



April 30, 1999  
GDP 99-2020

Ms. Cynthia D. Pederson  
Director, Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission  
Region III  
801 Warrenville Road  
Lisle, Illinois 60532-4351

**Portsmouth Gaseous Diffusion Plant (PORTS)  
Docket No. 70-7002**

**Submittal of Revision 5 of the PORTS Nuclear Criticality Safety (NCS) Program Corrective Action Plan (CAP) and NCS Program Quarterly Status Report**

Dear Ms. Pederson:

Pursuant to References 1 and 2, the United States Enrichment Corporation (USEC) is transmitting revision 5 of the PORTS NCS CAP (see Enclosure 1). As indicated in References 1 and 2, the reasons for this revision to the PORTS NCS CAP are summarized below:

- reflects the current ongoing work, provides an updated list of NCSA/Es, and deletes those tasks which have been completed or are no longer needed;
- clarifies the process for handling emergent work and the criteria for determining whether revised or new NCSA/Es should be covered under the NCS CAP;
- provides the basis for the projected milestone completion dates for Task 3; and
- includes a detailed justification for the consolidation of the revision 4 Priority 2 and 3 NCSA/Es.

PORTS has placed greater emphasis and focus on completion of the NCS CAP. Specifically, an NCSA Implementation Team has been assembled reporting directly to the General Manager. This team is headed up by the Commitment Management Manager and other managers that will provide a full time effort towards completing the near-term task of implementing the Priority 1 NCSA/Es.

It should be noted that the tasks and completion dates in revision 5 of the NCS CAP were reviewed and approved by the PORTS Corrective Action Review Board. Attachment 2 to Enclosure 1 provides the current list of Priority 1 and 2 NCSA/Es, those NCSA/Es requiring "Additional Reviews" (e.g., completion of the AQ-NCS classification), and a list of NCSA/Es deletions and consolidations.

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A detailed listing of the changes to the NCS CAP are provided in Enclosure 2.

Highlights of the revised CAP are listed below:

- The implementation date for the Priority 1 and Additional Reviews NCSA/Es has not been changed. The scope of the Priority 2 NCSA/Es has been increased to 27 from 22 and the implementation date for the Priority 2 NCSA/Es has been extended from March 3, 2000, to July 30, 2000.
- The completion dates for Task 5 have been extended from December 15, 1999, to March 30, 2000, for Priority 1 NCSA/Es and May 20, 2000, to January 31, 2001, for Priority 2 NCSA/Es.
- Tasks 8 and 21 have been reopened with both task completion dates being January 28, 2000.

Enclosure 3 to this letter is the Quarterly Status Report for the PORTS NCS CAP for the period of January 21, 1999, through April 20, 1999. This status report reflects the information provided to the NRC in Reference 2.

USEC previously identified that AQ-NCS requirements were not fully implemented for the following five Priority 1 NCSA/Es:

- NCSA/E 0326\_013.A06
- NCSA/E 0330\_004.A03
- NCSA/E 0333\_015.A03
- NCSA/E 0705\_015.A09
- NCSA/E PLANT079.A01

USEC previously reported these NCSA/Es as approved and implemented; however, after NRC violation 98206-02 was identified, these NCSA/Es should have been reported as implemented with AQ-NCS flowdown in process. This is properly reported in Enclosure 3.

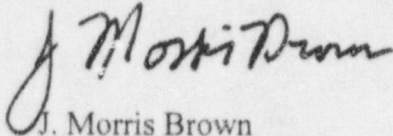
After evaluating the extensive calibrations and other field-work associated with the flow-down of AQ-NCS requirements for the NCSA/Es associated with cascade operations, USEC recently decided it is more appropriate to rewrite certain portions of the NCSA/Es. As a result of this additional information, USEC is changing the status of these five NCSA/Es to implemented with AQ-NCS flow-down in process. The revision of these five NCSA/Es will not change USEC's Priority 1 NCSA/E implementation completion dates.

The commitments contained in this letter are located in Enclosure 1, Attachment 1.

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If you have any questions concerning this submittal, please contact Peter J. Miner at (740) 897-2710.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. Morris Brown". The signature is fluid and cursive, with the first name "J." being small and the last name "Brown" being larger and more prominent.

J. Morris Brown  
General Manager  
Portsmouth Gaseous Diffusion Plant

Enclosures: As Stated

cc: NRC Document Control Desk  
NRC Resident Inspector - PGDP  
NRC Resident Inspector - PORTS  
NRC Project Manager - PORTS  
NRC Special Projects Branch  
DOE Regulatory Oversight Manager



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#### References

1. USEC letter to NRC dated February 1, 1999, GDP 99-0020, "Portsmouth Nuclear Criticality Safety Program - Quarterly Status Report."
2. USEC letter to NRC dated March 19, 1999, GDP 99-0050, "Notification of Change in Regulatory Commitments, Nuclear Criticality Safety Program Corrective Action Program."



