

DEPARTMENT OF ENERGY ANNUAL REPORT



DEFENSE NUCLEAR FACILITIES SAFETY BOARD
RECOMMENDATION 92-5

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**DEPARTMENT OF ENERGY
ANNUAL REPORT
FOR
DEFENSE NUCLEAR FACILITIES SAFETY BOARD
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**Defense Nuclear Facilities Safety Board
Recommendation 92-5 Annual Report**

Introduction

On August 17, 1992, the Defense Nuclear Facilities Safety Board (DNFSB) issued Recommendation 92-5, Discipline of Operations in a Changing Defense Nuclear Complex, to the Secretary of Energy. The DNFSB recommended the following:

1. For defense nuclear facilities scheduled for long term continued programmatic defense operations or for other long term uses, such as in cleanup of radioactive contamination or in storage of nuclear waste or other nuclear material from programmatic defense operations, the Department of Energy (DOE) should institute a style and level of conduct of operations comparable to that toward which it had been working at Building 559 at the Rocky Flats Plant and the K-Reactor at the Savannah River Site. The expected level of conduct of operations would be at least comparable to that required for commercial nuclear facilities, address at a minimum the activities referred to above.
2. When a facility, after a long period of idleness for whatever reason, is being readied for new use or reuse, special care should be taken to ensure that the line organization, both DOE and the contractor, has the technical and managerial capability needed to carry out its responsibilities. Appropriate and effective Operational Readiness Reviews should be conducted by the contractor and by the Department before restart of the facility to establish confidence that line management provides satisfaction of safety requirements.
3. For facilities designated for the various other future modes of use (such as standby), the Department should undertake to develop specific criteria and requirements that ensure meeting the safety goals enunciated in the Nuclear Policy Statement (SEN-35-91). Accomplishment of these criteria and requirements by line management should be confirmed by appropriate independent review.

On December 16, 1992, the Department accepted Recommendation 92-5 as addressed in the implementation plan to the DNFSB. The implementation plan did not address the part of the Recommendation pertaining to Operational Readiness Reviews since the Department was addressing this in detail in its

response to Recommendation 92-6, Operational Readiness Reviews. Because of the general nature and broad scope of Recommendation 92-5, a detailed implementation plan with schedules and milestones was not prepared. Rather, the Department committed to provide an annual status report to the DNFSB. On January 8, 1993 the DNFSB agreed that a detailed and scheduled implementation plan could not be accomplished on a one-time basis in a specified time period and that the Department's commitment to periodically inform the DNFSB of ongoing efforts at specified facilities met the spirit and intent of Recommendation 92-5.

The second annual report, contained herein, informs the DNFSB of the status of defense nuclear facilities and of plans for their future use, including a discussion on the ways in which the objectives of the implementation plan are being accomplished. The annual report is divided into the following three sections:

Section 1.0 provides a methodology for sorting facilities according to forecasted mission. Attachment 1 applies that methodology to the list of facilities for which Recommendation 92-5 was considered. For each facility, a description of the operational status and plans for future use is provided. Because of the uncertainty in the final configuration of the defense nuclear complex, the list is based on the best information available, which may have changed from the 1994 report. The Department will keep the DNFSB informed of changes in future discussions and reports related to Recommendation 92-5.

Section 2.0 provides the Department's approach towards implementation and oversight of conduct of operations. Attachment 2 outlines a schedule for implementing the Department's Conduct of Operations Requirements for reported facilities. A status of conduct of operations implementation at each of the facilities listed in Attachment 1 is also provided.

Section 3.0 provides the Department's conclusions.

The Department shares the DNFSB's concern for the necessary and sufficient application of standards and infrastructure at its facilities as they pass through the various phases of their life cycle. The Department of Energy recognizes that the DNFSB is aware of the complexity of the decisions associated with determining the future use of a facility. These final decisions may take some time.

In particular, the Department's response to DNFSB Recommendation 94-1 recognizes the importance of establishing

facility missions for the future handling and treatment of materials in question. A final report to define those facilities and their missions is due to the DNFSB in December 1995. An interim declaration was made in the implementation plan for 94-1 and is annotated in Attachment 1 of this report. These facilities will be assisted to accomplish these important missions for the Department while making full use of the readiness review process of DOE Order 5480.31. For operating facilities that experience mission changes affecting their conduct of operations, the facility's conduct of operations implementing matrix will be evaluated and altered, if necessary, using the graded approach.

1.0 General Facility Status

In light of the DNFSB's intent to carefully review operations at defense nuclear facilities on a case-by-case basis, a matrix is provided as Attachment 1 to show the status of facilities considered under Recommendation 92-5. For each facility, a description of the operational status and plans for future use is provided. Because of some uncertainty in the final configuration of the defense nuclear complex, the matrix is based on the best information available.

In the implementation plan for Recommendation 92-5, the Department committed to maintaining conduct of operations programs at standby facilities (general codes C and D) in an appropriate state of readiness to support future activities. For such standby facilities, additional information on radiological conditions, waste tank status, and maintenance of configuration and process descriptions has been included in Attachment 1.

To better summarize the classification of the facilities, an alphabetical letter was assigned to each facility in the matrix as follows:

<u>Code</u>	<u>Description</u>
A	Long term (>10 years) continued programmatic defense operations. This is meant to include operations including research and development, production, and utilization for defense purposes, and operations related to testing, assembly, disassembly, and storage of nuclear weapons and nuclear weapons components.
B	Other long term uses such as clean-up of contamination, treatment and storage of nuclear waste, or storage of other nuclear material from programmatic defense operations.
C	Currently in an operating status, but scheduled to be moved to stand-by ¹ or shut down mode within a short time period (<5 years).

¹Standby in the context of Recommendation 92-5 for this report is a policy decision whereby a facility is placed in a shutdown and inactive status with the capability of returning the facility to operations within a period of up to 10 years. Stand-by in this context is not a Technical Safety Requirement defined condition.

- D Stand-by or alternative use (clean-out versus production)² for an extended time period (2-10 years), and then shut down for decommissioning.
- E Shut down for decommissioning, within a short time period. (<5-10 years)

Shutdown for decommissioning is the status when a facility is in a condition of no production awaiting decontamination and decommissioning (D&D). The duration of the waiting period may be years. The defining element is that there is no intention to return the facility in this classification to operation. Efforts to maintain equipment condition and documentation configuration will be significantly lessened.

2.0 Conduct of Operations

The Department's philosophy on conduct of operations is stated in DOE Order 5480.19, "Conduct of Operations Requirements for DOE Facilities." The guidelines and requirements in this order are based on well developed industrial operations practices, and their successful implementation has been demonstrated to result in safe, reliable, and high-performance operations.

Implementation of DOE Order 5480.19 is a local responsibility carried out by the management and operating (M&O) contractor with oversight from DOE Operations and Area Offices. While the level of Conduct of Operations Requirements implementation from site to site and facility to facility remains variable, the Department's overall level of performance is improving. Last year, fewer than 30 percent of facilities had fully implemented conduct of operations. This year, over 50 percent of the listed facilities report full implementation.

This trend of operations is due, in part, to the success of some M&O contractors in meeting prior implementation plan commitments. However, the increasing success of several oversight programs within DOE has also influenced the progress in conduct of operations. These include the DOE Facility Representative program, the Environmental Management Operations Assessment program, facility startup and restart Readiness Reviews, the Office of Environment, Safety and Health (EH) Independent Oversight programs, and Occurrence Reporting Analyses and Performance Indicator programs.

Prior to 1994 the majority of DOE defense nuclear facilities had not effectively implemented conduct of operations, despite the issuance of DOE Order 5480.19 in 1990. The scope of the problem was evident in the numerous reported occurrences that were the result of poor conduct of operations. One of the factors contributing to this problem was the lack of structured or effective Operations and Area Offices oversight at many sites. However, in those locations where conduct of operations have been implemented and the oversight effective, there is growing evidence of improving operations. Specific examples include:

- o Policy on the use of neutron dosimetry at the Nevada Test Site has been upgraded at the Radioactive Waste Management Site as a result of the Office of Environmental Management (EM) Operations Assessment program.
- o Assessments at Fernald revealed numerous lockout/tagout deficiencies resulting from the disparate programs on site. FERMCO management implemented a single sitewide program, and deficiencies are largely resolved.

- o Procedure usage at Lawrence Livermore has been formalized through policy recently developed following a DOE assessment.
- o Configuration control at the Hanford steam plants has been markedly improved as a result of DOE assessments and followup since 1993.

During the past year, the DOE complex has made steady progress towards full implementation of Conduct of Operations Requirements as summarized in Attachment 2. EM and Defense Programs (DP) now report a combined total of over 50 percent of their facilities are fully implemented and oversight programs continue to grow stronger.

2.1 Facility Representative Program

The primary means by which DOE site managers and Headquarters program managers monitor day-to-day facility performance is through a growing corps of Facility Representatives. This program is modeled after similar and very successful programs pioneered by the Nuclear Regulatory Commission and the Navy Nuclear Propulsion Program. Facility Representative duties and responsibilities are detailed in DOE Standard 1053-93, which states that each representative should spend a majority of their time in assigned facilities observing operations and assessing operating conditions. In recognition of the Facility Representative's importance to the proper conduct of formal facility operations, complex wide staffing of the Facility Representatives Program has increased by 20 percent over the past year and 70 percent of currently identified positions have been filled. With respect to qualification, 30 percent are fully qualified and over 50 percent have completed the generic qualification requirements. The Facility Representative selection and qualification processes emphasize conduct of operations knowledge.

The Facility Representative programs at the Idaho National Engineering Laboratory (INEL) and the Savannah River Site (SRS) exemplify the very best programs in the DOE Complex. These programs have clearly resulted in an increased rigor and formality of operations at Idaho and Savannah River facilities. At the Idaho Test Reactor Area, facility representative interaction has resulted in improved contractor radiological controls performance, as indicated by marked reduction in received radiation doses and contamination incidents. At the Idaho Chemical Processing Plant, facility representative actions have upgraded the quality and timeliness of contractor occurrence reporting.

An example of the Savannah River Facility Representative program's effectiveness is at the Replacement Tritium Facility

(RTF). Three Facility Representatives carry out a comprehensive surveillance plan of the tritium complex and routinely interface with DOE and M&O contractor management on issues that are preventative in nature. Given that DOE Order 5480.19 has been fully implemented for nearly two years, the Facility Representatives have been able to focus the tritium complex towards excellence in conduct of operations. RTF has not progressed towards excellence without incident, however. In 1994, there were several serious conduct of operations occurrences, to include the defeat of a blocking bar interlock switch by operators in August 1994, and the inadvertent loss of ventilation, stack monitors, and the fire detection control panel during post maintenance testing of a different problem by system engineers in November 1994. In each case, the M&O contractor and DOE Facility Representative took decisive action to determine root causes and implement corrective action across the SRS tritium complex. In one case this included a facility stand down. In each instance, DOE senior management at Headquarters and the Operations Office were involved with the Facility Representatives in aggressively pursuing long term corrective action. Facility Representatives play a key role in establishing DOE presence and setting high performance expectations upon the M&O contractor at the tritium complex.

