



97-0003257

The Deputy Secretary of Energy
Washington, DC 20585

October 16, 1997

RECORDED
97 OCT 17 PM 5:44
DNF SAFETY BOARD

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, DC 20004

Dear Mr. *John* Chairman:

This is in response to your September 15, 1997, letter concerning the Department's administration of contracts at several of its field sites. Specifically, your letter forwarded questions that addressed procedures and mechanisms for field sites to ensure the satisfaction of contractual safety requirements. I am pleased to forward the enclosed responses to the Board's questions. These responses were prepared and submitted by the eight field offices specifically identified in your letter.

We look forward to a continuing dialogue with you and the other Board members as we press ahead with our comprehensive contract reform initiative and implementation of integrated safety management. Should you need additional information on this matter, please do not hesitate to contact me.

With best wishes,

Sincerely,

A handwritten signature in cursive script, appearing to read "Elizabeth A. Moler".

Elizabeth A. Moler

Enclosures

RECEIVED
97 OCT 17 PM 3:46
DNF SAFETY GUARD

Albuquerque Operations Office

Response to DNFSB Questions

October 1997

United States Government

Department of Energy

Albuquerque Operations Office

memorandum

DATE: October 10, 1997

REPLY TO: OMD

SUBJECT: Response To The Defense Nuclear Facilities Safety Board Questions
On Contract Administration

TO: Richard Crowe, Director, Safety Management Implementation Team

Attached is the Albuquerque Operation Office (AL) response to the questions outlined in the Defense Nuclear Safety Board letter concerning DOE contracting practices as requested in your letter dated September 22, 1997. This response addresses AL contracting policies and practices in regard to the management of work safety; the DOE review and approval of safety control measures and protocols at AL sites; remedies to potential contract violations; and the questions concerning the AL approved authorization agreement.

I look forward to a continuing dialogue with the Board as we progress with implementation of the Department's comprehensive contract reform and integrated safety management initiatives. Should you need additional information on these topics, please do not hesitate to contact me.

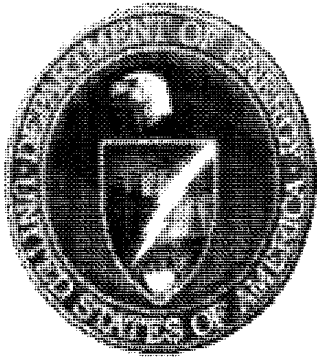
Inlow

original signed by Rush

Bruce G. Twining
Manager
Albuquerque Operations Office

Attachment

cc w/attachment:
V. Reis, DP-1
M. Whitaker, US-3.1



ALBUQUERQUE
OPERATIONS OFFICE RESPONSE
TO
DEFENSE NUCLEAR FACILITIES
SAFETY BOARD
September 15, 1997, LETTER
ON
CONTRACT ADMINISTRATION

October 10, 1997

original signed by Rush I nlow

Approved

Bruce G. Twining
Manager
Albuquerque Operations Office

Background

Contracting authority for U.S. Department of Energy (DOE) is vested in the Secretary of Energy. The Secretary of Energy has delegated this authority to the Procurement Executive, who, in-turn, has re-delegated this authority to the Albuquerque Operations Office (AL) Manager as the Head of Contracting Activity (HCA) for those facilities under the cognizance of AL. The HCA makes formal Contracting Officer appointments within the AL organizations. These formal contracting officer appointments are specific to qualified individuals primarily in the Contracts and Procurement Division (CPD) and the Area Offices. CPD is primarily responsible for the execution (i.e., award) of management and operating (M&O) prime contract documents, and the Area Offices are primarily responsible for the administration of the executed M&O contract documents. In general, a single line of authority relationship between the Manager and his Area Office Managers applies. The Area Office Manager, has direct access to the AL Manager on any matter. However, the AL Assistant Managers are authorized to issue to the Area Office Managers, policy and directives on matters within their assignments or functions. Lines of communication and direction between AL and the M&O contractors are principally through the Area Offices. The AL Manager serves as contracting officer for the AL M&O contracts. Area Office Managers are in-turn appointed as contracting officer for administration of the contract. The Area Manager is responsible for the site operations and the resolution of problems that occur in most areas of their site. Part of this responsibility is to accomplish the annual appraisal of performance by the M&O contractor. The AL appraisal process for the Kansas City Plant and Pantex Plant is pursuant to an award fee Performance Evaluation Plan that is developed in partnership with the M&O contractor and includes Performance Based Incentives for discrete portions of the work that can be objectively evaluated. The Los Alamos National Laboratory (LANL) and Sandia National Laboratories (SNL) are annually evaluated by AL in accordance with annual appraisal plans developed in partnership with the M&O contractors. The Labs typically provide a self-assessment that will be considered by AL in the evaluation process.

A. Contracting Policy and Practices

- 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 § 970.5204-78, how is "List B" initially arrived at for a given contract?**

RESPONSE:

Each AL contract will contain this DEAR clause that defines how requirements and standards are imposed for that particular contract. List B includes all applicable DOE directives and requirements. Applicability of a DOE directive is stated in the applicability, scope and purpose section of the directive, which is drafted by DOE Headquarters and AL Offices of primary interest. For non-ES&H directives, the AL

office of primary responsibility makes an initial determination of applicability which is then forwarded to the M&O contractor for evaluation and implementation. Final disposition/implementation of these requirements is negotiated between the contractor and AL.

ES&H directives are evaluated by DOE and contractor subject matter experts and line management personnel to determine their appropriateness to each sites List B. This evaluation is conducted through the use of three processes:

- a The Standards/Requirements Identification Document process (S/RIDs) is used at the Pantex Plant.
- a The Work Smart Standards (WSS) Process is used at Los Alamos National Laboratory.
- a The Directives process (DOE Order 251.1) is used at the Kansas City Plant and the Sandia National Laboratories.

These processes result in a recommendation, including the basis for the recommendation, to the Contracting Officer for modifications to ES&H requirements in List B. The Contracting Officer may also make many unilateral changes to the List B as needed. In taking such action, the Contracting Officer will notify the contractor in writing of the intent to revise the List B, and allow the contractor 30 days to assess the impact associated with the revision. Based on an analysis of the impacts, the Contracting Officer and the contractor will negotiate and agree on any changes regarding work scope and/or costs, prior to the unilateral changes becoming effective.

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

RESPONSE:

Newly developed or modified safety requirements which impact AL sites are reviewed by DOE subject matter experts and discussed with line organizations and the Contracting Officer to ensure early involvement and awareness prior to integrated safety reviews.

Reviews performed by DOE subject matter experts result in recommendations and are conducted prior to establishing and/or modifying safety requirements under the contract (as described in the answer to Question A1.). The Contracting Officer reviews the recommendations and discusses their basis with line and subject matter experts to enhance his/her understanding of safety requirements under the 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?

RESPONSE:

The AL Manager, is responsible and accountable for ensuring the safety of operations at all AL government-owned facilities. Safety violations are reported through various means contingent upon the types and magnitude of the violation. Specific responsibilities for reporting safety violations are further detailed among AL contractors and AL organizations (Area Office, Mission, and Institutional) to ensure the AL Manager is well-informed on the safe performance of work.

- 3 The AL contractors are required to perform self-assessment activities and self-identify safety and performance deficiencies. Safety violations are reported to the Contracting Officer (via the established organizational hierarchy) through the Occurrence Reporting and Processing System, Price Anderson Amendments Act (PAAA) non compliance tracking system and through contractor self-assessment activities.
- 3 The Area Office organizations are the on-site DOE representatives and provide day-to-day management and oversight of the AL M&O contractors. Specifically, the Facility Representatives monitor day-to-day activities and report safety violations to the Administrative Contracting Officer. The Administrative Contracting Officer then initiates appropriate actions.
- 3 The mission organizations monitor operational performance in the areas of national defense, environmental management, and science and technology (through periodic appraisals, assessments, technical assistance visits, surveillances, program reviews, etc.) to ensure work is performed safely and report their results to the Contracting Officer.
- 3 The institutional organizations provide oversight of M&O contractors with special emphasis on occupational safety and health, environmental protection, nuclear safety and environment, safety and health. This oversight includes analysis of Area Office and mission organization information, such as accident investigations, emergency notification, and Price Anderson Amendments Act notice of violation. Results from institutional organization oversight are reported to Area Office, mission organizations, and the Contracting Officer.

The combination of these organizations and activities provides timely information to the Contracting Officer and ensures that he/she is well-informed with regard to the safe performance of work.

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?

RESPONSE:

The sanctions available to the Contracting Officer for penalizing noncompliance and/or poor performance through the contract include: 1) the ability to disallow costs pursuant to contract provisions, 2) the Departmental decision to complete a contract in lieu of a contract extension to the incumbent contractor, and 3) the termination of all or part of the contract. In addition, the Pantex Plant and Kansas City Plant M&O contracts allow for a reduction or withholding of award fee at the discretion of the DOE AL Manager.

In addition to the above, and under DEAR 970.5204-2, the Department has the right "...at any time, the contractor's acts or failure to act causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the Contracting Officer may issue an order stopping work in whole or in part....".

Other sanctions are available to the Department under the Price-Anderson Amendments Act (PAAA). That Act authorizes the Department to issue notices of violation and to assess civil and or criminal penalties when a contractor violates a nuclear safety regulatory requirement.

Actions taken to address contractor noncompliance vary commensurate with the magnitude of the noncompliance. Actions could range from imposing contractual remedies specifically identified in the contract to written or verbal communication which identifies the contractor's failure, and DOE's expectations for corrective actions. DOE follow-up of resulting corrective actions would also vary contingent upon the magnitude of the noncompliance. In cases where PAAA violations are identified, fines may be levied until corrective action is determined to have taken place. Other types of follow-up might include adding or modifying contract performance measures and incentives; submittal and approval of formal implementation plans and milestones; increased monitoring or assessment; or a combination until corrective actions have been completed and verified.

Pantex Plant and Kansas City Plant contracts contain performance based incentives which provides a process for the Department to monetarily reward the contractor for exemplary performance in specifically defined areas.

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

RESPONSE:

Costs of corrective actions resulting from safety requirement violations or improper implementation may be disallowed (see answer to Question A4.). The determination by the Contracting Officer as to the allowability of such costs is made based on a complete investigation of the facts concerning the causes of the safety requirement violation or improper implementation, including the contractor's conduct. This includes such considerations as to the extent of the violation, past performance history and actual/potential consequences. In some circumstances, the government might consider formal legal action (other than those remedies available under the contract) against the contractor.

A6. What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety terms and conditions are violated?

RESPONSE:

AL has not completed institutionalizing requirements and guidance for establishing and implementing authorization agreements. AL's intent is that each authorization agreement will be contractually binding. AL's current M&O contracts provides for contractual remedies for failure to comply with contract requirements. (see answer to Question A4.).

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

RESPONSE:

Contracting Officers must meet certain educational requirements identified by the Office of Federal Procurement Policy to qualify for designation as a contracting officer (See Federal Acquisition Reform Act of 1996, P.L. 104-106, and FAR 1.603). There is no specific requirement for safety training and qualification. However, DOE G 450.4-1 (draft, July 1997) states that line management at all levels, including the Head Contracting Authority, possess the necessary Knowledge Skills and Abilities to fulfill their safety responsibilities. One purpose of the ISMS guide is to assist the Contracting Officer in reviewing and approving contractor ISMS. The guide also notes that all managers who perform a safety function must be trained sufficiently to enable them to fulfill their responsibilities. Head Contracting Authority responsibilities for safety are met largely through the imposition of contract requirements and effective administration and oversight of contract performance.

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

RESPONSE:

The AL Contracting Officer has a cadre of mission and institutional staff available at the Area Office and Operations Office (see answer to Question A3). The mission organizations staff provide coverage in the areas of national defense, environmental management, and science and technology. The institutional organizations provide support in the areas of contract administration, human resource management, legal, occupational safety and health, environmental protection, physical security, nuclear safety. In addition, Department corporate resources (such as the Department's Core Technical Group) are available to contracting officers, which can provide additional support.

In recent years, there has been an increase of participation (both volunteered and solicited) from members of the industrial community. These efforts have been fostered by benchmarking activities, voluntary protection program, and transition to industrial standards.

B1. Referring to Figures 10, 11 and 12 and paragraph 3.3.2.4 of DNFSB/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

RESPONSE:

The DOE control of safety planning processes and controls is commensurate with the importance of the work activity to the DOE mission, as well as the risk of hazards affiliated with site/facility's work activities. This rationale enables the DOE to focus resources and attention on those mission-critical activities that pose the greatest risk in terms of safety (public, worker, and environment). In terms of the TECH-16 figures, the DOE tightly controls safety planning and controls pertaining to public safety and takes a graded approach on other categories as explained below.

DOE expectations for safety planning and controls are defined in DOE Orders 5840.23, .22, .21, and AL Supplemental Directive 5481.1B. These DOE Orders require analyses be conducted which are then used to derive operating controls.

The DOE tightly controls planning and controls associated with environmental impacts, nuclear explosive operations, nuclear facilities, nonnuclear high hazard, and some moderate hazard facilities. At the site level, environmental impact statements and environmental assessments are reviewed and approved by DOE. Nuclear explosive operations are required to have a safety analysis of both the facility (DOE Order 5480.23), and the activity (DOE Order 452.2A). In addition, these operations have

derived Technical Safety Requirements (DOE Order 5480.22), Operating Safety Controls (DOE Order 452.2A) and an Nuclear Explosive Safety Study (NESS). Facilities categorized as nuclear facilities require Safety Analysis Reports (DOE Order 5480.23) and Technical Safety Requirements (DOE Order 5480.22). Radiological, nonnuclear high hazard and some moderate hazard facilities are required to have Safety Assessments (AL SD 5481.1B) and Operating Safety Requirements (OSRs) as directed by DOE. Nuclear facility modifications/changes that may impact the approved safety basis is controlled by the Unreviewed Safety Question (USQ, DOE Order 5480.21) under the facility configuration management program.

The DOE may decide to require a more rigorous safety analysis commensurate with various factors (such as, past safety performance, importance of the work activity, potential for significant consequences, etc.) The DOE requires the contractor to perform some level of safety analysis for all facilities/operations.

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

RESPONSE:

AL processes and means of communicating acceptance include, but are not limited to: execution of the contract, approval of site integrated safety management system descriptions and implementation plans, approval of work smart standards and S/RIDs, future authorization agreements, safety and hazard evaluation reports, approval of SARs/TSRs, operational readiness reviews, readiness assessments, site integration/control boards, facility representative reviews, observation reports, and line management ES&H oversight.