**PORTS Nuclear Criticality Safety Program  
Corrective Action Plan, Revision 5**

**I. Background**

As explained in earlier versions of the NCS CAP, the purpose of the CAP is to identify and define the steps to increase the effectiveness of the NCS Program and its support for the operation of the plant.

Since all but 4 of the 26 Tasks in revision 4 have been completed, revision 5 was prepared to make the document more concise and useful. In revision 5, subtasks were renumbered starting with .1 in each Task.

USEC letter GDP 99-0020 committed to clarify whether revisions to NCSA/Es should be covered under the NCS CAP. New NCSA/Es or changes to NCSA/Es are often needed to support plant safety, operational, or regulatory issues. This type of change (i.e., response to emergent work) is processed as a revision to an NCSA/E.

Revising NCSA/Es is considered routine support of day-to-day operations and there is no need to include the details of this activity in the NCS CAP.

USEC letter GDP 99-0050 committed to provide the basis for the Task 3 projected milestone completion dates. Although historical data of the time required to implement an NCSA/E is available, additional factors were considered to determine the time to implement the upgraded Priority 1 NCSA/Es. Factors considered included, the coordination of NCSA/E implementation with other important work that must be accomplished in the same time period, the personnel resources, especially subject matter experts, who are in most cases the same personnel being used to assist with upgrading Priority 2 NCSA/Es and related activities such as the additional reviews, and the need for proper sequencing of NCSA/Es being implemented. To determine completion dates, working sessions for each Priority 1 NCSA/E being implemented were held to identify and review implementing tasks (such as identifying which specific AQ-NCS instrumentation requires calibration, confirming adequacy of the related calibration procedures, initiating calibration work planning packages, and scheduling the calibrations), durations for these specific tasks were based on past performance and recent experience, critical paths were identified, and the specific tasks and times were integrated into a master schedule.

The processes for upgrading Priority 2 NCSA/Es are the same as the Priority 1 NCSA/E upgrades. The time to upgrade Priority 2 NCSA/Es is based on averages of the actual time to upgrade Priority 1 NCSA/Es.

USEC letter 99-0050 also committed to include a detailed justification for the consolidation of the list of Priority 2 and 3 NCSA/Es. To identify the remaining NCSA/Es requiring upgrade, the Non-Priority 1 NCSA/Es from revision 4 of the NCS CAP were reviewed in a systematic manner, using a checklist and criteria. For example: an outstanding problem report indicated a significant concern, or the NCSA controls could be worded significantly better for the user, or an NCSA control could be replaced with a better control (such as a passive barrier or active design feature). This review was performed by a Senior NCS Engineer. The results were reviewed by the managers of the Fissile Material Operations (FMOs), and approved by the NCS Manager. Based on the review, the new number of Priority 2 NCSA/Es is 27, the new number of NCSA/Es requiring "Additional Reviews" is 93, and the number of NCSA/Es that will be deleted or consolidated is 42.

The completion of Task 5 is dependent upon completion of Task 3, experience with performing previous surveillances of the implementation of NCSA/Es, with allowance for the fact that the implementation of NCSA/Es, and allowing for the fact that the implementation of NCSA/Es tend to accumulate toward the end of the schedule. The completion dates for Task 8 are based on the previous experience with resolving concerns in the NCS Vertical Slice Report with an allowance for time to review and compile the documentation as task closure evidence. The completion dates for Task 21 are based on previous experience with building walkdowns, the time to process drawings if required, and to compile the documentation as closure evidence.

## **II. Details of Open Tasks**

### **Task 3. NCSA/E Upgrade project**

The objective of the NCSA/E upgrade project is to improve the technical content of the NCSA/Es while making them easier to understand and enhance compliance, and to ensure proper flow-down and implementation of NCSA requirements.

NCSA/Es upgrades were prioritized as follows:

**Priority 1:** NCSA/Es for continuous operations which support feed, enrichment or withdrawal activities because these are the activities performed the most often and therefore have the highest potential risk.

**Priority 2:** A review, using a checklist and criteria, determined these NCSA/E should be upgraded. For example: an outstanding problem report indicated a significant concern, or the NCSA controls could be worded significantly better for the user, or an NCSA control could be replaced with a better control (such as a passive barrier or active design feature)



**Additional Reviews:** For NCSA/Es not classified Priority 1 or 2, a review will be performed to ensure proper AQ-NCS determination and flow-down of NCSA/E requirements.

