

U.S. Department of Energy
Washington, D.C.

ORDER

DOE 5480.1B

9-23-86

SUBJECT ENVIRONMENT, SAFETY, AND HEALTH PROGRAM
FOR DEPARTMENT OF ENERGY OPERATIONS

1. PURPOSE. To establish the Environment, Safety, and Health (ES&H) Program for Department of Energy (DOE) operations.
2. CANCELLATION. DOE 5480.1A, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION PROGRAM FOR DOE OPERATIONS, of 8-13-81.
3. SCOPE. The provisions of this Order apply to all Departmental Elements and contractors performing work for the Department as provided by law and/or contract and as implemented by the appropriate contracting officer.
4. REFERENCES.
 - a. DOE 0000.1A, STANDARD SUBJECT CLASSIFICATION SYSTEM, of 8-14-79, which contains the categories for filing records and documents.
 - b. DOE 1324.2, RECORDS DISPOSITION, of 5-28-80, which describes the procedures for retention of records and documents.
 - c. DOE 3790.1A, FEDERAL EMPLOYEE OCCUPATIONAL SAFETY AND HEALTH PROGRAM, of 10-22-84, which establishes the policy for the implementation and administration of the occupational safety and health program for Federal employees.
 - d. DOE 5000.3, UNUSUAL OCCURRENCE REPORTING SYSTEM, of 11-7-84, which establishes a system for reporting unusual occurrences having programmatic significance.
 - e. DOE 5440.1C, IMPLEMENTATION OF THE NATIONAL ENVIRONMENTAL POLICY ACT, of 4-9-85, which establishes procedures for implementing the National Environmental Policy Act of 1969.
 - f. DOE 5480.5, SAFETY OF NUCLEAR FACILITIES, of 9-23-86, which establishes DOE's nonreactor nuclear facility safety program.
 - g. DOE 5480.6, SAFETY OF DEPARTMENT OF ENERGY-OWNED NUCLEAR REACTORS, of 9-23-86, which established DOE's reactor safety program.
 - h. DOE 5480.14, COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT PROGRAM, of 4-26-85, which establishes a program to identify and remediate inactive hazardous waste disposal sites, and to control hazardous substance mitigation.

DISTRIBUTION:
All Departmental Elements

INITIATED BY
Assistant Secretary for
Environment, Safety, and Health

- i. DOE 5481.1B, SAFETY ANALYSIS AND REVIEW SYSTEM, of 9-23-86, which establishes uniform requirements for the preparation and review of safety analyses.
- j. DOE 5482.1B, ENVIRONMENT, SAFETY, AND HEALTH APPRAISAL PROGRAM, of 9-23-86, which presents the Department's policy and requirements for appraisal of environment, safety, and health programs.
- k. DOE 5483.1A, OCCUPATIONAL SAFETY AND HEALTH PROGRAM FOR GOVERNMENT-OWNED CONTRACTOR-OPERATED FACILITIES, of 6-22-83, which provides guidance and establishes procedures for the government-owned contractor-operated safety and health program.
- l. DOE 5484.1, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION INFORMATION REPORTING REQUIREMENTS, of 2-24-81, which establishes the requirements and procedures for reporting and investigating matters of environmental protection, safety, and health protection significance to DOE operations.
- m. DOE 5610.3, PROGRAM TO PREVENT ACCIDENTAL OR UNAUTHORIZED NUCLEAR EXPLOSIVE DETONATIONS, of 12-18-80, which establishes safety policies and procedures applicable to activities involving nuclear explosives.
- n. DOE 5700.1C, MAJOR SYSTEMS ACQUISITIONS, of 9-6-83, which establishes requirements and objectives and assigns responsibilities and authorities necessary for the acquisition of major systems.
- o. DOE 5700.4A, PROJECT MANAGEMENT SYSTEM, of 11-7-83, which provides the principles and requirements which govern the development, approval, and execution of DOE's major system acquisitions and major projects.
- p. DOE 5700.66, QUALITY ASSURANCE, of 9-23-86, which establishes DOE's quality assurance program.
- q. Title 29 CFR 1960, Safety and Health Provisions for Federal Employees, which provides the regulations and guidelines for the implementation of Executive Order 12196.
- r. Department of Energy Acquisition Regulation, 48 CFR 970.23, and 48 CFR 923.70, which together provide the clauses to be used in contracts where DOE is either required to, or elects to, enforce ES&H requirements.
- s. Executive Order 12088, "Federal Compliance with Pollution Control Standards", which establishes requirements and procedures for Federal agencies to comply with environmental legislation and regulations.

- t. Executive Order 12196, "Occupational Safety and Health Programs for Federal Employees," which establishes the requirement for Federal agencies to provide occupational safety and health programs for their employees.

