

**No.: Y15-331**

**Title: Lessons Learned Program**

**Rev. Date: 04/17/2002**

**This procedure defines the BWXT Y-12, L.L.C., (BWXT Y-12) program for identifying, disseminating and utilizing positive and negative operating experiences, i.e., Lessons Learned, which may be applicable to other organizations.**

**A hard copy of this document is valid only until the document revision number has changed on the web. The hard copy should be dated and signed the day it is printed. If you continue working from the hard copy, you should verify its accuracy on the web.**

**Date Printed:** \_\_\_\_\_

**Verifier:** \_\_\_\_\_

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

Number: Y15-331  
Rev. Date: 04/17/2002  
Supersedes: Y60-331  
Page: 1 of 28

BWXT Y-12  
Management Control

Subject: Lessons Learned Program

[Kathy Hensley]  
Procedure Written by

4/18/02  
Date

**Approvals: [Approval Signatures and Dates on File]**

[Mack I. Sparks]  
Functional Area Manager

4/18/02  
Date

[Mack I. Sparks for A. S. Dowd]  
Executive Manager

4/18/02  
Date

[S. G. Brown]  
Requirements and Issues Management

4/18/02  
Date

4/19/02  
Effective Date

\_\_\_\_\_  
Re-Affirm Date

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

Kathie Hensley 4/18/02  
Signature & Date

Subject: Lessons Learned Program

**TABLE OF CONTENTS**

PURPOSE .....	4
APPLIES TO .....	4
OTHER DOCUMENTS NEEDED .....	4
WHAT TO DO .....	4
A. Assigning Responsibilities .....	4
B. Identification of Potential Lessons Learned .....	7
C. Originating a Lessons Learned .....	8
D. Issuing Lessons Learned .....	10
E. Responses to Lessons Learned .....	11
F. Use of Lessons Learned Information .....	12
G. Assessing the Effectiveness of Lessons Learned .....	12
RECORDS .....	13
SOURCE DOCUMENTS .....	13
APPENDIXES .....	13
A. Definitions .....	14
B. Lessons Learned Template and Instructions .....	15
C. Guidelines for Use of a Manufacturer's Name in a Lesson Learned .....	18
D. Priority Descriptors .....	19
E. DOE Functional Category Codes .....	22
F. BWXT Y-12 Functional Subarea Category Codes .....	24
G. Hazard Codes .....	26
H. Work Activity Codes .....	28

Subject: Lessons Learned Program
----------------------------------

**REVISION LOG**  
**(Page 1 of 1)**

<b>Revision Date</b>	<b>Description of Change</b>	<b>Pages Affected</b>
04/17/2002	DM/R 01-PA-18  Intent change to address change in responsibility from the Quality Director to the Performance Assurance Director. Blue Sheet changes incorporated. Supersedes Y60-331, dated 11/01/2000.	4-5, 7-17, and 24
11/01/2000	Procedure adopted for use with noted changes by BWXT Y-12 Blue Sheet.	All
04/17/2000	DM/R 00-QAO-002  Intent Change, incorporating requirements resulting from corrective actions established due to the NaK incident and recent changes to DOE Standard, DOE-STD-7501-99, dated December 1999.	4, 5, 6, 7, 9, 12, 13, 15, 16, 17, 22, 23, 24, 25, 26, 27, and 28.
03/29/99	PM/R 99-QSO-034 Intent Change to address training; add "White" alerts; delete "Status Reporting;" and define "Responsibilities."  Procedure reformatted and renumbered from QA-331 to Y60-331.	All

