reviews—Multidisciplinary review of a change to verify consistency with the applicable requirements and technical basis. The safety and technical reviews include reviews of safety, environmental, and mission impacts and the identification of affected technical basis documents.

Structures, Systems, or Components—A term used to refer, collectively, to the following three things. Structures are elements that provide support or enclosure such as buildings, freestanding tanks, basins, dikes, and stacks. Systems are collections of components assembled to perform a function such as piping; cable trays; conduits; and heating, ventilation, fire protection, and air conditioning. Components are items of equipment such as pumps, valves, relays, dollies or carts, and elements of a larger array such as computer software, lengths of pipe, elbows, and reducers.

System Engineer—An individual (e.g., subject matter expert, facility engineer, process engineer, or technical representative) assigned by the operations manager/system owner to process a change request. Typically the system engineer is assigned to provide technical support for operations, maintenance, and configuration management of a system or process. In some situations, the system engineer is qualified on the systems including Vital Safety Systems.

Technical Basis Documents—Controlled documents that define the functional, physical, or operational attributes of an SSC. These documents are used to make accurate decisions to support operations and evaluate changes. They include drawings, technical specifications, analyses and calculations, and other technical documents that specify the required functions, capabilities, capacities, physical sizes and dimensions, limits and setpoints, etc.

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**APPENDIX “C”
Record of Technical Basis Reconstitution Decision
(Page 1 of 1)**

RECORD OF TECHNICAL BASIS RECONSTITUTION DECISION		Page	of
1. Change Request Number:	2. FCR Number: “ N/A		
<p>3. Status of Affected SSC TBIS: Identify whether TBIS exists or needs to be developed for affected SSC. Intent is to create a partial TBIS, at least, of the affected technical basis documents modified or created as a result of the change if no TBIS previously existed. If no technical basis documents are affected or generated, then no TBIS need be generated.</p>			
<p>4. Engineering Evaluation: Evaluate the proposed modification for need to develop additional design information needed to ensure technical adequacy of the modified SSC. Each affected engineering discipline should be addressed.</p>			
Approvals:			
5. OM/SO (Print Name):	6. OM/SO (Signature):	7. Date:	
8. DAR (Print Name):	9. DAR (Signature):	10. Date:	

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APPENDIX D
Guidance on Determining Required Safety and Technical Reviews
(Page 1 of 2)

Use the following as guidance for determining areas/disciplines that are required to perform safety and technical reviews. Consult with the operations manager/system owner as necessary. Enter the required safety and technical review areas/disciplines on the Safety and Technical Review form (Form UCN-20805).

Required Area/Discipline Review	Review Required When Change Impacts or Involves
Design Authority Representative (DAR)	All change requests
Environmental Compliance	Configuration controlled effluent monitoring SSCs; environmental permits (i.e., water, air, solid waste); RCRA permitted areas; or areas or equipment that may be contaminated with PCBs. Changes to storm and sanitary sewer systems, secondary containment dikes, air emission sources and/or exhaust systems and processes generating RCRA and/or PCB waste
Emergency Management	A "yes" answer provided to any of the questions on the Emergency Management Hazard Assessment Change Request Evaluation form Appendix E
Industrial Hygiene	High temperatures, noises, asbestos, dust, fiberglass, chemicals identified in Appendix A of 29CFR, 1910.119, <i>Process Safety Management of Highly Hazardous Chemicals</i> , or any change that requires the use of a respirator (for a reason other than radiological control)
Maintenance	Nonroutine repairs or fixes, low-cost modifications, or technical changes that require maintenance experience and input
Quality Assurance	Quality Assurance Plan or implementing procedures
Industrial Safety	Confined space, hoists and rigging, or scaffolds
Waste Management and Permitting	Waste handling, processing, permits, or Form UCN-2109 processing
Radiological Control	Radioactive material containment or control (e.g., changes to hoods, gloveboxes, ventilation systems, duckwork, or shielding), processes or operations that may introduce new radiological hazards or change the magnitude of existing radiological hazards. Any item involving non-uranium radioactive material and/or U-232
Utilities Management ^a	Steam, hydrogen, nitrogen, natural gas, compressed air, potable water, demineralized water, piping, sewer, electrical power distribution systems, other utility interfaces, or service outages
Safeguards and Security ^a	Security systems, security areas including material access area boundaries (i.e., breaching or touching), transfers between material access areas, or special nuclear material movement, or safeguards and security plans
Procedures Group	Technical procedures, job performance aids, or work instructions
Training	Training program or requirements
Plant Shift Superintendent's Office	Emergency Notification System (ENS) or Public Address (PA) System or the function of the ENS or PA System, Criticality Accident Alarm System (CAAS) or the function of the CAAS, and Emergency and Standby Power Generators
Nuclear Materials Control and	Equipment on the hold-up inventory checklist maintained by the Nuclear Materials