One last example of how conduct of operations is impacted by DOE Facility Representatives is an event that now serves as a case study for effective facility representative interaction with site operations. While performing pre-startup testing at the Savannah River Defense Waste Processing Facility, a Facility Representative observed rising levels in the Melter Feed Tank, contrary to the transfer procedure. The Facility Representative immediately halted system testing until the system was stabilized and the root cause addressed. This action prevented a major incident from occurring during the startup testing process and infused significant lessons learned to the operating staff.

In each of these examples, Facility Representatives played key roles in improving safety, establishing DOE presence, and reinforcing high performance expectations with the M&O contractor. These examples are representative of similar successes at other sites where a strong Facility Representative Program exists. Other initiatives that are strengthening the Facility Representatives include separate mentoring resources for Laboratory and Stockpile Support facilities in Defense Programs, and the workshop and steering group formed for Facility Representatives by the Offices of Field Management and Environmental Management. The Department recognizes the importance of the success of Facility Representatives, and will continue to fully support this program and report to the DNFSB through Recommendations 92-2 and 93-3.

2.2 Environmental Management Operations Assessment Program

Environmental Management established an Operations Assessment Program in 1992 to formalize and standardize the means by which Operations and Area Offices assess the safety and effectiveness of contractor facility operations. The program, which has also been implemented by some DP field activities, requires field offices to conduct detailed performance-based operations assessments on a two year cycle to determine implementation of DOE Order 5480.19 (as detailed in each facility's graded approach matrix). In addition, the headquarters Office of Operations Assessment (EM-25) evaluates each Operations Office on an annual basis to ensure program requirements are being met, and assigns an adjectival grade ranging from "outstanding" to "unsatisfactory". A high standard of program performance has been established. In 1994, five of eleven Operations Offices evaluated by EM were deemed "unsatisfactory" and directed to achieve compliance by June 30, 1995. As of May 15, 1995, three of the five operations offices have been re-evaluated as "satisfactory", and re-evaluation of the remaining two offices is pending.

Under this program, Operations Offices are required to schedule and perform operations assessments at six month intervals. At least once every two years, the operations office must perform a full assessment covering applicable guidelines of DOE Order 5480.19, and cover other areas, such as radiological controls, maintenance, and training to the extent that they affect operations. Assessments are "performance based" - meaning assessors base their conclusions primarily on observation of facility operations, using interviews and document reviews to validate findings. To assist operations offices in executing the program, EM-25 provides a two-week training course in performance based operations assessment, and has developed and distributed the "Operations Assessment Field Handbook", a popular pocket guide to performance-based assessment techniques. The EM program focuses on identifying programmatic operational weaknesses requiring management corrective action rather than on identifying lists of individual deficiencies. Corrective actions are required to be tracked and implemented, and the results of assessments must be reported to line managers and used as a factor in determining the contractor award fee.

During 1994 and 1995 implementation of the Environmental Management Operations Assessment program has resulted in strong improvement in operations oversight and improved operations at the Savannah River Site, Oak Ridge National Laboratory, Fernald Environmental Management Project, and Rocky Flats Environmental Technology Site. Some examples include:

- An assessment review at the Savannah River Receiving Basin for Off-Site Fuels Facility identified serious deficiencies in fuel handling procedures and resulted in more rigorous procedure validation. Also, an assessment of Environmental Restoration and Solid Waste facilities at Savannah River identified uncontrolled radioactive material storage at field activities, which consequently allowed facility management to intensify their radiological control improvement efforts.
- At Fernald, site-wide deficiencies in procedure development and review were discovered during an EM operations assessment. FERMC0 subsequently initiated an effort to standardize procedure development, implementation, and control; and issued a site-wide policy on operations procedures.
- At the Oak Ridge National Laboratory, an assessment of the Process and Non-Radiological Waste Treatment Plants revealed that deficiencies in the design of the alarm control program caused large numbers of nuisance alarms. Management modified the alarm control program to correct the nuisance alarm problem, and instituted program and procedure changes to upgrade operator response actions.
- At Rocky Flats, an operations assessment performed at Building 779 (Plutonium Development Facility) revealed widespread deficiencies in radiological survey postings, including one significant deficiency in control of a high radiation area. Contractor management has subsequently taken action to upgrade the rigor and update frequency of radiological postings.

This program has also enabled Headquarters managers to draw some important conclusions about common operational weaknesses which pervade the DOE complex. For example, numerous assessments and Operational Readiness Reviews have indicated the lack of effective operational drill programs at most facilities. As a result a DOE Standard on how to develop a drill program has been prepared in draft. Several sites, including Oak Ridge Y-12 and Mound, are implementing a program from the draft standard. Other common weaknesses recognized through analysis of past assessments include use of procedures, lockout/tagout systems; equipment and system status control, watchstanding practices, management self-assessment, and radiological controls. Implementation of this complex-wide oversight program will allow Field and Headquarters managers to target improvement actions and more effectively utilize scarce resources.

2.3 Readiness Reviews

Headquarters line management, independent oversight, and Field line management are involved with the conduct of readiness reviews in accordance with DOE Order 5480.31 and DOE Standard 3006-93. Each of these reviews is a structured assessment that consists of in-depth, comprehensive assessments of Conduct of Operations and other safety related topics. Readiness reviews often result in significant improvements to the formality of operations at a given facility, and in some cases, the overall site. Within the last year, Operational Readiness Reviews or Readiness Assessments were performed at many sites including Savannah River, Rocky Flats, Idaho, Los Alamos, and Hanford. Other readiness reviews in progress include Defense Program's support of Oak Ridge, Y-12, in resuming five separate nuclear operations and Environmental Management's support of the UNH Neutralization Project at Fernald and the In-Tank Precipitation facility at Savannah River.

In the course of executing implementation plans for other DNFSB Recommendations specifically concerning the readiness review process, such as 92-6 and 93-1, the Department has continued to increase the rigor of these processes, and this has resulted in stronger baseline Conduct of Operations programs at new and recently re-started facilities. Significant progress has also been made in response to DNFSB Recommendation 93-1 with regard to preparing readiness review guidance for facilities involved in the assembly, disassembly, and testing of nuclear weapons.

2.4 EH Independent Oversight Programs

Independent internal assessment of the Department's performance related to Conduct of Operations Requirements is provided by the Office of the Deputy Assistant Secretary for Oversight. The Office of Oversight evaluates DOE and contractor comprehensive safety management systems using three guiding principles for safety management: (1) line management responsibility for safety; (2) comprehensive requirements; and (3) competence commensurate with responsibilities. This approach to safety management was presented in Secretary O'Leary's letter to the DNFSB in October, 1994. The oversight program is designed to provide an integrated, systematic, and standards-based approach. Accurate and unbiased information is then provided to line managers at Headquarters and in the field.

The Office of Oversight analyzes data from a wide variety of internal and external sources. Specific site weaknesses among the various environment, safety, and health disciplines, including conduct of operations, are identified. This analysis helps to focus appraisal activities on the most significant weaknesses of a site's safety management program.

Implementation of DOE Order 5480.19, Conduct of Operations Requirements for DOE Facilities, may be one of the focus areas of the appraisal. Another appraisal option is oversight of Operational Readiness Reviews. This fulfills EH responsibilities detailed in DOE Order 5480.31, Startup and Restart of Nuclear Facilities, and allows significant input from the Office of Oversight on the effectiveness of facility conduct of operations programs prior to startup or restart.

Appraisals are accomplished using a number of different approaches (i.e., comprehensive inspections, reviews, and special studies) by Headquarters teams or routine surveillance conducted by EH Site Residents. An example of a recent Office of Oversight appraisal activity that evaluated conduct of operations performance is the comprehensive inspection of the Rocky Flats Environmental Technology Site in March, 1995. Conduct of operations at Rocky Flats was determined to be improving overall but with significant lapses in some areas.

Section 2.5 Occurrence Reporting Analyses and Performance Indicators

Over the past several years, the Department of Energy has made a concerted effort to improve the formality and uniformity of the conduct of operations in its many facilities. While it is recognized that improvements of the type envisioned will take many years to fully accomplish, there is a need to gain some sense of how the Department is progressing in its efforts to improve conduct of operations.

Currently, conduct of operations events are reviewed as are all occurrences during a Defense Programs daily review of DOE Occurrence Reports. Occurrence Reports are required by DOE 5000.3B and are submitted via the Occurrence Reporting and Processing System (ORPS). Select subject areas are summarized in monthly and quarterly reports (e.g., the Defense Programs Occurrence Analysis Report). EM also prepares a similar quarterly report. The results of these reviews provide a broad database with which one can identify significant issues and trends. The daily ORPS report reviews are driven by several objectives of the DOE Headquarters staff:

- o Prompt identification of significant issues that may have implications affecting environment, safety, and health.
- o Briefings of operational events to DOE Program management as necessary.
- o Subject matter expert review of all notification reports; this group assesses occurrence information

and conducts followup activities for generic issues, lessons learned, and good practices.

- o Review, sort, and track ORPS data for statistical analysis in order to identify emerging trends.

With respect to performance indicators DP and EM have developed a broad capability to identify Conduct of Operations trends through analysis of data collected by: (1) ORPS; (2) the DOE Performance Indicators (PI) (EH) Program Order 5480.26 data; and (3) contractor PI data generated at the sites. The results of these analyses are also published on a quarterly basis and distributed to Headquarters and Operations Offices. The Department recognizes the value of post-occurrence analysis associated with ORPS. However, an analysis of this type is "lagging" - a useful but time-late management tool. Presently, two pilot programs are underway at Albuquerque and SRS to attempt to develop "leading" performance indicators - measures that will detect deteriorating performance that can lead to an occurrence, thereby enabling management to take action to prevent the occurrence. This approach may be applied DOE-wide through a proposed EH program currently under review by DP and EM.

As part of the ongoing DP self-assessment effort to improve conduct of operations at DP sites, DP prepares the DP Performance Indicators Quarterly Review. Performance Indicators are considered a major component of the DP self-assessment program because they provide an objective measure of overall operational performance in the Environment, Safety and Health arena. The report contains: (1) the ten DOE Order 5480.26, "Trending and Analysis of Operations," performance indicators that are considered the most indicative of operations throughout the DP complex; and (2) a select set of contractor-determined site-specific PIs for each participating DP site. The site-specific PIs were chosen by contractor management as being most indicative of performance relative to their missions. DP is continuing to develop its PI program based on relative risk, site specific activities, and mission. Information contained in the DP PI Quarterly report is used in conjunction with performance monitoring information to assess the effectiveness of day-to-day operations and to assist DP line organizations in their efforts to determine priorities and allocate resources.

2.6 Other Improvements in Conduct of Operations During 1994/1995

1. At Los Alamos, a mentor program has been established since 1993, with the initial focus on upgrading Conduct of Operations at the Plutonium Facility, TA-55. Since April, 1995, the mentor program has been transitioning

the gains from TA-55 into a Facility Management model where an institutional benefit can be derived across Los Alamos National Laboratory (LANL).

This program was requested by LANL because they recognized problems with the facility safety basis, maintenance of the safety envelope, work control, and training and qualification. Management of the facility's operational safety requirements, with the assistance of the mentor program, has led to implementation of many sections of DOE Order 5480.19. Operations and staff personnel have significantly improved their performance in operations center discipline and formality, equipment status control, procedure compliance, log keeping, shift turnover, operator rounds, communications, on-shift training, and procedure improvement techniques. Also, new or improved program strategies were developed in configuration management, work control, training and qualification, management walk-around, and contamination control.