## Subject: Lessons Learned Program

<b>PURPOSE</b>	This procedure defines the BWXT Y-12, L.L.C., (BWXT Y-12) program for identifying, disseminating and utilizing positive and negative operating experiences, i.e., Lessons Learned, which may be applicable to other organizations.
<b>APPLIES TO</b>	<p>This procedure applies to all BWXT Y-12 Organizations and operations. This procedure is written for direct implementation.</p> <p><b>NOTE 1:</b> Unclassified Controlled Nuclear Information (UCNI), proprietary, Privacy Act, or classified information will not be entered on documents generated by this procedure. Questions regarding the classification of information must be reviewed and resolved by a Y-12 Authorized Derivative Classifier (ADC) and UCNI Reviewing Official PRIOR to entry on any electronic media.</p> <p><b>NOTE 2:</b> The term “Organization Manager” is a general term used to identify the manager of a major program or organizational unit.</p>
<b>OTHER DOCUMENTS NEEDED</b>	<ul style="list-style-type: none"> <li>• Y15-312INS, <i>Issues Management</i></li> <li>• UCN-21013, <i>Lessons Learned Feedback</i></li> </ul>
<b>WHAT TO DO</b>	<p><b>A. Assigning Responsibilities</b></p> <p><b>Performance Assurance Director</b></p> <ol style="list-style-type: none"> <li>1. Assign individual(s) to be the Lessons Learned Program Manager(s).</li> </ol> <p><b>Lessons Learned Program Manager(s)</b></p> <ol style="list-style-type: none"> <li>2. Oversee the implementation of the lessons learned process.</li> <li>3. Provide overall program integration and coordination of lessons learned tasks.</li> <li>4. Collect, evaluate and disseminate lessons learned information.</li> <li>5. Maintain Lessons Learned Information System.</li> </ol>

Subject: Lessons Learned Program
----------------------------------

**A. Assigning Responsibilities (cont.)****Lessons Learned  
Program  
Manager(s)**

6. Provide training or awareness sessions as appropriate to organizations and organizational Lessons Learned Coordinators.

**Organization  
Manager**

7. Use lessons learned information to improve day-to-day operations/activities.
  - a. Review lessons learned provided by the Lessons Learned Program Manager and other sources, as appropriate, for applicability to the operations, facilities, processes, systems, projects, and/or activities.
  - b. Review and/or ensure applicable lessons learned information is communicated to personnel during pre-job briefings, crew briefings, safety meetings, Operational Safety Board (OSB) meetings, etc., as appropriate.
  - c. Maintain evidence demonstrating any actions taken for lessons learned that are applicable to the operations, facilities, processes, systems, projects, and/or job activities.
  - d. Review organizational responses to lessons learned for adequacy and completeness.
8. Designate to the Lessons Learned Program Manager an organizational Lessons Learned Coordinator to assist in the effective generation, dissemination, and use of lessons learned information throughout the organization.
9. Ensure that the Lessons Learned coordinator has the appropriate technical knowledge and support to administer an effective lessons learned function.
10. Respond to lessons learned requirements promptly through the organizational Lessons Learned Coordinator.
11. Ensure lessons learned are generated from work activities for dissemination to other organizations.

Subject: Lessons Learned Program
----------------------------------

**A. Assigning Responsibilities (cont.)****Lessons Learned  
Coordinator**

12. Assist Organization Manager in the evaluation, generation, dissemination, and use of lessons learned within their organization.
13. Assist organizational employees with developing and submitting draft lessons learned.
14. Provide timely responses to lessons learned requirements.

**Employees**

15. Review disseminated lessons learned information.
  - a. Apply lessons learned information to daily activities and/or job planning.
  - b. Utilize applicable lessons learned information during pre-job briefings, crew briefings, safety meetings, OSB meetings, etc., as appropriate.
16. Identify potential lessons learned and work with the organizational Lessons Learned Coordinator to generate, submit, disseminate, and use lessons learned information.

Subject: Lessons Learned Program

**B. Identification of Potential Lessons Learned****Organization  
Manager**

1. Maintain awareness of operational incidents external to BWXT Y-12 by monitoring bulletins and publications and by developing Lessons Learned based on experiences potentially applicable to BWXT Y-12 operations.
2. Ensure development of Lessons Learned originated from sources such as:
  - occurrence reports
  - independent assessments
  - management assessment issues
  - internal operating experiences
  - readiness reviews
  - trend analysis activities
  - reviews of external operating experiences
  - personal experiences
  - field activities
  - Federal and industry information
  - DOE-wide information
  - issues identified as per Y15-312INS, *Issues Management*
  - generic implications reviews.