5. DEFINITIONS.

- a. DOE Contractor includes any prime contractor or subcontractor subject to the contractual provisions of 48 CFR 923.70, 48 CFR 970.23, or other contractual provisions where DOE has elected to enforce ES&H requirements by specific negotiated contract provisions.
- b. DOE Operations are those DOE-funded activities for which DOE has assumed responsibility for the environment, safety, and health programs.
- c. Environment, Safety, and Health Overview is an organized set of activities performed as independent functions. Its purpose is to assure that all aspects of environment, safety and health-related activities at the program, project, and contractor level are adequately addressed. Such activities include:
 - (1) Establishing Department-wide environmental safety, and health policies, requirements and standards;
 - (2) Periodic and timely reviews of program and project documents, activities, actions, and plans;
 - (3) Appraising the implementation of environment, safety and health programs at the Headquarters, field, and contractor level as appropriate; and
 - (4) Providing support, assistance, and guidance to Headquarters program offices and field organizations.
- d. Environment, Safety, and Health (ES&H) Program encompasses those DOE requirements, activities, and functions in the conduct of all DOE and DOE-controlled operation that are concerned with: controlling air, water, and soil pollution; limiting the risks to the well being of both operating personnel and the general public to acceptably low levels; and protecting property adequately against accidental loss and damage. Typical activities and functions related to this program include, but are not limited to, the following: environmental protection, occupational safety, fire protection, industrial hygiene, health physics, occupational medicine, process and facilities safety, nuclear safety, emergency preparedness, quality assurance, and radioactive and hazardous waste management.

- e. Environmental Survey is a documented, multidiscipline assessment (with sampling and analysis) of a facility to determine environmental conditions and to identify environmental problem areas of environmental risk requiring corrective action.
- f. Environmental Audit is a documented assessment of a facility to monitor the progress of necessary corrective actions, to assure compliance with environmental laws and regulations, and to evaluate field organization practices and procedures.
- g. Exception is an interim release from a standard of the type specified under the Occupational Safety and Health Act. An exception is processed in accordance with DOE 5483.1A.
- h. Federal Employee Occupational Safety and Health Program is that program mandated by Executive Order 12196 and implemented by 29 CFR 1960, DOE 3790.1A, and HQ 3790.2.
- i. Generic Exemption is a temporary or permanent release from the requirements of this Order or other Orders in the DOE 5480 series, which extends beyond specific facilities and projects or applies to a category of facilities or activities (see also paragraph 8d(6)).
- J. Implementation Plan is a concise description of the approach, resources, and time period planned for implementing orders that require such plans on a site-wide basis. The plan includes a description of the execution of environmental protection, safety, and health responsibilities and authorities by the field organization, and any proposed generic exemptions to parts of such DOE Orders.
- k. Line Organization is that unbroken chain of command which extends from the Secretary through the Under Secretary, to the program Senior Officials (PSO) who set program policy and plans and develop assigned programs, to the field organization managers who are responsible to the PSO for execution of these programs, to the contractors who conduct the programs. Environment, safety, and health are integral parts of each program. Accordingly, line management responsibility for ES&H functions flows from the Secretary through the Under Secretary, to the PSO, to the field organization managers, to the contractor' >.
- l. Program Senior Official (PSO) is a senior outlay program manager and includes the Assistant Secretaries for Conservation and Renewable Energy, Defense Programs, Fossil Energy, and Nuclear Energy, the Director of Energy Research, and the Director of Civilian Radioactive Waste Management. For purposes of this Order, this definition also includes the Administrators of the Bonneville and Western Area Power Administrations.

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- m. Standard means a specified set of rules or conditions concerned with the classification of components; delineation of procedures; definition of terms; specifications of materials, performance, design, or operations; or measurements of quality in describing materials, products, systems, services or practices. Standards may be specified by DOE as mandatory (i.e., required) or recommended.
 - n. Technical Safety Appraisal is a documented, multidiscipline appraisal of selected Department reactors and nuclear facilities conducted by a team selected by the Deputy Assistant Secretary for Safety, Health, and Quality Assurance (EH-30). They assure proper Department-wide application of particular safety elements of the ES&H program, nuclear industry lessons learned, and appropriate licensed facility requirements as described in DOE 5482.1B, paragraph 9b.
 - o. Unreviewed Safety Question. A proposed change, test, or experiment shall be deemed to involve an unreviewed safety question if:
 - (1) The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety evaluated previously by safety analyses will be significantly increased, or
 - (2) A possibility for an accident or malfunction of a different type than any evaluated previously by safety analyses will be created which could result in significant safety consequences.
 - p. Variance is a release from a standard of the type specified under the Occupational Safety and Health Act which is processed in accordance with DOE 5483.1A.
6. APPLICATION.
- a. This Order applies to the ES&H programs at all Government-owned contractor-operated (GOCO) facilities including the occupational safety and health programs for DOE contractor employees at GOCO facilities where the contracts include the occupational safety and health contract clause specified in DOE Acquisition Regulations 48 CFR 923.70 and 48 CFR 970.23. This Order also applies to environmental protection programs and programs for the protection against accidental loss or damage to property as provided by law and/or contract and as implemented by the appropriate contracting officer. This Order does not apply to the occupational safety and health programs for non-GOCO contractor employees doing work for the Department or Federal employees as described in DOE 3790.1A (see paragraph 8e of this Order).
 - b. A partial or complete variance from this Order may be granted when compliance with the Order may be inconsistent with external regulatory, legislative, or judicial requirements imposed on a DOE program. Such

