Summary of Changes

to

O 440.1-5B Fire Protection Program

Revised Version Issued as O 440.1-5C of 3/3/06

NETL Operating Plan 440.1-5B, Fire Protection Program, of 7/30/04, has undergone revisions. Revisions to the Operating Plan include (1) definition changes, (2) upgrade of the responsibilities section, and (3) modification of the program description section to ensure the document is complete and in compliance with established requirements. Please replace NETL Operating Plan 440.1-5B with NETL Operating Plan 440.1-5C.

U.S. Department of Energy

OPERATING PLAN

National Energy Technology Laboratory

O 440.1-5<mark>C</mark>

ISSUED: 3/3/06 **REVIEWED:** 3/3/06

SUBJECT: FIRE PROTECTION PROGRAM

- 1. <u>PURPOSE</u>. To establish a plan for managing NETL's fire protection program. This Operating Plan is implemented through procedures that cover the following functional areas: fire detection and alarms; fire extinguishing equipment; fire drills; non-emergency use of fire hydrants; training; assessment, inspection, testing, and maintenance of fire protection systems and equipment; freeze protection; and fire system impairment.
- 2. <u>CANCELLATION</u>. This Operating Plan replaces NETL Operating Plan 440.1-5B, Fire Protection Program, of 7/30/04.

3. REQUIREMENTS.

- a. NETL's fire protection program is described in Attachment 1, *National Energy Technology Laboratory Fire Protection Program Plan*, of this Operating Plan. This Program Plan establishes overall program objectives, outlines responsibilities, and describes the Fire Protection Program. The fire protection program description contains information and/or requirements related to fire prevention, fire protection, fire hazard analysis, facility fire protection appraisals, reliability assurance, and fire protection reports.
- b. In addition, specific implementing requirements for NETL's fire protection program are described in the following NETL procedures:
 - (1) NETL Procedure 440.1-4, Fire Detection Devices and Alarm Systems.
 - (2) NETL Procedure 440.1-5, Fire Extinguishing Systems, Including Fixed Systems and Portable Fire Extinguishers.
 - (3) NETL Procedure 440.1-6, Fire Drills.
 - (4) NETL Procedure 440.1-7, Fire Hydrant Non-Emergency Use.
 - (5) NETL Procedure 440.1-8, Fire Protection Program Training.
 - (6) NETL Procedure 440.1-9, Assessment, Inspection, Testing, and Maintenance of Fire Protection Systems Equipment, and Programs.

- (7) NETL Procedure 440.1-10, Fire Protection Cold Weather Protection Program.
- (8) NETL Procedure 440.1-11, Fire Protection Impairment.

4. <u>DEFINITIONS</u>.

- a. <u>AHJ</u> -- Authority Having Jurisdiction.
- b. <u>EOC</u> -- Emergency Operations Center.
- c. <u>Equivalency</u> -- A determination by the DOE AHJ that the use of an alternate method has met the intent of a code or standard.
- d. <u>Exemption</u> -- The approved deviation from a DOE directive or non-statutory code or standard.
- e. <u>FFPA</u> -- Facility Fire Protection Appraisals. A physical inspection of a facility for all aspects of fire protection.
- f. <u>FHA</u> -- Fire Hazard Analysis. Used to assess the risk from fire within individual fire areas and to ensure that fire protection objectives are being met.
- g. <u>FPPM</u> -- Fire Protection Program Manager. The designated <u>Federal NETL</u> Manager who has the day-to-day authority and responsibility to administer NETL's Fire Protection Program.
- h. <u>Major Modification</u> -- When in reference to a fire protection system modification, a major modification will be on the order of a branch line addition or removal, a change in the sprinkler system activation sequence, etc. The FPPM shall determine if a modification is considered to be a major modification.
- i. <u>MCFL</u> -- Maximum Credible Fire Loss. The value of property within a fire area, unless a fire hazards analysis demonstrates a lesser (or greater) loss potential. This assumes that all installed fire protection systems function as designed and the effect of emergency response is omitted except for post-fire actions such as salvage work, shutting down water systems, and restoring operation.
- j. <u>Modification</u> -- When in reference to a fire protection system change, a modification will be considered to be an activity more extensive than a simple replacement item installation. The FPPM shall determine if a change is a modification.
- k. <u>MPFL</u> -- Maximum Possible Fire Loss. The value of property, excluding land, within a fire area, unless a fire hazard analysis demonstrates a lesser (or greater) loss potential. This assumes the failure of both automatic fire suppression systems and manual fire-fighting efforts.