Subject: Integrated Safety and Change Control Process

Accountability	Control and Accountability Department. (This typically includes all fissile materials processing equipment and auxiliary systems such as hoods, drains, exhaust ducts, etc.)
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APPENDIX D
Guidance on Determining Required Safety and Technical Reviews
(Page 2 of 2)

Required Area/Discipline Review	Review Required When Change Impacts or Involves
Nuclear Criticality Safety	Any SSC impacting nuclear criticality safety, geometry limited equipment, equipment or container spacing, container specifications, or any change affecting new/modified fissile material activities or processes. This includes any SSC within or to be installed within a large geometry exclusion area.
Facility Safety	Facilities that have or will have safety basis documents or documents that are or will be described in a safety basis document, SSCs described in or will be described in safety basis documents, or SSCs that could affect SSCs described in or that will be described in safety basis documents
Pressure Safety Task Team	Pressurized SSCs that are noncode stamped systems or that have a design beyond code limits
Fire Protection ^a	Fire detection or fire suppression devices. This includes changes to SSC location or positioning that could affect functionality of fire detection or suppression devices
Facility Design Engineering, Mechanical, Manufacturing & Specialty Engineering, Product Engineering, Technology Development, or Technical Computing	Engineered features of an SSC or the technical basis documents that depict these engineered features.

^aChanges to Y-12 complex-wide systems within facilities require concurrence from the jurisdictional owner and from the facility organization.

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APPENDIX E
Emergency Management Hazards Assessment Change Request Evaluation Form
(Page 1 of 1)

**EMERGENCY MANAGEMENT HAZARDS ASSESSMENT
 CHANGE REQUEST EVALUATION**

Page of

Change Request No.	Field Change Request No. <input type="checkbox"/> N/A
--------------------	-------------------------------------------------------

No.	Change Request Evaluation Criteria	Yes	No
1.	Does the proposed change increase the maximum anticipated quantity of a material identified in the approved Hazard Identification (form UCN-20790)? This includes, as applicable, both physical limits (e.g., tank capacity) and associated administrative limits (e.g., maintain tank level <75%).		
2.	Does the proposed change alter the identified hazardous materials storage and/or process location(s)?		
3.	Does the proposed change alter the conditions under which the material is stored or used? This includes process systems or containers that hold the material and barriers/mitigative features that may affect its release or dispersion (e.g., shipping containers, buildings, berms, sumps, or catch basins).		
4.	Does the proposed change alter the engineered controls, safeguards, or safety systems designed to prevent or mitigate a hazardous material release? This includes both automatic and manually activated mitigating systems (e.g., fire sprinklers, filters, scrubbers, isolation dampers) as well as passive mitigating features and engineered geometry or configuration controls for fissionable materials.		
5.	Does the proposed change alter the administrative controls that would prevent or mitigate the initiation of a hazardous materials release? This includes such things as limits on the total quantity of a material in a single place or container or restrictions on where certain materials can be used or stored.		

Comments:

A "Yes" answer to any of the above questions indicates need for Emergency Management to be included in the Safety and Technical Review of the Change Request package.

System Engineer (Print Name)	Badge No.	System Engineer Signature	Date
Design Authority Representative (Print Name)	Badge No.	Design Authority Representative Signature	Date

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APPENDIX F
Safety and Technical Review form
(Page 1 of 1)

Safety and Technical Review

1. Page of

Section 1: Change Request Identification

2. Change Request No.	3. Date Review Initiated	4. Date Reviews Complete	5. Field Change Request No. <input type="checkbox"/> N/A
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Section 2: Safety and Technical Review Comments and Resolution

6. Area/Discipline	7. Reviewer	8. Comment/Resolution	9. Accepted	10. Date

Section 3: Safety and Technical Reviews Results and Summary

Section 4: Safety and Technical Reviews Approved

11. System Engineer (Print)	Badge No.	12. System Engineer Signature	13. Date
14. DAR (Print Name)	Badge No.	15. DAR Signature	16. Date

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APPENDIX G
Nuclear Criticality Safety Change Request Evaluation form
(Page 1 of 1)