One of the intended purposes of the Authorization Agreement is to provide a reference list of the documentation that provide the "...work specific safety plans for hazardous work...". Therefore, the acceptance criteria to "... evaluate the adequacy of the terms and conditions in Authorization Agreements..." will be those criteria used in the specific DOE process that generated that "work specific safety plan." For example, if an authorization agreement references a Safety Analysis Report, together with the associated Technical Safety Requirements, then the acceptance criteria for the AA are those used in the SAR/TSR approval process.

B3. "Authorization Agreement" has been defined in DNFSB/TECH-16 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 970.5204-78?**

RESPONSE:

The requirements for protection of public health and safety, worker safety, and the environment are incorporated into the M&O contract and are determined through the Standards/Requirements Identification Document process (S/RIDs), the Work Smart Standards (WSS) Process, or the Directives process (DOE Order 251.1). Authorization agreements are subject to the requirements in the contract (such as List B, DEAR clause 970.5204-78). DOE is currently institutionalizing guidance and criteria for authorization agreements which will provide a standard for formalized evaluation of authorization agreement contents.

- (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?**

RESPONSE:

AL does not generally approve contractor "manuals of practice", policies, directives, or procedures. AL concurrence or acceptance may be required in instances where a contractor document is required as part of an implementation plan (rule or DOE Order) or contractor documents which are included as an operating standard in the contract. All contractor documents are subject to review during Integrated ES&H Oversight evaluations, surveillances, readiness reviews and assessments, and technical/operational awareness activities.

- (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) site-wide 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?**

RESPONSE:

Work authorization typically occurs at various levels in a hierarchy: Mission, Program, Project, Facility, and Activity/Task levels. DOE authorizes work at the Mission, Program, Project, and Facility levels. The Albuquerque Operations Office (AL), the Office of Defense Programs and the Office of Environmental Management provide authorization of mission level work. AL, through various programmatic and budgetary documents, as well as the contract, authorizes the conduct of specific program and project work. For Category 2 nuclear facilities, radiological facilities, and moderate hazard chemical/industrial facilities, AL authorizes work through the completion of an Operational Readiness Review or Readiness Assessment, as appropriate. For low hazard facilities, the contractor authorizes work. AL does not authorize work at the Activity/Task level; this is accomplished by the contractor. Thus, activity or task level controls are addressed by the contractor. AL is still developing criteria for determining the level of work authorization which is best suited for application of the Authorization Agreement.

Site-wide controls are/will be developed as part of the commitments described in the various contractor's ISMS description document and are subject to AL review and approval. These will be developed through the Standards/Requirements Identification Document process (S/RIDs), the Work Smart Standards (WSS) Process, or the Directives process (DOE Order 251.1) and are added to the contract. Facility level controls are specified in the required authorization basis documentation, which are approved by either Defense Programs, AL or AL Area Offices, depending on the hazard category of the facility, and are reviewed and verified through Operational Readiness Reviews or Readiness Assessments. Nuclear Explosive Safety protocols are currently approved by Defense Programs

Activity/task controls do not generally receive prior AL approval, but are subject to review (inspection) during ORRs, RAs, Integrated ES&H Oversight evaluations, surveillances, facility representative monitoring and technical/operational awareness activities.

- (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?**

RESPONSE:

AL has not yet developed a protocol for Authorization Agreements. Assignment of responsibilities will be part of the development of this protocol and documented in the AL Level II Functions, Responsibilities, and Authorities Manual (FRAM).

Development of an AA protocol or the development and use of AAs will not change DOE/AL roles for the execution of safety oversight responsibilities. For example, day-to-day oversight will be accomplished by the Area Offices using such mechanisms as Facility Representatives. AL will utilize programmatic, institutional, and technical subject matter experts in both a program management and support role as well as an Integrated ES&H oversight role.

- 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?**

RESPONSE:

Authorization Agreements are subject to the requirements in the contract (List B) as specified in DEAR clause 970.5204-78, making it unnecessary to reiterate them in the authorization agreements. The contractor commits to meeting the requirements of "key safety management programs" through acceptance and execution of the requirements (List B) in the contract and through their participation in the requirement selection process [(Standards/Requirements Identification Document process (S/RIDs), the Work Smart Standards (WSS) Process, or the Directives process (DOE Order 251.1)]. AL will ensure that these contractual safety requirements (List B) are implemented through ORRs/RAs, Integrated ES&H Oversight evaluations, Facility Representative monitoring, surveillances, and technical/operational awareness activities.

General

- Cl. What is the status of the implementation of DEAR clauses 970.5204-2 and 970.5204-78 at your site?**

RESPONSE:

Implementation of these clauses may vary from site to site depending on when the clauses were actually incorporated into the contract. These clauses are included in the new DOE/University of California contract which covers Los Alamos National Laboratory. These clauses are part of the FY98 fee and scope negotiation objectives for the M&O contracts for the Kansas City Plant, and the Pantex Plant. Sandia National Laboratories will be incorporated through a separate negotiation process. Incorporation of these clauses into AL contracts is targeted to occur on or before December 31, 1997.

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

RESPONSE:

AL anticipates no difficulties since all of AL's M&O contractors have mature subcontract purchasing systems that will ensure the flowdown of prime contract clauses that requires application of the ES&H requirements in subcontracts. All M&O contracts also contain the clause DEAR 970.5204-22, "Contractor Purchasing System (OCT 1995)" that governs their subcontract purchasing policies and procedures which require approval by DOE, and DEAR 970.5204-44, "Flowdown of Contractual Requirements to Subcontracts (FEB 1997)" which stipulates clause flowdown requirements to subcontracts.

- C3. Does the Authorization Agreement at your site require the contractor to notify DOE when the contractor self-identifies a violation of the Agreement?**

RESPONSE:

The W69 Authorization Agreement includes this requirement. The W69 Authorization Agreement section 6.7 states, "...MHC shall report to the DOE Contracting Officer or to the cognizant Amarillo Assistant Area Manager any violation or potential violation of this agreement and the actions taken to bring the operations to a safe and stable condition...".

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

RESPONSE:

Self-assessment and corrective actions program requirements are management system requirements which apply to all activities. As such they are required under the operating contract per inclusion of 10 CFR 830.120, DOE Order 5480.19, and Pantex Plant General Information Document (GID). The W69 is subject to the controls and requirements established in the contract as well as those contained in the authorization agreement, making it unnecessary to reiterate self-assessment and corrective action requirements. In addition, the W69 authorization agreement did include specific requirements and conditions for corrective actions (reference section 6.7).

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

RESPONSE:

The W69 Authorization Agreement itself does not contain an incentive clause. The Authorization Agreement was issued pursuant to Contract DE-AC04-91AL65030, making performance to the agreement part of the award fee determination. In contracts which contain incentive provisions, AL incentivizes the accomplishments of work performed "safely", rather than compliance to a specific Authorization Agreement.

Site Specific

- C6. "The W69 Authorization agreement cited the BIO and CSSM as the authorization basis rather than a SAR, HAR, TSR, OSC, and NESRS as specified in 452.2. How does this approach comply with the Order?"**

RESPONSE:

DOE Order 452.2A (4.c.1.d.1) requires that a SAR be prepared in accordance with DOE Order 5480.23 for facilities used for nuclear explosive operations. DOE Order 5480.23 allows for an implementation period to develop compliant SARs. This Order requires that an interim authorization basis (referred to as a BIO) be developed and approved to allow continued operations while the safety analysis is being upgraded to the current Order expectations. The Critical Safety Systems Manual (CSSM) serves a similar purpose to the BIO for TSRs.

The underlying principle of the Order is to ensure that nuclear explosive operations (and associated facilities) are analyzed for hazards and the results of the analysis are used to design the operation. The SS-21 process used for the W69 drives this underlying

principle. This intent was met for the W69 even though the documentation had different labels.

An authorization agreement is a useful tool for specifying the basis DOE used to authorize operations. Its value is particularly realized in situations like the W69 startup where there are multiple documents and reviews. The authorization agreement pulls it all together to clearly communicate to the contractor what the basis is and what commitments must be executed to remain within the authorization basis.

C7. "The W69 AA cited an ABCD in lieu of using the TSRs, OSCs, and NESRs. Will all future AAs include an ABCD?"

RESPONSE:

An Activity Based Control Document (ABCD) is a new tool developed at Pantex Plant to help pull all of the controls together for a particular activity. The purpose of an ABCD (as envisioned by the new Integrated Safety Process (ISP)) is to link together controls from various documents for a specific activity. As specified in DOE Order 452.2A, a separate analysis is performed for specific nuclear explosive operations from the facility safety analysis. Each of these analyses results in derived controls. Process specific controls are labeled OSCs and NESRs, facility controls are labeled TSRs. As we began to implement this approach, we encountered difficulties. The ISP process has clarified some of the issues. What had in the past been referred to as "facility analysis" is now referred to as generic analysis and results in derived controls that are common to the set of operations that might be performed in a given facility. The process specific analysis will result in derived controls that are unique to the specific process being analyzed. The labeling of the resultant controls as TSR, OSC, or NESR is not important. The linkage of the control to the hazard, consequence, and analysis is specified in the document.

The ABCD allows the set of controls applicable to an operation to be defined. It is used to combine the appropriate "common" controls with the appropriate "unique" controls for a specific operation or set of operations. The ABCD is not intended to replace the documents that analyze and derive the controls (e.g. SAR/TSR, HAR/NESR) rather to point and reference to these documents to form a complete (integrated) authorization basis for an operation. AL has not committed to the preparation of ABCDs for all future AAs at this time. An ABCD may be required to define the DOE authorization basis accurately and completely, (particularly for weapons operations). However, there will be operations where a single document is all that will be required to define the DOE authorization basis, thus obviating the need for an ABCD to integrate multiple documents.

The W69 AA was a prototype for an authorization of an operation that spanned several facilities. In the Pantex submittal for ISMS, Pantex also proposed that some operations

be covered by authorization agreements that cover multiple operations in a single facility (e.g. special purpose bays). In this example, the authorization basis cited in the AA would likely be the analysis and derived "common" controls and no ABCD would be cited.

D. Contract Violations and Remedies

The use of the term "*violation*", is ambiguous and therefore problematic. In the response to the following questions AL has interpreted "*violation*", to mean a noncompliance with a contractual provision.

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?**

RESPONSE:

- a) DOE Order 425.1 states that "...DOE line management shall ensure the contractor's plan-of-action specifies the prerequisites for starting the responsible contractor's Operational Readiness Review". In this scenario the contractor took appropriate actions by terminating the ORR, when problems were identified. The contractor was in parallel with DOE expectations and has not violated the terms of the contract.
- b) In this scenario contractual remedies and/or sanctions do not apply. However, if the contractor has a history of these types of problems DOE would perform a review of the contractor Readiness Assessment Program to ensure future success in the conduct of contractor ORRs.
- c) The Contracting Officer (AL Manager) and/or his authorized representative would take any necessary action commensurate with the severity of the issue.
- d) In this scenario the costs incurred by the M&O contractor for the ORR would likely be considered allowable.

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?**

RESPONSE :

- a) The failure of the contractor to meet fire protection requirements in a contract is not the sole determining factor in establishing if there was a contract violation. DOE requires contractors to meet Improved Risk criteria similar to the relationship between private sector industry and an insurance company. Where the private sector controlling mechanisms are the premiums, the DOE establishes acceptable levels of risk. Thus the term fire protection does not suggest that a fire will or will not occur but rather that consequences and probabilities be defined and controlled. Causal factors that lead to fires are not limited to one of compliance violations but could include failure to follow administrative controls, design deficiencies, and/or misinterpretation and misapplication of a specific requirement. Single, failures such as missing one monthly testing requirement, when all others were conducted timely would technically be a violation of fire protection requirements, but might not be appropriate for a contractual remedy. The determination of whether a violation of the contract occurred would follow a complete investigation of the facts.
- b) See answer to Question A4.
- c) The Contracting Officer (AL Manager) and/or his authorized representative would take the appropriate action commensurate with the severity of the issue.
- d) See answer to Question A5.

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?**

RESPONSE:

- a) Price Anderson Amendments Act (PAAA) Nuclear Safety Rules, such as 10 CFR Part 835, "Operational Radiation Protection," are independent of DOE Management and Operating (M&O) contracts, and applicability, compliance and enforcement are matters of federal law. AL M&O contracts contain the PAAA indemnity clause and specifically incorporate by reference these nuclear safety rules. Consequently, a PAAA notice of violation with civil penalties may also result in a contract noncompliance.
- b) See answer for Question A4.
- c) The civil penalty is independent of a potential financial incentives of the contract. However, performance based contracts may contain specific criteria that evaluates the frequency of violations and severity of each violation. The evaluation of contract performance criteria, during the contract performance period, may lead to the reduction of award fees.
- d) See answer for Question A5.

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?**

RESPONSE:

- a) See answer for Question A4.

- b) The Contracting Officer (AL Manager) and/or his authorized representative would take any necessary action commensurate with the severity of the issue.

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?**

RESPONSE:

- a) In most cases, AL allows the contractor to develop their own procedures for conducting work and expects that contractor work practices are consistent with these procedures to meet AL's expectations. These procedures are not explicitly referenced in the contract, nevertheless, the contractors overall conduct would be measured in accordance with the terms and conditions of the contract, including compliance with DOE Orders.
- b) Contractual action taken by the DOE would be relative to nonimplementation of the contractual commitment, not the failure to follow internally derived procedures and practices. DOE can invoke contract sanctions and provisions for nonperformance of contractually binding requirements and performance as stated in the answer to Question A4. Failure of the contractor to follow internal procedures and practices would be identified in oversight activities (see answer to Question A3.) and follow-up would be commensurate with the magnitude of noncompliance.

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?**

RESPONSE:

- a) Whether the contractor had or had not violated the terms of the contract would depend on various factors such as the extent of the implementation deficiency, past performance, actual or potential consequences that might have been incurred/occurred; and whether the "intent" had been met, but not the explicit "terms".
- b) Contractual remedies and sanctions for contract violations are discussed in the answer to Question A4.
- c) The Contracting Officer (AL Manager) and/or his authorized representative would take any necessary action commensurate with the severity of the issue.

Idaho Operations Office
Response to DNFSB Questions

October 1997

United States Government

Department of Energy

memorandum

Idaho Operations Office

Date: October 10, 1997

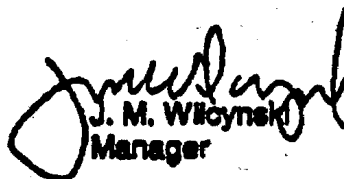
Subject: Department of Energy Idaho Operations Office (DOE-ID) Responses to Defense Nuclear Facilities Safety Board (DNFSB) Questions On Contract Administration (OPE-OS-97-116)

To: Richard Crowe, Director
Safety Management Implementation Team
DOE-HQ, DP-20, A-202/GTN

Reference: Memorandum, Richard Crowe to Operations Office Managers, Subject: Defense Nuclear Facilities Safety Board (DNFSB) Questions On Contract Administration, dated September 18, 1997

This memorandum forwards the DOE-ID responses to the DNFSB questions on safety and contract administration requested by the reference memorandum. The DOE-ID responses are provided for use in preparation of the Departmental response.