In April 1994 LANL management terminated normal operations at TA-55 following two events attributed to weaknesses in the implementation of the Operational Safety Requirement surveillance requirements. Normal operations resumed on July 5, 1994, after completion of required corrective action and readiness reviews. LANL management learned from this lesson and has since enhanced operational safety requirement implementation on a laboratory-wide basis.

LANL has recently developed a site-wide conduct of operations implementation matrix meeting the requirements of DOE Order 5480.19. Facility implementation matrices with milestones are expected to be completed by October 1995. Although implementation matrices have not materialized for some facilities at Los Alamos, many have progressed towards full compliance during the past year.

2. At Pantex, a special Conduct of Operations Improvement Program has been underway for approximately 16 months. Significant progress has been made in developing and implementing a Conduct of Operations Manual. Facility and DOE management continues to be strengthened in conduct of operations, including implementation of performance based assessments.

Special emphasis has been placed on control of and surveillances on critical safety systems at Pantex. Separate Critical Safety Systems Manuals for nuclear and non-nuclear facilities have been published to provide consolidated listings of critical safety systems, their

basis, surveillance requirements, and action steps required under varying conditions until safety analysis upgrades can be completed. The surveillance procedures and control of those procedures have also been improved.

3. A similar, but less mature program, is the conduct of operations improvement program now being developed at Oak Ridge, Y-12 Site. The program to date has resulted in the development of a nuclear operations Conduct of Operations Manual, a rewriting of the basic administrative control programs which are critical to successful execution of formal facility operations, and a modification of the organization to enhance the control of facility condition as well as operational processes within the nuclear operations organization. In addition, individual implementation plans for conduct of operations are being developed in each restart area. In accordance with the 94-4 implementation plan, a long range, fundamental improvement program will be put in place similar to that at Pantex.
4. The Office of Environment, Safety and Health established a mentoring assistance program in Fiscal Year 1994 to provide technical support to the Department's Program Offices, Operations Offices, and M&O contractors. The program helps its customers achieve near-term improvements in implementation of environment, safety and health programs. Throughout 1994, the EH Mentoring Assistance Program helped Westinghouse Hanford Company substantially improve performance in conduct of operations and also helped the Richland Operations Office improve its ability to oversee contractor conduct of operations.

EH mentors worked with Westinghouse Hanford Company during the restart of the 242-A Evaporator to promote full implementation of conduct of operations. The restart effort proceeded smoothly and the first reduction campaign was successfully completed. Westinghouse Hanford extended the mentoring program to the fuel storage facilities at K-Basin and the B-Plant. At these facilities, stronger radiological and maintenance work controls resulted from each worker's increased awareness of conduct of operations principles.

EH mentors have also worked with the Richland Operations Office to strengthen oversight of contractor conduct of operations implementation. The EH Mentoring Assistance Program has supported efforts to upgrade the Facility Representative Program by developing (1) a consistent, site-wide set of administrative instructions, (2) surveillance and performance assessment guides that

encompass all 18 elements of conduct of operations, and (3) comprehensive master assessment plans for each facility to ensure that Facility Representatives provide effective operations oversight.

In Fiscal Year 1995, EH Mentors extended their assistance to the Ohio Operations Office and the Idaho National Engineering Laboratory. At Ohio, EH Mentors have assisted the Fernald Area Office in strengthening their oversight of contractor conduct of operations by helping develop assessment guides and providing training on assessment and oversight techniques. At Mound, EH Mentors are assisting EG&G in implementing an upgraded conduct of operations program. At the Idaho National Engineering Laboratory, EH Mentors are assisting in efforts to upgrade conduct of operations and radiological protection at the Radiological and Environmental Science Laboratory.

3.0 Conclusions

The Department has made significant progress towards safe and formal operations at defense nuclear facilities. As compared to a year ago, there is clear evidence of maturing programs and developing initiatives described in Section 2, as well as the progress of conduct of operations reported in Attachment 2 for most facilities, as compared to a year ago. However, work remains to be done before complex-wide implementation can be achieved.

Over 50 percent of the facilities listed in Attachment 2 have been reported as fully implemented or compliant with DOE Order 5480.19. Most of the remaining facilities have a facility management plan defined for near term, full implementation and appropriate compensatory measures to ensure safe operation are in place. Each facility status was reported by the respective DOE field element, where approval authority resides.

There are a small minority of facilities which lag significantly in their progress towards full implementation of DOE Order 5480.19, where no definite plan exists, or where facility management has not yet reported a specific implementation target date in Attachment 2. For example, Los Alamos TA-55 and Pantex Building 12-116 report full implementation will not occur for over two years. Other facilities at Hanford and Los Alamos still have pending implementation plans and schedules. Such facilities will be more closely monitored during the coming year to assist in a more timely approach to implementation.

A unique set of facilities, designated by general codes "C" and "D" in Attachment 1, are currently in a standby status or expected to be placed in standby within 5 years. In keeping with the Department's implementation plan for Recommendation 92-5, specific attributes are being addressed and reported in Attachment 1. These attributes include decontamination and stabilization of the facility, disposition of waste storage tanks (if applicable), configuration and process descriptions, and training programs/manuals to support future operating and maintenance organizations where the potential exists for facility resumption. As future decisions on the ultimate disposition of these facilities continue to evolve, category "C" and "D" facilities will be updated.

Another group of facilities are those whose mission will change in the future due to initiatives such as the integrated facilities plan in development for DNFSB Recommendation 94-1. In such cases where a significant mission change occurs, modification of existing contractor developed plans for conduct of operations may be needed. The DNFSB will be kept apprised of less than fully implemented conduct of operations at such

facilities. The current status of facilities impacted by Recommendation 94-1 is included in the report.

Achieving excellence in conduct of operations remains our goal, yet it represents a fundamental change in the working culture of DOE and its contractors. The Department is addressing Recommendation 92-5 by:

- * implementing Conduct of Operations in a graded manner commensurate with the health and safety risks associated with the particular facility;
- * placing facilities that may be used in the future in an appropriate state of readiness with a program that includes appropriate decontamination, periodic tank inspections, updating configuration and process descriptions, procedures, and training manuals; and
- * As DOE changes its plans regarding future use of its defense nuclear facilities, the DNFSB will be updated periodically and at least annually on how the objectives of the implementation plan are being accomplished.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT				
Plant 1 - Sampling Plant	EM	E	Shutdown/Alternative use. Preparing for removal of enriched uranium from storage.	Safe shutdown removal of hold-up materials in progress. Long term D&D
Plant 2 - Refinery	EM	D	Alternative use. UNH stabilization preparations on-going.	Preparing portions of both plants for the stabilization of UNH. All other portions of Plants 2 and 3 are awaiting safe of the UNH project. No plan to return to operational status. Long term D&D
Plant 3 - Refinery	EM	D		
Plant 4 - Greensalt plant (blending operations only)	EM	E	Safe shutdown/stabilization complete, awaiting demolition.	No plan to return to operational status; awaiting demolition.
Plant 5 - Metal producing plant	EM	D	Alternative use. Waste packaging operations.	Plant 5 safe shutdown scheduled for fall 1995. No plan to return to operational status. Long term D&D.
Plant 6 - Metal fabrication plant	EM	D	Alternative use. Waste packaging operations.	No plan to return to full operational status. Long term D&D.
Plant 8 - Scrap recovery plant	EM	D	Alternative use. Waste water operations only. Remainder of plant is shut down.	No plan to return to full operational status. Long term D&D.
Plant 9 - Special products plant (salt bath only)	EM	D	Alternative use. Waste storage.	No plan to return to operational status. Long term D&D.
K-65 silo 1 - Pitch blend storage	EM	D	Waste storage. Awaiting clean-out w/vitrification process.	General code "D" due to scheduled near term cleanout (12/95 start). Long term D&D.
K-65 silo 2 - Pitch blend storage	EM	D	Waste storage. Awaiting clean-out w/vitrification process.	General code "D" due to scheduled near term cleanout (12/95 start). Long term D&D.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Thorium storage area - approximately 13,000 containers of thorium	EM	D	Waste storage. Awaiting removal of drummed waste.	General code "D" due to scheduled waste removal planned to begin 11/95.
HANFORD SITE				
N Reactor Complex (100 area)	EM	E	Shutdown awaiting decommissioning	D&D
N Reactor Fuel Fabrication Facility (300 area) -- 313 Building - Fuel Manufacturing Facility -- 333 Building - Fuel Manufacturing Facility	EM	D	Storing unirradiated Uranium. preparing for transition to D&D.	Near term - Uranium storage . Long term D&D.
100 KE and 100 KW fuel basins and support facilities	EM	D	Fuel basins: storage of N reactor irradiated fuels in basins. All radiological and hazardous areas are posted. No waste storage tanks at basin. In process of upgrading configuration and plant process control and support systems. Upgrades to be complete by December 1995.	Fuel basins: Near term storage of N reactor irradiated fuels. Facility contamination status will be improved during Dose Reduction Project, to be complete prior to December 1997, when fuel movement is scheduled to start. Long term D&D.
100 KB, C, D, H, F areas	EM	E	Shutdown awaiting decommissioning	D&D
Purex Plant Complex (200 area) -- 202A - Canyon Building	EM	E	"Undergoing facility deactivation and nuclear material stabilization. Consolidation electrical and ventilation systems for minimum operation and shutting off and blanking steam, water, and sewer connections. Dispositioning spent fuel (3.2 tons), radioactively contaminated nitric acid (183,000 gallons) and radioactively contaminated organic solvent (21,000 gallons). Stabilizing 19 gloveboxes and reducing radiation zones by 500,000 square feet."	D&D

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Purex Plant Complex (200 area) -- 224U - UO3 Plant	EM	E	224-U shutdown awaiting decommissioning (low surveillance and maintenance)	D&D
Plutonium Finishing Plant Complex (200 area) -- 234-5Z Plutonium Finishing -- 236-Z Plutonium Reclamation -- 241-Z Waste Treatment 2736-Z, ZA, ZB Pu Storage Complex	EM	D	Storage of stabilized plutonium. Transitioning excess portions of facility for decommissioning. Under DNFSB. 94-1 plans, more significant levels of Plutonium in process areas will be stabilized. All radiological areas are posted. Configuration and process descriptions will be maintained by engineering control system in a graded fashion based upon hazard. Waste storage tanks are clearly identified, monitored, and maintained due to RCRA requirements.	Storage of stabilized plutonium planned until shipment offsite or until FMD EIS indicates new direction. Stabilization operations planned until 2002. Facilities will transition to shutdown following completion of stabilization activities, and await future D&D.
Plutonium Finishing Plant Building 232Z	EM	E	Shutdown and undergoing plutonium removal to prepare for decommissioning	D&D
Solid Waste T Plant Complex (200 area) -- 2706T - Canyon Building	EM	B	Operational. Performing Waste and decontamination services for solid/liquid/TWRS programs.	Long-term study of decontamination services completed. Study showed continued need for T. Plant services. Continuing LLW decontamination activities mission.
Solid Waste: waste Receiving and Handling Facility	EM	B	WRAP 1 under construction since FY 94	WRAP 1 operational in FY 97. WRAP 11 A will be privatized purchased service, scheduled to be built and operational by FY 2000. A future WRAP 11 B facility is planned for the outyears, following development of the systems engineering study (to be completed June 30, 1995).