variances shall be recorded by means of a memorandum of understanding (MOU) to be signed by the Assistant Secretary for Environment, Safety, and Health (EH-1) and by the requesting program Senior Official (PSO). The MOU will contain the basis for the granting of the variance, the identification of the specific portion(s) of the Order to which the variance applies, and, when applicable, the alternative measures that will be implemented to accomplish the intent and purpose of the Order's requirements.

7. POLICY. It is Department policy to:

- a. Assure the protection of the environment and the health and safety of the public.
- b. Assure safe and healthful workplaces and conditions of employment for all employees of DOE and DOE contractors as described in paragraph 6, above.
- c. Protect Government property against accidental loss and damage.
- d. Assure compliance with applicable statutory requirements affecting Federal facilities and operations and where possible, consistent with the Department's mission and supported by appropriate cost/benefit analysis, reduce identified environment, safety, and health risks, even though not mandated by specific requirements.
- e. Assure that quality assurance is pursued (i.e. that research, development, demonstration, and production activities are performed in a controlled manner; that components, systems, and processes are designed, developed, constructed, tested, operated, and maintained according to industry accepted engineering standards, quality practices, and Technical Specifications/Operational Safety Requirements; and that resulting technology data are valid and retrievable).
- f. Require line management to be responsible for effective Environment, Safety, and Health (ES&H) performance in their programs. Through overview, the Assistant Secretary for Environment, Safety, and Health (EH-1) is responsible to assure acceptable ES&H performance for the Secretary and for Program Senior Officials.

8. RESPONSIBILITIES AND AUTHORITIES.

- a. Under Secretary (S-3) has overall responsibility and authority for DOE programs and may take necessary management actions to ensure safety, including directing the curtailment and suspension of operations, when in his or her opinion, such operation would result in an undue risk.
- b. Program Senior Officials (PSO) are assigned primary responsibility for implementation of the DOE ES&H program. This responsibility includes confirming that DOE and Federal ES&H policies and directives are

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adhered to vigorously in all DOE operations. Including responsibilities described in other DOE 5480 series Orders, PSOs shall:

- (1) Provide clear and explicit delegations of authority and responsibilities.
- (2) Ensure that appropriate ES&H requirements, as identified in the DOE Orders, are included in program plans and proposals for design, construction, operation, modification, and decommissioning of DOE operations.
- (3) Take necessary management actions, including the requirement that budget proposals for their assigned functions provide adequate ES&H resources.
- (4) Confirm that applicable ES&H requirements are identified and provided to the contracting officers for inclusion in contracts.
- (5) Perform program reviews to confirm effective implementation of DOE ES&H requirements by program and field organizations. In the execution of this responsibility, maximum use should be made of the appraisals and other reviews performed by EH, including assuring that recommendations made by EH are addressed in a responsive and timely manner.
- (6) Provide program and project direction to the field organizations consistent with the ES&H Orders and ES&H policy guidance requirements relating to ES&H. Program or project direction that is related to ES&H and affects more than one field organization must be concurred in by EH-1.
- (7) Provide EH-1 with copies of field organization implementation plans for DOE 5480 series Orders.
- (8) Review and, subsequent to EH-1 concurrence, approve implementation plans for DOE 5480 series Orders submitted by field organizations.
- (9) Assume the responsibilities assigned to Heads of Field Organizations in paragraph 8d below for DOE program activities not assigned to a field organization for implementation.
- (10) Take such action as may be appropriate to ensure safety, including directing the field organization head to curtail and suspend operations when, in their opinion, such operation would result in an undue ES&H risk.
- (11) Ensure that documents generated under this Order and other DOE 548C series Orders are reviewed for classification where appropriate.