**Lessons  
Learned  
Coordinator**

3. Ensure review of operational information for potential Lessons Learned.

UCN-21013, *Lessons Learned Feedback*, may be used to document this review.

Subject: Lessons Learned Program

**B. Identification of Potential Lessons Learned (cont.)****Issues  
Management  
Support Staff**

4. Screen internal and external sources of operational information to identify and disseminate potentially applicable information and Lessons Learned.

**All Employees**

5. Identify and originate Lessons Learned from positive and negative experiences encountered during operations or from reviews of industry experiences which are potentially applicable to BWXT Y-12 organizations.

**C. Originating a Lessons Learned****Originator**

1. Initiate a draft Lesson Learned using Appendix B, *Lessons Learned Template and Instructions*.
2. Ensure the draft receives an ADC approval, where required.
3. **IF** the draft Lesson Learned includes references to a manufacturer, **THEN**  
follow the guidelines in Appendix C, *Guidelines for Use of a Manufacturer's Name*.
4. Determine initial priority designation for the Lesson Learned using Appendix D, *Priority Descriptors*.
5. Determine initial category codes for the Lesson Learned using Appendices E, F, G and H.
6. Obtain review of the draft Lesson Learned by a validator.

The validator of a Lesson Learned is knowledgeable of the subject and the technical accuracy of the experience described.

**Validator**

7. Validate the draft Lesson Learned to ensure that the experience is potentially applicable to other BWXT Y-12 organizations or personnel.
8. Review draft Lesson Learned for technical accuracy and consistency with previously issued Lessons Learned on similar experiences.

Subject: Lessons Learned Program
----------------------------------

**C. Originating a Lessons Learned (cont.)**

- |  |  |
|--|--|
| <b>Validator</b>                       | <p>9. Coordinate any required changes in the Lesson Learned with the originator.</p> <p>10. Forward the validated Lesson Learned to a Lessons Learned Program Manager.</p>   |
| <b>Lessons Learned Program Manager</b> | <p>11. Review the submitted Lesson Learned for completeness and readability.</p> <p>12. Forward all Lessons Learned pertaining to public safety to the Law Department for review.</p> <p>13. Obtain necessary approvals and response requirements based on the priority descriptor for the Lesson Learned using Table 1.</p> |

**TABLE 1  
APPROVALS OF LESSONS LEARNED**

Priority Descriptor	Validator	Lessons Learned Program Manager	Director, Performance Assurance
RED	X	X	X
YELLOW	X	X	
BLUE	X	X	
WHITE	X	X	
GREEN	X	X	

“X” indicates the approvals required based on the Priority Descriptor assigned to the Lesson Learned.

Subject: Lessons Learned Program
----------------------------------

#### D. Issuing Lessons Learned

**Lessons Learned  
Program  
Manager**

1. Distribute Lessons Learned with a priority descriptor of “Blue,” “White,” and “Green” to applicable organizational Lessons Learned Coordinators. |
2. Distribute Lessons Learned with a priority descriptor of “Red ,” and “Yellow,” to all organizational managers and all organizational Lessons Learned Coordinators. |

Include time frame for any required responses in the transmittal, normally 30 working days. |

3. Track required actions as appropriate.
4. Place the lesson on the Lessons Learned Information System.

The Lessons Learned Information System may be accessed from the Y-12 Internal Home Page at the Lessons Learned link. |

5. Obtain necessary approvals for external release of the Lesson Learned.

External release approvals are necessary to release the Lesson Learned to the DOE Lessons Learned List Service or other external sources.

6. Ensure release of the Lesson Learned to external sources upon receipt of necessary approvals.

Subject: Lessons Learned Program
----------------------------------

**E. Responses to Lessons Learned****Organization  
Manager**

1. Ensure review of issued Lessons Learned for applicability and development of organizational response, as defined in lesson transmittal.