- 1. NFPA -- National Fire Protection Association.
- m. PIV -- Post Indicator Valve.
- n. <u>SARS</u> -- Safety Analysis and Review Systems. A system implemented to ensure that risks associated with NETL's on-site R&D projects, facilities, and support operations are analyzed, understood, and eliminated, mitigated, or controlled prior to potential adverse impacts on workers, the public, the environment, facilities, or equipment.

5. REFERENCES.

- a. DOE Order 231.1, Environment, Safety and Health Reporting.
- b. DOE Order 420.1, Facility Safety.
- c. DOE Order 440.1, <u>Worker Protection Management for DOE Federal and Contractor Employees.</u>
- d. DOE Guide 440.1-5, <u>Fire Safety Program for Use With DOE Order 420.1 and DOE</u> Order 440.1.
- e. NETL Order 440.1, <u>Safety and Health Program</u>.
- f. NETL Procedure 440.1-4, <u>Fire Detection Devices and Alarm Systems</u>.
- g. NETL Procedure 440.1-5, <u>Fire Extinguishing Systems</u>, <u>Including Fixed Systems and Portable Fire Extinguishers</u>.
- h. NETL Procedure 440.1-6, Fire Drills.
- i. NETL Procedure 440.1-7, Fire Hydrant Non-Emergency Use.
- j. NETL Procedure 440.1-8, Fire Protection Program Training.
- k. NETL Procedure 440.1-9, <u>Assessment, Inspection, Testing, and Maintenance of Fire Protection Systems, Equipment, and Programs</u>.
- 1. NETL Procedure 440.1-10, Fire Protection Cold Weather Protection Program.
- m. NETL Procedure 440.1-11, Fire Protection Impairment.
- n. DOE-STD-1066, Fire Protection Design Criteria.
- o. DOE-STD-1088-95, Fire Protection for Relocatable Structures.

- p. Statutory ES&H Standards:
 - (1) 29 CFR 1910.38, Emergency Action Plans.
 - (2) 29 CFR 1910.39, Fire Prevention Plans.
 - (3) 29 CFR 1910, Subpart L, Fire Protection.
 - (4) 29 CFR 1926, Subpart F, Fire Protection and Prevention.
- q. Reference ES&H Standards:
 - (1) NFPA 10, Portable Fire Extinguishers.
 - (2) NFPA 25, Inspection, Testing and Maintenance of Water Based Fire Protection Systems.
 - (3) NFPA 72, National Fire Alarm Code.
 - (4) NFPA 101, Life Safety Code.

6. <u>RESPONSIBILITIES</u>.

- a. FPPM shall:
 - (1) Maintain this Operating Plan and its Procedures that implement the NETL Fire Protection Program.
 - (2) Provide daily oversight and management of NETL's Fire Protection Program.
- b. Environmental, Safety, and Health Division Director shall:
 - (1) Appoint the FPPM.
 - (2) Ensure submission of the annual fire summary report by the FPPM to DOE-HQ.
 - (3) Provide program assessments and general policy oversight to ensure compliance with this Operating Plan and the implementing Procedures.
- c. <u>SSC ES&H Staff</u> shall implement various aspects of the NETL Fire Protection Program as directed by the FPPM.

7. <u>ATTACHMENTS</u>.

a. Attachment 1 -- NETL Fire Protection Program Plan.

Director, OIBO	

ATTACHMENT 1

NATIONAL ENERGY TECHNOLOGY LABORATORY FIRE PROTECTION PROGRAM PLAN

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NETL FIRE PROTECTION PROGRAM PLAN

1. INTRODUCTION

The NETL Fire Protection Program establishes the requirements and controls to safeguard life and property from the hazards of fire at NETL. Effective implementation of the Fire Protection Program provides an adequate degree of protection sufficient to assure that:

- a. There is no undue hazard to employees from fire (to DOE and contractor employees occupying or otherwise using NETL's facilities).
- b. No threats to public health or welfare result from fire.
- c. Vital programs do not suffer unacceptable delays as a result of fire.
- d. Property damage is held to manageable levels.