- (12) Request EH-1 concurrence in generic exemptions (post implementation plan) from ES&H requirements and responsibilities as contained in the DOE 5480 series Orders.
 - (13) Participate in selected field organization appraisals, as appropriate, in accordance with DOE 5482.16.
 - (14) Ensure that EH-1 recommendations on ES&H upgrades are considered in their formulation of budget requests to the Office of Management and Budget and Congress.
 - (15) Approve the construction and initial operation of reactors and high and selected moderate hazard facilities or modifications thereto involving an unreviewed safety question in accordance with DOE 5481.1B.
 - (16) Assure that EH-1 is provided all information and documentation requested to enable efficient discharge of their overall ES&H responsibilities.
- c. Assistant Secretary for Environment, Safety and Health (EH-1) shall:
- (1) Develop and establish ES&H policies, standards, guidance, requirements, and procedures for DOE projects and program operations, including but not limited to those on notification, investigation, and reporting of occurrences having ES&H significance.
 - (2) Review and concur in ES&H program and project direction issued by a PSO to the field that is directly related to ES&H matters which affect more than one field organization.
 - (3) Provide advice and assistance concerning ES&H programs to line organizations.
 - (4) Seek the advice of appropriate field organizations and program offices in determining ES&H research and technical assistance activities to be undertaken.
 - (5) Provide a central point for coordination within DOE and liaison with other agencies and groups in the development of ES&H related regulations, standards, and requirements; and resolution of environmental, safety, or health issues applicable to DOE operations, including review of proposed statutes (where appropriate), regulations, standards, and requirements for their application to and potential impact on DOE activities; and participation in the development and review of general design criteria.
 - (6) Develop guidelines on the content of field organization Implementation Plans which will be used by all field organizations to ensure a consistent approach to the implementation of the DOE 5480 series Orders where required.

- (7) Review and concur in all field organization Implementation Plans for DOE 5480 series Orders.
- (8) Conduct appraisals of the line organization's ES&H programs in accordance with DOE 5482.1B and other DOE 5480 series Orders.
- (9) Identify needs for research and development to support ES&H programs and recommend appropriate actions.
- (10) Provide a central point for the collection, retention, evaluation and dissemination of information having ES&H significance.
- (11) Render interpretations of this Order and other DOE 5480 series Orders.
- (12) Provide independent assurance that safety analyses are prepared and reviewed in accordance with DOE 5481.1B.
- (13) Concur in generic exemptions from ES&H requirements and responsibilities contained in DOE 5480 series Orders.
- (14) Process requests for variances from occupational safety and health standards in accordance with the procedures of DOE 5483.1.
- (15) Conduct reviews of facilities and operations including, technical safety appraisals of Department reactors and nuclear facilities, environmental surveys, and environmental audits. The planning and conduct of these reviews will be coordinated with the appropriate field organizations and Headquarters program offices to minimize overlap or duplication of effort. Appropriate field organizations and Headquarters program offices will be requested to participate.
- (16) Participate in selected field organization ES&H appraisals of contractor facilities/operations in accordance with DOE 5482.16. All participation shall be as a full active member and scheduled for the year at the time of the annual submittal by the field of its proposed appraisal schedule.
- (17) Provide an independent prioritization of ES&H corrective actions and upgrade projects to the PSO and the Assistant Secretary for Management and Administration (MA-1), for use in initiating and, ultimately, by the Under Secretary, in establishing the Departmental budget requested. This input would be based on a number of information sources including ES&H appraisals, environmental surveys, environmental audits, and Field Office Manager's and PSO's recommended budget requests.

- (18) For reactors and high and selected moderate hazard facilities, concurs in accordance with DOE 5481.1B, with the safety related aspects of the construction and initial operating authorizations or modifications involving an unreviewed safety question.
- (19) Prepare and coordinate Departmental comments on emerging regulations, and policies of other agencies related to ES&H that could impact DOE projects and program operations.
- (20) Curtail or suspend operations at DOE facilities, under the conditions described below, when a clear and present danger exists to workers or members of the public. (Clear and present danger is a condition or hazard which could reasonably be expected to cause death or serious harm to plant workers or the public immediately or before such condition or hazard can be eliminated through normal procedures.)
- (a) Whenever EH-1, in carrying out his or her responsibilities, determines that the environmental, safety, or health conditions at any DOE facility present a clear and present danger, EH-1 shall notify the Under Secretary that such a determination has been made. In addition, notification shall be provided to the Program Senior Official and the Head of the appropriate Field Element. Upon receiving such notification, the Head of the Field Element shall take immediate action to curtail or suspend the operation and to mitigate the danger.
- (b) If appropriate action is not taken to curtail or suspend the operation and mitigate the identified danger, EH-1 shall advise the Secretary. In the event that the Secretary is unavailable, EH-1 is authorized to direct the PSO or field element to suspend or curtail an operation which EH-1 has determined is posing a clear and present danger until the danger has been mitigated.
- (c) The authority reflected in subparagraph (20) may not be redelegate or assumed by acting officials and will terminate on 1-31-88, unless specifically renewed.

- d. Heads of Field Organizations are responsible for assuring that all operations under their jurisdiction are carried out consistent with sound ES&H practices and in accordance with the ES&H Orders. In carrying out this responsibility the Heads of Field Organizations shall:
- (1) Execute programs and assure that contractors and their subcontractors execute programs and policies which utilize appropriate ES&H program elements, as identified in this and other Orders for siting, design, construction, operation, maintenance, modification, deactivation, decontamination, and decommissioning of DOE facilities and activities.
 - (2) Take such action as may be appropriate to assure acceptable environment, safety, and health, including curtailment and suspension of operations when, in their opinion, such operation would result in an undue ES&H risk.
 - (3) In the selection of contractors, ensure the ability of offerors to meet ES&H requirements. Assure that applicable environment, safety, health, and quality assurance requirements are included in contracts.
 - (4) Execute programs and assure that contractors and their subcontractors execute programs and policies in a manner that complies with mandatory requirements relating to ES&H.
 - (5) Appraise the programs, projects, and facilities of subordinate field activities in accordance with DOE 5482.1B, and other DOE 5480 series Orders.