If you have any questions in this matter, please contact DOE-ID Safety Management Implementation Team member John Hobbs at (208) 526-0370.


J. M. Wilczynski
Manager

Attachment

cc w/att:
M. B. Whitaker, Jr., DOE-HQ, S-3.1, 6H-025/FORS
T. Hobbes, DOE-HQ, EH-2/ID, MS 1212

Department of Energy Idaho Operations Office (DOE-ID) Responses
Defense Nuclear Facilities Safety Board (DNFSB) Questions On Contract Administration

OVERVIEW

The Department of Energy Idaho Operations Office (DOE-ID) is organized to provide effective management, direction, and oversight of all work performed at the Idaho National Engineering and Environmental Laboratory (INEEL). The chain of command for day-to-day work and operations at all INEEL defense nuclear facilities is from the DOE-ID Manager, through the Deputy Manager, Office of Program Execution (OPE) Assistant Manager, and OPE Deputy Assistant Manager for Operations, to the federal Facility Directors. The DOE-ID Manager is the Head of the Contracting Activity, and serves as the Fee Determination Official for the contract. The remaining positions are appointed Contracting Officer Representatives (CORs). All positions in this specific chain of command are designated Senior Technical Safety Manager positions. The federal Facility Directors are supported by technical staffs, which include qualified Facility Representatives and Subject Matter Experts. The Directors for the Divisions responsible for environment, safety, and health assistance to the line organization also report to the OPE Deputy Assistant Manager for Operations, and the positions are designated Senior Technical Safety Managers.

The Contracting Officer serves as the focal point for all contract matters as the government procurement agent. The Contracting Officer provides expertise in contracting methods, negotiations, contracting provisions, and required clauses. These personnel are expected to provide significant business management expertise, and not necessarily technical expertise in environment, safety, and health matters. COR authority is limited to those actions not involving a change in contract scope, cost, terms, or conditions.

DOE-ID participated in the development of the DOE implementation plan prepared in response to the Defense Nuclear Facility Safety Board's (Board) Recommendation 95-2 (Safety Management). DOE-ID saw the potential of increased risk, and a corresponding reduction in the level of protection afforded the workers, the public, and the environment, if multiple work control systems and processes were employed at a multi-program site such as the Idaho National Engineering and Environmental Laboratory (INEEL). DOE-ID advocated a single process for integrated safety management, not just one which would apply to defense nuclear facilities.

DOE-ID also recognized that the concept and practice of integrated safety management could only be institutionalized through contracts. By approaching integrated safety management in the broader context of the contract, several normal contract processes, mechanisms, and remedies are available to support effective implementation. Some of these processes are being modified, enhanced, and codified in the Department of Energy Acquisition Regulations (DEAR) as a result of collaboration between the Safety Management Implementation Team (SMIT) and the contract reform initiative teams.

The Board is accurate in its observation that "overall program descriptions in response to clauses in the DEAR...are only a part of what is needed from contractors and DOE administrators to ensure compliance with specified safety directives." DOE-ID believes that the existing contractual processes, mechanisms, and remedies help ensure that all hazardous

work DOE performs or contracts to perform is done under safety controls providing adequate protection of the workers, the public, and the environment. The Department's contract administration activities include monitoring technical compliance, inspection and acceptance, cost and schedule surveillance, engineering evaluations, and evaluation and reporting on contractor performance. The DEAR assigns these responsibilities to the Contracting Officer, and defines the process for delegation of certain duties to Contracting Officer Representatives (COR). A formal letter to Assistant Managers, Deputy Assistant Managers, and Directors accomplishes the Contracting Officer delegation.

DOE-ID has assigned Facility Directors, Facility Engineers, and Facility Representatives to provide day-to-day technical monitoring and evaluation of contractor performance at all INEEL facilities. This coverage is augmented by technical support from other Division Directors and Subject Matter Experts (SME). A graded approach is used in determining the extent of coverage of facility work and operations, the extent of day-to-day contacts, and raising issues with the contractor. Serious issues are elevated quickly through the chain of command, and raised at an appropriate level with the contractor management.

The INEEL is working on a broad set of initiatives to improve work and operations performance. The initiatives include implementation of Integrated Safety Management, certification to the ISO 14001 Environmental Management System standard, implementation of the Department's Enhanced Work Planning process, and achieving Star status in the Department's Voluntary Protection Program.

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 §970.5204-78, how is "List B" initially arrived at for a given contract?

DOE-ID Response A1: DOE-ID establishes the "List" of contract applicable DOE Directives by letter as indicated by clause H.18 of the INEEL prime contract. The contract clause states, "The contractor shall comply with all applicable DOE Orders as directed by the Contracting Officer." The basis for this initial H.18 List was DOE Acquisition Letter No. 93-8, dated August 17, 1993.

The H.18 List is maintained and modified based on the processes identified in ID Notice 251.1B, "ID Directive System." This ID Notice establishes the objectives of the system and the basic processes for local Directive development and application of DOE Directives to the

contract. Specific requirements include a formal integrated safety review within DOE to ensure technical review and consideration of operational, cost and environment, safety, and health impacts prior to initial incorporation of a new DOE Directive in the H.18 List. In addition, LMITCO review and comment is initiated at the earliest stage to allow for implementation impacts to be surfaced. Negotiations occur to ensure efficient and effective transition to new requirements. In accordance with the terms and conditions of the contract, environment, safety, and health requirements flow down to all subcontracts.

The requirements set out in DEAR clause 970.5204-78 entitled "Laws, regulations and DOE Directives" have been included in a draft modification, which is currently being negotiated with LMITCO.

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

DOE-ID Response A2: The Contracting Officer is supported by CORs, including Subject Matter Experts in all areas. Routine reporting is through normal supervisory reporting channels up to the Operations Office Manager. CORs also are responsible for advising the Contracting Officer of any changes needed in work scope, terms and conditions, or requirements applicable to their specific contract. In addition to these processes, and those described in A1 above, the Contracting Officer is advised via acquisition letter of any changes in Department contracting requirements, and is responsible to adjust contracts under his cognizance accordingly.

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?

DOE-ID Response A3: Contractor performance relative to contract safety requirements is monitored and evaluated on a continuing basis by federal staff assigned to INEEL facilities, who are supported by subject matter expert, program, project, and other support staff. Facility Directors are designated CORs. Routine reporting is through normal supervisory reporting channels up to the HCA (Operations Office Manager). As discussed elsewhere, the CORs also have the authority and responsibility to direct correction of the situation, within the limits of their delegated authority. These actions are coordinated with the Operations Office senior line managers. The CORs and support staff performing technical monitoring of the contractor performance also are responsible for advising the Contracting Officer promptly of the violation or inadequate implementation of any safety requirements where contract remedies may be appropriate.

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?

DOE-ID Response A4: The primary tool for the HCA to reward or penalize the contractor for compliance with contract safety requirements is through the award fee process. The HCA is the Fee Determination Official for the contract. Specific environment, safety, and health areas of emphasis are included in the award fee criteria. The Fee Determination Official also may make adjustments to fee earned based on significant events and trends in contractor

performance. At INEEL, the prime contract also includes some incentive fee arrangements. The contract includes a provision making the contractor ineligible for payment of all or part of an incentive fee, if in the course of meeting the incentive fee component the contractor has caused, or has contractual or legal responsibility for worker or public fatality(ies); hazardous material exposure to workers or the public exceeding regulatory limits; loss of control over special nuclear material or classified material; willful or knowing violation of regulatory reporting requirements; or safety performance below pertinent Bureau of Labor Statistics (5 year averages).

The Safety and Health contract clause (I.73) and the Nuclear Safety clause (I.89) provide, in the event that the Contractor fails to comply with said regulations or requirements of DOE, the Contracting Officer may, without prejudice to any other legal or contractual rights of DOE, issue an order stopping all or any part of the work; thereafter, a start order for resumption of the work may be issued at the discretion of the Contracting Officer. The Contractor shall make no claim for an extension of time or for compensation or damages by reason of, or in connection with, such work stoppage.

The Nuclear Hazards Indemnity Agreement clause (I.68) provides extra-contractual enforcement measures to the Department under the Price-Anderson Amendments Act (PAAA). That Act authorizes the Department to issue notices of violation and/or to assess civil penalties when a contractor violates a nuclear safety regulatory requirement. For willful and knowing violations, the Department, pursuant to the PAAA, may also recommend to the Department of Justice that criminal action be taken against the contractor. DOE relies on a standard contract clause to implement these provisions of the PAAA. The clause contains a provision to flow-down the requirements of the clause to subcontractors

As a final measure, the Termination Clause (I.99) provides a mechanism for terminating the contract if the contractor is in noncompliance with safety requirements.

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

DOE-ID Response A5: When the contractor agrees the contract requirements are not being met, it generally will proceed to find a way to remedy the deficiency. As a general rule, the government is a self-insurer. Since the INEEL contract is a cost-reimbursement type, unless there are willful and knowing violations by management, DOE would pay all reasonable and allowable costs to remedy the problem, but without additional fee. Fines, and the cost of civil or criminal proceedings in any court, are generally not allowable costs. The contractor's fee is at risk and could be affected significantly if it violates or improperly implements safety requirements. Where the safety problem results in a DOE-ID Contracting Officer directed suspension of all or any part of the work, contract provisions call for the Contracting Officer to issue a start order for resumption of work at his discretion. In this case, the contractor is barred from any claim for extension of time or for compensation or damages by reason of, or in conjunction with, such work stoppage.

A6. What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety

terms and conditions are violated?

DOE-ID Response A6: There are currently no Authorization Agreements at INEEL. The contract terms and conditions for environment, safety, and health apply to all work performed under the contract, and are adequate for defining the safety envelope for most low hazard work. The contract terms and conditions also define when the contractor must obtain DOE approval for safety basis documents. There are contractual and non-contractual remedies available to the Contracting Officer and the CORs for violations of contract terms and conditions, or for deviations from a facility safety basis. For a violation of the Safety Analysis Report Technical Safety Requirements, the contractor is required to follow formal procedures for resolving the safety issue. Contractual remedies for failure to meet these requirements include DOE-ID directing suspension of a specific work activity, or suspension of all work under the scope of the contract. These options could be exercised if the contractor failed to take timely, effective, and appropriate action. There are also non-contractual remedies that would be used in addressing performance problems that do not flow from a violation of a contract term or condition. An example would include a formal letter identifying deficient performance, and directing the contractor to prepare a corrective action "get well" plan. Other contractual remedies include termination of the contract, and the subsequent debarment or ineligibility of the contractor.

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

DOE-ID Response A7: All positions in the chain of command of line direction for defense nuclear facilities are designated Senior Technical Safety Manager positions. The federal Facility Directors are supported by technical staffs, which include qualified Facility Representatives and Subject Matter Experts. The environment, safety, and health Division Director positions are designated Senior Technical Safety Managers. The DOE-ID Manager is the Head of the Contracting Activity, and the remaining positions are appointed Contracting Officer Representatives. Contracting personnel must meet requirements prescribed in the Federal Acquisition Reform Act of 1996, P.L. 104-106 and FAR 1.603. Personnel as designated Contracting Officers must further meet the requirements of DOE Order 541, "Appointment of Contracting Officers and Contracting Officer Representatives." Training requirements of CORs also are identified in this order. The order requirements principally focus on contracting, business, pricing, and contract law matters.

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

DOE-ID Response A8: The Contracting Officer has the complete matrix organization available to him on a day-to-day basis to assess contract compliance issues involving safety. This matrix organization includes technical monitors familiar with all aspects of safety issues, financial analysts familiar with the contractor's costs and accounting system, and attorneys familiar with safety and compliance issues. Specific individuals have been designated to act as Contracting Officer Representatives (CORs) for functions such as technical monitoring, inspection, testing, and other functions of a technical nature not involving a change in the scope, price, terms or conditions of the contract. The designation is in writing and contains

specific instructions regarding the extent to which the COR may take action for the Contracting Officer. At INEEL, CORs and federal technical staff are assigned to the site facilities to assist in carrying out these functions.

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 work-specific terms and conditions mutually agreed upon by DOE and the contractor. As illustrated by Figures 10, 11 and 12 of DNFSB/TECH-16, contractors can proceed with (a) highly hazardous operations entailing potential risk to all sectors (public, workers, environment) only after mutually agreed-upon 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/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

DOE-ID Response B1: DOE-ID implements safety planning processes through the application of DOE Order 5480.22, Technical Safety Requirements, and DOE Order 5480.23, Nuclear Safety Analysis Reports (SAR), for nuclear facilities located at the INEEL. The hazard categorization for these facilities is initially determined by the use of DOE-STD-1027-92, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports, and the risk is analyzed using the graded approach as described in the standard. DOE Order 5480.22, Technical Safety Requirements (TSR), defines how DOE-ID and the contractor apply the controls that result from the nuclear safety analysis. Nuclear facility SARs and TSRs are approved by DOE-ID. Facilities that are found to be less than a hazard category III nuclear facility, i.e. non-nuclear, are characterized with the use of DOE Order 5481.1B, Safety Analysis and Review System, that is implemented by contract through DOE-ID Notice 420.A, Safety Basis Review and Approval Process. DOE-EM-STD-5502-94, Hazard Baseline Documentation, also provides guidance for the safety planning process for non-nuclear facilities at the INEEL. Hazard classifications for all non-nuclear facilities and SARs with the associated operational controls for facilities designated as a high or moderate hazard are approved by DOE-ID.

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

DOE-ID Response B2: DOE-ID reviews and approves safety plans and processes in accordance with DOE-ID Notice 420.A, Safety Basis Review and Approval Process. This Notice requires the review to be documented and resolutions to be provided for any review issues. A letter is then provided to the contractor that approves the safety analysis report and associated controls to the contractor. This approval letter from DOE-ID is the instrument that communicates acceptance of the contractor's safety plans. Nuclear facilities that are implementing the DOE Orders 5480.22 and 5480.23 also establish interim safety requirements as Basis for Interim Operations, BIOs, through the DOE approval of the implementation plans. DOE-ID also provides approval letters for these implementation plans.

B3. "Authorization Agreement" has been defined in DNFSB/TECH-16 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 970.5204-78?