**Lessons  
Learned  
Coordinator/  
Organization  
Manager**

2. Determine applicability of the Lesson Learned to organization's staff (including subcontractors).
3. Disseminate the Lesson Learned to the organization's staff, specifying any required actions or response requirements.
4. Identify any actions taken or planned relative to the Lesson Learned.
5. Provide documented response of actions taken or planned, as required by the initial Lesson Learned transmittal, to the Lessons Learned Program Manager within the required timeframe.

**Lessons Learned  
Program  
Manager**

6. **IF** a response is required for a Lesson Learned, **THEN**
  - a. Compile responses from all organizations
  - b. Obtain necessary site or organizational review of responses, as appropriate.
  - c. Forward compiled responses to BWXT Y-12 senior management and others as deemed appropriate.

Subject: Lessons Learned Program

**F. Use of Lessons Learned Information**

**NOTE:** The Lessons Learned Information System is accessible through the Y-12 Internal Home Page at the Lessons Learned link.

**Organization  
Manager**

1. Ensure employees conduct word and subject searches of the Lessons Learned Information System to identify applicable Lessons Learned.

Word and subject searches of previously issued Lessons Learned are performed in situations such as:

- Defining new corrective actions
- Developing new programs or procedures
- Incorporating applicable Lessons Learned into project, job and budget planning
- Evaluating adverse or positive program trends to identify methods previously proven effective (or ineffective) in addressing similar situations
- Evaluating and incorporating Lessons Learned into new and existing training programs.

**G. Assessing the Effectiveness of Lessons Learned****Organization  
Managers**

1. Assess the application and utilization of Lessons Learned through a follow-up of issued lessons, or as part of regularly scheduled management assessment activities.

**Performance  
Assurance  
Organization**

2. Conduct periodic follow-up on utilization of Lessons Learned during independent assessments of organizations and inform senior management of results.

Subject: Lessons Learned Program
----------------------------------

**RECORDS**

The following records are generated and maintained according to established BWXT Y-12 records management practices and approved records inventory and disposition schedules.

Records supporting corrective actions defined in response to “Red Alerts” are maintained in accordance with Y15-312INS, *Issues Management*.

**SOURCE  
DOCUMENTS**

- BWXT Y-12 Standards/Requirements Identification Document (S/RID), Requirement Units: RUID 9938 and 10791
- Y60-101PD, *Quality Program Description*
- DOE-STD-7501-99, *The DOE Corporate Lessons Learned Program*

**APPENDIXES**

- A. Definitions
- B. Lessons Learned Template and Instructions
- C. Guidelines for Use of a Manufacturer’s Name in a Lesson Learned
- D. Priority Descriptors
- E. DOE Functional Category Codes
- F. BWXT Y-12 Functional Subarea Category Codes
- G. Hazard Codes
- H. Work Activity Codes

Subject: Lessons Learned Program
----------------------------------

**APPENDIX A**  
**Definitions**  
**(Page 1 of 1)**

**LESSON LEARNED** - A “good work practice” or innovative approach that is captured and shared to promote repeat application. A Lesson Learned may also be an adverse work practice or experience that is captured and shared to avoid recurrence.

**LESSONS LEARNED COORDINATOR** - The coordinator for the Lessons Learned Program for a specific organization.

**LESSONS LEARNED PROGRAM MANAGER** - The administrator for the Lessons Learned Program for BWXT Y-12.

**ORIGINATOR** - The individual who identifies and documents a proposed Lesson Learned.

**PRIORITY DESCRIPTOR** - A designator provided to identify the potential level of significance or applicability of a Lesson Learned (See Appendix D).

**VALIDATOR** - An individual who, by education, training, and/or experience, is recognized as a subject matter expert in the particular subject or experience described by the Lesson Learned.