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Solid Waste: Waste Management Facilities	EM	B	Operational. Presently storing or preparing for disposal of several waste types.	Ongoing waste disposal operations
Waste Tank Operations	EM	B	Storage of wastes/residues in support of Transition Projects Site Cleanup.	Continued operations. Outyears - D&D.
B Plant/Waste Encapsulation Storage Facility	EM	B	Storage and waste management activities for radioactive Cs-137 and Sr-90 Isotopes	Long-term storage of radioactive Cs-137 and Sr-90 Isotopes at WESF. B-plant canyon being planned for isolation from WESF to allow D&D of the canyon.
PNL (324,325,327)	EM	B	Undergoing facility cleanout/upgrade	Possible future use by TWRS program for core examination. Possible location for pilot thermal treatment testing unit
242A Evaporator	EM	A	Operational	Continued operations
Analytical Services 222S Laboratory and Waste Sampling and Characterization Facility	EM	B	Operational	Continuing analytical services to support the cleanup mission
200 Area Liquid Effluent Treatment Facility	EM	B	Estimated to be operational by September 1995	Continued Operation.
300 Area Treated Disposal Facility 340 Waste Handling	EM	B	Operational	Continued Operation.
Fast Flux Test Facility	EM	D	Defueled	D&D
IDAHO				
Portions of the high level waste facilities (NWCF/Tank Farm)	EM	B	Operational. NWCF currently undergoing maintenance/configuration upgrades. Tank farm operational with upgrades in progress.	Long term processing of remaining high level waste.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Portions of Nuclear fuels facilities at the Idaho Chemical processing Plant (CPP-603/CPP-666)	EM	B	Operational. Also fuel movements from CPP-603 to CPP-666 in progress. Fuel receipts continuing at CPP-666 (94-1).	Long term fuel storage While awaiting dry storage.
Portions of INEL Waste Operations (RWMC/WROC/WERF)	EM	B	Operational (with upgrades in progress.) WERF/WROC preparing for startup.	Long term waste management.
LAWRENCE LIVERMORE NATIONAL LABORATORY				
Building 332 - Plutonium Facility (contains SIS Engineering Demonstration Facility)	DP	A	Normal operation	Long term continued operation for processing, stabilization, repackaging and storage (94-1).
Building 625 - Transuranic Waste Storage Facility	EM	B	Normal operation	Continue operation
Building 625 - Transuranic Waste Treatment Facilities	EM	B	Normal operation	Continue operation
Building 625 - Transuranic Waste Handling Facilities	EM	B	Normal operation	Continue operation
Buildings B231 & B233 - Materials Management Complex	DP	B	Normal operation	Continue operation
Building B239 - Radiography Facility	DP	A	Normal operation	Continue operation

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Building B251 - Heavy Element Facility	DP	D	<p>With respect to preparations for standby and then decommissioning the following actions have completed or are in progress:</p> <ol style="list-style-type: none"> 1. Programmatic activities were completed and the radionuclide inventory has been reduced and residual materials cleaned up from fume hoods, gloveboxes and other laboratory spaces. Continued progress is expected thru FY 97. Facility safety procedures ensure workers are not unnecessarily exposed to radiological hazards. 2. No radiological, hazardous or toxic contaminated areas are present that could affect the public. This condition will be maintained. 3. Building 251 contains no waste tanks and all tank inspections are conducted and fully compliant with California regulations. In addition, the LLNL environmental protection department maintains a waste database of all tanks and their status. 4. All documentation for the facility is being maintained consistent with the program standby mode which indicates that the intended facility function is not being performed but could be. 	This building has been designated as a surplus facility and limited to clean-up and inventory reduction, however, B251 remains a candidate facility to support DPs nuclear test program.
Building B255E - Calibrations and Standards Fac.	DP	A	Normal operation	Continue operation

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Building B331 - Tritium Facility	DP	D	<p>With respect to preparations for standby and then decommissioning, the following actions have completed or are in progress:</p> <ol style="list-style-type: none"> 1. The tritium inventory removal project has reduced total facility inventory to >3 grams. This presently meets the goal if future use of facility is to handle legacy waste. If other use is defined, further tritium removal may be required. Currently, all building access requirements meet DOE requirements for nuclear facilities. 2. Stabilization, posting and recording of all radiological, hazardous, and toxic contaminated areas are completed. There are no waste tanks and tank inspections are in accordance with California regulations. 3. Documentation on all facility equipment and systems currently in use or that may be used in a possible future mission are being maintained. 	Future mission to be determined. may use portable tritium processing system to clean up legacy waste.
Building B334 - Hardened Engineering Test Fac.	DP	A	Normal operation	Continue operation
Buildings 490S, 491, 493 - Separator Demo Complex	NE	B	Cold standby	Transition to operations planned for 10/95 per DOE/USEC agreement signed 4/95
Buildings 513, 513A, 514, 514A	EM	B	Normal operation	Continue operation
Buildings 612, 612A, 614, 625, 6197, 6197B, 6198 233 CSU - Hazardous Waste Mgt. Complex				

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
LOS ALAMOS NATIONAL LABORATORY				
Plutonium Processing Facility (TA-55)	DP	A	Operational (94-1)	Continued long term operations for processing Pu.
CMR Building (TA-3-29)	DP	A	Operational (94-1)	Major upgrades planned based on continued long term operations
U Storage Facility (TA-3-164)	DP	D	Shutdown	Shutdown status for an undetermined time period and then D&D.
Main Storage Vault (TA-41-1)	DP	B	Operational - Storing only tritium - Inventory reduction in process	Shutdown status for an undetermined time period and then commence non-nuclear activities
Waste Disposal Site (TA-54)	EM	B	Operational - NEPA being prepared on expansion to meet current needs (94-1)	To be closed upon reaching capacity of 2000. New disposal facility planned.
Tech Shops Addition (TA-3-102)	DP	D	Shutdown	Shutdown status for an undetermined time period and then D&D
Icehouse (TA-41-4)	DP	B	Programmatic activity in process of being transferred to other facilities - non operational	Shutdown status for an undetermined time period and then commence non-nuclear activities
Omega West Reactor (TA-2)	DP	E	Shutdown	No future program mission.
Critical Experiment Facility (TA-18)	DP	A	Operational	Continued long term programmatic use
TA-16-205 Weapons Engineering Tritium Facility	DP	A	Operational	Continued long-term operations
TA-18-26 Hillside Vault (Pajarito Site)	DP	A	Operational	Continued long-term operations

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
TA-21-3, 4 ,5 etc. DP-West	DP	C	Building 4 - Shutdown Building 5 - Operational	DP-West to be shutdown and D&D within 5-10 years
TA-21-209 Tritium Science and Fabrication Facility	DP	A	Operational	Continued long-term operations
TA-33-86 High-Pressure Tritium Facility	DP	E	Shutdown and inventory reduction in progress. Target date for transfer to EM for D&D is October, 1995.	D&D
TA-49 Site of underground hydronuclear testing	EM	B	Shutdown, inactive burial site	Monitoring in progress.
TA-50-1 Radioactive Liquid Waste Treatment Facility/TA-2 Pilot Plant	EM	B	Operational. To be replaced in 10 years (94-1).	D&D
TA-50-37 Treatment Demonstration Facility (Controlled Air Incinerator)	EM	B	Mods in process to permit full operations	Ongoing operation for regulatory compliance
TA-50-69 TRU Waste Site Reduction Facility	EM	B	Operational	Ongoing operation
TA-50-69 TRU Waste Site TRU Pad Remediation	EM	B	PSAR in development	Full remediation within 10 years
Facilities not yet constructed and/or started up:				
Nuclear Material Storage Facility (TA-55)	DP	B	Never operational	Make repairs and operate as a storage facility
New Radioactive Liquid Waste Treatment Facility	EM	N/A	Not operational yet	In planning stage

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
MOUND PLANT				
T Building	EM/DP	C	Operating. At the conclusion of operations, Radiological areas will be stabilized, recorded, and posted such that custodial control will not lead to undue risk to the public. Configuration and process descriptions will be maintained. This facility will not be in "stand-by"; it will be shutdown with no intention of future operations. No waste tanks are involved.	D&D start after 1999. Management transferred to EM on October 1, 1994. Landlord is EM; DP is responsible for further processing activities related to safe shutdown.
SW-R Tritium Complex	DP	C	Operating. At the conclusion of operations, the facility will be shutdown for decommissioning, with no intent to return to operational status. Configuration and process descriptions will be maintained as appropriate to support decommissioning. No waste tanks are involved.	D&D continued on individual rooms - funding dependent.
CFX-NRF	EM	E	Shutdown	Shutdown for decommissioning.
NEVADA SITE				
Area 27 -- Device Assembly/Disassembly Area	DP	D	Standby. No tests are scheduled. Facility is not contaminated and will not be maintained beyond initiation of operations at CDAF	Will be deactivated when the Combined Device Assembly Facility (CDAF) becomes operational. Estimated less than 1 year.
Area 5 Radioactive Waste Management Site	EM	B	Operating	Long-term continued programmatic operations
Area 3 Radioactive Waste Management Site	EM	B	Operating	Long-term continued programmatic operations

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Combined Device Assembly Facility	DP	A	Being prepared for operation - under construction.	Due to become operational this year for long term programmatic use.
OAK RIDGE GASEOUS DIFFUSION PLANT				
K-25 Waste Storage Building	EM	B	Operational	Operational
Proposed Defense Nuclear Facility: -- Remote Handled TRU Waste Handling and Packaging Plant	EM	N/A	Proposed	FY 98 Line Item
OAK RIDGE NATIONAL LABORATORY				
Building 3019	DP	B	Operational, as a storage site of U233	Operational, continue to store U-233
Solid Waste Storage Area #5 - Remote TRU waste storage	EM	B	Operational	Future closure actions are being evaluated. Closure will probably be tied to CERCIA activities in SWSA 5.
Melton Valley Storage Tanks - Low-Level liquid defense waste	EM	B	Operational	Operational
OAK RIDGE Y-12 PLANT				
Building 9201-5N - Depleted Uranium Plating and Machining	DP	A	Stand down; transitioning to operating status	Long-term operation
9616-7 - West End Treatment Facility	EM	A	Operational	Long-term operation
9720-5 - HEU Warehouse	DP	A	Stand down; transitioning to operating status	Long-term operation

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
9809 - Uranium Oxide Storage	EM	A	Stand down; transitioning to operating status	Long-term operation
9825-1 Uranium Oxide Storage	EM	A	Stand down; transitioning to operating status	Long-term operation
9825-2 Uranium Oxide Storage	EM	A	Stand down, transitioning to operating status	Long-term operation
9995 - Plant Laboratory	DP/EM	A	Stand down, transitioning to operating status	Long-term operation
Building 9212 - Enriched Uranium Operations	DP/EM	A	Stand down, transitioning to operating status	Long term continued programmatic defense operations and environmental support for chemical processing, casting, and packaging (94-1).
Building 9206 - Enriched Uranium Operations	DP	C	Cold standby: shutdown, cleanout, some functions transferred to Building 9212	D&D
Building 9215 - Enriched Uranium Operations	DP	A	Stand down, transitioning to operating status	Long term continued programmatic defense operations
Building 9215 - Depleted Uranium Operations	DP	A	Stand down, transitioning to operating status	Long term continued programmatic defense operations
Building 9998 - Depleted Uranium Casting Operations	DP	A	Stand down, transitioning to operating status	Long term continued programmatic defense operations
Building 9201-5 - Depleted Uranium Operations			Stand down, transitioning to operating status	Stand-by or alternative use (clean-out vs. production) for an extended time period (2-10 years) and then shutdown for decommissioning