2. OBJECTIVES

The objectives of the NETL Fire Protection Program are as follows:

- a. To reduce the fire loss potential by anticipating and identifying hazards or problem areas and instituting appropriate improved risk control measures.
- b. To promote the fastest and most effective emergency response by personnel from outside organizations.
- c. To reestablish normal conditions with as little confusion and as promptly as possible.
- d. To lessen the chances of the same type of emergency occurring more than once.
- e. To ensure a better public relations posture by effective preparation for fire emergencies.

3. RESPONSIBILITIES

- a. The <u>NETL Director</u> has the ultimate responsibility for NETL's safety and health programs and to provide support of the Fire Protection Program.
- b. The Fire Protection Program Manager (FPPM):
 - (1) Develops and maintains a fire protection program that provides for an improved risk level of fire protection.

- (2) Establishes and maintains a review system to assure that the intent of DOE's fire protection standards and guides is incorporated in the plans and specifications for new facilities and modifications of existing facilities at NETL.
- (3) Conducts or assists in the investigation of all fires to determine the cause, the estimated loss, and all pertinent facts.
- (4) Ensure fire inspections of equipment and facilities are conducted and makes recommendations to NETL management for achieving or maintaining effective fire protection at NETL.
- (5) Assures that new or repaired fire protection systems are in compliance with national and local fire codes.

c. <u>Line Managers</u>:

- (1) Ensure that plans and specifications for new or altered facilities, processes, equipment, and procedures include fire protection provisions, as appropriate.
- (2) Plan work assignments in such a manner that fire protection requirements are addressed.

d. NETL Site Support Contractors:

- (1) Ensure the on-site fire protection equipment and systems are in full operating condition, initiate corrective action when repairs are required, and ensure repairs are done in a reasonable amount of time.
- (2) Schedule and perform fire protection equipment and system inspection, testing, and maintenance.
- (3) Review documents, etc., as requested by the FPPM, and provide advice to DOE.
- (4) Assist the FPPM in the completion of the fire protection facility appraisals and inspections.
- (5) Assist the FPPM in developing and implementing the Fire Protection Program.
- (6) Propose compensatory/equivalency measures to the FPPM, as necessary.
- (7) Maintain or have access to an adequate fire protection staff to accomplish the above stated responsibilities.
- (8) Notify the FPPM of any fire protection concerns.

4. PROGRAM DESCRIPTION

The NETL Fire Protection Program consists of three elements, each of which represents distinct yet related functions for achieving overall fire safety at NETL. These include:

- <u>Fire Prevention</u> -- Preventing fires from starting by using a proactive housekeeping and training approaches to reduce fire hazards.
- <u>Fire Protection</u> -- Detecting fires quickly, suppressing those fires that occur, putting them out quickly, and limiting their damage by the use of automatic or manual fire suppression techniques.
- <u>Reliability Assurance</u> -- Test inspections, audits and other similar activities performed to assure the reliability, availability, and adequacy of fire prevention and protection measures.

a. Fire Prevention

- (1) Codes, Standards, and Regulations
 - (a) The International Building Code is used as a standard for facility construction projects.
 - (b) The National Fire Protection Association (NFPA) Codes and International Building Code are incorporated into the construction design where applicable.
 - (c) New DOE facilities and additions or alterations to existing facilities are to be planned and designed to incorporate the provisions required by the Department of Labor under Section 6 of Public Law 91-596 (Occupational Safety and Health Act of 1970).
 - (d) DOE Orders (related to general design) and the regulations described in these orders are to be followed in facility planning, design, and construction to ensure adequate fire prevention measures at NETL.
 - (e) NETL Directives' requirements are to be followed in facility planning, design, and construction as outlined in the following:
 - NETL Procedure 440.1-4, Fire Detection Devices and Alarm Systems.
 - NETL Procedure 440.1-5, Fire Extinguishing Systems, Including Fixed Systems and Portable Fire Extinguishers.

- NETL Procedure 440.1-6, Fire Drills.
- NETL Procedure 440.1-7, Fire Hydrant Non-Emergency Use.
- NETL Procedure 440.1-8, Fire Protection Program Training.
- NETL Procedure 440.1-9, Assessment, Inspection, Testing, and Maintenance of Fire Protection Systems, Equipment, and Programs.
- NETL Procedure 440.1-10, Fire Protection Cold Weather Protection.
- NETL Procedure 440.1-11, Fire Protection Impairment.
- (2) Building Construction and Materials
 - (a) Buildings at NETL are designed and constructed to minimize the use of combustible materials. Building materials are of noncombustible materials with fire resistance ratings.
 - (b) Areas within the buildings are divided into zones with fire resistive walls and fire rated doors.
 - (c) Ventilation damper closing devices are utilized to prevent the spread of fire should one occur.
 - (d) All electrical wiring is placed in conduit or sealed raceways.

