[DNFSB LETTERHEAD]

September 15, 1997

The Honorable Federico F. Peña
Secretary of Energy
1000 Independence Avenue, SW
Washington, DC 205851000

Dear Secretary Peña:

A major purpose of the Defense Nuclear Facilities Safety Board's (Board) Recommendation 952 is to institutionalize the concept and practice of integrated safety management at defense nuclear facilities. Recognizing that these facilities are operated by the Department of Energy (DOE) through contractors, Item 4 of the Recommendation stated in part: "The requirement for conformance [with Safety Management Programs] should be made a contract term." The Board is aware that DOE has amended its Department of Energy Acquisition Regulations (DEAR) for this purpose with the Contracting Officers assigned responsibility for contract administration. This, in effect, makes the contract and the Contracting Officer key elements in the Department's integrated safety management program to which the Department is committed both by Policy P450.4 and by the response to Board Recommendation 952.

Overall program descriptions in response to clauses in the DEAR, however, are only a part of what is needed from contractors and DOE administrators to ensure compliance with specified safety directives. The end objective of the Integrated Safety Management concept the Board advocated in Recommendation 952 is to ensure that all hazardous work DOE performs or contracts to perform is done under such safety controls that the public, workers and the environment will not be unduly impacted or harmed. Such controls are to be:

- developed as an integral part of work planning,
- activity or operationsspecific and tailored to the hazards,
- mutuallyagreed upon by contractor and authorized Department officials,
- made explicit terms and conditions for performing the work through authorization protocols established for such purpose,
- embedded into work procedures to which workers are trained and by which work is done, and
- a focus of safety oversight by DOE of the work authorized.

The Board would like to gain a better understanding of:

1. How DOE field office managers administer contracts to ensure that the safety requirements to which a contractor is committed are satisfied, and

2. What kinds of measures are taken to hold contractors to compliance with workspecific control measures.

The Board has scheduled a public briefing for October 23, 1997, at which it will hear testimony from a number of DOE contracting officers and others involved in the contract process. In preparation for this

briefing, the Board requests, pursuant to 42 U.S.C. 2286b(d), that the Department of Energy submit a report responding to the questions listed in Enclosure A. This report should include submittals from: Savannah River Operations Office, Oak Ridge Operations Office, Albuquerque Operations Office, Rocky Flats Office, Idaho Operations Office, Oakland Operations Office, Richland Operations Office, and Nevada Operations Office.

This report should be submitted by October 16, 1997. If you need additional information, please do not hesitate to contact me.

Sincerely,

John T. Conway
Chairman

Enclosure

c:
Mr. Mark B. Whitaker, Jr., S3. 1

Enclosure A

A. Contracting Policy and Practices

Background

A large fraction of safety requirements DOE contractors must satisfy in performing work for the Department are set forth as contract terms and conditions. Recent modifications to the Department's Acquisition Regulations (DEAR) have been issued to more explicitly deal with this matter. The Contracting Officer will play a key role in setting up safety responsibilities the contractor assumes and shares with DOE in performing work.

A1. On what basis does the Contracting Officer decide which DOE requirements (other than laws and regulations) and standards should be imposed by contract? In terms of the DEAR Clause entitled " Laws, regulations, and DOE directives," 48 CFR §970.520478, how is "List B" initially arrived at for a given contract?

A2. How does the Contracting Officer become informed regarding the safety requirements of a contract?

A3. By what processes or procedures does the Contracting Officer become aware that contract safety requirements have been violated or have not been adequately implemented?

A4. What courses of action are available to the Contracting Officer to (a) penalize noncompliance with contract safety requirements, (b) ensure that noncompliance is promptly corrected, or (c) reward a high level of compliance?

A5. When contract safety requirements are violated or improperly implemented, who bears the cost burden of the corrective actions?

A6. What corrective actions can a Contracting Officer take when some term or condition of a formal

Authorization Agreement is violated? When other mutually agreedupon safety terms and conditions are violated?

A7. What are DOE's safety training and qualification requirements for Contracting Officers who are responsible for defense nuclear contracts?

A8. What staff support, technical and legal, is provided to the Contracting Officer on a daytoday basis with respect to contract compliance issues that involve safety?

B. DOE Review and Approval of Safety Control Measures and Protocols

Background

DOE line management has primary responsibility for ensuring protection of the public, workers, and the environment. This responsibility is shared by contractors that perform hazardous work on behalf of the Department. The degree to which this responsibility is shared is defined, in general, by contract terms as discussed in Section A, above, and by more detailed workspecific terms and conditions mutually agreed upon by DOE and the contractor. As illustrated by Figures 10, 11 and 12 of DNFSB/TECH16, contractors can proceed with (a) highly hazardous operations entailing potential risk to all sectors (public, workers, environment) only after mutually agreedupon terms and conditions are established and (b) other work entailing only limited worker risk without explicit prior DOE approval.

The Board wishes to understand better how DOE makes explicit what it expects the contractor to do to satisfy safety management responsibilities for work it expects the contractor to perform.

B1. Referring to Figures 10, 11 and 12 and paragraph 3.3.2.4 of DNFSB/TECH16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

B2. What processes and means does DOE use to communicate acceptance of contractors' workspecific safety plans for hazardous work?

B3. "Authorization Agreement" has been defined in DNFSB/TECH16 as a documented agreement between DOE and the contractor for facilities in which hazardous work is performed that requires preventive and/or mitigative safety measures to ensure protection of the public, workers and the environment. With respect to such agreements:

(a) What referenced standard will be used by DOE to evaluate the adequacy of terms and conditions in Authorization Agreements for protection of (a) public health and safety, (b) worker safety, and (c) the environment? How will this frame of reference be tied to the requirements of DEAR clause 970.520478?