<u>Subtask No.</u>	<u>Subtask Description</u>
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- |     |   |
|-----|---|
| 3.1 | Upgrade and implement Priority 1 NCSA/Es in accordance with approved procedures, including the following: <ul style="list-style-type: none"><li>• Complete PORC approval.</li><li>• Complete AQ-NCS classification of Systems, Structures, and components (SSCs).</li><li>• Complete the procedures, training, and implementation.</li></ul>  |
| 3.2 | Upgrade and implement Priority 2 NCSA/Es in accordance with approved procedures, including the following: <ul style="list-style-type: none"><li>• Form review groups which would typically consist of representatives from NCS, Systems Engineering, Operations Management, and a hands-on, operator or maintenance technician.</li><li>• Perform reviews and walk-downs in accordance with an approved procedure (e.g., XP4-EG-NS2042, Nuclear Criticality Safety).</li><li>• Table top scrub NCSA/Es and their supporting documents, including a review and closeout of applicable problem reports.</li><li>• Review PGDP NCSA/Es for similar activities and apply where appropriate.</li><li>• Conduct peer review.</li><li>• Obtain PORC approval.</li><li>• Complete AQ-NCS classification of SSC.</li><li>• Update applicable procedures, postings, training, Boundary Manuals, and associated plant conditions (e.g., calibrations).</li><li>• Walk-down approved (PORC and General Manager) NCSA/Es to document their readiness for implementation.</li><li>• Implement the NCSA/E.</li></ul> |
| 3.3 | For NCSA/Es not Priority 1 or 2, perform reviews of the implementation of NCSA/Es to ensure or correct the following: <ul style="list-style-type: none"><li>• AQ-NCS classifications of SSC are proper, and,</li><li>• Requirements are properly flowed-down (e.g., into procedures, postings, and training).</li></ul>   |

<b>Task 5.</b>	<b>Safety, Safeguards and Quality (SS&amp;Q) Review of Implementation</b>
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As part of the ongoing self-assessment activities at PORTS, SS&Q is monitoring the implementation of new NCSA/Es in the field. This monitoring utilizes ANSI/ASQC Z1.4, *Sampling Procedures and Tables for Inspection by Attributes*, for sampling guidance and takes the form of a series of assessments after the NCSA/Es are implemented. The plan for implementing this review process follows:

<u>Subtask No.</u>	<u>Subtask Description</u>
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- |     |   |
|-----|---|
| 5.1 | Develop list of NCSA/E changes from Task 3.                   |
| 5.2 | Write an Assessment Plan.                                     |
| 5.3 | Schedule assessments as an extension of Task 3's schedule.    |
| 5.4 | Perform assessments in accordance with applicable procedures. |

**Task 8.        Vertical Slice Review**

This task is to ensure the recommendations, observations, and concerns in the final signed version of the NCS Vertical Slice Report are properly evaluated and dispositioned.

<u>Subtask No.</u>	<u>Subtask Description</u>
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- |     |   |
|-----|---|
| 8.1 | Evaluate recommendations, observations, and concerns in the NCS Vertical Slice Report.            |
| 8.2 | Provide an explanation for those items considered acceptable-as-is (i.e., no change is required). |
| 8.3 | Where applicable, determine corrective actions and completion dates.                              |
| 8.4 | Complete corrective actions.  |

**Task 21.       Fissile Material Operation (FMO) Identification**

The FMOs were previously identified. The objective of this task is to confirm these FMOs (including handling, storage, processing, and transportation) involving uranium enriched to 1.0 wt. % or higher <sup>235</sup>U and 15 grams or more of <sup>235</sup>U are properly identified and to enhance the documentation associated with the identification of FMOs.

<u>Subtask No.</u>	<u>Subtask Description</u>
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- |      |   |
|------|---|
| 21.1 | Issue an approved procedure for identifying and documenting FMOs.     |
| 21.2 | Conduct training on the methods for identifying and documenting FMOs. |
| 21.3 | Conduct field walk-downs to identify and document FMOs.               |

**Attachments**

1. Implementation Schedule End Dates
2. List of NCSA/Es

Implementation Schedule End Dates		
Task #	Description	Target Date
3	Complete PORC approval of 4 Priority 1 NCSA/Es	05/21/99
	Complete AQ-NCS classifications for 4 PORC approved Priority 1 NCSA/Es	06/09/99
	Complete procedures, training, and implementation of Priority 1 NCSA/Es	09/30/99
	Complete PORC approval of Priority 2 NCSA/Es	01/28/00
	Complete AQ-NCS classifications for Priority 2 NCSA/Es	02/25/00
	Complete procedures, training, and implementation of Priority 2 NCSA/Es	07/30/00
	Complete changes to AQ-NCS classifications resulting from additional reviews	05/19/00
	Complete changes to procedures, training, and implementation resulting from additional reviews	05/18/01
5	Complete SS&Q review of implementation of Priority 1 NCSA/Es	03/30/00
	Complete SS&Q review of implementation of Priority 2 NCSA/Es	01/31/01
8	Complete resolution of recommendations and observations in the NCS Vertical Slice Report	01/28/00
21	Complete the documentation of Fissile Material Operations	01/28/00



Priority 1 NCSA/Es (Without Date Extensions)