- (6) Prepare implementation plans for this Order and other DOE 5480 series Orders.
- (a) These plans shall include:
- 1 The designation of ES&H responsibilities and authorities by the field organization and their contractors; and
 - 2 A concise description of the approach, resources, and time period planned for implementing Orders that require such plans on a site wide basis, including a description of the execution of ES&H responsibilities and authorities by the field organization, and any proposed generic exemptions to parts of such Orders.
- (b) The field organization implementation plans will be reviewed and approved by the cognizant PSO before implementation. This requirement in no way prohibits Heads of Field Organizations from initiating actions of necessity in exercising responsibility for environment, safety, and health activities. Specific exemptions to the requirements of this Order or other ES&H Orders which are dependent on specific facility designs would not be a part of the implementation plans but shall be identified in the facility design documentation and safety analysis which will be reviewed and approved in the normal process of facility design and operation and assessed as part of the ES&H appraisal programs.
- Note: These procedures for specific exemptions do not apply to Federal regulations (such as the National Environmental Policy Act), Environmental Impact Statements, or Environmental Assessment documents.
- (7) Establish and maintain liaison with regional, State, or local officials as appropriate, and advise the responsible PSO of any ES&H requirements issued by these officials that will significantly affect their operations. Concurrently advise EH-1 of all requirements issued that will significantly affect any DOE operation.
- (8) Grant exceptions to, and process requests for variances from occupational safety and health standards in accordance with DOE 5483.1.
- (9) Request Program Senior Official approval of generic exemptions from ES&H requirements and responsibilities as contained in the DOE 5480 series Orders.

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- (10) Authorize the construction and initial operation of reactors and high and moderate hazard facilities or modifications thereto involving an unreviewed safety question in accordance with DOE 5481.1B.
- (11) Assure that documents generated under this Order are reviewed for classification where appropriate.
- (12) Provide EH-1 with copies of their prioritized recommendations for major ES&H upgrades and corrective actions included in their budget requests to the PSO.
- (13) Provide EH-1 all information and documentation requested to enable efficient discharge of EH-1 overall responsibilities.
- (14) Assure the establishment, implementation, and maintenance of a Quality Assurance Program, by DOE contractors to whom this Order is made applicable, in accordance with this Order and DOE 5700.6B.
- (15) provide for an overview of environment, safety, and health in their organization independent of line management responsibility.

NOTE : The Manager, Pittsburgh Naval Reactors Office, and the Manager, Schenectady Naval Reactors Office, together with their branch field offices located at DOE Naval Reactor prototype sites, report to the Deputy Assistant Secretary for Naval Reactors because of their unique responsibility solely involved with the Naval Reactors Program. In this regard, the Deputy Assistant Secretary for Naval Reactors will continue to carry out responsibilities for approving implementation of DOE requirements in such areas as reactor safety, criticality control, radiation protection, and radiological environmental monitoring and protection defined herein and in other DOE Orders for field organization managers.

- e. The Director of Administration (MA-2) is responsible for the administration and overview of the Federal Employee Occupational Safety and Health Program. In carrying out this function, MA-2 responsibilities and authorities are detailed in DOE 3790.1A. Questions regarding impact on Federal employees shall be addressed to this organization.
- f. Deputy Assistant Secretary for Naval Reactors shall:
 - (1) Be responsible for conducting management appraisals, implementing DOE ES&H requirements, and establishing overviews in such areas as reactor safety, criticality control, radiation protection, and radiological environmental monitoring and protection in the Naval Reactors Program. These appraisals, implementation actions, and overviews are Excluded from EH-1 responsibility, notification, requirements, and authority.

- (2) Carry out responsibilities assigned herein and in other DOE ES&H Orders to field organization managers for approving and implementing DOE requirements in such areas as reactor safety, criticality control, radiation protection, and radiological environmental monitoring and protection.
- (3) Carry out the responsibilities and authorities of a Program Secretarial Officer for activities under his cognizance.