Subject: Lessons Learned Program

APPENDIX B
Lessons Learned Template and Instructions
(Page 1 of 3)
OFFICIAL USE ONLY

TITLE: \_\_\_\_\_

IDENTIFIER: \_\_\_\_\_

DATE: \_\_\_\_\_

LESSONS LEARNED STATEMENT: \_\_\_\_\_

DISCUSSION: \_\_\_\_\_

ANALYSIS: \_\_\_\_\_

RESOLUTION/RECOMMENDED ACTIONS: \_\_\_\_\_

ORIGINATOR: \_\_\_\_\_

BWXT Y-12 Complex

(Name of Site)

(Person Name, Phone)

(Division Name)

VALIDATOR: \_\_\_\_\_

(Name, Phone)

CONTACT: \_\_\_\_\_

NAME OF AUTHORIZED DERIVATIVE CLASSIFIER: \_\_\_\_\_

NAME OF REVIEWING OFFICIAL: \_\_\_\_\_

ESTIMATED SAVINGS/COST AVOIDANCE (if applicable) \_\_\_\_\_

PRIORITY DESCRIPTOR: \_\_\_\_\_

DOE FUNCTIONAL CATEGORY: \_\_\_\_\_

ISM CORE FUNCTION(S): \_\_\_\_\_

BWXT Y-12 FUNCTIONAL CATEGORY: \_\_\_\_\_

HAZARDS: \_\_\_\_\_

WORK ACTIVITY: \_\_\_\_\_

KEYWORDS: \_\_\_\_\_

REFERENCES: \_\_\_\_\_

Subject: Lessons Learned Program
----------------------------------

**APPENDIX B**  
**Lesson Learned Template and Instructions**  
**(Page 2 of 3)**

**TITLE:** Brief description of the subject of the Lesson Learned.

**\*\*IDENTIFIER:** Unique identifier. **\*\*DATE:** Date issued.

**LESSONS LEARNED STATEMENT:** One or two sentence statement that summarizes the lesson that was learned from the activity.

**DISCUSSION:** Brief description of the facts which resulted in the initiation of the lesson learned. Indicate references for additional information.

**ANALYSIS:** Results of any causal analysis, results of investigation, etc.

**RESOLUTION/RECOMMENDED ACTIONS:** Brief description of the actions which were taken, will be taken, or should be taken in association with the Lesson Learned.

**ORIGINATOR:** BWXT Y-12 - Site which originates the Lesson Name and phone number of the originator of the Lesson Learned. |  
Name of organization which originated the Lesson Learned.

**VALIDATOR:** Name and phone number of the validator of the Lesson Learned.

**CONTACT:** Name of Lessons Learned Program Manager.

**NAME OF AUTHORIZED DERIVATIVE CLASSIFIER:** Name of the Y-12 Authorized Derivative Classifier who determined that the Lesson Learned document did not contain classified information. |

**NAME OF REVIEWING OFFICIAL:** Name of Y-12 Reviewing Official who determined that the Lesson Learned document did not contain UCNI Information, provided by Lessons Learned Program Manager prior to external release. |

**ESTIMATED SAVINGS/COST AVOIDANCE:** If applicable, provide estimate of hard and/or soft dollar savings resulting from actions taken in response to lessons learned or corrective actions.

**PRIORITY DESCRIPTOR:** A descriptive code that assigns a level of significance to the Lesson Learned. See Appendix D

Subject: Lessons Learned Program
----------------------------------

**APPENDIX B**  
**Lesson Learned Template and Instructions**  
**(Page 3 of 3)**

**DOE FUNCTIONAL CATEGORY:** Category which best describes the area(s) in which the lesson is most applicable. See listing in Appendix E.

**ISM CORE FUNCTION(S):** ISM Core Functions which best describes this lesson. See listing in Appendix E.

**BWXT Y-12 FUNCTIONAL SUBAREA CATEGORY:** Category which best describes the area(s) in which the lesson is most applicable. See listing in Appendix F.

**HAZARD CODES:** Hazard Code which best describes the hazards in which the lesson is most applicable. See listing in Appendix G.

**WORK ACTIVITY CODES:** Work activity code which best describes the activities in which the lesson is most applicable. See listing in Appendix H.