DOE-ID Response B3(a): It is anticipated that authorization agreements for nuclear and non-nuclear facilities will be evaluated against the established DOE Orders and DOE-STD-3009-94, Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Safety Analysis Reports, and DOE-EM-STD-5502-94, Hazard Baseline Documentation, respectively. These standards are implied in DOE-ID Notice 420.A, Safety Basis Review and Approval Process, and confirmed through the DOE-ID review and approval process. DOE-ID Notice 420.A is a requirement in the contract.

- (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?

DOE-ID Response B3(b): Manuals that describe institutional safety programs are considered commitments in DOE-ID approved Safety Analysis Reports, and may become administrative controls in the associated Technical Safety Requirements. The contractor's manuals of practice are subject to DOE review when the facilities SAR or TSR are reviewed and approved. In many cases these manuals result from a DOE Order or other directive that required an initial approval of the program. However, DOE-ID does not require DOE approval of these manuals of practice. The requirements and associated controls are subject to compliance oversight actions as they are a part of the approved authorization basis for that facility. For DOE-ID, the compliance oversight is performed on a continuing basis.

- (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) site-wide 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?

DOE-ID Response B3(c): The INEEL currently has no approved Authorization Agreements. It is anticipated that DOE-ID's approval for authorization protocols less formal and extensive than Authorization Agreements also will be done in the context of the contract. Specifically, a significant portion of routine low hazard work will be authorized via approval of the Safety Management System description, and other relevant contract provisions. As a part of contract administration, DOE would always have an inspection role relative to the contractor's technical and safety performance. Activities requiring DOE-ID review and approval will be defined in documents and direction under the prime contract.

- (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?

DOE-ID Response B3(d): Yes. In general terms, this responsibility is assigned to a COR-designated Facility Director supported by appropriate federal technical resources as described elsewhere in this report.

- 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?

DOE-ID Response B4: These programs are conditions of the approved authorization basis for nuclear facilities at the INEEL. Implementation is monitored as a COR function by federal facility personnel.

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 H-Canyon)

General

- C1. What is the status of the implementation of DEAR clauses 970.5204-2 and 970.5204-78 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 self-identifies a violation of the Agreement?
- C4. All approved Authorization Agreements lack a commitment to a contractor self-assessment 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

DOE-Albuquerque Manager:

- C6. The new order DOE O 452.2, *Safety of Nuclear Explosive Operations* requires the use of the safety analysis and activity-specific 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?

DOE-Oakland 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 agreed-upon (and DOE-approved) 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.

DOE-Rocky 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?

DOE-ID Response D1: a) The contractor has not violated the terms or conditions of the contract. b) The appropriate course of action based on this scenario would be a formal letter and corrective plan. The LMITCO award fee would likely be reduced with the issue identified as a deficiency in the evaluation report or in the fee determination transmittal letter. c) Action for the specific facility would be the responsibility of the appropriate CORs. The HCA and other DOE-ID senior managers would vigorously work the overall issue of failure to meet facility readiness requirements, and the associated impact on the site, with the contractor executive management. d) The additional expense of the ORR and associated corrective actions would be allowable costs under the prime contract.

- 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?

DOE-ID Response D2: a) Based on the scenario, the contractor violated the terms or conditions of the contract. However, even if the contract were not violated, a significant response from DOE may be appropriate. b) A general description of available contractual and non-contractual remedies are discussed elsewhere in this report, and range from requiring corrective action plans, to terminating the contract. The event also may warrant accident investigation if specified thresholds were exceeded, and/or be subject to PAAA investigation and enforcement. c) Assuming the most serious scenario, actions would be taken by the HCA and the cognizant DOE Headquarters Assistant Secretaries, and criminal sanctions

instituted. d) Costs of complying with the fire and property protection requirements are allowable. Costs of PAAA civil fines or criminal penalties are not allowable costs.

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?

DOE-ID Response D3: a) Based on the scenario description, the contractor is in violation of a contract term or condition. b) In addition to the civil penalties, the contractor would likely receive a reduction in award fee for the associated management system weaknesses leading to the violation. If judged to be appropriate, DOE-ID CORs, the Contracting Officer, and/or the HCA could direct suspension of all or part of the work being performed under the contract, or terminate the contract. c) The civil penalty would be paid by the contractor out of fee. The award fee also would likely be reduced based on the seriousness of the programmatic breakdowns and consequences. d) Costs of complying with the radiological protection requirements are allowable. Costs of PAAA civil fines or criminal penalties are not allowable costs.

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?

DOE-ID Response D4: There currently no Authorization Agreements in place at INEEL.

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?

DOE-ID Response D5: a) The contractor has not violated the terms or conditions of the

contract. b) The appropriate course of action based on this scenario would be a formal letter and corrective action plan. Performance in this area could receive special emphasis in the award fee evaluation criteria and in determining the contractor's award fee.

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?

DOE-ID Response D6: a) This appears to be a violation of terms or conditions of the contract. It would be considered a violation if the contract required a program, and no program was implemented. For designated facilities, an evaluation would be performed to determine if reporting and enforcement under the PAAA requirements was appropriate. Additionally, a determination would have to be made if the failure to implement the DOE Order requirement also comprised a violation of other statute or regulation necessary for protection of the workers, the public, or the environment. b) The appropriate course of action based on this scenario would include a formal letter, and may include PAAA investigation and enforcement actions. Depending on the nature of the issue, and the contractor's immediate actions, contractual remedies such as a stop-work order for the affected work or activity may be required. The contractor award fee would likely be affected. c) Action for the specific facility would be the responsibility of the appropriate CORs. The HCA and other DOE-ID senior managers would vigorously work the issue of ineffective requirement management with the contractor executive management.

Nevada Operations Office
Response to DNFSB Questions

October 1997

**Department of Energy**

Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518

OCT 10 1997

Richard C. Crowe, DOE/HQ (S-3.1) GTN

**DOE NEVADA OPERATIONS OFFICE (DOE/NV) RESPONSE TO THE DEFENSE
NUCLEAR FACILITY SAFETY BOARD (DNFSB) QUESTIONS ON INTEGRATED
SAFETY MANAGEMENT AND CONTRACT ADMINISTRATION**

As you requested, enclosed is the DOE/NV response to the DNFSB questions provided in their September 15, 1997, letter to the Secretary. The response also includes a background appendix developed by staff.

If you have any questions, please contact me at (702) 295-3211 or Mitchell P. Kunich, at (702) 295-1001.

Joseph N. Fioi
for G. W. Johnson
Manager

EAMD:MPK-8018
DEF-5

Enclosure:
As stated

**DEPARTMENT OF ENERGY
NEVADA OPERATIONS OFFICE**

**RESPONSE TO
THE DEFENSE NUCLEAR FACILITY
SAFETY BOARD
SEPTEMBER 15, 1997, LETTER**

ON

**INTEGRATED SAFETY MANAGEMENT
AND
CONTRACT ADMINISTRATION**

OCTOBER 10, 1997

INTRODUCTION

The Defense Nuclear Facility Safety Board , in a letter to Secretary Peña, requested DOE Operations Offices, including Nevada, to provide answers to a set of questions regarding integrated safety management and DOE contract administration matters. This report provides an Introduction and Responses to Questions sections. A Background Appendix, prepared by DOE/NV staff, is also provided for the general information of the Board and staff.

RESPONSE TO QUESTIONS

This Section provides the DNFSB questions in **bold type** and DOE/NV Responses to the questions in *italics*.

A.1 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,” 48CFR § 970.5204-78, how is “List B” initially arrived at for a given contract?

Response: The Contracting Officer, utilizing the acquisition regulations and support from DOE/NV Offices of Primary Responsibility(OPRs), decides which DOE directives (other than laws and regulations) and standards should be imposed by contract based upon the hazards associated with the work. In making this determination the Contracting Officer consults with and obtains input from the DOE/NV Environment Safety and Health Division, various DOE/NV Technical/Programmatic Divisions, and the Office of Chief Counsel.

The DOE/NV BN contract does not currently include the clause in 48 CFR 970.5402-78 (June 1997). In the BN contract, laws, regulations, industry standards, and DOE Directives are addressed in special contract provision that apply in connection with the contract implementation of Work Smart Standards (standards established through application of the DOE approved Necessary and Sufficient [N&S] Closure process). “List B” Directives in the DOE/NV BN contract consist of the DOE/NV approved complex-wide Work Smart Standards (a document, Volumes 1 & 3) and an Appendix to the contract which is divided into three categories: 1) the DOE Directives applicable to activities not included in the N&S process; 2) the DOE Directives applicable to the Device Assembly Facility; and 3) DOE Directives Applicable to Life Cycle Asset Management until implementation Plan Developed.

“List B” DOE Directives would initially be provided to the Contracting Officer by the DOE/NV OPRs (Division Directors) and would initially include all applicable DOE Order requirements. The OPRs and line management, in making their determination and recommendations to the Contracting Officer, would base their input on a review of the contractor scope of work, available hazard analyses and potential hazard controls, and DOE/NV complex-wide Work Smart Standards (WSS).

If the work had not previously been analyzed as part of the DOE/NV complex-wide WSS, a convened group (team) would be assembled of DOE/NV, contractor, and other stakeholders to exercise the Necessary & Sufficient Closure Process and establish contract specific WSS. In the case of BN, changes (additions, additions, and modifications) would be made to their existing contract specific WSS.

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

Response: The Contracting Officer becomes informed regarding the safety requirements of a contract by reading the contract, examining the acquisition regulations, reviewing the hazards and analyses associated with the scope of work with appropriate line management and technical support personnel. Input is also solicited from the DOE/NV Offices of Primary Responsibility (OPRs). These offices include DOE/NV's Environment, Safety, and Health Division, Office of Chief Counsel, and line management/programmatic Divisions. The Contracting Officer also obtains information from the contractor, including the contractor's Safety Management System documentation. For the BN contract, this input takes into consideration the DOE/NV approved Contractor Integrated Environment, Safety, and Health Management (ES&H) System description and DOE/NV complex-wide Work Smart Standards.

In addition, DOE/HQ has recently developed a training program on Integrated Safety Management. This training has been developed for two-hour or eight-hour presentation. These courses will assist Contracting Officers in their understanding of established and new currently evolving DOE safety management requirements, concept, and methods.

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?

Response: The Contracting Officer becomes aware that safety requirements have been violated or have not been adequately implemented largely through input from others. The Contracting Officer is supported by line management program and technical subject matter experts, including safety, in assessing the contractor's performance. This input includes the use of periodic environmental, safety and health assessments and evaluations. Furthermore, DOE officials have a duty to report any contract violations they become aware of to the Contracting Officer. In addition, the contractor provides the results of self assessments to the Contracting Officer and is required to advise the Contracting Officer of any safety violations in accordance with applicable DOE Rules and directives.

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?

Response: The Contracting Officer has the right of termination or the right to issue a stop work order until a noncompliance is corrected. The Contracting Officer is also able to reduce or increase fee payments based upon safety performance.

New draft language proposed by DOE/HQ regarding Conditional Payment of Fee or Incentives (Exclusive of Base Fee), was recently included in the BN contract modification, September 1997. In order for the contractor to receive all otherwise earned fee, profit, or share of cost savings under the contract in an evaluation period, the contractor must meet four minimum

requirements, two of which relate to safety and environmental protection, as follows:

- Minimum requirements for Environment, Safety, & Health (Program). The contractor shall develop, obtain DOE approval of, and implement a Safety Management System across the appropriate ES&H functional areas in accordance with the provisions of DEAR 970.5204-2. The minimum performance requirements of the program will be set forth in the approved Safety Management System or similar document. If the contractor fails to obtain approval of the Safety Management System or fails to achieve the minimum performance requirements of the system during the evaluation period, the DOE Operations Office Manager, at his/her sole discretion, may reduce, any otherwise earned fees, profit or share of cost savings, for the evaluation period by an amount up to the amount earned.

- Minimum requirements for catastrophic event. If, in the performance of the contract, there is a catastrophic event (such as a fatality, hazardous material exposure exceeding regulatory limits, loss of control over classified or special nuclear material, or an event that causes significant damage to the environment), the DOE Operations Officer Manager may reduce, any otherwise earned fees, profit or share of cost savings, for the evaluation period by an amount up to the amount earned.

Any determination under this clause is not subject to the Disputes clause of the contract.

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

Response: In a cost reimbursable M & O contract, the government will bear the burden of corrective actions, unless it can be clearly established that the cost consequences of a contractor's actions were unallowable under terms of the contract.

A6. What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety terms and conditions are violated?

Response: The Department has not yet developed guidelines for establishing and implementing "Authorization Agreements." When some term or condition of an authorization basis document is violated or when other mutually agreed upon safety terms and conditions are violated, the Contracting Officer, in addition to the right of termination, can stop work on all or part of the contract work, and otherwise re direct the contractor to take corrective actions. The Contracting Officer is also able to reduce fee payments in the event that significant safety issues arise.

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

Response: While there are general contracting education requirements imposed by statute and DOE Order 541.1 dated 4-30-96 ("Appointment of Contracting Officers and Contracting Officer's Representatives"), there are no special safety training and qualifications requirements for Contracting Officers who are responsible for contracts which include operation of defense nuclear facilities. However, safety training requirements are imposed on line management and technical support personnel who provide input to Contracting Officers.

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

Response: The DOE/NV Environment, Safety, and Health Division, line management and technical support Divisions, and Office of Chief Counsel provide ongoing advice and input to the Contracting Officer 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 work-specific terms and conditions mutually agreed upon by DOE and the contractor. As illustrated by Figures 10, 11 and 12 of DNFSB/TECH-16, contractors can proceed with (a) highly hazardous operations entailing potential risk to all sectors (public, workers, environment) only after mutually agreed-upon 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/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

Response: The degree of DOE/NV control of the work planning process, including safety and safety controls, is based on risk and potential hazards of a particular facility and associated activities that affect the safety and health of the public, worker, and the environment.

A tailored approach is used in planning for all work that begins with defining the work,

identifying and analyzing the hazards associated with the work, and identifying and developing the standards and controls to mitigate significant safety and environmental hazards and risks. For significant hazard facilities, many analyses are performed and documented: Safety Analysis Report; Hazard Assessments; NEPA analyses; Environmental Permits; Technical Safety Requirements; Operational Safety Requirements; contractor Environment, Safety and Health Management Plans; Nuclear Explosive Safety Studies; and other plans, procedures, analyses, and assessments serve as the DOE approved Authorization Basis documents. DOE establishes requirements in DOE approved documents and contract provisions are formally controlled by processes administered by the DOE/NV. Lower level process controls and requirements are implemented and controlled by the contractor. A line of demarcation between DOE/NV approved and Contractor approved requirements and controls begins to form with the application of DOE-STD-1027 criteria or DOE Order 5481.1 criteria used for designating nuclear-facilities or less significant hazard facilities and activities, respectively.