JOHN S. HERRINGTON
Secretary

REDESIGNATION OF THE CHAPTERS OF DOE 5480.1A*

<u>DOE 5480.1A Chapter No.</u>	<u>Title</u>	<u>New Order No.</u>
I	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS	5480.4
None	HAZARDOUS AND RADIOACTIVE MIXED WASTE MANAGEMENT	5480.2
III	SAFETY REQUIREMENTS FOR THE PACKAGING OF FISSILE AND OTHER RADIOACTIVE MATERIALS	5480.3
V	SAFETY OF NUCLEAR FACILITIES	5480.5
VI	SAFETY OF DEPARTMENT OF ENERGY OWNED REACTORS	5480.6
VII	FIRE PROTECTION	5480.7
VIII	CONTRACTOR OCCUPATIONAL MEDICAL PROGRAM	5480.8
IX	CONSTRUCTION SAFETY AND HEALTH PROGRAM	5480.9
X	INDUSTRIAL HYGIENE PROGRAM	5480.10
XI	REQUIREMENTS FOR RADIATION PROTECTION	5480.11
XII	PREVENTION, CONTROL, AND ABATEMENT OF ENVIRONMENTAL POLLUTION	5480.12
XIII	AVIATION SAFETY	5480.13

* Individual chapters will remain in effect until replaced by a new Order.

U. S. Department of Energy
Washington, DC

PAGE CHANGE

DOE 5400.1B Chg 1

2-18-88

SUBJECT: ENVIRONMENT, SAFETY, AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS

1. PURPOSE. To transmit revised pages of DOE 5480.1B, ENVIRONMENT, SAFETY AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS, OF 9-23-86.
2. EXPLANATION OF CHANGE. To update the "sunset" clause of paragraph 8c (20)(c).
3. FILING INSTRUCTIONS.

a.	<u>Remove Page</u>	<u>Dated</u>	<u>Insert Page</u>	<u>Dated</u>
		9-23-86		9-22-86
	10	9-23-86	10	2 - 18 - 88

- a.
- b. After filing the attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:

LAURENCE f. DAVENPORT
Assistant Secretary
Management and Administration

DISTRIBUTION.
All Departmental Elements

INITIATED BY.
Assistant Secretary for
Environment, Safety, and Health

- (7) **Review and concur in all field organization Implementation Plans for DOE 5480 series Orders.**
- (8) **Conduct appraisals of the line organization's ES&H programs in accordance with DOE 5482.1B and other DOE 5480 series Orders.**
- (9) Identify needs for research and development to support ES&H programs and recommend appropriate actions.
- (10) **Provide a central point for the collection, retention, evaluation and dissemination of information having ES&H significance.**
- (11) **Render interpretations of this Order and other DOE 5480 series Orders.**
- (12) Provide independent assurance that *safety analyses* are prepared and reviewed in accordance with DOE 5481.1B.
- (13) Concur in generic exemptions from ES&H requirements and responsibilities contained in DOE 5480 series Orders.
- (14) Process requests for variances from occupational safety and health standards in accordance with the procedures of DOE 5483.1.
- (15) Conduct reviews of facilities and operations, including technical safety appraisals of Department reactors and nuclear facilities, environmental surveys, and environmental audits. The planning and conduct of these reviews will be coordinated with the appropriate field organizations and Headquarters Program offices to minimize overlap or duplication of effort. Appropriate field organizations and Headquarters program offices will be requested to participate.
- (16) Participate in selected field organization ES&H appraisals of contractor facilities/operations in accordance with DOE 5482.1B. All participation shall be as a *full* active member and scheduled for the year at the time of the annual submittal by the field of its proposed appraisal schedule.
- (17) **Provide an independent prioritization of ES&H corrective actions and upgrade project to the PSO and the Assistant Secretary or Management and Administration (MA-1), for use in initiating and, ultimately, by the Under Secretary, in establishing the Departmental budget requested. This input would be based on a number of information sources including ES&H appraisals, environmental surveys, environmental audits, and field Office Manager's and PSO's recommended budget requests.**

- (18) **For reactors and high and selected moderate hazard facilities, concurs in accordance with DOE 5481.10, with the safety related aspects of the construction and initial operating authorizations or modifications involving an unreviewed safety question.**
- (19) **Prepare and coordinate Departmental comments on emerging regulations, and policies of other agencies related to E&S that could impact DOE projects and program operations.**
- (20) Curtail or suspend operations at DOE facilities, under the conditions described below, when a clear and present danger exists to workers or members of the public. (Clear and present danger is a condition or hazard could reasonably be expected to cause death or serious harm to plant workers or the public immediately or before such condition or hazard can be eliminated through normal procedures.)
- (a) Whenever EH-1, in carrying out his or her responsibilities, determines that the environmental, safety, or health conditions at any DOE facility present a clear and present danger, EH-1 shall notify the Under Secretary that such a determination has been made. In addition, notification shall be provided to the Program Senior Official and the Head of the appropriate Field Element. Upon receiving such notification, the Head of the Field Element shall take immediate action to curtail or suspend the operation and to mitigate the danger.
- (b) If appropriate action is not taken to curtail or suspend the operation and mitigate the identified danger, EH-1 shall advise the Secretary. In the event that the Secretary is unavailable, EH-1 is authorized to direct the PSO or field element to *suspend or curtail* an operation which EH-1 has determined is posing a clear and present danger until the danger *has* been mitigated.
- (c) **The authority reflected in subparagraph (20) may not be redelegated or assumed by acting officials and will terminate on 1-31-89, unless specifically renewed.**

Vertical line denotes change.