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Building 9204-4 - Depleted Uranium Operations	DP	C	Stand down, transitioning to operating status	Stand-by or alternative use (clean-out vs. production) for an extended time period (2-10 years) and then shutdown for decommissioning
Building 9204-4 - Weapon Disassembly & Weapon Quality Evaluation	DP	C	Stand down, transitioning to operating status	Stand-by or alternative use (clean-out vs. production) for an extended time period (2-5 years) and then shutdown for decommissioning
Building 9204-2 Lithium Operations	DP	A	Stand down, transitioning to operating status	Long term (>10 years) continued programmatic defense operations
Building 9204-2E - Assembly Operations	DP	A	Stand down, transitioning to operating status	Long term (>10 years) continued programmatic defense operations
Proposed Defense Nuclear Facility: -- Low-Level Waste Disposal Facility (proposed at the K-25 site)	EM	B	Title 1 Design Stage	3-Site LLW waste disposal. Will handle some DP waste.
PANTEX SITE				
Burning Grounds Explosives Treatment	EM	A	Currently in use	Burning ground upgrades/continued weapons demilitarization and sanitization; continued waste treatment
Zone 4 East and Zone 11 - Hazardous Waste Staging	EM	A	Currently in use	Continue hazardous waste staging for long-term use
Zone 4 Magazines (4-19, 4-21, 4-25, 4-30, 4-44, 4-101 to 4-142)	DP	A	Operational	Continue operations
On-site transportation (4-26, 12-98 & 12-99 Loading Docks)	DP	A	Operational	Continue operations

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
12-26 Bay 27 Vacuum Chamber Bay	DP	A	Operational	Continue operations as staging cell until SNM Staging Facility operational
12-26 Bay 28 Bottle Bay	DP	A	Operational	No longer used for SNM operations. Tritium bottle staging for shipment to SRS is an interim mission until Bld 12-116 is operational.
12-26 Pit Vault	DP	A	Operational	Continue operations as Pit Vault until SNM Staging Facility operational
12-41 Spray Paint Facility	DP	A	Operational	Continue operations until new paint Facility operational in 12-104A
12-42 South Vault	DP	A	Operational	Continue operations until SNM Staging Facility operational
12-42 North Vault	DP	A	Operational	Continue operations until SNM Staging Facility operational
12-44 Cells 2 to 6	DP	A	Operational	Continue operations
12-44 Cell 8	DP	A	Operational	Continue operations until SNM Staging Facility operational
12-50 Separation Test Facility	DP	A	Operational	Continue operations
12-58 Bays 4 and 5	DP	A	Operational	Continue operations until SNM Staging Facility operational
12-60 Bays 1 to 6	DP	A	Operational	Continue operations
12-64 Bays 1 to 17	DP	A	Operational	Continue operations
12-84 Bays 1 to 20	DP	A	Operational	Continue operations
12-85 Cell	DP	A	Operational	Continue operations

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
12-94 Weapons Aging Facility	DP	A	Operational	Continue operations
ROCKY FLATS PLANT				
Plutonium Recovery (Building 371)	EM	B	Shutdown. Storage of Pu and fissile residues.	Possible future use as a shipment depot for offsite shipments and residue processing, and SNM consolidation, and thermal stabilization (94-1).
Waste Treatment (Building 374)	EM	B	Operating - waste water treatment	Continued operation through D&D of entire site.
Non-nuclear Manufacturing (Building 460)	EM	D	Shutdown for transition, 10/94. No radiological hazards exists; no decontamination required. All hazardous waste areas are posted. Air compressor condensate is the only process waste being introduced to the system (process waste system consists of 5 sump pits, ancillary lines, pumps, and 3 tanks.)	Transferred to EM for economic development and final disposition. RCRA inspections are being completed every 24 hours. A RCRA closure plan had been submitted to CDPH&E for approval.
SST Modification Center (Building 440)	EM	D	Shutdown for transition, 10/94. No radiological hazards exist; no decontamination required. All hazardous waste areas are posted.	Transferred to EM for economic development and final disposition.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Manufacturing Building (Building 444)	EM	D	Shutdown for transition, 10/94. Building has Radiological Buffer Area (RBA). Decontamination has not commenced in the RBA. All radiological areas are posted, including areas requiring specific PPE. All hazardous waste areas are posted. Radiological records and logs are maintained. No external process waste is being introduced into the process waste system. Building ground water from within the RBA is periodically pumped into the process waste system from various locations.	Transferred to EM for economic development and final disposition. A RCRA closure plan is being drafted. RCRA inspections are being completed every 24 hours and are being maintained by the custodian.
Plutonium Analytical Lab (Building 559)	EM	B	Analytic chemistry analysis for waste/residue characterization (94-1).	Continue operations.
Waste Storage/Staging (Building 664)	EM	B	Packaged waste storage/shipment	Continued operation through D&D of entire site.
Plutonium Manufacturing and Assembly (Building 707)	EM	B	Unrestricted Thermal Stabilization Operations	Possible residue processing (short term operation), repackaging, and storage (94-1)
Plutonium Recovery (Building 771)	EM	D	Shutdown for transition. Pu residue, waste storage. Facility has contamination: leaks in process equipment continue to occur; there is plutonium in ducts, gloveboxes, and plenums. Decontamination will be required in some areas during D&D operations. All radiological areas are posted including areas requiring specific PPE. All hazardous waste areas are posted. Radiological records and logs are maintained. A consolidated master list of tanks is maintained.	Restart for continued liquid residue processing (short term operation), followed by stabilization and D&D. Phase 2 of the solution Stabilization Program (scheduled for FY 96/97) removes liquids from tanks and process lines to dry out the system, but does not take tanks to complete closure. During D&D operations, remaining tank and duct sludge will be removed. Solid SNM consolidation will occur in FY 97. RCRA and state inspections of tanks are being conducted within required periodicity (94-1).

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Waste Treatment (Building 774)	EM	B	Liquid waste processing for storage/disposal (94-1).	Continued operation through D&D of entire site.
Plutonium Recovery and Waste Management (Building 776)	EM	B	Waste management (size reduction, supercompactor). Waste storage.	Continue operations (94-1).
Manufacturing (Building 777)	EM	B	Shutdown for transition. Pu and residue storage.	Pu and residue storage (94-1).
Plutonium Development (Building 779)	EM	D	Shutdown for transition. Pu and residue storage.	Restart for residue processing and/or repackaging (short term operation) (94-1).
Material & Process Development Lab (Building 865)	EM	D	Shutdown for transition. Building has Radiological Buffer Area (RBA). Beryllium contaminated areas exist. Decontamination has not commenced in the RBA. All hazardous waste areas are posted. Radiological records and logs are maintained.	Transferred to EM for economic development and final disposition. No external process waste is being introduced into the process waste system. A RCRA closure plan is being drafted. RCRA inspections are being completed every 24 hours and are maintained by the custodian.
Manufacturing and General Support (Building 881)	EM	D	Analytic chemistry analysis for waste characterization. Facility has contamination. Rad Con implementation scoping survey in progress. Decontamination is being performed as problem areas are identified. All radiological and hazardous waste areas are posted. Radiological records and logs are maintained.	Planned for shutdown after consolidation of site laboratories. The Process Waste System consists of 7 tanks located in Building 887 and associated ancillary equipment. Waste input to these tanks results from General Lab processes. Tanks are in the process of being moved from Interim Status to 90-day area. RCRA inspections are performed every 24 hours.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Rolling and Forming Facility (Building 883)	EM	D	Shutdown for transition. Building has a Radiological Buffer Area (RBA). Decontamination has not commenced in the RBA. All radiological areas are posted including areas requiring specific PPE. All hazardous waste areas are posted, including areas requiring specific PPE. Radiological records and logs are maintained.	Transferred to EM for economic development and final disposition. Decontamination will be conducted under the NCPP cooperative agreement. Three process waste systems exist in this facility: A, B, and nitric waste systems. A RCRA closure plan for A series tanks has been forwarded to DOE for approval. A RCRA closure plan for B series tanks is under contractor review. RCRA closure plan for nitric waste systems is being drafted.
Building 886	EM	D	Shutdown for transition. Low level waste storage. Utilities systems are in a suspect condition. No prints or documents exist. No FSAR exists. The facility has low levels of contamination; some decontamination will be required. All radiological areas are posted, including areas requiring specific PPE. All hazardous waste areas are posted. Radiological logs and records are maintained.	Waste storage prior to transition to D&D. The Solution Stabilization Program removes the HEUN from the system to dry out tanks and pipes. Sludge remaining in the tanks will be removed during D&D operations. A Basis for Interim Operation (BIO) is being prepared to authorize facility decontamination deactivation (94-1).
Product Staging (Building 991)	EM	D	Pu storage, shipment depot (cold facility). All radiological and hazardous waste areas are posted, including areas requiring specific PPE. Radiological records and logs are maintained. No tanks are potentially contaminated with radiological or hazardous material.	Pu storage and shipment depot prior to transition to D&D.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
SANDIA NATIONAL LABORATORIES				
Hot Cell Facility (Building 6580)	DP	A	Operating	Continue operations for long term programmatic use (>10 years) medical radioisotope production.
Annular Core Research Reactor (TA-5),SNLA	DP	A	Operating	Continue operations for long term programmatic use (>10 years) medical radioisotope production.
Sandia Pulse Reactor (TA-5), SNLA	DP	A	Operating	Continue operations for long term programmatic use (>10 years).
SAVANNAH RIVER SITE				
P Reactor - Long-term shutdown	EM	E	Presently storing spent nuclear fuel (94-1).	D&D
K Reactor - Production Operations	EM	D	Placed in cold standby during 1993. Cold standby contains elements of both standby and shutdown conditions, recognizing that the facility has ceased operation but has not been declared excess.	Standby tritium production source. Other priorities: reduction of radiological hazards, facility stabilization, configuration archiving and disposition of materials.
L Reactor - Long-term shutdown	EM	E/B	Presently storing spent nuclear fuel (94-1).	Disassembly basin is to be upgraded to support storage of excess spent nuclear fuel from domestic power reactors and potentially from foreign power reactors.
C Reactor - Long-term shutdown	EM	E	Shutdown	D&D
R Reactor - Long-term shutdown	EM	E	Shutdown	D&D