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

Response: For the BN contract, the contractor produced an Integrated ES&H Management System description which was reviewed and approved by DOE and incorporated into the contract for implementation by contract modification in September 1996. Implementation was then initiated by the contractor. DOE line management and technical personnel, such as Project Managers, Facility Representatives, Safety Representatives, Engineers, Scientists, Industrial Hygienists, and others monitor, inspect, or assess the contractors ongoing implementation for compliance with mandatory DOE requirements. DOE/NV has recently implemented a Work Authorization Process which will include all new proposed work scopes, all work scope changes which result in an expanded safety envelope, and eventually all existing work scopes on a risk-based priority basis that were not analyzed during the DOE/NV Work Smart Standards development process.

B3. "Authorization Agreement" has been defined in DNFSB/TECH-16 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 970.5204-78?**

Response: DOE does not currently have formal established standards or complex-wide guidance for the preparation, review, and approval of "Authorization Agreements." The

DOE/DP has established guidance on Authorization Basis document in a memorandum from Victor H. Reis, dated August 21, 1995. DOE/NV conforms to this guidance for significant hazard facilities, such as the Device Assembly Facility and the Radioactive Waste Management Sites at NTS.

For the BN contract in the case of the Devices Assembly Facility, the Appendix of DOE Directives contains a facility-specific category of applicable DOE Directives. These Directives and Authorization Basis documents establish the facility-specific frame of reference for the work performed by BN in accordance with DEAR 5402-78. For the BN contract in the case of the Radioactive Waste Management Sites at NTS, the complex-wide DOE/NV Work Smart Standards define applicable laws, regulations, standards, and DOE Directives for the activities.

- (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?**

Response: The M&O contractor's manuals of practice are not subject to DOE approval. These documents are subject to DOE/NV review during integrated ES&H oversight evaluations, surveillance, and technical/operational awareness activities. These documents are readily available to DOE/NV Project Managers and Facility Representatives.

- (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) site-wide 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?**

Response: Authorization Agreements are currently only contemplated by DOE/NV for significant hazard facilities. DOE/NV considers the Work Smart Standards and authorization basis documents as sufficient to serve as the "authorization protocol" controls for site-wide operations on an activity basis for work performed by BN. Lower level contractor plans and procedures are not generally approved by DOE/NV; however, such documents are subject to review during DOE assessments, surveillance, and inspections.

- (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?**

Response: In responding to this question, "authorization protocol" and "protocol" as used in the first sentence are assumed to mean a binding commitment document, or authorization basis document.

Once DOE/NV has reviewed and approved an "Authorization Protocol," the DOE and contractor line management are responsible to ensure that established mandatory requirements, facility conditions, and controls contained therein are adequately and effectively implemented by the contractor. These responsibilities are defined for the DOE/NV federal employees in the Level 2 DOE/NV Functions, Responsibilities, and Authorities Manual (FRAM). For a contractor, responsibilities are defined in various contract provisions of the contract, authorization basis documents, and contractor level documents.

B4. This question was directed by the Board to the Operations Offices responsible for Pantex and Lawrence Livermore National Laboratory. DOE/NV response is not required.

C. The set of C questions were directed by the Board to the Albuquerque, Oakland, and Rock Flats, and Savannah River Operations Offices). DOE/NV response is not required.

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?

Response: No. In fact, this appears to be an appropriate course of action under applicable DOE Directives.

b) What contractual remedies or sanctions are available?

Response: None are necessary.

c) Who in DOE is responsible for taking contract actions?

Response: Not applicable.

d) Does DOE or the contractor bear the unnecessary added expense of the ORR?

Response: Assuming unnecessary expenses, under allowable cost provisions of a cost type contract, DOE would ordinarily bear the risk of such cost consequences.

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?

Response: Yes, to the extent that failure to comply with a contract requirement constitutes a violation of the contract.

b) What contractual remedies or sanctions are available?

Response: It depends on the conditions and causes of the fire and the extent of programmatic impact, property damage, and/or injury to workers or the public. The Contracting Officer, in addition to right of termination, can stop work on all or part of the contract, and otherwise direct the contractor to take corrective actions. The Contracting Officer is also able to reduce fee payments.

c) Who in DOE is responsible for taking contract actions?

Response: The Contracting Officer.

d) Who pays for repairing the damage caused by the fire?

Response: Under the allowable cost provisions of cost-type contracts DOE would ordinarily bear the risk of such cost consequences.

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?

Response: Yes.

b) Will contract remedies also be invoked for the violation?

Response: Yes.

- c) **Will the civil penalty impact financial incentives under the contract?**

Response: The violation would likely impact contract fee.

- d) **Who bears the cost of correcting the conditions leading to the penalty?**

Response: See answer to D2.(d).

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?**

Response: See answer to D2(b). Remedies or sanctions depend on the nature of the violation.

- b) **Who in DOE is responsible for taking contract actions?**

Response: The Contracting Officer.

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?**

Response: Yes, assuming the non conformance is significant, e.g., the procedure establishes the process for meeting a mandatory requirement of a DOE Directive or Authorization Basis document for a significant hazard facility, and because of the nature of operations at the time of the occurrence, and/or significant potential existed for unacceptable consequences.

- b) **What measures could be taken to bring the contractor into compliance with its own practices and procedures?**

Response: See answer to D2.(b).

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?

Response: Yes.

b) What contractual remedies or sanctions are available?

Response: See response to D2(b). In addition, for nuclear safety requirements non compliance, Price-Anderson Ammendments Act fines and penalties may be assessed by the DOE.

c) Who in DOE is responsible for taking contract actions?

Response: The Contracting Officer is responsible. In the case of PAAA violations, EH/HQ Oversight Enforcement may take actions outside the bounds of the contract.

BACKGROUND

As the Board's questions were considered by DOE/NV staff personnel, it appeared that several topics warranted general discussion associated with our specific responses to questions related to safety management matters, hypothetical scenarios, and contract administration matters. These topics and the information that follows are provided in the spirit of discussion between DOE/NV and the Board and staff. These topics include:

- Contracting Officer authority/responsibility relationships, i.e. Head of Contracting Activity, line management chain-of-command, and management and technical support personnel,
- Mandatory requirements, i.e., contract requirements, and laws and regulations,
- Authorization Basis and Authorization Basis documents, i.e. documents defined in contract provisions,
- Binding commitment documents, i.e., contracts, contract modifications, and DOE approved documents defined in contract provisions,
- Changes to binding commitment documents,
- Work Smart Standards, i.e., laws, regulations, standards, and DOE directives,
- Authorizations Agreements, and
- DEAR Clause 970.5204-2, Integration of Environment, Safety, and Health into Work Planning and Execution (June 1997), and DEAR Clause 970.5204-78, Laws, Regulations, and DOE Directives (June 1997), and similar predecessor clauses which have existed in contracts since before September 1995.

Contracting Officer relationships. The Head of Contracting Activity (HCA) of the Nevada Operations Office is the Manager, NV. The Manager of the Operations Office has ultimate responsibility and authority for contract administration and safety at the DOE facilities assigned to the Operations Office.

At DOE/NV, the personnel designated to serve as Contracting Officers include the Assistant Manager for Business and Financial Services, Contracts Management Division Director, and other qualified staff members of the Contracts Management Division. These personnel are qualified and authorized within certain financial thresholds to sign contract documents (contracts,

modifications, correspondence). In general those Contracting Officers within the administrative part of the DOE organizations provide expertise in procurement regulations, contracting methods, negotiations, contract provisions, accounting, financial, and other business management matters. These business management personnel are not necessarily technical experts in environment, safety, and health matters.

The Contracting Officer serves as the focal point for all contract matters as the government procurement agent. The Contracting Officer is the only individual authorized to a) accept nonconforming work, b) waive any requirement of the contract, or c) modify any term or condition of the contract.

DOE line management, as has been previously defined by DOE, starts at the Secretary, DOE, and extends through the program office, and the Operations Office to the contractor operating a DOE facility. Certain responsibility and authority regarding a contract may be officially delegated by the Contracting Officer in writing to Designated Officials, or Contracting Officers Representatives¹. These designated DOE personnel act as authorized representative of the Contracting Officer, for such functions as technical monitoring, inspections, and other functions of a more technical or programmatic nature. Designated Official authority is limited by the Contracting Officer to those actions not involving a change in contract scope, cost, terms, or conditions. The designation is personal and cannot be delegated to others. The contractor is provided copies of such designations and is expected (shall) comply with written direction provided by the Designated Officials acting within his/her authority.

Some Designated Official are DOE line management positions. For the BN contract the Assistant Manager for National Security and Assistant Manager for Environmental Management and their Deputies are Designated Officials. He/she, as Designated Official, is supported by program staff and technical support staff, including for example project managers, facility representatives, engineers, scientists, industrial hygienists, industrial safety specialists, quality assurance, and other technical experts. It is by actions of these Designated Officials and their line management staff and support personnel that DOE ensures (monitors, inspects, and assesses performance, etc.) They ensure that the contractor work is defined and authorized, and that the contractor is meeting the scope and all other requirements of the contract, including mandatory environment, safety, and health requirements. These DOE personnel also are responsible to evaluate contractor performance and provides input for fee determination and recommendations

¹ For the purposes of this report only Designated Official is used to mean Designated Official or Contracting Officer Representative. The responsibility and authorities of both designations are similar and depend on terminology used in an existing contracts. The DOE/NV contract with BN uses the terms Designated Official, and the other existing DOE/NV contracts use Contracting Officer Representative. There are currently about a dozen Designated Officials by name identified in the BN contract. Each person is designated by letter from the Contracting Officer as Designated Official on the BN performance-based management and operations contract.

to the Contracting Officer and the Fee Determination Official (Manager, DOE/NV).

When contractor non compliant conditions are encountered, DOE line management and the contractor work to resolve the condition. If the issues cannot be resolved within the authority of personnel at a low level, then issues will be elevated to higher levels of contract authority, including the Contracting Officer, Head of Contracting Activity levels, or Headquarters to resolve the issues. As defined in contracts, resolution may include stop work or ultimately termination of the contract. Ultimately, DOE retains responsibility for the safety of workers, the public, and the environment on DOE facilities and operations.

Mandatory Requirements. Requirements established as mandatory on contractors are those contained in the signed contract, and documents identified to be established by a contractor (and, as in the case of Work Smart Standards, DOE and contractor jointly) in contract provisions or as directed by the Contracting Officer, and approved by DOE. In addition, contractors are required to comply with all applicable federal, state, and local laws and regulations.

Authorization Basis or Authorization Basis Documents. DOE/NV develops Authorization Basis documentation when appropriate for significant hazards facilities² and activities as determined by DOE Order and DOE Standards. Authorization Basis documents serve as a binding agreements between DOE and the contractor assigned responsibility for operating a significant hazard DOE facility or activities. Both the contractor and ultimately DOE line management share responsibility for ensuring operational safety and compliance with the requirements defined in authorization basis documents. Authorization Basis documents are binding contract requirements only upon approval of the document by the DOE Contracting Officer or other Designated Official and provided in writing to the contractor. In essentially all cases such documents are required by provisions of clauses in contracts, DOE directives included in the contract, or otherwise directed by the Contracting Officer.

DOE/DP and DOE/EM have established guidance for the development of information collectively referred to as Authorization Basis. This documentation is to be established prior to a contractor being granted authority to commence hazardous operations in a significant hazard facility.

For a significant hazard DOE facilities, many authorization basis documents are produced: Safety

²Significant hazard facilities are defined for the purposes of this report only to include radiological or other significant potential hazard facilities or operations where such conditions may occur. Analysis of facility specific conditions, operations, and activities would be conducted and be classified in accordance with DOE-STD-1027 or DOE Order 5481.1. Classification would result in the identification of appropriate Authorization Basis documentation to be established, and mandatory requirements and controls would be identified as a result of specific documented analysis.

Analysis Report; Environmental Impact Statement; Findings of No Significant Impact; Environmental Assessment, Environmental Permits; Technical Safety Requirements; Operational Safety Requirements; contractor Environment, Safety and Health Management Plans; Nuclear Explosive Safety Studies; and other plans, procedures, analysis, and assessments. These documents serve as the DOE approved Authorization Basis documents. These Authorization Basis documents and contract clauses define the demarcation line between requirements established and controlled by the DOE and lower level process control (plans and procedures) documents developed, approved, and controlled by the contractor.

DOE control of requirements for significant hazard facilities is exercised through planning, development, and implementation of safety and environmental analysis and assessment documentation used as Authorization Basis. Planning documentation serves to define mitigating design features and requirements to be included in the facility design and administrative process control requirements to govern operations and activities. Facility specific planning documentation serves as a part of the basis for an ultimate DOE decision to authorize a contractor to operate a significant hazard DOE facility. The DOE Operations Readiness Review process provides another significant part of the basis of a DOE decision to authorize operations of a significant hazard facility. The Operations Readiness Review process assists DOE management to confirm that a facility, the contractor, and the DOE can demonstrate necessary capability to meet established requirements and controls. The DOE decision to allow operations to be conducted is focused on the adequacy of the facility and planned operations requirements and other control measures used to protect the public, workers, and the environment from the perceived hazards and ensures that the qualification and capability of personnel to implement the requirements and controls are in fact in place. The documents serve define the mandatory sets of safety, health, and environmental requirements and controls applicable to the specific facility (for example including: facility design features, configuration management, training and qualification of personnel, facility maintenance and surveillance, conduct of operations controls, and quality assurance requirements, and etc., to support an integrated management system).

Contractor procedures (which naturally contain some lower level of requirements) established to meet Authorization Basis requirements are contractor controlled documents. Such contractor plans, process controls, and implementation are subject to DOE review in periodic management assessments, inspection, and surveillance by the DOE/NV line management and support personnel. Identification of noncompliance and contractor corrective action would occur to resolve conditions found unacceptable. These contractor level documents are not normally reviewed and approved by the DOE.

By implementing a tailored approach in establishing authorization basis requirements documents and contractor implementing process documents, DOE has endeavored to define and control mandatory DOE requirements based on documented analysis, and then authorize hazardous operations after Operations Readiness Reviews have been successfully completed. This does not preclude the DOE from identifying a contractor controlled document as an Authorization Basis document. It also does not preclude the DOE Contracting Officer from approving and expecting

implementation of a contractor site-wide plan, program, or set of mandatory environment, safety, health, security, emergency management, or other operational or functional activities performed by the contractor under the contract or as directed by the Contracting Officer.