NCSA #	SUBJECT
0326_013.A06	Cascade Operations in the X-326 Building
0326_015.A05	Extended-Range Product (ERP) Withdrawal Station
0330_004.A03	Cascade Operations in the X-330 Building
0330_007.A02	Product Withdrawal at the Tails Withdrawal Station
0330_013.A01	Long Term Storage of PEH Converter in X-330
0333_015.A03	Cascade Operations in the X-333 Building
0333_017.A02	Low Assay Withdrawal (LAW) Station
0344A002.A03	X-344A Pigtail Vent System
0705_009.A01	Seal Dismantling Room
0705_012.A03	Small Parts Hand-Table Operations
0705_015.A09	Waste Water Treatment (Microfiltration System)
0705_024.A01	Calciners, Solution Recovery
0705_025.A01	Nitrous Oxide (NOx) Scrubber System
0705_034.A03	Spray Booth Operations
0705_041.A01	Material Handling and Storage in X-705
0705_042.A02	Small Equipment Tear-Down (Blue Room)
0705_064.A01	Seal Can Handling and Storage in X-705
0710_009.A01	Uranium Chain of Custody
PLANT004.A03	Storage, Handling, and Transportation of Large UF6 Cylinders
PLANT006.A07	General Use of Small Diameter Containers for Storing High Enriched Material
PLANT018.A02	Dry Active Waste (Contaminated Burnables) in Waste Generation Areas and in Interim Storage
PLANT022.A01	Sample Cylinder Handling and Storage
PLANT030.A03	Evacuation Booster Stations
PLANT033.A02	Surge Drums
PLANT038.A01	Interbuilding Tie Lines
PLANT043.A02	Fissile Material Transport
PLANT049.A02	Portable, Small UF6 Release Gulpers
PLANT054.A01	Lube Oil System
PLANT055.A01	Laundry
PLANT062.A02	Cascade Maintenance, Equipment Removal and Storage
PLANT066.A03	Mopping Contaminated Areas (CCZs, CAs and HCAs)
PLANT076.A00	340 Complex Oil Interceptors, Scale Pits, & Sumps
PLANT079.A01	Opening Equipment containing Greater than A Safe Mass of Uranium-Bearing Material
PLANT082.A00	340 Complex Waste Streams
PLANT085.A00	X-340 Complex Autoclave Operation

Total: 35

**Priority 1 NCSA/Es (With Date Extensions)**

<b>NCSA #</b>	<b>SUBJECT</b>
0326_014.A02	X-326 Seal Exhaust
0330_005.A01	X-330 Seal Exhaust and Area 3 Wet Air Evacuation
0333_016.A02	X-333 Seal Exhaust and Wet Air Evacuation
PLANT029.A02	Cascade Datum Systems

**Total: 4**

Priority 2 NCSA/Es

NCSA #	SUBJECT
0326_001.A02	Nuclear Criticality Safety of Shutdown and Standby X-326 Cells
0326_022.101	X-326 Use of Portable HEPA Ventilation Units for Specific Activities
0326_028.A00	Handling and Storage of Seals with Undetermined or Unknown Enrichment in X-326
0330_003.A02	Storage and Handling of Seals in X-330
0344A005.A02	X344A Small Diameter Container Storage
0705_002.A02	2.5-Ton, 10-Ton, and 14-Ton Cylinder Cleaning
0705_021.A01	B-Area Batching Handtable Operations
0705_031.A00	Equipment Disassembly in the North Teardown Area
0705_033.1C4	South Annex Operations - Cascade Equipment
0705_038.A01	Truck Alley Cleaning
0705_076.A00	Inadvertent Containers
0705_083.A01	"A", "B", and "C" Loop Concentrate Storage and Metering Systems
0710_006.A01	Uranium Sampling Laboratory
0710_008.A01	U-236 Isotopic Standards Preparation Laboratory
0710_011.A00	Mass Spectrometry Laboratory
0710_012.A01	Uranium Analysis Laboratory
0720_018.A00	Hydro Table In the X-720 Hydro Shop
PLANT013.A00	Batching Solutions and Solids
PLANT025.A01	General Use of Small Diameter Containers for Storing up to 10% Enriched Material
PLANT034.A00	Liquid Waste Collection and Sampling Systems
PLANT036.A00	Storage of Safe Batch Containers
PLANT045.A01	Limited Safe Volume Containers
PLANT048.A03	Contaminated Metal
PLANT053.A01	Uranium Analysis and Sampling
PLANT057.001	Use of Gas Sampling Cart
PLANT063.A01	Building Decontamination Activities
PLANT064.A01	Handling and Storage of Seals in X-326, X-330, and X-333

