

FIRE SAFETY PROGRAM PERFORMANCE MEASURES

Distribution

The purpose of this memorandum is to provide you with a list of recommended fire safety program performance measures. These measures were developed by the Department of Energy (DOE) Fire Safety Committee as a means to more completely and accurately judge the level of success of our Field programs. They are deemed sufficient, if implemented, to satisfy the requirements of DOE Order 210.1, "Performance Indicators and Analysis of Operations Information," for fire protection programs and they will address the need for "accurate fire safety performance measures" that was delineated in the May 14, 1998 Secretarial memorandum on fire safety programs.

The subject measures, which are included as an Attachment, were developed because it was concluded by the Committee that the historic indicators of fire protection program performance (fire losses, fire loss rates, and recurring fire protection costs) were no longer completely effective, considering DOE's history of limited fire losses. Additionally, the historic measures did not address important facets of Field fire safety programs, such as the completeness of program documentation, the resolution of deficiencies, the effectiveness of fire system testing and maintenance programs, and site emergency services capabilities.

Neither this memorandum nor the attachment impose new requirements on the Department or its contractors. They are provided to you as "guidance" to assist you with your efforts to comply with the above-referenced DOE Order and the Secretarial Memorandum. It is expected that they will also facilitate your efforts to more effectively review and manage the program(s) within your responsibility.

Nothing in this guidance prevents the development of alternate approaches that will achieve a comparable level of effectiveness in measuring program performance. However, we encourage the adoption of these specific measures to assure consistency across the Department. Note that a number of sites have already or are in the process of adopting these measures.

If you have any questions, please contact me on 301-903-4794.

Dennis Kubicki, Chairman
DOE Fire Safety Committee

Attachment

Fire Protection Program Performance Measures

Fire-Related Losses

Loss rates (as defined in DOE Order 231.1) are stable or declining. If an increase has occurred from the previous year's loss rate, the rate increase has not exceed 10%.

Costs

Recurring fire protection program costs per \$100 of assessed value are stable (have not exceeded 10% of the historic norm).

Fire Protection Engineering

Fire protection program documents are comprehensive (as compared to the DOE "model" program) and current (updated every 3 years).

Fire Hazards Analyses/fire protection assessment reports are complete (as compared to the DOE "model") and current (refer to the risk-based schedule in the fire protection program Implementation Guide to DOE Orders 420.1 and 440.1).

Inventories (new, closed, open, delinquent) of fire protection and emergency services audit findings are decreasing.

The qualifications and training of the fire protection engineering staff meet or exceed the site (or organization) work load analysis (or equivalent).

Fire Protection Systems

Fire protection systems (including fire barriers) are inspected, tested, and maintained in accordance with the established site program.

Fire alarm activation statistics (number of alarms and cause) are current and accurate.

Fire protection system failure rates (see system operability requirements) have not exceeded 10% of the historic norm.

For each type of fire protection system on site, maintenance costs have not exceeded 10% of the historic norm.

Maintenance technicians meet or exceed industry qualifications and training requirements.

Emergency Services

The site has access to a fleet of mobile emergency services apparatus that is operational and capable of responding effectively and in a timely manner to all credible anticipated site emergencies as determined by the Operational Basis Document (OBD) (a.k.a. "Baseline Needs Assessment"). NOTE: This capability can be achieved through "mutual aid" agreements.

The emergency services organization satisfies staffing levels as defined by the OBD.

Emergency services personnel meet or exceed required minimum qualifications and training as defined by the OBD. NOTE: This includes Federal, state and local requirements.

Fire department (brigade) pre-plans and program documents are complete and current.

The local emergency communications capability is functionally effective and meets or exceeds industry standards.

Emergency services equipment has been provided as per the OBD and is maintained in accordance with industry standards.

Fire department (brigade) operational statistics (e.g. number and type of emergency and non-emergency responses, training hours, training breakdown by type, number of emergency drills, number of fire prevention inspections, quantification of maintenance activities, etc.) are accurate and current.