(3) Administrative Controls

- (a) Storage of Hazardous Materials -- The storage of combustible and flammable gases and liquids, including waste materials are controlled in facilities. Materials are maintained in approved containers and cabinets, and quantity of materials are regulated. Refer to NETL Procedure 440.1-19, Handling, Storing, and Using Hazardous Materials, and NETL Procedure 440.1-43, Handling Compressed Gases, for specific requirements.
- (b) Smoking Regulations -- Smoking is prohibited inside all laboratory buildings. Designated smoking areas are available where smoking is allowed. Refer to NETL Operating Plan 440.1-4, General Workplace Safety Program, and NETL Procedure 440.1-50, Smoking in the Workplace, for specific requirements.
- (c) Hot Work Permit System -- Control of hot work operations is accomplished through a permit system. Specific safety issues are checked to

- ensure safe performance of hot work tasks. Refer to NETL Procedure 440.1-37, Work Permits and Special Work Conditions, Attachment A Hot Work for specific requirements.
- (d) Housekeeping -- Good housekeeping is a key element for an effective fire protection program. Minimizing fire hazards associated with overall cleanliness of the workplace, accumulation of combustible materials, etc., must be monitored and controlled. Refer to NETL Operating Plan 440.1-4, General Workplace Safety Program; NETL Procedure 440.1-46, Housekeeping; and NETL Operating Plan 440.1-2, Chemical Hygiene Program, for more specific housekeeping requirements.
- (e) Maintenance -- Preventive maintenance, to be effective, must be orderly, and scheduled to prevent breakdown and prolong the useful life of equipment. Maintenance of safety devices can also minimize fire hazards in the workplace. Devices such as temperature limit switches, flame failure equipment, and flashback arresters shall be used as necessary to control heat sources or detect fuel leaks. Equipment and systems installed on heat-producing equipment must be properly maintained to prevent accidental ignition of combustible materials.
- (4) Fire Protection Design Reviews
 - (a) All proposed construction and/or major modifications to facilities receive a fire protection design review by the NETL FPPM or designee. This review is performed to assure those adequate fire prevention principles and pertinent design criteria have been incorporated into the design specifications for procurement actions and work orders.
 - (b) Fire protection reviews for new and/or modified existing research and support service operations in the NETL facilities are addressed in the Safety Analysis and Review System (SARS) processes or the Work Permit/Control processes. These reviews ensure that any new or specified hazards introduced are properly identified and measures taken to minimize the degree of risk.

b. Fire Protection

- (1) Water Supplies
 - (a) The main non-potable water supply for the NETL-PGH Bruceton Research Center is a 48-inch water main along Cochrans Mill Road. At Wallace Road, a 12-inch water supply line branches off the 48-inch water main and extends up to the boundaries of Bruceton Research Center. The water supply on this 12-inch line is approximately 200 pounds per square inch (psi). At this point, an 8-inch water line loops the Bruceton Research Center and 900 site a 10-inch water line loops the 920 site. The water

- supply on this 8-inch line is approximately 200 psi with a flow of 1,300 gallons per minute (gpm).
- (b) Two water mains supply the NETL-MGN site: an 8-inch main off Collins Ferry Road enters the southwest corner of the site, and another 8-inch main off Morgan Drive enters the southeast corner of the site. An 8-inch line connects both 8-inch mains, resulting in a redundant water supply for NETL fire-fighting needs.
- (2) Automatic Fire Extinguishing Systems
 - (a) Automatic Sprinkler Protection Systems -- Occupied NETL buildings are protected by automatic sprinkler protection systems. There are some storage facilities that do not meet the criteria to justify having a sprinkler system.
 - (b) Special Agent Extinguishing Systems -- In certain areas, special extinguishing systems have been installed to minimize fire damage.
- (3) Fire Protection Alarm Systems
 - (a) Buildings at NETL are provided with fire protection alarm systems.