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
F Canyon - Chemical Separations	EM	D	Restart scheduled 11/95 to support solution processing, residues and scrap stabilization and Am/Cm vitrification (94-1).	Shutdown after completion of stabilization activities.
F Area Outside Facilities	EM	D		
F Area A Line - Reduction of U-238 UO3 to power	EM	D		
FB Line - Pu 239 Production	EM	D	Restart scheduled 7/95	
Multipurpose Processing Facility - F Canyon	EM	D	Shutdown	Will be required to disposition Am/Cm solution in F Canyon.
F Area Tank Farm - high-level liquid radioactive waste storage	EM	B	Operating	Continue operation
H Canyon - Chemical Separations	EM	D	Operational - Supporting Pu-238 production in HB Line	After processing, solutions and spent nuclear fuel, shutdown (94-1).
Uranium Solidification Facility - Uranium reclamation from Uranyl Nitrate	EM	D	Project is suspended pending completion of alternatives study to disposition UNH.	
H Area Outside Facilities	EM	D	Operational	Shutdown with H Canyon (94-1).
HB Line - Pu-238 Production (Pu-242, NP-237)	EM	D	Operating	Shutdown after completion of all processing operations and scrap stabilization (94-1).
H Area Tank Farm - high-level liquid rad. waste storage	EM	B	Operating	Continue operation
PuFF, Bldg. 235-F	EM/NE	E	Shutdown.	D&D
Actinide Billet Line - 235-F	EM	D	Cold standby; no plans to restart	D&D

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Replacement Tritium Facility (RTF) 233-H Tritium Facilities - Tritium processing 232-H, 234-H, 236-H, 238-H	DP	A	Operating	Continued operation in all Bldgs to support stock pile management program. 233H to be primary location for non-nuclear reconfiguration mission from Mound
Receiving Basin for Offsite Fuels - pool storage	EM	B	Presently storing various nuclear materials including spent fuels	Forecasted long-term mission for storage of spent Fuel, Targets and Ion Exchange Resin Regeneration (94-1).
Burial Ground - Low-level rad. solid waste disposal	EM	C	Shallow level waste burial. Ceased uncertified waste burial as of 3/31/95.	Closed under RCRA
Experimental TRU Waste Assay Facility - certification of drummed transuranic waste for long-term storage	EM	D	Shutdown	Currently under review
Production Control Facility - process laboratory 772-F, 772-IF	EM	A	772-F Shutdown (will S/U in near term). 772-IF Operational.	Support to EM expected to increase as DP mission decreases; analysis support to separations facilities expected to continue to D&D (94-1).
Building 321-M - Rx fuel fabrication facility	EM	D	Operating. De-inventory of fuel for shipment to Oak Ridge.	Complete de-inventory FY 98
Building 773A - Savannah River Technology Center	EM	A	Operating in support of SRS missions, including technology transfer	Ongoing mission (> 5 years)
Plutonium Experimental Facility - developmental work glovebox line	EM/NE	E	Shutdown.	D&D
Effluent Treatment Facility - Low-level liquid rad. waste treatment	EM	B	Operating	Continue operation

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER	GEN'L CODE	CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Defense Waste Processing Facility - high-level liquid radioactive waste vitrification	EM	B	Startup testing	Long-term operations.
Saltstone Facility - concrete forms for low-level fraction of high-level liquid rad. waste	EM	B	Operating	Continue Operation
Consolidated Incineration Facility	EM	B	Under construction: 99% complete startup testing underway	Operate
Mixed Waste/Hazardous Waste Disposal Facility - stabilization of mixed/hazardous waste forms and vault burial	EM	B	Disposal vaults: waiting on RCRA permit to begin construction. Treatment building: begin operations around 2006.	Operate
E Area Low-Level Waste Disposal Vaults	EM	B	Operational	Operate
TRU Waste Facility	EM	B	Begin operations around 2020	Operate
WASTE ISOLATION PILOT PLANT				
Waste Handling Building	EM	B	Maintained in a stand-by status. No radioactive waste at the WIPP site.	Readiness to begin disposal of TRU waste will be attained no earlier than FY 1998 following completion of statutory and regulatory prerequisites.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICER		CURRENT OPERATIONAL STATUS	FUTURE USE PLAN/REMARKS
Underground	EM	B	In operation for non-radioactive experiments. No radioactive waste at the WIPP site.	Continue non-radioactive experiments. Readiness to begin disposal of TRU waste will be attained no earlier than 1998 following completion of statutory and regulatory prerequisites. The WIPP site is Transitioning from a readiness posture to begin tests with radioactive waste. Readiness was lost following an October 1993 decision to discontinue plans for radioactive testing at WIPP in lieu of an enhanced laboratory testing program.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT			
Plant 1 - Sampling Plant	EM	Fully implemented upon project start (July 1995)	<p>Conduct of operations is considered fully implemented at Fernald when an implementation matrix has been prepared by the contractor, the matrix has been approved by DOE-FN, and a validation assessment of contractor operations has been performed by DOE-FN. To date, each facility has received a partial operations assessment during calendar year 1995. Full assessments will be performed during facility remediation on a project by project basis.</p> <p>Site-wide compensatory measures include: Adherence to DOE 5700.6C, implementation of site-wide "Safety First" program, site General Employee Training modification to include training on DOE 5480.19, and a site Conduct of Operations newsletter to raise employee awareness of the philosophy of Conduct of Operations.</p> <p>For those facilities no longer operational, graded implementation of DOE Order 5480.19 will occur at the divisional management level (vice the facility level) to support safe shutdown and other remediation activities. Project level implementation matrices will be developed as needed.</p>
Plant 2 - Refinery	EM	Fully implemented for UNH project (June 1995)	
Plant 3 - Refinery	EM		
Plant 4 - Greensalt plant (blending operations only)	EM	July 1995	
Plant 5 - Metal producing plant	EM	July 1995	
Plant 6 - Metal fabrication plant	EM	July 1995	
Plant 8 - Wastewater treatment	EM	July 1995	
Plant 9 - Special products plant (salt bath only)	EM	July 1995	
K-65 silo 1 - Pitch blend storage	EM	Full implemented upon project start (December 1995)	
K-65 silo 2 - Pitch blend storage	EM		
Thorium storage area - approximately 13,000 containers of thorium	EM	Full implemented upon project start (November 1995)	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
HANFORD SITE			
N Reactor Complex (100 area)	EM	TBD Management of these facilities has recently been assumed by Bechtel. Conduct of Operations implementation plans and schedules are pending.	<p>At Hanford, full implementation of Conduct of Operations is based on a DOE-RL approved facility graded-approach matrix, and the successful completion of an operations assessment to validate conduct of operations implementation at each facility. Compensatory measures include:</p> <ul style="list-style-type: none"> - Assignment of EH Mentors - Designation of selected employees as ConOps "champions" to focus improvement efforts in specific areas of ConOps. - Use of performance indicators and performance indexing to monitor performance improvements. - Implementation of a site-wide lessons learned program. - Continued day -to-day focus on ConOps by Facility representative during walk-through and surveillance.
N Reactor Fuel Fabrication Facility (300 Area) -- 313 Building - Fuel Manufacturing Facility -- 333 Building - Fuel Manufacturing Facility	EM	Partial implementation. Implementation matrix being revised 3/95. Next full assessment scheduled for 1/97.	
100 KE and 100 KW fuel basins and support facilities	EM	Fully implemented. Assessment complete 3/94.	
100 KB, C, D, H, F areas	EM	TBD Management of these facilities has recently been assumed by Bechtel. Conduct of Operations implementation plans and schedules are pending.	
Purex Plant Complex (200 area) -- 202A - Canyon Building -- 224U - UO3 Plant	EM	Fully implemented. Assessment complete 4/95.	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
Plutonium Finishing Plant Complex (200 area) --234-5Z Plutonium finishing --236-Z Plutonium Reclamation --241-Z Waste Treatment --2736-Z, ZA, ZB Pu Storage Complex	EM	Partial Implementation. Implementation matrix approved 11/94. Operations assessment scheduled for 10/95.	
Plutonium Finishing Plant Building 232Z	EM	TBD Management of these facilities has recently been assumed by Bechtel. Conduct of Operations implementation plans and schedules are pending.	
Solid Waste: T Plant complex (200 west area) - 2706T and Canyon Building Waste Receiving and Handling Facilities, Waste Management Facilities	EM	Implementation matrix submitted to DOE/RL, awaiting approval. Assessment scheduled for 8/95.	
Waste Tank Operation	EM	Full Implementation. Implementation matrix approved 3/94. Assessment complete 11/94	
B Plant/Waste Encapsulation Storage Facility	EM	Partial Implementation. Implementation matrix approved 7/94. Assessment scheduled for 4/96.	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
PNL (324,325,327)	EM	Matrix approved 10/92, currently undergoing revision. Full implementation at 327 (assessment completed 9/94). Partial implementation at 324 and 325 (assessment scheduled for 4/97).	
242A Evaporator	EM	Full implemented. Assessment completed 11/94. Revised matrix approved 2/95	
Analytical Services 222S Laboratory and Waste Sampling and Characterization Facility	EM	Partial Implementation. Matrix approved 11/94. Assessment scheduled for 11/95.	
200 Area Liquid Effluent Treatment Facility	EM	TBD	
300 Area Treated Disposal Facility 340 Waste Handling	EM	TBD	
Fast Flux Test Facility	EM	Partial Implementation. Matrix approved 2/94. Assessment scheduled for 1/96.	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
IDAHO			
Portions of the high level waste facilities (NWCF/Tank Farm)	EM	In compliance (based on matrix approval and contractor report). Implementation matrix submitted 3/31/93, approved 1/18/95	<p>At Idaho, compliance with DOE 5480.19 is based on the following:</p> <ul style="list-style-type: none"> - DOE approval of a graded-approach implementation plan prepared by the operating contractor, and; - Contractor report of compliance with implementation plan. <p>DOE-ID operations assessments of each facility are also performed on a two-year cycle IAW the EM Operations Assessment Program.</p>
Portion of Nuclear Fuels Facilities at the Idaho Chemical Processing Plant (CPP-603/CPP-666)	EM	In compliance (based on matrix approval and contractor report). Implementation matrix submitted 3/31/93, approved 1/18/95	
Portion of INEL Waste Operations (RWMC/WROC/WERF)	EM	<p>In compliance (based on matrix approval and contractor report). Implementation matrix submitted:</p> <p>RWMC: 5/2/94 WROC: 9/13/94 WERF: 3/24/94 Matrices approved: 1/18/95.</p>	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
LAWRENCE LIVERMORE NATIONAL LABORATORY			
Building 332 - Plutonium Facility (contains SIS Engineering Demonstration Facility)	DP	December 1995	Compensatory measures include: accelerated implementation of those areas directly associated with SAR/TSR implementation (before 6/95), B332 5480.23 safety analysis report, B332 facility safety procedure, FSP B332 operational safety procedures (OSPs), 322 detailed operating procedures, B332 training plan and Defense and Nuclear Technologies Self-Assessment Plan.
Building 625 - Transuranic Waste Storage Facility	EM	October 1994	Assessments and training; no formal compensatory measures in place
Building 625 - Transuranic Waste Treatment Facilities	EM	October 1994	Assessments and training; no formal compensatory measures in place
Building 625 - Transuranic Waste Handling Facilities	EM	October 1994	Assessments and training; no formal compensatory measures in place
Buildings B231 Vault & B233 Vault -Materials Management Complex	DP	B233 in full compliance	B231 continues to have two inactive gloveboxes contaminated with uranium. Piping has been labelled and drawings are on file for these boxes. All associated equipment that requires independent verification has been listed in log books that are signed off monthly by the Operations Manager.
Building B239 - Radiography Facility	DP	In full compliance	Material inventory has been reduced to less than Hazard Cat. 3 threshold and is removed from the designated nuclear facility list.
Building B251 - Heavy Element Facility	DP	In full compliance	
Building B255E - Calibrations and Standards Facility	DP	In full compliance	