Total: 27



NCSA/Es Additional Reviews

NCSA #	SUBJECT
0326_027.A00	Operation of the X-326 NDA Laboratory
0330_009.A01	Flushing/Cleaning of 1-1/2" Vented Cavity Pipes and Compressor "B" Seal Cavities
0330_014.A00	X-330 Cold Recovery Area Wet Air Evacuation System
0330_015.A00	Interim Purge Area
0333_022.A00	Flushing/Cleaning of Vented Cavity Pipes and Compressor "B" Seal Cavities
0700_001.001	Fissile Material at the Radiation Instrument Calibration Facility
0700_002.A01	Heavy Metals Sludge Storage
0700_004.A01	X-700 Converter Disassembly, Repair, and Storage
0700_005.A00	Glass Bead Blasting
0700_006.A00	Biodenitrification (Pilot Plant and New Plant)
0700_007.A00	Cleaning Tank #3 Converter Flushing Station
0700_020.A00	Operation of the X-700 Chemical Tanks 1, 2, 4, and 5
0705_004.A01	5-Inch Cylinder Cleaning
0705_005.A00	Small Cylinder Rinse Pit
0705_010.A02	Small Parts Glass Bead Blaster
0705_011.A02	Small Parts Pit
0705_014.A01	Leaching/Complexing Handtable
0705_018.A03	8- and 12-Inch Cylinder Cleaning
0705_022.A01	B-38, B-1, and Dissolver Solution Storages
0705_023.A00	Operation of the "A," "B," and "C" Loop Extractor/Stripper Systems
0705_027.A03	Heavy Metals Precipitation
0705_028.A00	Technetium Ion Exchange
0705_030.A00	Recovery Elevator
0705_035.A05	Tunnel Storage
0705_037.A00	Ground Water Sumps
0705_039.A02	Oil and Grease Removal System
0705_040.A00	Overhead Storage
0705_043.A00	Elevator Tunnel
0705_044.001	Maintenance Shop
0705_050.A00	X-705 Process Laboratory
0705_051.A01	Solution Preparation
0705_055.A00	Facility Drains
0705_072.A00	Inspection and Testing of UF6 Cylinders
0705_073.001	Genie Model AWP30 Manlift
0705_075.A00	F- Area Fissile Material Handling and Storage

NCSA/Es Additional Reviews

NCSA#	SUBJECT
0705_082.A00	"A", "B", "C" Loop Pre-Evaporator Systems
0705_084.A00	"A" and "B" Loop Raffinate Storage and Recycle System
0705_085.A00	"A", "B," "C" Loop T-Water Storages
0705_086.A00	"A", "B", and "C" Loop Post Evaporator Systems
0705_099.A01	Post Evaporator Spray Condenser and Sample Condenser Systems
0705_100.A02	Pre-Evaporator Spray Condenser and Sample Condenser Systems
0705_102.A00	B Area Condensate Drain System
0705_103.A00	Process Vent System
0705_105.A02	Cylinder Cleaning Gulper System
0705_107.A00	2.5-ton, 10-ton, and 14-ton Cylinder Receiving & Storage
0705_110.A01	Used Microfilters Removal and Storage
0705_111.A01	Buffing Booth
0705_114.A00	Facilities Utilities/Services - Process Steam
0705_122.A02	Blending Cylinder Wash Solution
0705_123.A01	Small Cylinder Receipt and Storage
0705_124.A01	F-Area Oxide Glovebox
0705_127.A00	Classified Scrap Metal (Seal Parts Only)
0705_128.A00	Storage of 8-inch EBS Pipe in the Large Parts Cage
0705_129.A00	Decontamination of Unfavorable Geometry Parts in Tunnel Spray Booths
0705_131.A00	Draining, Transferring, and Collecting Uranium-Bearing Liquids in X-705
0710_001.A02	Use of NilFisk Model 80 Portable Vacuum in X-710
0710_004.101	Gulpers for Mass Spectrometers
0710_007.A01	Small Diameter Container Storage in X-710
0710_014.A00	X-Ray Fluorescence Laboratory
0710_015.A02	Handling of Samples and Process Waste in ES&H Analytical Labs
0710_020.A00	Process Chemistry Laboratory
0710_021.A00	Process Services Laboratory
0710_022.A00	Laboratory Standards and Controls
0710_023.A00	Miscellaneous Uranium Operations
0710_024.A00	Handling and Storage of Sources
0710_025.A00	Handling and Storage of Samples from ES&H Analytical Labs
0720_009.A00	Small Parts Glovebox
0720_014.A00	Valve Shop Vapor Degreaser
0720_015.A02	Cleaning and Decontaminating Space Recorder Cans
0720_016.A00	Transmitter Cleaning Station