 Alarm control panels provide annunciation of local alarms. Buildings are generally zoned by floor. Either automatic or manual initiating devices can actuate systems. Alarm signals sound continuously until the actuated device is restored to normal and the control panel reset switch is operated.
 - (b) The alarm systems are connected to a centralized computer Alarm Notification System, which is continuously monitored by site security guard personnel.
- (4) Fire Protection Alarm Devices
 - (a) Manual Pull Box Stations -- In buildings that contain fire alarm systems, non-coded, single action fire alarm stations are located in the facility. Upon actuation, all general alarm signals sound. The actuating handle locks in the down position, providing a positive indication that the station has been operated.
 - (b) Water Flow Alarms -- All of the sprinkler systems are equipped with water flow devices that initiate an alarm whenever water flows in the system due to an open head, ruptured pipe, or leak.
 - (c) Smoke Detectors -- These devices detect the products of combustion, flame, smoke, and/or heat. These devices are located in strategic locations. Detectors are supervised by the alarm panel systems.

(d) Rate-of-Rise Detectors -- Rate-of-rise detectors are temperature-sensing devices that set off an alarm if the temperature rises sharply in a short period of time. These devices are located in strategic locations and are supervised by the carbon dioxide and pre-action systems.

(5) Manual Fire-Fighting Equipment

- (a) Portable fire extinguishers have been installed in all NETL facilities in accordance with NFPA 10. The type of extinguishers available include: stored pressure carbon dioxide, stored pressure BC dry chemical, stored pressure D dry power, wet chemical K, and stored pressure ABC multipurpose dry chemical. No water-based extinguishers are located on site. Wheel-type carbon dioxide extinguishers are of 75 to 150 pound (lb) capacity. These units are located generally in high-hazard operational areas. Portable fire extinguishers are used on a voluntary basis only.
- (b) Fire hose stations are installed in some PGH buildings. Generally, they are 100 feet in length. All hoses are provided with fog-spray nozzles.

(6) Fire Department Services

- (a) NETL-MGN has a memorandum of understanding (MOU) with the Morgantown Fire Department (MFD) covering planning, preparedness, and response for fire-related emergency situations at NETL. The MFD responsibilities include fire-fighting and search and rescue operations. The MFD is a fully paid fire department with approximately 40 personnel operating three fire stations. During worst traffic conditions, the MFD fire alarm response time is estimated to be within 5 minutes from two of the stations.
- (b) At NETL-PGH, the Broughton Fire Department provides fire-fighting services to the Bruceton Research Center. The department consists of volunteer fire fighters and officers. Several department personnel are employed at the Bruceton Research Center. The fire department participates in the Hill Top Association, which is a mutual aid agreement with 16 fire departments in the immediate area. Manpower and fire-fighting equipment are available through the agreement. The distance from the fire station to the Bruceton Research Center is approximately 2.0 miles. Estimated time from receipt of an alarm to arrival at the site is from 20 to 25 minutes.

(7) Fire Safety Training and Education

Training and education programs are established to provide basic training for personnel who work at NETL, outside emergency organizations, community officials, etc. Programs include:

- (a) Fire Principles and the Use of Portable Fire Extinguishers -- This training course is designed to educate employees about these principles. Furthermore, the trainees become knowledgeable of extinguisher capabilities and limitations, their operation, and fire-fighting techniques. The training course offers a classroom course followed by actual fire-fighting experience.
- (b) Evacuation Drills -- Evacuation drills are conducted at least annually to assure that all personnel are knowledgeable of how to evacuate from their work area. These drills include emergency scenarios for the purpose of evaluating the effectiveness of emergency plans and to assure personnel are familiar with required emergency actions.
- (c) Emergency Organization Training -- Training and education of fire department personnel is conducted periodically. Training topics include hazardous materials at NETL, facility orientation, emergency response procedures, etc.
- (d) Fire Prevention Public Relations -- Periodically, the FPPM and other designated fire protection staff meet with offsite fire department officials to discuss status of fire safety, future construction activities, public and site impacts from emergencies, etc.
- c. Fire Hazard Analysis (FHA)
 - (1) An FHA must be conducted by a certified fire protection engineer.
 - (2) An FHA is used to assess the risk from fire within individual fire areas and to ensure that NETL fire protection objectives are being met.
 - (3) An FHA, accepted by FPPM, is required prior to beginning facility operation for all new high hazard facilities, and facilities expected to have an MPFL of over \$1 million.
 - (4) The FHAs address the following items, if applicable:
 - (a) Description of construction.
 - (b) Description of operations.
 - (c) Protection of essential safety class equipment.
 - (d) Fire protection features.
 - (e) Description of fire hazards.