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Building B331 - Tritium Facility	DP	In full compliance	
Building B334 - Hardened Engineering Test Bldg.	DP	In full compliance	
Buildings B490S, B491, B493 - Separation Demo Complex	NE	In full compliance	
Buildings B513, B513A, B514, B514A 612, 612A, 614, 625, 6197, 6197B, 233 CSU 6198 - Hazardous Waste Mgt. Complex	EM	August 1995	Facilities are in full compliance with the exception of completion of a formal radiological orientation for visitors. A video based Facility Safety orientation is scheduled for completion in August 1995. Compensatory measures include a formal, documented briefing for visitors before entry.
LOS ALAMOS NATIONAL LABORATORY			The Laboratory approved implementation plan for DOE 5480.19 requires the completion of an implementation matrix or completion of Phase 1 Order Compliance Self-Assessment (Statement-by-Statement, 687 statements) to document compliance with the DOE Order. to date (May 30, 1995) two nuclear facilities (TA-18 and TSFE) have completed an implementation matrix for 5480.19. The institution and four nuclear facilities have completed Phase 1 Order Compliance Self-Assessment (TA-55, CMR, TA-50-1, and WETF); all non-compliant statements were evaluated as low risk. Phase 1 OCSA for TA-54 is currently under way and is scheduled to be completed by August 1995.
Plutonium Processing Facility (TA-55)	DP	Nov 1997	Phase 1 of the Order Compliance Self Assessment completed in June 1994 and 4 CSA's submitted for DOE approval in May 1995. Scheduled completion dates extend to Sept 1997. Walk around program implemented in November 1994 and weekly performance based assessments on 5480.19 conducted by trained Division, Group, and Team Leaders

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
CMR Building (TA-3-29)	DP	June 1995	Facility is essentially in compliance. Phase 1 of the Order Compliance Self Assessment completed in January 1995 and three CSA's are under consideration for DOE approval, scheduled for completion by June 1995.
U Storage Facility (TA-3-164)	DP	Appropriate level of Conduct of Operations Implemented.	All SNM removed effective December 20, 1993. The Laboratory has verified that no accountable quantities of material are in the building and has no plans to reuse facility for storage of nuclear materials. The facility has been surveyed, decontaminated, and decontrolled and transferred to the Director of Facilities. It will be used for non-radioactive equipment storage.
Main Storage Vault (TA-41-1)	DP	Appropriate level of Conduct of Operations Implemented.	All potentially hazardous operations are performed under SOPs or Special Work Permits approved in accordance with the Weapons Engineering Group Safe Operation Program. All programmatic tritium operations terminated May 8, 1993 and all SNM removed in early 1993. Less than 24 grams of tritium remain in storage.
Waste Disposal Site (TA-54)	EM	TBD	Phase 1 Order compliance is in progress and Conduct of Operations status will not be known until August 1995. Based on the recently submitted FSAR, non-compliances are not anticipated.
Tech Shops Addition (TA-3-102)	DP	Appropriate Level of Conduct of Operations Implemented	No longer a programmatic requirement for highly enriched uranium machining (determined by Lab in February, 1992). No longer a nuclear facility.
Icehouse (TA-41-4)	DP	Appropriate Level of Conduct of Operations Implemented.	All programmatic tritium operations terminated and tritium removed. Downgrade to non-nuclear facility (Reis memo on 5/12/94).

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
Omega West Reactor (TA-2)	DP	Appropriate Level of Conduct of Operations Implemented.	The facility is shutdown and fuel has been removed. The shutdown plan has been developed for DOE approval.
Critical Experiment Facility (TA-18)	DP	July 1995	The facility has completed an Implementation Matrix for DOE 5480.19 in February 1995. All but two items (management review of operational log books and control of operator aids) have been fully implemented. The remaining two items will be fully implemented by July 1995.
TA-16-205 Weapons Engineering Tritium Facility	DP	Appropriate Level of Conduct of Operations Implemented.	May 1995 completion of the Phase 1 Order Compliance Self-Assessment and all statements are compliant. WETF has implemented formality of Operations to meet the intent of DOE Order 5480.19.
TA-18-26 Hillside Vault (Pajarito Site)	DP	July 1995	The facility has completed an Implementation matrix for DOE 5480.19 in February 1995. All but two items (management review of operational log books and control of operation aids) have been fully implemented. The remaining two items will be fully implemented by July 1995.
TA-21-3, 4, 5 etc. DP-West	DP	Appropriate Level of Conduct of Operations Implemented.	DP West is currently operating under a DOE approved D&D program (#1055) and conduct of Operations has been formalized through an interim DOE approved OSR and round sheet for inspection of critical equipment. Bldgs 3S and 4S demolished, D&D continuing Bldgs 3N and 4N have ceased programmatic activities.
TA-21-209 Tritium Science and Fabrication Facility, and TA-21-155 TSTA Facility	DP	December 1995	Self-assessment and implementation matrix completed August 1993 and corrective action plans are currently underway Low risk corrective actions are scheduled for completion by December 1995.

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TA-33-86 High-Pressure Tritium Facility	DP	Appropriate Level of Conduct of Operations Implemented	Laboratory group has established a formal approval for safe shutdown and cleanup. All operations are performed under approved procedures or instructions. All accountable tritium is being removed and the target date for completion is October 1995.
TA-49 Site of underground hydronuclear testing	EM		Inactive burial site, monitoring in progress.
TA-50-1 Radioactive Liquid Waste Treatment Facility/TA-2 Pilot Plant	EM	Implemented	The facility is complete with Phase 1 of the DOE Order Compliance Self Assessment as well as the CoO Implementation Plan Matrix. All statements of 5480.19 are considered compliant and implemented.
TA-50-37 Treatment Demonstration Facility (Controlled Air Incinerator)	EM	TBD	This facility is currently not operating and will be in a stand down mode pending a DOE review of incineration as an acceptable methodology. When a final decision is reached within the next two years, an implementation plan will be developed to rigorously apply CoO.
TA-50-69 TRU Waste Size Reduction Facility	EM	June 1995	Facility is currently under construction. Recent audit findings on Conduct of Operations have been corrected and facility is in compliance.
TA-50-69 TRU Waste Site TRU Pad Remediation	EM	TBD	FSAR scheduled for completion and submission to DOE/AL June 1994
Facilities not yet constructed and/or started up:			
-- Nuclear Material Storage Facility (TA-55)	DP	TBD	This facility is not operational and not staffed. Upgrades are planned and when an operational date is set, implementation of Conduct of Operations will be determined.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHA COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
New Radioactive Liquid Waste Treatment Facility (in planning stage)	EM	TBD	Proposed for construction in FY 97.
MOUND PLANT			
T Building	EM/DP	Full implementation by March 1996: 1. EG&G submit revised implementation matrices and manual by July 1995 2. DOE-OH approves matrices and manual by September 1995. 3. DOE-MB establishes operations assessment program by October 1995. 4. DOE-MB evaluates implementation at each facility by March 1996.	Although full implementation was previously reported by Mound in May 1993, subsequent EG&G and DOE reviews identified program weaknesses indicating that ConOps implementation was deficient. The following improvements and compensatory measures are being or have been implemented: 1. The Mound Conduct of Operations manual was upgraded. 2. An occurrence/event critique program has been initiated. 3. The management surveillance program is being upgraded. 4. The site lessons Learned program is being improved. 5. Scheduling/planning of site activities is being reviewed. 6. EH mentors have been assigned to facilities. 7. The EM Operations Assessment Program is being implemented.
SW-R Tritium Complex	DP		
CFX-NRF	EM		

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NEVADA SITE			
Area 27 -- Device Assembly/Disassembly Area	DP	In compliance	
Area 5 Radioactive Waste Management Site	EM	In compliance	
Area 3 Radioactive Waste Management Site	EM	In compliance	
Combined Device Assembly Facility	DP	Upon commencing operations.	Facility is under construction. Full implementation will occur when authority to commence operations is authorized
OAK RIDGE GASEOUS DIFFUSION PLANT			
K-25 Waste Storage Building	EM	Implemented	Continual improvements in ConOps is an EM program goal which is being implemented through the Contractors ConOps Improvement Program
Proposed Defense Nuclear Facility: Remote Handled TRU Waste Handling and Packaging Plant	EM	When facility goes operational	This is a 1998 line item. Continual improvements in ConOps is an EM program goal which is being implemented through the Contractors ConOps Improvement Program.
OAK RIDGE NATIONAL LABORATORY			
Building 3019	DP	December 1996	Current practices meet the intent of the Order and non-compliances do not present unacceptable risk to ES&H.

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Solid Waste Storage Area #5 - Remote TRU waste storage	EM	Implemented	Continual improvements in ConOps is an EM program goal which is being implemented through the Contractors ConOps Improvement Program
Melton Valley Storage Tanks - Low-Level liquid defense waste	EM	Implemented	Continual improvements in ConOps is an EM program goal which is being implemented through the Contractors ConOps Improvement Program
OAK RIDGE Y-12 PLANT			
Building 9201-5N - Depleted Uranium Metalworking	DP	Upon Resumption	A baseline assessment of ConOps within the nuclear facilities has been conducted in support of DNFSB Recommendation 94-4 Implementation Plan Item N.3.1. This is providing a basis for developing the facility - specific implementation plans for DOE Order 5480.19 that are necessary to support restart of nuclear facilities IAW 5480.31.
9616-7 - West End Treatment Facility	EM	Implemented	Continual improvements in ConOps is an EM program goal which is being implemented through the Contractors ConOps Improvement Program
9720-5 - HEU Warehouse	DP	Upon Resumption	A baseline assessment of ConOps within the nuclear facilities has been conducted in support of DNFSB Recommendation 94-4 Implementation Plan Item N.3.1. This is providing a basis for developing the facility - specific implementation plans for DOE Order 5480.19 that are necessary to support restart of nuclear facilities IAW 5480.31.
9809 - Uranium Oxide Storage	EM	Implemented	Continual improvements in ConOps is an EM program goal which is being implemented through the Contractors ConOps Improvement Program
9825-1 and 9825-2 Uranium Oxide Storage	EM	Implemented	Continual improvements in ConOps is an EM program goal which is being implemented through the Contractors ConOps Improvement Program

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9995 - Plant Laboratory	DP/EM	Upon Resumption	A baseline assessment of ConOps within the nuclear facilities has been conducted in support of DNFSB Recommendation 94-4 Implementation Plan Item N.3.1. This is providing a basis for developing the facility - specific implementation plans for DOE Order 5480.19 that are necessary to support restart of nuclear facilities IAW 5480.31.
Buildings 9206, 9212, and 9215 - Enriched Uranium Operations	DP	Upon Resumption	A baseline assessment of ConOps within the nuclear facilities has been conducted in support of DNFSB Recommendation 94-4 Implementation Plan Item N.3.1. This is providing a basis for developing the facility - specific implementation plans for DOE Order 5480.19 that are necessary to support restart of nuclear facilities IAW 5480.31.
Building 9204-4 - Weapon Disassembly & Weapon Quality Evaluation	DP	Upon Resumption	A baseline assessment of ConOps within the nuclear facilities has been conducted in support of DNFSB Recommendation 94-4 Implementation Plan Item N.3.1. This is providing a basis for developing the facility - specific implementation plans for DOE Order 5480.19 that are necessary to support restart of nuclear facilities IAW 5480.31.
Building 9204-2 Lithium Operations	DP	Upon Resumption	A facility - specific plan is being developed. The plan will be completed by mid-July 1995 and will reflect the date of full implementation of conduct of operation.
Building 9204-2E - Assembly Operations	DP	Upon Resumption	A baseline assessment of ConOps within the nuclear facilities has been conducted in support of DNFSB Recommendation 94-4 Implementation Plan Item N.3.1. This is providing a basis for developing the facility - specific implementation plans for DOE Order 5480.19 that are necessary to support restart of nuclear facilities IAW 5480.31.