NCSA/Es Additional Reviews

NCSA#	SUBJECT
0760_003.A01	Sample Buggy Repair
0847_001.A03	General Storage of Uranium-Bearing Waste, XT-847
0847_002.A02	Storage of B-25 Waste Boxes at XT-847
PLANT011.A02	Use of Portable HEPA Ventilation Units
PLANT012.A01	Favorable Geometry Vacuum Cleaner
PLANT014.A00	Use of Unsafe Geometry Vacuum Cleaners
PLANT016.A00	Use of Commercial Floor Scrubbing Machines and Power Sweepers
PLANT017.A00	Storage and Handling of B-4 Pumps
PLANT028.A04	Removal and Handling of PEH Equipment
PLANT031.A03	Use of Portable Infrared Analyzers (PIRA Buggies, FTIRs, etc.)
PLANT037.A00	Use of Small Diameter Container Carts
PLANT044.A00	Cold Recovery - Cold Traps
PLANT050.A00	Use, Handling, and Storage of Fixed HEPA Filters and Prefilters
PLANT051.A00	Cold Recovery Chemical Traps
PLANT052.A00	Cold Recovery - Holding Drums
PLANT060.A02	Cylinder Valve Replacement
PLANT065.A00	Use of Limited-Safe Geometry Vacuum Cleaners
PLANT068.A00	Negative Air Machine (NAM)
PLANT069.A00	Test Buggies
PLANT070.A00	Miscellaneous Waste Accumulation Areas
PLANT077.A00	Long Term Storage of Legacy PEH Equipment
PLANT081.A00	Dry Ice Blasting For Decontamination
PLANT083.A00	Use of Cascade Cells as Surge Volumes

**Total:** 93



**NCSA/Es Subject to Deletion or Consolidation**

<b>NCSA #</b>	<b>SUBJECT</b>
0326_016.A00	Operating Floor Freon Degradar
0326_024.A04	Feeding of 5-inch, 8-inch and 12-inch Cyls. in the X-326 Product Withdrawal Area
0330_006.A01	X-330 Area 3 Seal Exhaust and Wet Air Evacuation
0333_007.A01	1000 CFM Negative Air Machine
0333_018.001	Freezer/Sublimar
0333_023.A01	Long Term Storage of 33-8-6 Stage 7 PEH Compressor
0342A001.A02	General Handling, Weighing, & Storage
0342A002.A01	Autoclave Operation
0342A004.A01	Oil Interceptor
0342A005.001	Sump
0342A006.A02	Waste Streams
0343_001.001	General Handling, Weighing, & Storage
0343_002.A02	Autoclave Operation
0343_003.101	Oil Interceptors
0343_005.A02	Waste Streams
0343_008.001	Disposal of Pigtails, Manifolds, Cylinder Safety Valves, and Other Used Autoclave Components
0344A001.A02	Autoclave Operation
0344A003.A00	X-344A Scale Pits and Sumps
0344A004.A00	Evacuation System and Cold Traps
0344A006.A03	Sample Cylinder Handling and Storage
0344A007.A04	Waste Streams
0344A010.0C1	Disposal of Pigtails, Manifolds, and Cylinder Safety Valves, and Other Used
0344A011.A01	Technetium (Tc) Trap in Autoclave
0700_016.A01	Uranium Bearing Materials Storage Area Between Columns D10 and D12
0700_017.A00	RCRA 90 Day Storage Area Bounded by Columns E2, E3, F2, and F3
0700_018.A00	X-700 Large Sandblasting Operation
0700_019.A00	Routine Operations in x-700 Cleaning Tanks 1, 2, 4, 5
0705_020.A00	Flocculation & Filtration of Solutions from Leaching Operations
0705_071.001	2.5-ton, 10-ton, and 14-ton Cylinder Drying
0705_108.001	SES (Solution Enrichment System) 2 (X-705)
0705_126.A00	RCRA 90 Day Storage Area Roughly Bounded by Columns F-23,G-23, F-24 and G-24
0705_130.A00	Testing of the 5-inch and 8- & 12-inch Cylinder Cleaning Operations
0710_026.A00	Sampling, Transporting, and Handling in X-710
0720_001.A02	Cleaning Lightly Contaminated Floor Areas
0720_003.A01	Dry Blast Machines for Non-Visibly Contaminated Parts
0847_003.A00	XT-847 Drum Crusher

**NCSA/Es Subject to Deletion or Consolidation**

<b>NCSA#</b>	<b>SUBJECT</b>
PLANT001.A02	Storing Small Diameter Containers in Plastic Bags, Plant
PLANT002.0C1	Water Cooling of UF6 Cylinders at LAW, ERP, Tails, X-342 and X-343
PLANT074.A00	Decontamination Using a Steam Jenny
PLANT078.A00	Use of Ledoux 1S Cylinders at PORTS
PLANT080.A00	Use, Handling and Storage of Autoclave Filter Units
PLANT084.A00	Removal of Uranium Bearing Components with Less than 15g 235U

**Total:** 42

### **Summary of Changes Between Revision 4 and 5 of the NCS CAP**

USEC letter GDP 99-0020, dated February 1, 1999, reported that Task 3, NCSA/E Upgrade Project; Task 5, SS&Q Review of Implementation; Task 17, Oversight of Plan Implementation; and Task 18, Evaluation and Feedback, remained open in the NCS CAP. In revision 5, Tasks 17 and 18 have been deleted (see task description below). Recently, USEC decided to reopen Task 8, Vertical Slice Review, and Task 21, Fissile Material Operation (FMO) Identification.