U. S. Department of Energy
Washington, DOE

PAGE CHANGE

DOE 5480.1B Chg 1

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	9	9-23-86	9	9-23-86
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LAWRENCE F. DAVENPORT
Assistant Secretary
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DISTRIBUTION:
All Departmental Elements

INITIATED BY:
Assistant Secretary for
Environment, Safety, and Health

- (7) Review and Concur all field organization Implementation Plans for DOE 5480 series Orders.
- (8) Conduct appraisals of the line organization's ES&H programs in accordance with DOE 5482.1B and other DOE 5480 series Orders.
- (9) Identify needs *for* research and development to support ES&H program and recommend appropriate actions.
- (10) Provide a central point for the collection, retention, evaluation and dissemination of information having ES&H significance.**
- (11) Render interpretations of this Order and other DOE 5480 series Orders.**
- (12) Provide independent assurance that safety analyses are prepared and reviewed in accordance with DOE 5481.1B.
- (13) Concur in generic exemptions from ES&H requirements and responsibilities contained in DOE 5480 series Orders.
- (14) Process requests for variances from occupational safety and health standards in accordance with the procedures of DOE 5483.1.
- (15) Conduct reviews of facilities and operations, including technical safety appraisals of Department reactors and nuclear facilities, environmental surveys, and environmental audits. The planning and conduct of these reviews will be coordinated with the appropriate field organizations and Headquarters program offices to minimize overlap or duplication of effort. Appropriate Field organizations and Headquarters program offices will be requested to participate.
- (16) Participate in selected field organization ES&H appraisals of contractor facilities/operations in accordance with DOE 5482.1B. All participation shall be as a full active member and scheduled *for the year* at the time of the annual submittal by the field of its proposed appraisal schedule.
- (17) Provide an independent prioritization of ES&H corrective actions and upgrade projects to the PSO and the Assistant Secretary or Management and Administration (MA-1). for use in initiating and, ultimately, by the Under Secretary, in establishing the Departmental budget requested. This input would be based on a number of information sources including ES&H appraisals, *environmental surveys*, environmental audits, and Field Office Manager's and PSO's recommended budget requests.

- (18) For reactors and high and selected moderate hazard facilities, concurs in accordance with DOE 5481.1B, with the safety related aspects of the construction and initial operating authorizations or modifications involving an unreviewed safety question.
- (19) Prepare and coordinate Departmental comments on emerging regulations, and policies of other agencies related to ES&M that could impact DOE projects and program operations.
- (20) Curtail or suspend operations at DOE facilities, under the conditions described below, when a clear and present danger exists to workers or members of the public. (Clear and present danger is a condition or hazard which could reasonably be expected to cause death or serious harm to plant workers or the public immediately or before such condition or hazard can be eliminated through normal procedures.)
- (a) Whenever EH-1, in carrying out his or her responsibilities, determines that the environmental, safety, or health conditions at any DOE facility present a clear and present danger, EH-1 shall notify the Under Secretary that such a determination has been made. In addition, notification shall be provided to the Program Senior Official and the Head of the appropriate Field Element. Upon receiving such notification, the Head of the Field Element shall take immediate action to curtail or suspend the operation and to mitigate the danger.
- (b) If appropriate action is not taken to curtail or suspend the operation and mitigate the identified danger, EH-1 shall advise the Secretary. In the event that the Secretary is unavailable, EH-1 is authorized to direct the PSO or field element to suspend or curtail an operation which EH-1 has determined is posing a clear and present danger until the danger has been mitigated.
- (c) The authority reflected in subparagraph (20) may not be redelegated or assumed by acting officials and will terminate on 1-31-89, unless specifically renewed.

Vertical line denotes change.

U. S. Department of Energy
Washington, D.C.

PAGE CHANGE

DOE 5480.1B Chg 2

1-23-89

SUBJECT: ENVIRONMENT, SAFETY, AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS

1. PURPOSE. To transmit revised pages of DOE 5480.1B, ENVIRONMENT, SAFETY, AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS, OF 9-23-86.
2. EXPLANATION OF CHANGE. To update the "sunset" clause of paragraph 8c(20)(c).
3. FILING INSTRUCTIONS.

a.	<u>Remove Page</u>	<u>Dated</u>	<u>Insert Page</u>	<u>Dated</u>
	9	9-23-86	9	9-23-86
	10	9-23-86	10	1-23-89

- a. After filing the attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:



LAURENCE F. DAVENPORT
Assistant Secretary
Management and Administration

DISTRIBUTION,
All Departmental Elements

INITIATED BY:
Assistant Secretary for
Environment, Safety, and Health

- (7) Review and concur in all field organization Implementation Plans for DOE 5480 series Orders.
- (8) Conduct appraisals of the line organization's ES&H programs in accordance with DOE 5482.1B and other DOE 5480 series orders.
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 - (c) The authority reflected in subparagraph (20) may not be redelegated or assumed by acting officials and will terminate on 1-31-90, unless specifically renewed.