**KEYWORDS:** Word(s) used to convey related concepts or topics stated in the lesson.

**REFERENCES:** References with additional or related information to the lesson, such as CAPS identifiers, Occurrence Report numbers, procedure numbers, etc.

\*\* The Lessons Learned Program Manager is responsible for entry of information in these fields.

Subject: Lessons Learned Program
----------------------------------

**APPENDIX C**  
**GUIDELINES FOR USE OF A MANUFACTURER'S NAME**  
**IN A LESSON LEARNED**  
**(Page 1 of 1)**

**PURPOSE:**

To avoid the possible appearance of slander of goods or commercial disparagement, care must be taken when information about manufactured goods or products is distributed as a Lesson Learned. The following guidelines are intended to advise lesson originators of factors to consider when a manufacturer's name is included in a Lesson Learned.

**USE OF MANUFACTURER'S NAME:**

Certain situations may warrant inclusion of a manufacturer's name when:

- Worker safety and health could be affected,
- A potential for property damage exists,
- There is a demonstrated need to track the failure rate or trending of problems associated with a particular type of goods or products, or
- The manufacturer's name is essential for utilizing the Lesson Learned.

**GUIDELINES:**

When it has been determined that a manufacturer's name should be referenced or included in a Lesson Learned, the following guidelines should be followed:

1. State facts only and not opinions.
2. Draw no conclusions from the facts.
3. Describe the circumstances of the failure or shortcoming of the goods or products and the extent of the problem in the Lesson Learned "Discussion."
4. Notify the manufacturer and relate the problem. If the manufacturer undertakes corrective action, such as issuing replacement parts, include a statement of that fact in the "Recommended Actions" on the Lesson Learned. Also, notify the appropriate department personnel about the problem. If appropriate, include a contact's name and telephone number in the References section.
5. Document the discussion with manufacturer.

Subject: Lessons Learned Program

**APPENDIX D**  
**PRIORITY DESCRIPTORS**  
 (Page 1 of 3)

	<b>RED ALERT (Actual Event)</b>	<b>YELLOW ALERT (Potential Event Conditions)</b>	<b>BLUE/ INFORMATION (Fact or Discovery of Benefit to Others)</b>	<b>WHITE/ADVISORY (Product Information of Benefit to Others)</b>	<b>GREEN ALERT (Good Work Practice)</b>
<b>Public Safety</b>	Event related to site operation that has affected public safety and health or threatened public safety and health	Potential event related to site operation which may have affected public safety and health	Information to protect public safety and health including, but not limited to, cumulative findings from trending	Consumer product information to protect public safety and health including, but not limited to, cumulative findings from trending	Action, activity, or practice which improves public safety and health
<b>Worker Safety</b>	Fatality, near fatality, serious injury, or permanent /total disability	Conditions which resulted in: - injury - temporary or partial disability or - significant loss of work time or productivity	Information to protect worker health and safety including, but not limited to, cumulative findings from trending	Consumer product information to protect worker health and safety including, but not limited to, cumulative findings from trending	Action, activity, or practice that promotes: - safe work practices or - healthful work practices

Subject: Lessons Learned Program

**APPENDIX D**  
**(Page 2 of 3)**

	<b>RED ALERT (Actual Event)</b>	<b>YELLOW ALERT (Potential Event Conditions)</b>	<b>BLUE/ INFORMATION (Fact or Discovery of Benefit to Others)</b>	<b>WHITE/ADVISORY (Product Information of Benefit to Others)</b>	<b>GREEN ALERT (Good Work Practice)</b>
<b>Environmental Protection</b>	Uncontained hazardous release beyond the site boundary. Significant uncontained on-site hazardous release requiring cleanup	Condition which may have resulted in an uncontained release to the environment or a moderate on-site hazardous release	Information to protect the environment including: - measurable, but minor, hazardous releases or - cumulative findings from trending	Consumer product information to protect the environment including: - measurable, but minor, hazardous releases or - cumulative findings from trending	Action, activity, or practice which: - prevents on or off-site environmental degradation or - will limit or reduce on or off-site releases to the environment.
<b>Compliance</b>	Violations of Federal or State law with significant penalties	Violations of Federal or State law with minor penalties. Significant non-compliance with the technical requirements of DOE Orders or regulations	Information which may improve compliance performance	Consumer product information which may improve compliance performance	Action, activity, or practice which improves the compliance performance of the site