Also, subtasks were renumbered starting with .1 in each task in revision 5. All tasks identified in revision 4 and their current status is discussed below.

#### **Task 1      Facility Review of Nuclear Criticality Safety**

Subtask 1.8, Implement Corrective Action, was rolled over into Task 3. Outstanding corrective actions were documented on problem reports. Task 3 includes a review of problem reports to ensure any work rolled over to Task 3, as well as other outstanding work, is appropriately incorporated into NCSA/Es. Task 1 is considered completed and the text was deleted in revision 5.

#### **Task 2      Review of NCSA/Es Regarding Qualification**

Six NCSA/Es were found to have significant problems. Five of these were redone by qualified individuals and were PORC approved. The sixth was for one-time use and was deactivated. This task is considered completed and the text was deleted in Revision 5.

#### **Task 3      NCSA/E Upgrade Project**

The task description and subtasks were updated to reflect current status and activities. Subtasks that were one time activities and are completed were deleted.

#### **Task 4      Enhance NCSA/E Training (Interim Process)**

This task is considered completed and text was deleted in revision 5.



**Task 5      Safety, Safeguards and Quality (SS&Q) Review of Implementation**

The task description and subtasks were updated to reflect current status and activities. Subtask 5.5 was completed and text was deleted in revision 5.

**Task 6      Complete Comprehensive Root Cause Analysis**

This task is considered completed and text was deleted in revision 5.

**Task 7      Compare Applicable Industry Standards**

This task is considered completed and text was deleted in revision 5.

**Task 8      Vertical Slice Review**

This task was reopened because resolution of the recommendations, observations, and concerns in the final signed version of the NCS Vertical Slice Report is still in progress.

**Task 9      Continuous Improvement Program**

This task is considered completed and text was deleted in revision 5.

**Task 10     Personnel Qualification Verification**

This task is considered completed and text was deleted in revision 5.

**Task 11     Outside/Independent Assessments**

This task is considered completed and text was deleted in revision 5. In response to concerns about incomplete documentation identified during a recent NRC inspection, the results of Task 11 were reviewed again and documentation was corrected.

**Task 12      Policy/Procedure Revision and Training**

This task is considered completed and text was deleted in revision 5.

**Task 13      Revise Training Program for Site Personnel**

This task is complete through subtask 13.5. Subtasks 13.6, 7, and 8, upgrading and implementing training modules to reflect improvements in NCSA/Es, are covered by Task 3. Task 13 is considered completed and the text was deleted in revision 5.

**Task 14      Corrective Action Program Enhancements**

This task is considered completed and text was deleted in revision 5.

**Task 15      Configuration Management Program Enhancements**

This task is considered completed and text was deleted in revision 5.

**Task 16      Revise Assessment Programs**

This task is considered completed and text was deleted in revision 5.

**Task 17      Oversight of Plan Implementation**

The objective of this task was to perform an independent assessment of the NCS CAP on a bimonthly frequency. Evaluations of the effectiveness of the implementation of the tasks in the NCS CAP were conducted to ensure management's expectations were being met. Since the number of NCS CAP activities involving physical work is now significantly reduced (from 26 to 3), the objectives of this task can be met through management oversight. There is no longer a need for separate SS&Q assessments. Therefore, this task is deleted and the text was deleted in revision 5.

**Task 18      Evaluation and Feedback**

The objective of this task was to conduct a systematic evaluation of each task in the NCS CAP to support the NCS CAP Quarterly report. Since the number of activities in the NCS CAP is now significantly reduced, the need for a task separate from day-to-day supervision and management is no longer necessary. Therefore, this task is deleted and the text was deleted in revision 5.

**Task 19      Evaluate Continued Use of Murder Board**

This task is considered completed and text was deleted in revision 5.

**D.7          Response to Anomalous NCS Conditions**

This task is considered completed and text was deleted in revision 5.

**D.8          NCS Oversight on the Operating Floors**

This task is considered completed and text was deleted in revision 5.

**Task 20      NCS Field Operational Assistants**

This task is considered completed and text was deleted in revision 5.

**Task 21      Fissile Material Operation (FMO) Identification**

This task was reopened to confirm FMOs are properly identified and enhance the documentation associated with the identification of FMOs.

**Task 22      Compare SAR Chapter 5.2 to Applicable Industry Standards and the NCS Program**

This task is considered completed and text was deleted in revision 5.



**Task 23      Short Term Corrective Actions**

This task is considered completed and text was deleted in revision 5.