Binding Commitment Documents. The documents containing requirements considered binding on a contractor include: Contracts; contract modifications; and applicable federal, state, and local laws regulations and related permits and/or agreements; task plans³; and unilateral directions of the Contracting Officer provided in writing to the contractor. These documents (other than laws and regulations) are established for implementation upon approval of the Contracting Officer, appropriate Designated Official, or in some cases higher level authorized DOE/HQ program officials.

Changes to Binding Agreement/Commitment Documents. DOE/NV's role in review and approval of contractor documents is defined in various provisions of the contract. In addition to contract modifications and task plan modifications; DOE/NV review, approval, and control of changes to the facility Authorization Basis documents are required. The Unreviewed Safety Question process, as defined in DOE Order 5480.21, is used to evaluate and control, and approve changes which may impact Authorization Basis documents applicable to significant hazard facilities. Such changes may involve facility considerations as well as administrative control procedures establish to meet mandatory DOE safety requirements. Changes to DOE approved Authorization Basis documents are reviewed and approved by the same DOE level as originally approved the document. Changes to lower level contractor processes are approved by contractor management. These change mechanisms also serve to establish a demarcation line between DOE and contractor authority to change requirements and controls.

Work Smart Standards are binding contract requirements only upon incorporation in a contract initially, by modification, or by unilateral direction of the Contracting Officer.

WSS have been established for DOE/NV on an activity basis for complex-wide application, with some exceptions. These exceptions include: nuclear device assembly/disassembly, energetic experiments (with special nuclear material), nuclear explosive safety, safeguards and security for special nuclear materials, classification of information, and national emergency response assets activities. Certain DOE Orders provide DOE mandatory requirements for these exception activities, and appropriate DOE Orders governing these activities are included in contracts, where appropriate.

³Task plans are a DOE Work Authorization Process document established in the BN contract used to define programmatic and business management commitments (lower level scope, schedule, and budget/cost commitments).

The DOE/NV complex-wide WSS set was developed using the DOE approved Necessary and Sufficient Closure Process by analysis of all work activities based on hazard analysis. These WSS are intended to apply DOE/NV complex-wide to our M&O contractors, laboratories, and other federal agencies and users of DOE/NV facilities performing work under the purview of DOE/NV, upon incorporation in contracts and other agreements.

The DOE/NV, Bechtel Nevada (BN), and other interested stakeholders participated as a convened group to evaluate the work, identify associated hazards and available hazard analysis documents, and define appropriate laws, regulations, standards, and DOE directives to be included in the WSS set. The BN contract was modified in July 1997 to incorporate the DOE/NV complex-wide WSS set, change several contract clauses impacted by the set (DEAR clauses involving DOE Orders), and revised (significantly reduced) the Appendix which originally listed 160 DOE Directives included as mandatory requirements⁴. Revision of the DOE directives list was accomplished subsequent to the establishment of DOE/NV complex-wide WSS by an effort of coordination with DOE/NV Offices of Primary Responsibility (OPRs) and the contractor, in light of the WSS set. Currently for their assigned activities under the contract, BN is responsible for implementing, on a site-wide basis and activity basis, environment, safety and health programs consistent with the WSS defined in the contract and their ES&H Management System. The BN Integrated ES&H System description (an earlier title of an Integrated Safety Management System description) was reviewed and approved by DOE/NV under the terms of Dear Clause 970.5204-2, Environment, Safety, and Health by contract modification M011, dated 9/17/96. The 5204-2 clause in the current BN contract is a version unique to the BN contract and predates the new June, 1997, version. The June 1997 Clause is not yet in any DOE/NV contracts. Current direction from DOE/HQ procurement officials requires the new 5204-2 and 5204-78 clauses to be negotiated into existing M&O contracts, such as BNs, by December 1997.

Authorization Agreements. Currently "Authorization Agreement" is an evolving term which continues to be the subject of much debate between the DOE and members of the DNFSB and staff. The new DEAR Clause 970.5402-2 (June 1997), paragraph (b)(7), discusses agreements tailored to the complexity and hazards associated with the work. Currently, guidance is being developed under the direction of Richard Crowe, S-3.1, DOE/HQ, for inclusion in the Integrated Safety Management System Guide. Several Technical Reports, published by the DNFSB, have endeavored to place illumination on the nature of an "Authorization Agreement".

"Authorization Agreement", as a new term, initially received DOE/NV attention as it was

⁴ For the BN contract, WSS consists of the 1) "DOE/NV Industrial Standards Program, N&S Closure Process Documentation", Volumes 1 & 3 which define the work, identify the hazards and management risks, identify the laws, regulations, standards, and DOE Directives (requirements) that apply to the defined work, and implementation considerations; and 2) Section J, Appendix I, which listed DOE Directives. BN in turn, has established organizational plans and procedures based on DOE approved WSS as agreed in the contract.

discussed in DNFSB-TECH 5⁵. "Authorization Agreement", as used in Tech-5 appeared as a reference to an agreement document between the DOE and a DOE contractor facility operator which would be akin to an NRC nuclear reactor license application, an agreement between the NRC and the Licensee (owner). What appeared desirable from the DNFSB-TECH 5 perspective was three things in one document: 1) a binding agreement/commitment of the parties to a contract on a set of mandatory conditions and requirements (or referenced approved requirements document list) for contractor implementation; 2) an understanding of the documentation DOE used (by referenced approved documents or directly in the authorization agreement document) to base the decision to authorize a contractor to operate a hazardous DOE facility; and 3) DOE and contractor commitment to ensure, through assessments of performance and mutual feedback, the protection of the public, worker, and environment. DNFSB-TECH 5 did not appear to expect DOE to be in the review and approval cycle of all contractor safety plans, procedures, and other processes controlling the performance of work of a general nature or every particularly work activity in a significant hazard facility.

Authorization Agreement to the Board appears to mean much the same as Authorization Basis documents mean to the DOE/NV, except for the possible larger expectation on the part of the Board for a "composite of information a contractor must provide in response to all ES&H requirements applicable to a facility," as discussed in TECH-5. It appears, and rightfully so, that DOE/NV could currently identify a single document which lists those documents established as facility specific Authorization Basis document, and collocate identification of the documents upon which DOE bases the decision to allow authorization to be granted in one summary level document called an "Authorization Agreement". Maybe a DOE requirement for a document such as the Authorization Agreement can serve these purposes. However, under existing guidance, the Authorization Basis documents are identified in the planning phase, are established, provide a basis for DOE/NV's action to grant authority to our contractors to operate, are in writing approved by authorized personnel, and identify the mandatory conditions and requirements under which our contractors must operate. DOE/NV Authorization Basis documents are under tight DOE/NV control.

DOE/NV has just very recently established one Authorization Agreement, Radioactive Waste Management Sites, dated September 4, 1997 and issued October 1, 1997. A second Authorization Agreement for the Device Assembly Facility is currently being developed and scheduled for completion in the first quarter of 1998. In addition, DOE/NV considers the modification to the BN contract which incorporated WSS as the Authorization Agreement for general work defined as a part of the DOE/NV WSS process and operations under the contract.

DEAR Clauses. DOE/NV has implemented DEAR Clause, 970.5204-2, Environment, Safety, and Health, and Clause 5402-78, Laws, Regulations, and DOE Directives, as these clauses were

⁵Fundamentals for understanding Standards-Based Safety Management of DOE Defense Nuclear Facilities, Paper prepared for DNFSB Public Meeting 5/31/95 on Standards Based Management, by Joseph J. DiNunno.

defined and included in the initial BN contract signed in 1995, and subsequently modified in May 1997 and September 1997, as a result of DOE/NV establishment of complex-side WSS. In July 1996 DOE/NV approved the BN Integrated ES&H Management System description document, in accordance with Clause 5204-2. Subsequently, DOE/NV, BN, and other DOE/NV stakeholders, including workers, participated in the Necessary and Sufficient (N&S) Closure process to establish a set of applicable complex-wide laws, regulations, standards, and DOE Directives for the work. The May 1997, contract modification M024 incorporated complex-wide WSS documents by reference into Clause 5204-2 and 5204-78 and changed the Appendix of DOE Directives. The listing of DOE Directives (an appendix listing 160 DOE Orders) significantly reduced the number of applicable orders. Since DOE/NV management exempted some activities from the N&S process and the contractor was not prepared to implement the new Life Cycle Asset Management DOE Directive and was relying on predecessor contractor systems, three lists of DOE Orders were necessary to clarify applicability and added to the BN contract. The referenced WSS documents approved by DOE/NV identify some DOE Orders and other DOE documents along with laws, regulations, and standards. In an Appendix to the BN contract, List A contains DOE Directives applicable to activities not included in the Necessary and Sufficient Process. List B contains DOE Directives applicable to the Device Assembly Facility. List C contains DOE Directives applicable to Life Cycle Asset Management.

In addition, DOE/NV has received direction from Procurement Executive, DOE/HQ, in a DEAR ACQUISITION LETTER dated September 26, 1997, to incorporate certain new or changed contract reform clauses, including the new DEAR Clause 5204-2 and 5204-78 (June 1997) which must be negotiated into existing contracts (BN) by December 1997. Also, the DOE/NV Security Protection Force Contract is currently in process for re competition, and the new clauses are being included in the Request for Proposals now under development.

**Oakland Operations Office
Response to DNFSB Questions**

October 1997

*Reading File**10-14-97*

James M. Turner, Ph.D., Manager
DOE Oakland Operations Office

OAK Response to September 15, 1997, DNFSB
Questions Regarding Institutionalization of ISMS

Dick Crowe, Director
DOE Safety Management Implementation Team

The subject OAK response was electronically transmitted to your office on October 10, 1997, and the printed copy is being sent today, as requested. This memorandum serves as confirmation that the electronic transmittal from Charles Simkins to Richard Wolfe of your office was the official OAK response and is identical to the printed version attached to this memorandum.

If there is any further information needed, please contact OAK through Charles Simkins or T.K. Subramanian.

IS/ JMT

James M. Turner, Ph.D.
Manager

Attachment

cc: Frank Peters, FM-1

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

(OAK Responses to Enclosure)*

Letter of September 15, 1997

John T. Conway to Frederico F. Pena

Overview of OAK's Approach to Contract Management

OAK provides DOE field management of three major contracts for management and operation of the Lawrence Livermore National Laboratory (LLNL), the Lawrence Berkeley National Laboratory (LBNL), and the Stanford Linear Accelerator Center (SLAC). Because the nature of the missions of the three laboratories is research and development, OAK has awarded cost-reimbursable contracts that conform to Departmental requirements. In particular, through the use of performance-based management concepts which provide for greater contractor accountability and cost effectiveness, the recently awarded contracts with the University of California for managing and operating LLNL and LBNL are very much aligned with the Department's Contract Reform Initiative.

The OAK Manager is the Head of Contracting Activity (HCA); is the senior Departmental contracting official for LLNL, LBNL and SLAC; and has broad authorities and responsibilities (generally prescribed in DOE Directives) for managing a comprehensive range of governmental functions and assigned programs. As HCA, the OAK Manager has the ultimate authority to commit the government to contractual obligations and make all decisions reserved to contracting officers under the provisions of a contract. The OAK Manager has re-delegated this contracting authority in writing to warranted contracting officers who can take formal contract actions and exercise government rights under the contract.

In the day-to-day management of contracts, most issues are either resolved before a formal contract action is required or result in a mutually agreeable contract action. Formal contract actions typically follow a process of internal OAK assessment of contract issues by assigned lead organizations (with input from subject matter experts) and an opportunity for the contractor to respond before a proposed contract action is taken. Formal contract actions include contract modifications to add, modify or replace terms, conditions and requirements (applicable directives); issuance of stop-work orders; determination of cost allowability; and termination (in part or whole) of the contract.

In addition to warranted contracting officers, the OAK Manager has designated others to carry out specific contract management duties within the contract terms and conditions. With regard to environment, safety, and health (ES&H) activities, the OAK Functions, Responsibilities and Authorities Manual (FRAM) details specific OAK organizational designations (site managers, program managers, functional managers, and facility representatives) and contract management duties, such as: including appropriate ES&H contract clauses and applicable standards in contracts;

October 16, 1997

OAKDNFSB.wpd FINAL

approving safety management plans and related documents; entering into authorization agreements for selected facilities; and assessing contractor ES&H performance. These duties are carried out within the general framework of and consistent with the terms and conditions of existing contracts for the three (3) major laboratories under OAK cognizance.

The use of performance-based management is fundamental to OAK's approach to contract management. The prime tools for implementing this approach are appropriate performance expectations and measures, vigorous and credible contractor self-assessments, and OAK contractor performance validations and assessments which are heavily based on knowledge of on-going operations.

OAK has shifted its oversight focus from compliance to performance results. A heavy investment of effort is made with the contractor to establish clear, well-defined performance expectations that are fully understood by all parties. During performance, the contractor is held accountable for identifying problems, root causes and solutions. A sound knowledge of on-going operations is acquired by OAK through implementation of Assessment Management Plans (AMPs). AMPs describe the annual OAK activities at each site which provide knowledge useful to contractor ES&H performance assessment. These activities include assessment of contract performance expectations and measures, operational awareness activities (including Facility Representative activities), and formal appraisals/inspections/reviews.

OAK's day-to-day operations are directed towards a results-oriented, proactive approach to contract management. This approach is intended to motivate contractor self-improvement and avoid potential contractual problems and disputes. If required, the full range of cost-reimbursement contract remedies are available and can be exercised within OAK's contracting authority.

OAK's specific responses to the questions posed by the DNFSB are as follows:

A. Contracting Policy and Practices

A.1. On what basis does the Contracting Officer decide which DOE requirement (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 970.5204-78, how is "List B" initially arrived at for a given contract?

Response:

- o The ES&H Clauses in DOE-OAK's M&O contract for the Lawrence Livermore National Laboratory resulted from a decision made by the Contracting Officer in consultation with environmental safety and health subject matter experts, program management personnel, and the Site Manager. (Reference ENG-48, 6.0 SITE MANAGEMENT) (DEAR 923.7002[a])
- o DOE OAK's automatic notification (EXPLORER) of all DOE Directives, Orders and Notices goes to the Contracting Officer, program managers, environment safety and health personnel, and the Site

Manager. The Contracting Officer, in consultation with program managers, subject matter experts, and the Site Manager, determines requirements in the Directives System applicable to the contract (site).

The applicable requirements are included in the contract in the Appendix G listing, which is updated as new or changed requirements as developed by DOE. As "Work Smart Standards" are developed for a project and/or site wide application, Appendix G is modified to incorporate those standards. (Reference ENG-48, 5.0 CONTRACT ADMINISTRATION, Clause 5.5 - DEAR 970.5204-78 Laws, Regulations, and DOE Directives) (DEAR 970.0470-1[a] and [b], DOE N450.3, DOE M450.3, DOE P450.3)

A.2. How does the Contracting Officer become informed regarding the safety requirements of a contract?