Subject: Lessons Learned Program

**APPENDIX D**  
**(Page 3 of 3)**

	<b>RED ALERT (Actual Event)</b>	<b>YELLOW ALERT (Potential Event Conditions)</b>	<b>BLUE/ INFORMATION (Fact or Discovery of Benefit to Others)</b>	<b>WHITE/ADVISORY (Product Information of Benefit to Others)</b>	<b>GREEN ALERT (Good Work Practice)</b>
<b>Management/ Administra- tion</b>	Significant management violations including fraud, abuse, and discrimina-tion	Identified actions reflecting failure to operate within DOE management imperatives	Information which may improve DOE management performance	Consumer product information which may improve DOE management performance	Action, activity, or practice which improves DOE management performance
<b>Investment and Investment Protection</b>	Significant loss or damage of major equipment, property or facility	Potential for major equipment, property or facility to become: - lost or damaged - degraded - unreliable	Information which may improve: - value - efficiency - cost	Consumer product information which may improve: - value - efficiency - cost	Action, activity, or practice which improves: specifica-tions, reliability, efficiency, credibility
<b>Public Interest</b>	On-site event that is perceived by the public to have: - an effect on public safety and health or - threatened public safety and health	A potential site operations event which may have affected the public, excluding safety and health, had the event occurred	Information beneficial to public relations	Consumer product information beneficial to public relations	Action, activity, or practice that promotes benefits to the public

Subject: Lessons Learned Program
----------------------------------

**APPENDIX E**  
**DOE FUNCTIONAL CATEGORY CODES**  
**(Page 1 of 2)**

AB	Authorization Basis
AF	Alternate Fuels
BS	Business and Support Services
CF	Configuration Management
CO	Conduct of Operations
	General
	Configuration Management
	Lockout/Tagout
	Procedure Development
	Procedure Adherence
	Work Planning
	Work Control
CR	Criticality
DD	Decontamination and Decommissioning
EC	Energy Conservation
EM	Emergency Management
EN	Engineering Design and Construction (Nuclear)
EP	Environmental Protection
	General
	Environmental Sampling
	Releases
	RCRA Management
	Underground Storage Tanks
	NEPA Management
	TSCA Management
ER	Environmental Restoration and Waste Management
FP	Fire Protection
HF	Human Factors
HR	Human Resources
IT	Information Technology

Subject: Lessons Learned Program
----------------------------------

**APPENDIX E**  
**(Page 2 of 2)**

MA Maintenance

- Electrical
- Facility
- HVAC
- Instrumentation and Control
- Mechanical
- Power Distribution and Utilities
- Roads and Grounds
- Structural
- Safety Systems
- Heavy Equipment
- Vehicle

MG Management

NN Engineering Design and Construction (Non-Nuclear)

