## memorandum

ATE: June 10, 1988

REPLY TO

ATTN OF: EH-25

SUBJECT: Guidance Related to Analysis of Impacts to Workers in National

Environmental Policy Act (NEPA) Documentation

TO: DISTRIBUTION

The purpose of this memorandum is to provide general guidance regarding the analysis of impacts to workers in DOE environmental impact statements (EISs) and environmental assessments (EAs) in order to assist DOE program and field offices in meeting the requirements of NEPA and to establish a general consistency in the Department's NEPA documentation. This guidance was prompted by several questions raised in this regard and was developed by the Office of NEPA Project Assistance, after consultation with the Office of General Counsel.

## Background

Neither the Council on Environmental Quality (CEQ) regulations for implementing NEPA nor the Department of Energy (DOE) NEPA guidelines specifically address the appropriate treatment of impacts to workers in NEPA documents, and questions have recently been raised regarding The CEQ regulations define the "human environment" as this-subject. "the natural and physical environment and the relationship of people with that environment," and require that this definition "shall be interpreted comprehensively" (40 CFR 1508.14). Furthermore, the regulations include health among the "effects" which must be evaluated when establishing the reasonably foreseeable impacts of a proposed action and its alternatives (40 CFR 1508.8). There is no indication that analyses of impacts to workers are beyond the scope. of NEPA, and to the contrary, in recent EIS scoping comments, the Environmental Protection Agency has specifically included requests. for analyses of occupational impacts. Consultation with the CEQ and with the Office of General Counsel established that there has been no litigation directly on this point.

To gain further perspective on this matter, a survey of past EISs prepared by DOE and other agencies was conducted. The review revealed a fairly uniform treatment of <u>nonradiological</u> impacts to workers. The EISs generally discussed both routine and accidental impacts if the impacts were considered to be potentially significant. In contrast, the review found less consistency in the analyses of radiological impacts to workers. Although radiological occupational impacts were generally evaluated for routine operations, impacts to workers under accident conditions were often omitted.

## Occupational Impacts Analysis

To reduce inconsistencies in future NEPA documents, we have determined that DOE NEPA documentation should include an analysis of potentially significant impacts to workers. The analysis should include both radiological and nonradiological impacts under routine and accident conditions. The scope of the discussion should include potential impacts to workers in adjacent facilities as well as those workers directly associated with the project. Furthermore, the analysis of accidents should consider both the potential impacts to workers, as a direct result of an accident, and those impacts associated with potential cleanup activities.

When analyzing occupational impacts, in particular those associated with worker-s within a proposed facility, it is. recognized that NEPA documents frequently must be prepared when detailed design information is limited. If sufficient information is not available to quantify the impacts to workers, and such impacts are potentially significant, the NEPA document should disclose the fact that information is incomplete or unavailable and should present: discussion of the reasons why a credible quantitative evaluation of impacts to workers cannot be performed in a timely manner; (2) an explanation of why such quantitative information is not essential to a reasoned choice among alternatives, or when preparing an EA, why the information is not necessary to determine whether to prepare an EIS or a finding of no significant impact; (3) a discussion of the Safety Analysis and Review System (DOE Order 5481.1B) and how it functions to ensure the adequate protection of worker health; and (4) a qualitative discussion of projected impacts to workers.

This qualitative discussion could include a brief summary referencing the requirements and procedures established in the appropriate DOE safety orders pertaining to facility design, construction, and operation, e.g., DOE Order 6430.1A, General Design. Criteria, and safety orders providing for occupational health and safety. Information pertinent to facility design features, both administrative and engineered, related to mitigation of occupational impacts could be presented. Examples of such measures for a nuclear facility may include potential implementation of remote handling technology, extra shield wall thickness, and well-designed emergency preparedness procedures targeted at reducing occupational impacts by providing effective warning systems and orderly evacuation plans.

## Conclusion

We believe the preceding guidance will clarify the appropriate treatment of occupational impacts analysis in the Department's NEPA documents and in doing so represents a continued commitment to maintain the highest standards of protection for workers in DOE facilities. If you have any questions regarding this general

guidance, please call me. For further information regarding its application to particular NEPA documents, please direct your staff to contact Carol Borgstrom, Acting Director, Office of NEPA Project Assistance, at FTS 896-4600.

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Environment, Safety and Health