(b) Where control measures consist of commitments to a contractor's manuals of practice, are such manuals subject to DOE review and approval and DOE compliance oversight actions?

(c) What level of review and approval does DOE plan for authorization protocols less formal and extensive than Authorization Agreements made a part of the contract? In the answer, consider (a) sitewide controls, (b) facility controls, (c) activity controls, and (d) task controls. At what level does the DOE role become one of inspection rather than prior review and approval?

(d) Once DOE has reviewed and approved an authorization protocol, will there be a clear

assignment of responsibility within DOE to ensure that the processes and controls contained in the protocol are observed by the contractor? To whom will this responsibility be assigned?

B4. The terms and conditions of the Authorization Agreements executed for Pantex (W69) and for the Lawrence Livermore National Laboratory (B332) do not contain commitments to key safety management programs, for example, operational safety procedure review and approval, radiation control, maintenance, and emergency response. How will DOE ensure that the contractual safety requirements (i.e., List A and List B) for these programs are implemented?

C. Questions for Field Managers Who Have Approved Authorization Agreements (Bruce Twining, Albuquerque, for Pantex W69; James Turner, Oakland, for Lawrence Livermore National Laboratory Building 332; Jessie Roberson, Rocky Flats, for Building 771; and Mario Fiori, Savannah River, for HCanyon)

General

Cl. What is the status of the implementation of DEAR clauses 970.52042 and 970.520478 at your site?

C2. Do you anticipate any difficulty ensuring that the DEAR clauses and contract requirement flowing therefrom are carried through into subcontracts?

C3. Does the Authorization Agreement at your site require the contractor to notify DOE when the contractor selfidentifies a violation of the Agreement?

C4. All approved Authorization Agreements lack a commitment to a contractor selfassessment and corrective action program. Why is this so in your case?

C5. Is there an incentive clause in the contract addressed specifically to performance of work in conformance with an Authorization Agreement?

Site Specific

DOEAlbuquerque Manager:

C6. The new order DOE O 452.2, *Safety of Nuclear Explosive Operations* requires the use of the safety analysis and activityspecific hazard analysis and development of Technical Safety Requirements, Operational Safety Controls, and Nuclear Explosive Safety Rules for nuclear explosive operations. However, the Pantex Authorization Agreements cite the Basis for Interim Operations and the Contractor Safety Systems Manual as the authorization basis in lieu of the SARs, HARs, TSRs, OSCs, and NESRs. How does this approach comply with the Order?

C7. For example, the W69 Dismantlement Authorization Agreement used an Activity Based Controls Document generated by the contractor to define the controls in lieu of using the TSRs, OSCs, and NESRs. Will all future Authorization Agreements include an Activity Based Controls Document similar to the W69 Dismantlement Agreement? If not, how will the controls relied upon for safety be delineated and their maintenance assured?

DOEOakland Manager:

C8. The Lawrence Livermore National Laboratory Building 332 Authorization Agreement does not

explicitly define the scope of work that DOE is authorizing for that facility. What limited range of work activities is authorized under the Agreement?

C9. For new experimental work, there needs to be a mutually agreedupon (and DOEapproved) procedure, that will be executed by the contractor. This represents one type of "authorization protocol." However, the Building 332 Authorization Agreement does not appear to include a commitment to such a protocol. Please explain.

DOERocky Flats Manager:

C10. The Building 771 Authorization Agreement references commitments to specific controls drawn from Authorization Basis documents. Please explain why deadlines for implementing Authorization Basis controls are not specified in the Agreement.

D. Contract Violations and Remedies

Consider the following possible scenarios:

D1. A contractor conducts an Operational Readiness Review (ORR) prior to commencing a significant operation involving nuclear materials. It becomes apparent that the ORR was premature and will have to be repeated after corrective actions have been taken. The contract requires the contractor to follow applicable DOE orders and other guidance governing the conduct of ORRs.

In this scenario:

a) Has the contractor violated a term of the contract?
b) What contractual remedies or sanctions are available?
c) Who in DOE is responsible for taking contract actions?
d) Does DOE or the contractor bear the unnecessary added expense of the ORR?

D2. A fire occurs at a facility. An investigation concludes that the fire was caused by a failure of the contractor to meet fire protection requirements in the contract.

In this scenario:

a) Is the contractor in violation of the contract?
b) What contractual remedies or sanctions are available?
c) Who in DOE is responsible for taking contract actions?
d) Who pays for repairing the damage caused by the fire?

D3. A contractor is found to be in violation of 10 CFR Part 835 (Radiation Protection) and a civil penalty is imposed for the violation.

In this scenario:

a) Is the contractor also in violation of the contract?
b) Will contract remedies also be invoked for the violation?
c) Will the civil penalty impact financial incentives under the contract?
d) Who bears the cost of correcting the conditions leading to the penalty?

D4. A contractor receives DOE approval of an Authorization Agreement (AA) for a facility. The AA is

made a contractual requirement. Later, it is discovered that important safety terms of this Agreement have been violated.

In this scenario:

a) What contractual remedies or sanctions are available?
b) Who in DOE is responsible for taking contract actions?

D5. A contractor is found not to be following its own work practices and procedures. These practices and procedures are not explicitly referenced in the contract, but are needed to implement DOE Orders which are required by contract.

In this scenario:

a) Is the contractor in violation of the contract?
b) What measures could be taken to bring the contractor into compliance with its own practices and procedures?

D6. A contractor provides an implementation plan for a safety order listed as a requirement in the contract. During a DOE review at a later time, it is discovered that the contractor has not lived up to the terms of the implementation plan.

In this scenario:

a) Has the contractor violated a term of the contract?
b) What contractual remedies or sanctions are available?
c) Who in DOE is responsible for taking contract actions?