**Task 24      PEH Deposit Surveillance Tracking**

This task is considered completed and text was deleted in revision 5.

**Task 25      Compliance Plan Review**

This task is considered completed and text was deleted in revision 5.

**Task 26      NCSA/E Calculation Review**

This task is considered completed and text was deleted in revision 5.

**Attachments**

Table 1, Root Cause by Process Block Number, on page 20 of revision 4 was deleted.

**April 1999 Quarterly Status Report of the  
PORTS Nuclear Criticality Safety Program  
Corrective Action Plan**

**I. Purpose**

To convey the status of the tasks in the NCS CAP.

**II. Scope**

This report covers the four open tasks (numbered 7, 5, 8, and 21) in Revision 5 of the NCS CAP. The report period is from January 21, 1999, to April 20, 1999. Note: Target dates are shown on Attachment 1 of revision 5 of the NCS CAP (Enclosure 1).

**III. Executive Summary**

Two milestones were met: PORC approved 36 of 40 Priority 1 NCSA/Es by March 19, 1999, and the associated AQ-NCS classification of structures, systems, and components (SSC) was completed for these 36 Priority 1 NCSA/Es by April 9, 1999. Four Priority 1 NCSA/Es are still being upgraded (reference GDP 99-0050, dated March 19, 1999). One Priority 1 NCSA/E (0326\_024.A04) of the 36 has been deleted subsequent to its PORC approval and AQ-NCS classification being completed. Additionally, 19 Priority 1 NCSA/Es were upgraded and PORC approved during this report period.

A review (using a checklist and criteria) of revision 4 Non-Priority 1 NCSA/Es was completed to determine the NCSA/Es that require upgrading as Priority 2. New listings of Priority 2 NCSA/Es and NCSA/Es requiring "Additional Review" were developed. Upgrading of Priority 2 NCSA/Es has started with 13 in NCS engineering review.

**IV. Details of Open Tasks**

**Task 3 NCSA/E Upgrade Project**

Revision 4 of the NCS CAP identified 54 Priority 1 NCSA/Es to be upgraded. Fourteen of these NCSA/Es were consolidated into other Priority 1 NCSA/Es and

NCSA/E 0326\_024, Feeding of 5-inch, 8-inch, and 12-inch Cylinders in the X-326 Product Withdrawal Area, was deleted because this activity is no longer being performed. The number of Priority 1 NCSA/Es is 39. Two NCSA/Es were implemented during this report period. As explained in the cover letter, USLJ has identified that AQ-NCS requirements were not fully implemented for five Priority 1 NCSA/Es previously reported as complete.

PORC approval of 36 Priority 1 NCSA/Es was completed by March 19, 1999. AQ-NCS classification for these 36 NCSA/Es was completed by April 9, 1999. PORC approval and AQ-NCS classification of the 4 remaining Priority 1 NCSA/Es is on schedule.

The following chart illustrates the status of Priority 1 and Priority 2 NCSA/Es:

Activity	Priority 1 Status 01/20/99	Priority 1 Status 04/20/99	Priority 2 Status 04/20/99
Approved and Implemented	8	4	0
Implemented with AQ-NCS flow-down in process	0	5	0
Approved by PORC and awaiting implementation	13	26	1
Scheduled for PORC review	4	0	0
Reviewed by NCS Subcommittee and being Prepared for PORC Review	4	0	0
Scheduled for NCS Subcommittee	9	0	0
In Peer Review	2	4	1
Started NCS Engineering Review	0	0	13
Not Started	0	0	12
Total	40	39	27



The upgrading of Priority 2 NCSA/Es is in progress (e.g., a schedule was established, assignments for upgrading NCSA/Es were made, and changes to NCSA/Es are being evaluated). One Priority 2 NCSA/E has previously been upgraded and approved by PORC.

NCSA/Es not classified Priority 1 or 2 upgrade will receive additional review. Although some initial review activities are complete; the details of the additional review process, final expectations and acceptance criteria, and coordination with other NCS CAP activities are being planned.

**Task 5            SS&Q Review of Implementation**

Two SS&Q walkdowns are in progress for the two NCSA/Es that were implemented during this report period.

**Task 8            Vertical Slice Review**

Although problem reports were processed where applicable and some corrective actions were completed, this task was reopened because resolution of the recommendations, observations, and concerns in the final signed version of the NCS Vertical Slice Report is still in progress. A review of the entire report was performed and there are no outstanding safety significant concerns. Although many of the recommendations and concerns from the report have already been incorporated into approved NCS procedures, the recommendations, observations, and concerns were recently reassigned to applicable organizations for additional evaluation and resolution. After corrective actions have been completed, the documentation for this task will be reviewed and consolidated to ensure a proper close-out of the report.

**Task 21          Fissile Material Identification**

A procedure for confirming and documenting the identification of FMOs is being planned. Work has not started on walk-downs or verifications for this task.