- (f) Life safety considerations.
- (g) Critical process equipment.
- (h) High value property.
- (i) Damage potential (Maximum Possible Fire Loss [MPFL]).
- (j) Recovery potential.
- (k) Potential for a toxic, biological, and/or radiation incident due to a fire.
- (l) Exposure fire potential, including the potential for fire spread between fire areas.
- (m) Compliance with NFPA and OSHA fire protection requirements.
- (n) Fire alarm adequacy.
- (o) Effect of significant fire safety deficiencies on fire risk.
- d. Facility Fire Protection Appraisals (FFPA)
 - (1) An FFPA is a physical inspection of the facility for all aspects of fire protection, including life safety. If an FHA or previous FFPA for a facility exists, the FHA or previous FFPA is used as a starting point for the FFPA. Accuracy of the FHA or previous FFPA must be verified, and the document is revised to account for facility modification, new information, etc.
 - (2) The FFPA addresses the following items, if applicable:
 - (a) Fire protection of safety class equipment.
 - (b) Life safety considerations.
 - (c) Compliance with NFPA and OSHA fire protection requirements.
 - (d) Fire alarm systems.
 - (e) Fire protection of vital programs.
 - (f) Fire protection of high value property.
 - (g) Fire suppression equipment.

- (h) Water runoff.
- (i) Pre-fire plans.
- (j) Fire apparatus accessibility.
- (k) Completeness and accuracy of fire hazards analyses (FHAs), if available.
- (1) Fire barrier integrity.
- (m) Completeness of fire loss potential (MPFL/MCFL) determinations.
- (n) Fire safety training.
- (o) Inspection, testing, and maintenance reports.
- (p) Adequacy of facility appraisal reports.
- (q) Tests of fire suppression systems, water supplies, and procedures for maintaining these in working order.
- (r) Administrative controls.
- (s) Temporary protection and compensatory measures.
- (t) Status of findings from previous assessments.
- (u) Conformance with applicable orders, codes, and standards.
- (v) A separate list showing areas of concern and the code(s) being violated, if applicable.
- e. Reliability Assurance
 - (1) Fire Protection Reviews
 - (a) Fire Hazard Analysis and Facility Fire Protection Appraisals are performed by the FPPM or designee on 2- and 3-year cycles. The reviews are made to verify compliance and effectiveness of the following:
 - Assure that the hazard to life and property from fire, explosion, or related risk has been evaluated and reduced to acceptable levels.
 - Evaluate the adequacy of the local fire protection and prevention programs to minimize injury and protect DOE property.

- Provide written reports to responsible management, which include recommendations for appropriate action.
- (b) ES&H Management Walk-Through Inspections conducted monthly by NETL Line Managers and ES&H staff include fire protection activity/ equipment reviews.
- (2) Fire Equipment Inspection, Maintenance, and Testing
 - (a) An inspection schedule has been developed to assure fire protection equipment is inspected, maintained, and tested in accordance with applicable requirements. Inspection and testing frequency is in accordance with NFPA requirements.
 - (b) Emergency maintenance and repairs of fire protection systems and equipment is coordinated with the FPPM and Site Operations Division Staff.
- (3) Watchman Services -- Security guard personnel (contracted services) perform watchman services. Roving patrols are conducted of the facilities on a scheduled basis. Security is also responsible for providing fire watch services when fire protection systems are out of service. The FPPM determines the frequency of patrols. In no case is the frequency less than once every 2 hours.
- f. Fire Protection Reports
 - (1) An <u>Annual Fire Protection Property Loss Report</u> is completed by NETL and issued to DOE-HQ. The report includes the following topic areas as a minimum to the extent that they apply:
 - (a) Loss Experience Analysis.
 - (b) Losses of Interest.
 - (c) Replacement Property Values.
 - (d) Recurring Fire Protection Costs.
 - (e) Major Fire Protection Accomplishments for the Calendar Year.
 - (f) Major Fire Protection Objectives, Planned Improvements, and Construction Activities for the Calendar Year.
 - (g) Extinguishing System Performance.

- (h) Items of Interest.
- (2) An <u>Annual Property Valuation Report</u> is prepared by NETL Property Officer and issued to DOE-NETL, which identifies the value of land, buildings, and personal property under the organization control and jurisdiction for the previous calendar year.