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Proposed Defense Nuclear Facility: Low-level Waste Disposal Facility (proposed at the K-25 Site)	EM	When facility goes operational	This is an FY 95 line item. On-the-job training is being developed and performed in the order of complexity of operations. The labeling system is also being applied based on importance of systems. The operations are assessed based on the EM-25 Conduct of Operations program.
PANTEX SITE			
Burning Grounds Explosives Treatment	EM	April 1996	Conduct of Operation Implementation Plan has been in place since April 1994. The Conduct of Operations Manual is in place. Procedures are in place, personnel have been trained, and elements of a program are being adhered to with outside assistance. Self assessments and independent assessments are in place (performance-ased).
Zone 4 East and Zone 11 - Hazardous Waste Staging	EM	April 1996	
Zone 4 Magazines (4-19, 4-21, 4-25, 4-30 to 4-44, 4-101 to 4-142) 12-26 Pit Vault 12-26 Bay 28 Bottle Bay 12-42 South Vault 12-44 Cells 2 to 6 12-44 Cell 8 12-58 Bays 4 and 5 12-60 Bays 1 to 6 12-64 Bays 1 to 17 12-84 Bays 1 to 20 12-85 12-96 12-98 Cells 1 to 4 12-99 Bays 1 to 9 12-104 Bays 1-16	DP	April 1995 (complete)	Implementation in this context is defined as: 1. Conduct of Operations manual is in place. 2. Completion of Action Items from the January 1994 Performance Based Assessment 3. No non-compliance from Phase 1 self assessment completed in December 1993. 4. On-going Performance based Assessments in place.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
Transportation facilities (4-26, 12-98 & 12-99 loading docks)	DP	April 1996	Conduct of Operation Implementation Plan has been in place since April 1994. The Conduct of Operations Manual is in place. Performance based assessments are being conducted and lessons learned from self-assessments contribute towards continuous improvement.
12-26 Bay 27 Vacuum Chamber Bay 12-41 Spray Paint Facility	DP	April 1996	These facilities will be replaced by new facilities, In the interim, Conduct of Operations will be pursued on a graded approach, implementing all chapters except chapter 18, "Equipment and Piping labeling."
12-42 North Vault 12-50 Separation Test Facility 12-94 Weapons Aging Facility	DP	Complete	
12-116 SNM Staging	DP	June 1997	ORR scheduled for FY 97
ROCKY FLATS PLANT			
Plutonium Recovery (Building 371)	EM	September 1995	All restart operations are being performed in accordance with DOE Order 5480.31, Startup and Restart of Nuclear Facilities. During high hazard operations, such as tank draining in Building 771, RFFO directs the contractor to develop a program plan. This plan specifically addresses Conduct of Operations issues necessary to perform the activity.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
Waste Treatment (Building 374)	EM	September 1995	<p>Facility Representatives continue to routinely monitor building operations, however, there is an increased emphasis on implementation of Conduct of Operations as this is the number one priority in the buildings. Last year, RFFO tasked EG&G to increase the rate and scope of ConOps implementation. EG&G was directed to prepare implementation plans for all site facilities by June 1994. These plans are complete (except for the plans for Buildings 440, 664, and 886, which are being revised due to changes in facility mission/scope) and the acceleration in full conduct of operations implementation is reflected in this matrix.</p>
Non-nuclear Manufacturing (Building 460)	EM	IN full compliance (based on contractor report). Operations assessment scheduled for June 1995.	<p>Additional compensatory measures for Buildings 460, 440, 444, 771, 881, 865, 883, and 991 (all general code D):</p> <ul style="list-style-type: none"> - All electrical, plumbing, floor plan, etc. drawings are maintained by contractor document control. - Walk-downs are performed and documented on all systems prior to authorizing activities. - Two training and qualification coordinators exist for each facility (except bldg 991, where all staff is fully qualified.) Training and qualification records are maintained in a database. A list of all qualified personnel is distributed monthly to verify qualifications prior to starting work.
SST Modification Center (Building 440)	EM	Currently 87% compliant. Planned full implementation date being revised due to change in facility mission/scope. Revised implementation plan will be delivered to DOE by June 15, 1995.	<p>Additional compensatory measures for Building 886 (General code D):</p> <ul style="list-style-type: none"> - Personnel assigned to the building are reassigned from Building 771 and are trained and qualified for Plutonium areas. - A Basis for Interim Operation (BIO) is being prepared to allow activities to proceed in the facility.

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
Manufacturing Building (Building 444)	EM	IN full compliance (based on contractor report). Operations assessment scheduled for June 1995.	
Plutonium Analytical Lab (Building 559)	EM	In compliance. DOE ORR completed January 1992. DOE operations assessment scheduled for January 1996.	
Waste Storage/Staging (Building 664)	EM	Currently 87% compliant. Planned full implementation date being revised due to change in facility mission/scope. Revised implementation plan will be delivered to DOE by June 15, 1995.	
Plutonium Manufacturing and Assembly (Building 707)	EM	In compliance. DOE ORR completed January 1993. DOE operations assessment scheduled for January 1996.	
Plutonium Recovery (Building 771)	EM	September 1995	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
Waste Treatment (Building 774)	EM	September 1995	
Plutonium Recovery and Waste Management (Building 776)	EM	September 1995	
Manufacturing (Building 777)	EM	September 1995	
Plutonium Development (Building 779)	EM	October 1995	
Rolling and Forming Facility (883)	DP	October 1995	
Material & Process Development Lab (Building 865)	EM	August 1995	
Manufacturing and General Support (Building 881)	EM	August 1995	
Building 886	EM	The planned full implementation date is being revised due to a change in facility mission/scope.	
Product Staging (Building 991)	EM	IN full compliance (based on contractor report). DOE operations assessment scheduled for July 1995.	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
SANDIA NATIONAL LABORATORIES			
Hot Cell Facility (Building 6580)	DP	June 1996	<p>In July 1994, SNL Technical Area 5 (TA-V) staff completed a table top review of their implementation of conduct of Operations, with the conclusion that facility procedures addressed all elements of DOE Order 5480.19. In March 1995, a DOE team led by the Kirtland Area Office reviewed CoOps implementation at the nuclear facilities in TA-V. In general, the team found successful implementation within the operating organization but poor coordination/work controls between the operating organization and external service organization (i.e., maintenance, radiological controls). These deficiencies are being addressed (1) by promulgation of a new RPP Manual (March 1995), and (2) by bringing maintenance/modification work under the controls applied to experiment proposals.</p> <p>Also, note that a qualified, full-time Facility Representative has been assigned to TA-V. This individual completed Phase 2 (facility specific) qualifications in September 1994.</p>
Annular Core Research Reactor (TA-5), SNLA	DP	June 1996	
Sandia Pulse Reactor (TA-5), SNLA	DP	June 1996	
SAVANNAH RIVER SITE			
P Reactor - Long-term shut down	EM	In compliance	<p>At SRS, guidelines of DOE 5480.19 are applied on a site-wide basis through the Westinghouse Savannah River Company Manual 2S, Conduct of Operations. The requirements of Manual 2S are "graded" on a facility specific basis using specific exemption request forms (approved by DOE-SR on a case-by-case basis). DOE-SR then validated implementation by performing an Order Compliance assessment against the requirements of Manual 2S at each facility. This process was completed in October 1994.</p>
K Reactor - Production Operations	EM	In compliance	
L Reactor - Long-term shut down	EM	In compliance	
C Reactor - Long-term shut down	EM	In compliance	

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R Reactor - Long-term shut down	EM	In compliance	
F Canyon - Chemical Separations	EM	Partially compliant. Alarm Response Procedures to support Phase II restart still being developed. Full implementation planned by 10/31/95 to support Phase II restart 11/95.	Current status does not impact ongoing Phase I operations. Phase II Alarm Response Procedures are currently contained in operating procedures (vice separate ARPs). Phase II ARPs will be complete by 10/31/95.
F Area Outside Facilities	EM	In compliance	
F Area A Line - Reduction of U-238 UO3 to power	EM	In compliance	
FB Line - Pu 239 Production	EM	In compliance	
Multipurpose Processing Facility - F Canyon	EM	In compliance	(inactive)
F Area Tank Farm - high-level liquid rad. waste storage	EM	In compliance	
H Canyon - Chemical Separations	EM	In compliance	
Uranium Solidification Facility - Uranium reclamation from Uranyl Nitrate	EM	N/A	Project suspended. Facility never operated.
H Area Outside Facilities	EM	In compliance	
HB Line - Pu-238 Production (Pu-242, NP-237)	EM	Partially compliant. Full Implementation date revised to July 1996.	All emergency announcements are rebroadcast over the H-area PA system over the HB-Line system until the H-Area PA system is upgraded.
H Area Tank Farm - high-level liquid rad. waste storage	EM	In compliance.	

SITE/FACILITY	RESPONSIBLE SECRETARIAL OFFICE	DATE OF FULL IMPLEMENTATION OF CONDUCT OF OPERATIONS	WHAT COMPENSATORY MEASURES UNTIL FULL IMPLEMENTATION ACHIEVED / REMARKS
PuFF, Bldg. 235-F	EM/NE	In compliance	inactive facility
Actinide Billet Line, Bldg 235-F	EM	In compliance	(inactive)
Replacement Tritium Facility (RTF) 233-H	DP	In compliance	
Tritium Facilities - Tritium processing 232-H, 234-H, 236-H, 238-H	DP	In compliance	
Receiving Basin for Offsite Fuels - pool storage	EM	In compliance	
Burial Ground - Low-level rad. solid waste disposal	EM	In compliance	
Experimental TRU Waste Assay Facility - certification of drummed transuranic waste for long-term storage	EM	In compliance	
Production Control Facility - process laboratory 772-F, 772-IF	EM	In compliance	
Building 321-M - Rx fuel fabrication facility	EM	In compliance	
Building 773A - Savannah River Technology Center	EM	In compliance	
Plutonium Experimental Facility - developmental work glovebox line	EM/NE	In compliance	
Effluent Treatment Facility - Low-level liquid rad. waste treatment	EM	In compliance	

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Defense Waste Processing Facility - high-level liquid radioactive waste vitrification	EM	In compliance	
Saltstone Facility - concrete forms for low-level fraction of high-level liquid rad. waste	EM	In compliance	
Consolidated Incineration Facility	EM	In compliance	
Mixed Waste/Hazardous Waste Disposal Facility - stabilization of mixed/hazardous waste forms and vault burial	EM	In compliance	
E Area Low-Level Waste Disposal Vaults	EM	In compliance	
TRU Waste Facility	EM	In compliance	
WASTE ISOLATION PILOT PLANT			
Waste Handling Building	EM	Implemented	
Underground	EM		