Vertical line denotes change.

REDESIGNATION OF THE CHAPTERS OF DOE ORDER 5480.1A

DOE 5480.1A Chapter No.	Title	New Order No.
I	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS	5480.4
II	HAZARDOUS AND RADIOACTIVE MIXED WASTE MANAGEMENT	5400.3
III	SAFETY REQUIREMENTS FOR THE PACKAGING AND TRANSPORTATION OF HAZARDOUS MATERIALS, HAZ. SUBSTANCES & HAZ. WASTES	5480.3
V	SAFETY OF NUCLEAR FACILITIES	5480.5
VI	SAFETY OF DEPARTMENT OF ENERGY OWNED NUCLEAR REACTORS	5480.6
VII	FIRE PROTECTION	5480.7
VIII	CONTRACTOR OCCUPATIONAL MEDICAL PROGRAM	5480.8
IX	CONSTRUCTION SAFETY AND HEALTH PROGRAM	5480.9
X	CONTRACTOR INDUSTRIAL HYGIENE PROGRAM	5480.10
XI	REQUIREMENTS FOR RADIATION PROTECTION	5480.11
XII	PREVENTION, CONTROL, AND ABATEMENT OF ENVIRONMENTAL POLLUTION	5400.1
XIII	AVIATION SAFETY	5480.13

1. Individual chapters will remain in effect until replaced by a new applicable Order.
2. 5480.11 establishes radiation protection standards for occupational workers. Environmental portions of the Chapter are being revised in the 5400 series. Until revision are completed radiation protection standards for the public and the environment contained in, Chapter XI of 5480.1A, cancelled on 9-23-86 by issuance of 5480.1B, remain in effect.

Vertical line denotes change

U.S. Department of Energy
Washington, D.C.

PAGE CHANGE

DOE 5480.1B Chg 4

3-27-90

SUBJECT: ENVIRONMENT, SAFETY, AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS

1. PURPOSE. To transmit revised pages of DOE 5480.1B, ENVIRONMENT, SAFETY, AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS, of 9-23-86.
2. EXPLANATION OF CHANGE. To update the "sunset" clause of paragraph 8c(20) (c).
3. FILING INSTRUCTIONS .

a.	<u>Remove Page</u>	<u>Dated</u>	<u>Insert Page</u>	<u>Dated</u>
	9	9-23-86	9	9-23-86
	10	1-23-89	10	3-27-90

- a. After filing take attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:

JIM E. TARRO
Acting Director of Administration and
Human Resource Management

DISTRIBUTION.

All Departmental Elements

INITIATED BY.

Assistant Secretary for
Environment, Safety, and Health

- (7) Review and concur in all field organization Implementation Plans for DOE 5480 series Orders.
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Vertical line denotes change.

U.S. Department of Energy
Washington, D.C.

PAGE CHANGE

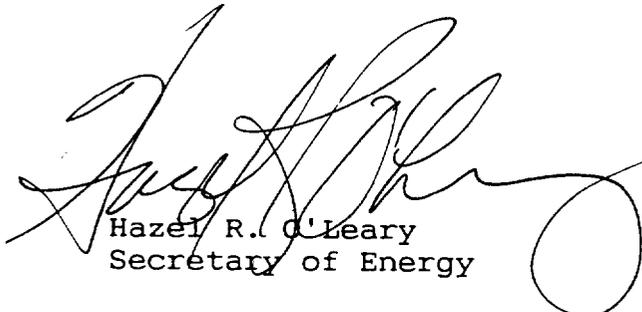
DOE 5480.1B Chg 5

5-10-93

SUBJECT: ENVIRONMENT, SAFETY, AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS

1. PURPOSE. To transmit revised pages of DOE 5480.1B, ENVIRONMENT, SAFETY AND HEALTH PROGRAM FOR DEPARTMENT OF ENERGY OPERATIONS, of 9-23-86.
2. EXPLANATION OF CHANGE. To renew the authority of the Assistant Secretary for Environment, Safety and Health to curtail or suspend operations at Department of Energy facilities.
3. FILING INSTRUCTIONS.

- | a. | <u>Remove Page</u> | <u>Dated</u> | <u>Insert Page</u> | <u>Dated</u> |
|----|--------------------|--------------|--------------------|--------------|
| | 9 | 9-23-86 | 9 | 9-23-86 |
| | 10 | 3-27-90 | 10 | 5-10-93 |
- b. After filing the attached pages, this transmittal may be discarded.



Hazel R. O'Leary
Secretary of Energy

DISTRIBUTION:
All Departmental Elements

INITIATED BY:
Assistant Secretary for
Environment, Safety, and Health

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