Response:

- o There are two processes that keep the Contracting Officer informed of safety and other requirements:
 - (1) The "Explorer" program automatically informs the DOE/OAK Contracting Officer of new DOE Directives, Orders and Notices that are issued and/or changed. When this happens, the Contracting Officer queries the program managers, subject matter experts, and Site Manager regarding applicability to the contract/site. Subsequently the contractor (UCOP) is formally notified and transmitted the new requirement for consideration and inclusion in the contract. In addition, the WSS process, (DOE M450.3) provides instruction to the OAK office and the contract on how to invoke the process to address such issues.
 - (2) Program managers, subject matter experts, and the Site Manager periodically notify the Contracting Officers of new requirements to consider for inclusion in the contract. (Reference ENG-48, 5.0 CONTRACT ADMINISTRATION, Clause 5.5 - DEAR 970.5204-78, Laws, Regulations, and DOE Directives, Para. [f])

A.3. By what processes or procedures does the Contracting Officer become aware that contract safety requirements have been violated or have not been adequately implemented?

Response:

- o The contractor is required to notify the Contracting Officer, Program managers, the Site Manager and ES&H/DOE Facility Representatives of violations. DOE Line Managers, ES&H personnel and/or the Site Manager also notify the Contracting Officer of violations and suggest actions for Contracting Officer consideration. The OAK Facility Representative program provides Operational Awareness of the DOE non-reactor nuclear facilities. The Facility Representatives presence at the site, which will assist the responsible managers with regular knowledge of operational safety as well as providing the Contracting Officer with input on potentially unsafe conditions.

**A.4. 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?**

Response:

- o Under the new incentive fee arrangement the Contracting Officer can penalize and/or reward the contractor annually for its overall environment, safety and health performance. (Reference ENG-48, 5.0 CONTRACT ADMINISTRATION, Clause 5.3 - Program Performance Fee; Appendix F - PERFORMANCE OBJECTIVES, CRITERIA, AND MEASURES)
 - o The Contracting Officer has ability to terminate the contract in whole or in part for noncompliance with contract requirements. However, in addition and preference to the termination contractual remedy, the Contracting Officer has the right to stop work under all, or a part of, the contract for the contractor's failure to meet requirements. (Reference ENG-48, 13.0 TERM OF CONTRACT/TERMINATION; and 5.0 CONTRACT ADMINISTRATION, Clause 5.12 - FAR 52.242-15 Stop-Work Order, (Reference ENG-48, 6.0 SITE MANAGEMENT, Clause - DEAR 970-504-2 Integration of Environment Safety, and Health into Planning and Execution).
 - o Extra-contractual enforcement measures are available:
 - (1) The Environmental Protection Agency, California Environmental Protection Agency and local governing authorities can also affect contractor operations for reasons of noncompliance by issuing citations and fines. (Reference ENG-48, 6.0 SITE MANAGEMENT, Clauses 6.7 - DEAR 970.5204-2 Integration of Environment Safety and Health into Planning and Execution; 6.8 - DEAR 970.5204-29 Permits and Licenses; 6.9 - FAR 52-223-2 Clean Air and Water; 6.10 - FAR 52.223-3 Hazardous Material Identification and Material Safety Data; 6.11 - FAR 52.223-10 Waste Reduction Program).
 - (2) Under the Price-Anderson Amendments Act (PAAA), the Department can issue notices of violation when a contractor violates a nuclear safety regulatory requirement. For willful and knowing violations, the Department, pursuant to the PAAA, may also recommend to the Department of Justice that criminal action be taken against the contractor. (Reference ENG-48, 4.0 LITIGATION AND CLAIMS, Clause 4.3 - DEAR 952.250-70 Nuclear Hazards Indemnity Agreement). The University of California which operates Lawrence Livermore National Laboratory has been exempted from civil penalties because it is a non profit organization. However, the University of California is not exempted from criminal penalty
- A.5. When contract safety requirements are violated or improperly implemented, who bears the cost burden of the corrective action?**

Response:

- o Under the cost reimbursement contract, the Department would reimburse the contractor for costs incurred in performance of the contract, including the costs of corrective actions, that are allowable, allocable and reasonable. Costs that do not meet the test of allowability, allocability and reasonableness or are specifically identified in the contract as unallowable are borne by the contractor. The costs related to fines and penalties are specifically identified as unallowable. (Referenced ENG-

A.6 What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety terms and conditions are violated?

Response:

- o The Department has yet to develop guidance for establishing and implementing authorization agreements, including the manner in which such agreements might be incorporated into a contract. Dependent upon the circumstances of the violation and the requirements violated, the Contracting Officer has the actions specified in the above answer to Question A.4. at his/her disposal. (See the response to Question A.4. above.)

A.7 What are DOE's safety training and qualification requirements for Contracting Officers who are responsible for defense nuclear contracts?

Response:

- o OAK Contracting Officers (GS Series 1102) have no safety training and qualification requirements. The educational requirements, academic and training, for the 1102 Series are principally business related. (Reference DOE Order 541)
- o OAK Contracting Officers, as well as other OAK personnel, have opportunities to take program management courses. They are also required to attend formal safety briefings for normal facility operations and access including radiation safety training. For example, the Contracting Officer requiring access to NIF has taken the mandatory safety briefings. All personnel accessing the Superblock are required to complete facility safety training/review.

A.8 What staff support, technical and legal, is provided to the Contracting Officer on a day-to-day basis with respect to contract compliance issues that involve safety?

Response:

- o OAK Contracting Officers have day-to-day access to a full complement of expertise: Program and Site Managers, ES&H subject matter experts and management; environmental and contract law counsel; business and operations personnel; OAK Senior Managers and the HCA. This is facilitated by the close geographic proximity of the sites to the Operations Office.

B.1. Referring to Figures 10, 11 and 12 and paragraph 3.3.2.4 of DNFSB/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

Response:

The OAK safety planning process does not follow Tech-16 although it recognizes the intent of the illustrations. The term "tightly control" is not clear but the OAK nuclear facilities are operated under the DOE standards for nuclear facilities and the SAR/TSR etc. standards are used. All other facilities are controlled under the terms of the contract based upon individual evaluation of the work and hazards.

B.2 What processes and means does DOE use to communicate acceptance of contractors' work specific safety plans for hazardous work?

Response:

The role of the DOE Facility Representative (FR), is described in the response to B.3(d). The FR has regular interactions with the contractor and both the FR and the responsible program manager meet regularly with their counterparts in the contractor's organization. OAK does not accept work specific plans as assumed by the question. OAK requires overall planning effectiveness by the contractor which eliminates the need to review and accept work specific plans.

B.3 "Authorization Agreement" has been defined in DNFSB/TECH-16 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 970.5204-78?**

Response:

While the term Authorization Agreement is convenient for describing such contracts, the existing contract contains sufficient existing standards utilizing DOE Orders and voluntary consensus standards as well as existing laws and regulations. OAK and LLNL have participated in development of guidance to the Safety Management Implementation Team (SMIT) to address Authorization Agreements. It is expected that this will result in Departmental guidance on Authorization Agreements.

- (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?**

Response:

This would depend upon analysis of the hazards associated with the work. For high hazard nuclear facilities, a greater degree of familiarity and discussion between DOE and the contractor may take place but due to the type of experimental work being performed, the contractor is most qualified to evaluate the adequacy of work practices. See the response to part (c) below.

- (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) site-wide 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?**

Response:

Site-Wide controls consist of the DOE approved Environmental Impact Statement, and regulatory agency approved air, water, and waste permits. Facility level controls include the DOE approved SARs, Technical Safety Requirements (TSRs) and LLNL approved Facility Safety Procedures. Activity controls generally consist of contractor approved Operation Safety Procedures and Operating Procedures. Task Controls include contractor approved maintenance task codes, Surveillance Requirement Procedures, Administrative Control Procedures, etc.

DOE approves top level controls such as documentation to support NEPA determinations (Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements), Safety Analysis Reports, Technical Safety Requirements (TSRs), and concurs or approves on environmental permits. However, DOE approves through the Administrative Control Section of the TSRs the contractors commitment to having a Facility Safety Procedure and Operational Safety Procedures in place as well as Safety Management Systems that include the task level controls which DOE does not provide prior review and approval. The validation of implementation of controls that are site-wide, facility, activity, and task levels are part of DOE's assessment process.

- (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?**

Response:

The DOE Facility Representatives are generally responsible for ensuring that site-wide controls, as implemented at the facility level, and facility, activity, and task level controls and processes are in place and are effective for nuclear and other assigned non-nuclear facilities. Other technical staff generally cover non-nuclear facilities not assigned to Facility Representatives. Facility Representatives and technical safety experts report to line managers who are held accountable for ensuring that adequate controls are in place and the risks associated with authorized activities are acceptable.

- B.4. 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?**

Response:

The Authorization Agreement for the Lawrence Livermore National Laboratory (LLNL) Plutonium Facility requires in Section 5.B of the agreement that the contractor conduct operations within the controls specified in the DOE approved Technical Safety Requirements (TSRs) document. These TSRs include Administrative Controls which include Operational Safety Procedures, a Radiation Safety Program, a Maintenance Program, and an Emergency Response Program in addition to several other safety management programs such as an Unreviewed Safety Question Program, Emergency Preparedness Program, Criticality Safety Program, Fire Protection Program, Measuring and Test Equipment Program, Configuration Management Control Program, Radioactive Materials Shipping and Receiving Program, and a Quality Assurance Program. Appendix F addresses site-wide safety management programs which are evaluated through both regular Operational Awareness activities as well as the annual pilot appraisal.

C.1. What is the status of the implementation of DEAR clauses 970.5204-2 and 970.5204-78 at your site?

Response:

They are required to be, and are included in the new contract. There are also 2nd tier agreements, such as SARs, which implement the requirements of the clauses.

C.2. Do you anticipate any difficulty ensuring that the DEAR clauses and contract requirements flowing therefrom are carried through into subcontracts?

Response:

No.

C.3. Does the authorization Agreement at your site require the contractor to notify DOE when the contractor self-identifies a violation of the agreement?

Response:

The LLNL Plutonium facility authorization agreement requires the contractor to notify DOE when any violation of the agreement occurs including self identified violations.

C.4 All approved Authorization Agreements lack a commitment to a contractor self-assessment and corrective action program. Why is this so in your case?

Response:

The requirement for contractor self assessment and corrective action programs is contained in other documents such as Appendix F of the DOE/UC contract and the Administrative Control section of the TSRs for B332.

C.5 Is there an incentive clause in the contract addressed specifically to performance of work in conformance with an Authorization Agreement?

Response:

No. Since the definition of the term Authorization Agreement does not exist within the Department, it would be improper to invoke it within the terms of a contract without creating a definition. The existing contractual terms and agreements are used in the existing Authorization Agreement for the Superblock and as such contain incentives.

C.8 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?

Response:

The scope of activities defined in the Authorization Agreement for the LLNL Plutonium Facility is intentionally general and basically is limited to research and development activities involving unencapsulated fissile materials.

C.9 For new experimental work, there needs to be a mutually agreed-upon (and DOE approved) 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 the commitment to such a protocol. Please explain.

Response:

Work activities are dynamic and any new work must undergo two distinct review processes in order to be authorized. The Unreviewed Safety Question (USQ) process ensures that any new work or changes in current activities be analyzed against the Safety Analysis Report and TSRs. Any increase in risk requires DOE approval prior to proceeding. In addition to the USQ process, the National Environmental Protection Act (NEPA) requires a review for environmental impacts for any proposed new activities and DOE approval of supporting documents. Both these processes are specifically identified in the Authorization Agreement as part of the basis for authorization.

D. Contract Violations and Remedies

OAK would preface the answers to the question with:

Generally, there is insufficient information contained in the questions posed to provide a detailed response to the questions posed. When such problems do arise, there must be a systematic process of data gathering and assessment with first priority given to assuring continued safe operations or, if required, cessation of operations. An important part of fixing a problem is to deal directly with contractor top management to ensure commitment to corrective actions and that appropriate management is held accountable. After operational corrective actions are implemented, the focus can shift to assessing appropriate contract violations and remedies.

As a first step in the assessment of contract violations and remedies in any of these scenarios, the actions of the various parties, including the Government, must be thoroughly understood. For example, in question D.2, if the contractor requested funding to meet the fire protection requirements of the contract but the Government did not

provide adequate funding, sole contractor responsibility is questionable. As another example, the civil penalty in question D.3 would normally be an unallowable cost under the contract. However, in accordance with contract provisions, if the contractor's fine occurred because the contractor was complying with a specific direction of the contracting officer or other terms of the contract, then the contractor would likely be reimbursed for the fine.

Even if the contractor is solely responsible for a problem, responsibility must first be evaluated in the context of the contract arrangement. Under a cost reimbursement contract such as the one with LLNL, the contractor is expected to use its best efforts to perform the contract work requirements and will be reimbursed the cost of performing the work as long as the Government provides funding and the costs are deemed to be reasonable, as defined by Government contracting standards.

The contract would then be further evaluated to identify applicable terms and conditions which might be pertinent to the facts surrounding the problem. There could be multiple provisions of the contract with varying degrees of remedies and sanctions (e.g., award/incentive fees, stop-work authority, allowability of costs, changes, and contract termination) that would need to be evaluated, and decisions on appropriate actions to be taken must be made by the contracting officer. The contracting officer's decision must balance programmatic, environment, safety, and health, business, and legal considerations, but above all must be fair and reasonable.

Specific response to the questions are as follows:

D. Contract Violations and Remedies

Consider the following possible scenarios:

D.1. 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?**

Response:

The contractor is not prohibited from performing a preliminary ORR to assess his state of readiness. Prior to startup the DOE must review and concur in the formal ORR.

D.2. 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?**

Response:

The general answer to part a) is that the contractor is in violation of the contract unless there are extenuating circumstances, such as directions from the DOE or failure to provide requested funding which cause the work to be done without allowing the contractor to meet fire protection requirements. The answer depends upon the level of responsibility of the contractor, i.e. who failed to meet the standards. Parts b) through d) are covered in the preamble to these answers.

D.3. 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?**

Response:

The contract requires compliance with all applicable laws and regulations so that the contractor is in violation of the contract unless there are other mitigating circumstances such as failure to provide requested funding. Remedies/Sanctions would be assessed in light of the details of the incident as discussed in the preamble. LLNL is exempt from civil penalties by statute.