Nuclear Criticality Safety Change Request Evaluation		1. Page of
2. Change Request Number	3. Field Change Number <input type="checkbox"/> N/A	
Blocks 4–13 to be completed by Nuclear Criticality Safety Representative		
4. Will a new CSA or CSR be required for <u>installation</u> of this change?..... <input type="checkbox"/> Yes <input type="checkbox"/> No		
12. Will a revision to an existing CSA or CSR be required for <u>installation</u> of this change?... <input type="checkbox"/> Yes <input type="checkbox"/> No If “Yes,” provide CSA or CSR Numbers:		
12. Will a new CSA or CSR be required for <u>placing the new/modified equipment in service</u> ?.... <input type="checkbox"/> Yes <input type="checkbox"/> No If “Yes,” will this be the same CSA or CSR identified in Block 4?..... <input type="checkbox"/> Yes <input type="checkbox"/> No		
12. Will a revision to an existing CSA or CSR be required for <u>placing the new/modified equipment In service</u> ?..... <input type="checkbox"/> Yes <input type="checkbox"/> No If “Yes,” provide CSA or CSR Numbers: Will this be the same CSA or CSR identified in Block 5?..... <input type="checkbox"/> Yes <input type="checkbox"/> No		
8. Will a new/revised CSE be required?..... <input type="checkbox"/> Yes <input type="checkbox"/> No		
9. Will a CSA or CSR cancellation, suspension, or reactivation for <u>installation</u> or <u>Placing the new/modified equipment in service</u> be required?..... <input type="checkbox"/> Yes <input type="checkbox"/> No If “Yes,” provide CSA or CSR Numbers:		
10. Comments (provide basis for any “Yes” answers in Blocks 4–9:		
Signature below indicates technical accuracy of this form and affected CSAs/CSRs have been listed on the Change Implementation Verification and Close Out for this Change Request package.		
11. NCS Representative (Print Name)	12. NCS Representative Signature	13. Date

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APPENDIX H
Field Change Request
(Page 1 of 1)

FIELD CHANGE REQUEST

1. Page of

Section 1: Field Change Identification and Description			
2. Originator (Print Name)	Badge No.	3. Phone Number	4. Date
5. Change Request No.		6. Field Change Request No	
7. Description of Field Change <i>(include drawing/sketch, if required)</i>			
Section 2: Safety and Technical Reviews Complete			
8. Date Safety and Technical Reviews Completed?			
9. New or Revised USQD Screen(s), USQD(s), or Change Evaluation(s) Number (attach copies)			<input type="checkbox"/> Not Required
10. System Engineer (Print Name)	Badge No.	11. System Engineer Signature	12. Date
Section 3: Operations Safety Board (OSB) Review			
13. Operations Safety Board Review Required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
14. Operations Safety Board Recommendation <input type="checkbox"/> Approve <input type="checkbox"/> Reject		15. OSB Chairperson Signature	16. Date
Section 4: Field Change Request Approval			
17. Field Change Request Approved? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If NOT approved, provide reason</i>			
18. OM/SO (Print Name)	Badge No.	19. Operations Manager/System Owner Signature	20. Date
This Field Change Request has been reviewed by an Authorized Derivative Classifier and UCNI Reviewing Official and has been determined to be UNCLASSIFIED and contains no UCNI. This review does not constitute clearance for public release.		AUTHORIZED DERIVATIVE CLASSIFIER/UCNI REVIEWING OFFICIAL SIGNATURE	DATE

UCN-20808 (7/02)

Authorized Derivative Classifier / UCNI Reviewing Official Determination

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APPENDIX I
Change Request Application
(Page 1 of 1)

The intent of the CM Program is to control changes during the lifecycle, beginning with design phase, through the construction phase and the operating phase, and ending when the facility ceases to operate. Each of these phases is handled in different manners in terms of reviews and approvals. Procedure Y15-187 was developed specifically to address control of change to existing, operating SSCs. It is applied from initial startup of the SSC until such a time that the SSC removed from service.

Procedure Y15-005 was specifically developed to address design and construction of “greenfield” projects. Y15-005 is streamlined to accommodate the evolution of the detailed design and serves as a change control tool during construction. It does not involve changes to existing SSCs during the design and construction phases, therefore the rigor of review and approval of changes relative to facility operations and Safety Basis limits is not an issue. In the situation where new systems and equipment that will ultimately be in the CM Program are being built/constructed outside the facility, the streamlined Y15-005 can be used. Once the construction is completed, the installation and interface with other systems and support utilities is to be accomplished and managed using a Y15-187 Change Request package.

As an example, consider the situation where a glovebox is being designed and constructed outside the facility. It has been determined that the glovebox will be in the CM Program once installed. During the design and construction phases, Y15-005 is to be used. The actual installation, including location in the facility, utility tie-in modifications, operating procedure changes, Documented Safety Analysis changes, etc. to make the glovebox operational is to be controlled using Y15-187.