NP Natural Phenomena Hazards

OP Operations

- Facility
- Heavy Equipment

OS Occupational Safety & Health

- General
- Personnel Protective Equipment

PT Packaging & Transportation

QU Quality

RD Research & Development

RP Radiation Protection

SF Safety

SS Safeguards & Security

TQ Training & Qualifications

ISM Core Functions

DW Define Work

AH Analyze Hazards

DC Develop/Implement Controls

PW Perform Work

FI Feedback and Improvement

Subject: Lessons Learned Program
----------------------------------

**APPENDIX F**  
**BWXT Y-12 FUNCTIONAL SUBAREA CATEGORY CODES**  
**(Page 1 of 2)**

AC	Accounting & Financial Management
AD	Administration
AF	Alternate Fuels
AU	Auditing
BA	Benefits Administration
BF	Benefits
BS	Business Systems
BT	Business Services
CL	Classification
CM	Configuration Management
CP	Compensation
CR	Contracts
CS	Criticality Safety
CU	Computing
EC	Engineering and Construction
EE	Employee Relations
EL	Electrical
EM	Emergency Management
EO	Workforce Diversity
EP	Environmental Protection
ER	Environmental Restoration
ET	Ethics
EV	Evaluations
FO	Fire Protection Operations
FP	Fire Protection Engineering
FS	Facility Safety
HF	Human Factors
HO	Hoisting and Rigging
HR	Human Resources
IC	Instrumentation and Controls
IO	Information Flow & Operations
IT	Information Technology
LE	Legal
LR	Employee Relations
MA	Maintenance
MD	Medical
ME	Mechanical/Structural
MS	Management Systems

Subject: Lessons Learned Program
----------------------------------

**APPENDIX F**  
**(Page 2 of 2)**

NM	Nuclear Materials
NP	Natural Phenomena Hazards
NS	Nuclear Safety
OP	Conduct of Operations
PC	Procurement
PL	Planning and Controls
PM	Property
PR	Public Relations
PS	Protective Services
QA	Quality Assurance
QC	Quality Control
RD	Research/Development
RE	Reindustrialization
RP	Radiological Protection
SA	Safety Analysis
SD	Safety Design
SH	Safety and Health
SS	Safeguards and Security
ST	Staffing
SU	Subcontracting
TE	Telecommunications
TQ	Training and Qualification
TR	Transportation Safety
TT	Technology Transfer
WD	Workforce Diversity
WM	Waste Management
WO	Work for Others
WP	Weapons

Subject: Lessons Learned Program
----------------------------------

**APPENDIX G**  
**HAZARD CODES**  
**(Page 1 of 2)**

BH	Biological Hazards
CN	Contamination
CS	Confined Space
EG	Ergonomics/Lifting
EL	Electrical/NEC
EN	Environmental
EW	Elevated Work/Falling Objects
EX	Excavation & Trenching
FE	Firearms & Explosives
FR	Fire/NFPA
HH	Health/Hygiene
HN	High Noise Levels
HZ	Hazardous Materials
LZ	Laser
ME	Mechanical/Structural
NI	Non-Ionizing Radiation
NP	Natural Phenomena
OT	Other
PA	Plants/Animals/Insects
PI	Personal Injury/Exposure
	Airborne Materials
	Ambient Temperature Extremes
	Asbestos
	Beryllium
	Hazardous Material (General)
	Infectious Agents
	Mechanical Injury (Striking/Crushing)
	Noise
	Other
	Radiation/Contamination
	Slips and Tripping
	Toxic Material
PP	Personnel Protection
PS	Pressurized Systems
PT	Power Tools

Subject: Lessons Learned Program
----------------------------------

**APPENDIX G**  
**(Page 2 of 2)**

RD	Radiological
SS	Safeguards & Security
ST	Slips & Tripping
TE	Temperature Extremes
TF	Traffic
TR	Transportation
WA	Wastes
WR	Weather-Related
WW	Walking/Working Surfaces

Subject: Lessons Learned Program
----------------------------------

**APPENDIX H**  
**WORK ACTIVITY CODES**  
**(Page 1 of 1)**

CO	Construction
DD	Decontamination & Decommissioning
DE	Demolition
DR	Driving
EX	Excavation
FE	Facility Equipment
FM	Facility Maintenance
GR	Roads/Grounds
HE	Heavy Equipment
HO	Hoisting and Rigging
HV	HVAC
IC	Instrumentation & Control
IT	Inspection & Testing
LE	Laboratory/Experimentation
MF	Machining & Fabrication
MH	Material/Material Handling
MS	Material Storage
MT	Measurement & Test Equipment
OT	Other
PU	Power & Utilities
RD	Radiological
SS	Safety/Safety Significant Systems
VE	Vehicles
WB	Welding, Burning, Hotwork
WC	Work Control
WD	Well Drilling
WR	Waste Remediation