D.4. 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?**

Response:

The OAK Authorization Agreement consists of existing contractual agreements. The degree to which the alleged violations are serious and purposefully done will be evaluated by the appropriate parties at OAK and in the worst case referred to the Assistant Secretary for Environment, Safety, and Health, for Price Anderson Amendments Act actions or otherwise handled in accord with performance measures in the contract and the terms of the contract. Without specific reference to just what "important safety terms" may be, it is not possible to define the remedies or sanctions to be applied.

D.5. 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?**

Response:

DOE does not review and approve the contractor's procedures except as explained under the Response to question B.3(c) which applies to all LLNL facilities. At OAK, safety assessments are carried out which review work practices. Unless violation of standards has occurred due to the use of improper procedures or failure to follow proper procedures, there is no violation of the contract. The part b) question is dependent upon the above circumstances being considered and presupposes that the contractor is in error.

D.6. 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?**

Response:

The premise to the question provides the answer as it defines a violation of the contract. This is answered in A.5, A.6., B.3(b)(c). The contract does not differentiate except as performance measures are evaluated.

The contractual remedies and sanctions for contract violations are discussed in the preamble to these answers.

Attachments

Clauses from University of California Contract referenced in response

CLAUSE 3.2 - DEAR 970.5204-13 ALLOWABLE COSTS (MANAGEMENT AND OPERATING) (JUN 1997) (DEVIATION)

(23) Fines and penalties, unless, with respect to civil fines and penalties only, the Contractor demonstrates to the Contracting Officer that,

- (i) Such a civil fine or penalty was incurred as a result of compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer; or
- (ii) Such a civil fine or penalty was imposed without regard to fault and could not have been avoided by the exercise of due care.

4.0 LITIGATION AND CLAIMS

CLAUSE 4.3 - DEAR 952.250-70 NUCLEAR HAZARDS INDEMNITY AGREEMENT (JUN 1996)

(a) Authority. This clause is incorporated into this contract pursuant to the authority contained in Subsection 170d. of the Atomic Energy Act of 1954, as amended, (hereinafter called the Act.)

(b) Definitions. The definitions set out in the Act shall apply to this clause.

(c) Financial protection. Except as hereafter permitted or required, in writing, by DOE, the Contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability, as described in subparagraph (d)(2) below. DOE may, however, at any time require, in writing, that the Contractor provide and maintain financial protection of such a type and in such amount as DOE shall determine to be appropriate to cover such public liability, provided that the costs of such financial protection are reimbursed to the Contractor by DOE.

(d) Indemnification.

(1) To the extent that the Contractor and other persons indemnified are not compensated by any financial protection permitted or required by DOE, DOE will indemnify the Contractor and other persons indemnified against

(i) claims for public liability as described in subparagraph (d)(2) below; and

(ii) such legal costs of the Contractor and other persons indemnified as are approved by DOE, provided that DOE's liability, including such legal costs, shall not exceed the amount set forth in Section 170e.(1)(B) of the Act in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or \$100 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in (d)(1) above is public liability as defined in the Act which

(i) arises out of or in connection with the activities under this contract, including transportation; and

(ii) arises out of or results from a nuclear incident or precautionary evacuation, as those terms are defined in the Act.

(e) Waiver of defenses.

(1) In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the Contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

(2) In the event of an extraordinary nuclear occurrence which:

(i) Arises out of, results from, or occurs in the course of the construction, possession, or operation of a production or utilization facility; or

(ii) Arises out of, results from, or occurs in the course of transportation of source material, by-product material, or special nuclear material to or from a production or utilization facility; or

(iii) Arises out of or results from the possession, operation, or use by the Contractor or a subcontractor of a device utilizing special nuclear material or by-product material, during the course of the contract activity; or

(iv) Arises out of, results from, or occurs in the course of nuclear waste activities, the Contractor, on behalf of itself and other persons indemnified, agrees to waive:

(A) Any issue or defense as to the conduct of the claimant (including the conduct of persons through whom the claimant derives its cause of action) or fault of persons indemnified, including but not limited to:

1. Negligence;

2. Contributory negligence;

3. Assumption of risk; or

4. Unforeseeable intervening causes, whether involving the conduct of a third person or an act of God;

(B) Any issue or defense as to charitable or governmental immunity; and

(C) Any issue or defense based on any statute of limitations, if suit is instituted within three years from the date on which the claimant first knew, or reasonably could have known, of his injury or change and the cause thereof. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.

(3) The term extraordinary nuclear occurrence means an event which DOE has determined to be an extraordinary nuclear occurrence as defined in the Act. A determination of whether or not there has been an extraordinary nuclear occurrence will be made in accordance with the procedures in 10 CFR Part 840.

(4) For the purposes of that determination, "offsite" as that term is used in 10 CFR Part 840 means away from "the contract location" which phrase means any DOE facility, installation, or site at which work under this contract is being carried on, and any Contractor-owned or controlled facility, installation, or site at which the Contractor is engaged in the performance of work under this contract.

(5) The waivers set forth above:

(i) Shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action;

(ii) Shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified;

(iii) Shall not preclude a defense based upon failure to take reasonable steps to mitigate damages;

(iv) Shall not apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant;

(v) Shall not apply to injury to a claimant who is employed at the site of and in connection with the activity where the extraordinary nuclear occurrence takes place, if benefits therefor are either payable or required to be provided under any workmen's compensation or occupational disease law;

(vi) Shall not apply to any claim resulting from a nuclear incident occurring outside the United States;

(vii) Shall be effective only with respect to those obligations set forth in this clause and in insurance policies, contracts or other proof of financial protection; and

(viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under

(A) the limit of liability provisions under Subsection 170e. of the Act, and (B) the terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.

(f) Notification and litigation of claim. The Contractor shall give immediate written notice to DOE of any known action or claim filed or made against the Contractor or other person indemnified for public liability as defined in subparagraph (d)(2). Except as otherwise directed by DOE, the Contractor shall furnish promptly to DOE, copies of all pertinent papers received by the Contractor or filed with respect to such actions or claims. DOE shall have the right to, and may collaborate with, the Contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right to (1) require the prior approval of DOE for the payment of any claim that DOE may be required to indemnify hereunder; and (2) appear through the Attorney General on behalf of the Contractor or other person indemnified in any action brought upon any claim that DOE may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by DOE, the Contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.

(g) Continuity of DOE obligations. The obligations of DOE under this clause shall not be affected by any failure on the part of the Contractor to fulfill its obligation under this contract and shall be unaffected by the death, disability, or termination of existence of the Contractor, or by the completion, termination or expiration of this contract.

(h) Effect of other clauses. The provisions of this clause shall not be limited in any way by, and shall be interpreted without reference to, any other clause of this contract, including Clause 5.10, Disputes, provided, however, that this clause shall be subject to Clause 1.6, Covenant Against Contingent Fees, and Clause 3.1, Accounts, Records, and Inspection, and any provisions that are later added to this contract as required by

applicable federal law (including statutes, executive orders and regulations) to be included in Nuclear Hazards Indemnity Agreements.

- (i) Reserved. (Note: The Contractor is specifically exempt from civil penalties pursuant to Section 34 of the Price-Anderson Amendments Act of 1988.)
- (j) Criminal penalties. Any individual director, officer, or employee of the Contractor or its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to criminal penalties, pursuant to Section 223(c) of the Act for knowing and willful violation of the Atomic Energy Act of 1954, as amended, and applicable DOE nuclear safety-related rules, regulations or orders which violation results in, or, if undetected, would have resulted in a nuclear incident.
- (k) Inclusion in subcontracts. The Contractor shall insert this clause in any subcontract which may involve the risk of public liability, as that term is defined in the Act and further described in subparagraph (d)(2) above. However, this clause shall not be included in subcontracts in which the subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under Section 170b. of the Act or NRC agreements of indemnification under Section 170c. or k. of the Act for the activities under the subcontract.
- (l) Indemnity agreement. This indemnity agreement shall be applicable with respect to nuclear incidents occurring on or after October 26, 1988.
- (m) Effect on other contract provisions. To the extent that the Contractor is compensated by any financial protection, or is indemnified pursuant to this clause, or is effectively relieved of public liability by an order or orders limiting same, pursuant to Section 170e. of the Act, the provisions of any clause providing general authority indemnity shall not apply.

CLAUSE 5.3 - PROGRAM PERFORMANCE FEE (SPECIAL)

(a) Fee . The Contractor shall receive an annual program performance fee of \$5,600,000 subject to the provisions below. Of the program performance fee \$3,920,000 shall be at risk in accordance with paragraph (b) below. The Contractor, for exceptional performance, may earn up to \$800,000 in additional fee as described in paragraph (c) below.

(b) Fee at risk. If, during any annual evaluation period, the Contractor's performance in science and technology fails to achieve the "good" rating as determined by DOE, the Contractor's program performance fee will be reduced by \$1,960,000. If the Contractor's performance in any administration and operations functional area fails to achieve the "good" rating the Contractor's program performance fee shall be reduced by \$196,000 for each administration and operations functional area in which the "good" rating is not achieved. The Contracting Officer shall reduce the Contractor's authorization to draw down program performance fee from the payments cleared financing arrangement by the amount of any fee reduction due pursuant to this provision. In the event that a fee reduction under this provision is greater than the program performance fee due the Contractor, the Contractor agrees to remit the excess amount within 30 days of demand by the Contracting Officer.

(c) Exceptional performance.

(1) If, during any annual evaluation period, the Contractor's performance in science and technology achieves the "outstanding" rating the Contractor shall earn additional fee in the amount of \$240,000 for such an achievement. If during any annual evaluation period, the Contractor's performance in any administration and operations functional area achieves the "outstanding" rating the Contractor shall earn additional fee in the amount of \$56,000 for each such achievement. If the Contractor's performance in any administration and operations functional area achieves the "excellent" rating, the Contractor shall earn additional fee in an amount equal to 25% of the additional fee available for achieving the "outstanding" rating in that functional area. The Contracting Officer will authorize the Contractor to withdraw from the payments cleared financing arrangement the amount of additional fee earned pursuant to this provision within 60 days of DOE's determination of the final evaluation rating. The maximum amount of additional fee earnable under this provision shall be \$800,000.

(2) The allocation of additional fee is premised on the existence of 10 administration and operations functional areas at the Laboratory. In the event that the development of the performance-based management system results in a greater or lesser number of non-science and technology functional areas, the Parties agree to allocate the \$560,000 over the number of administration and operations functional areas actually being used for the evaluation.

(d) Payment of fees . The following terms shall apply in addition to the provisions of paragraph (a) of Clause 3.5, Payments and Advances:

(1) The program performance fee shall be paid to the Contractor from the funds obligated under the contract in monthly installments representing one-twelfth (1/12) of the annual fee.

(2) Fees once paid become the property of the Contractor and are not subject to audit or reduction except as otherwise provided for in this contract.

(e) Proration in the event of termination. In the event the contract is terminated in whole prior to the expiration date, the program performance fee payable under this contract shall be prorated to the date on which performance of work ceases. No proration shall be made for a partial contract termination; however, the Parties agree that if a partial termination substantially modifies the Contractor's performance and financial risk or reduces the magnitude of the work under the contract, an equitable adjustment to the program performance fee payable under this clause shall be made.

(f) Limitation on expenditure of fees. The Contractor, consistent with its nonprofit status, shall apply program performance fee paid under this contract only to the payment of costs arising from, or otherwise reasonably related to, the Contractor's management and oversight of Laboratory operations performed under this contract or under Contracts No. W-7405-ENG-36 and DE-AC03-76SF00098, including the payment of liability claims and the establishment of necessary and prudent risk pools for future claims incurred either during the

performance of the contract or as a consequence of termination of the contract, and the conduct of University-Directed Research and Development of this contract in accordance Clause 1.7, University-Directed Research And Development. At the completion of the contract term or termination of the contract pursuant to Clause 13.2, Termination, such fee amounts as shall remain unexpended for the foregoing purposes, including such amounts as remain in any Contractor established risk pools or reserves, shall be promptly paid or otherwise credited to the Government; nothing, however, herein shall preclude the Contractor from retaining that portion of funds it deems necessary and prudent for the payment of future claims until such time as a final settlement and release shall be agreed upon by the Parties.

**CLAUSE 5.5 - DEAR 970.5204-78 LAWS, REGULATIONS, AND DOE DIRECTIVES
(JUN 1997) (MODIFIED)**

- (a) In performing work under this contract, the Contractor shall comply with the requirements of applicable federal, state, and local laws and regulations, unless relief has been granted in writing by the appropriate regulatory agency.
- (b) In performing work under this contract, the Contractor shall comply with the requirements of those DOE Directives, or parts thereof, identified in the List of Applicable Directives (List) referred to in Appendix G, DOE Directives. The Contracting Officer may, from time to time and at any time, revise the List by unilateral modification to the contract to add, modify, or delete specific requirements; provided, however, that no directive added to the List shall in any manner modify the rights and obligations of the Parties except as set forth elsewhere in this contract.
- (c) Prior to revising the List, the Contracting Officer shall notify the Contractor, in writing, of DOE's intent to revise the List and provide the Contractor with the opportunity to:
- (1) Assess the effect of the Contractor's compliance with the revised List on contract cost and funding, technical performance, and implementation schedule for directives on the List; and
 - (2) Identify any potential inconsistencies between the revised List and the other terms and conditions of the contract, including an alternative set of requirements incorporated by reference in accordance with paragraph (f) below.
- (d) Within 30 days after receipt of the Contracting Officer's notice, the Contractor shall advise the Contracting Officer, in writing, of the potential impact of the Contractor's compliance with the revised List, including the matters identified in paragraph (c) above.
- (e) Based on the information provided by the Contractor and any other information available, the Contracting Officer shall decide whether to revise the List, and so advise the Contractor not later than 30 days prior to the effective date of the revision of the List. The Contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision of the List pursuant to Clause 5.6, Changes. No DOE directive shall be considered a requirement of this contract unless it has been included in the List in accordance with the procedures set out in this clause.
- (f) Environmental, safety, and health (ES&H) requirements applicable to this contract may be determined by a DOE approved process to evaluate the work and the associated hazards and identify an appropriately tailored set of standards, practices, and controls, such as a tailoring process included in a DOE approved Safety Management System implemented under Clause 6.7, Integration of Environment, Safety, and Health into Work Planning and Execution. When such a process is used, the set of tailored ES&H requirements, as approved by DOE pursuant to the process, shall be incorporated into the List as contract requirements with full force and effect. These requirements shall supersede, in whole or in part, the contractual environmental, safety, and health requirements previously made applicable to the contract by the List.
- (g) The Contractor shall be responsible for compliance with the requirements made applicable to this contract, for work performed at the Laboratory regardless of the performer of the work. Consequently, the Contractor shall be responsible for flowing down the necessary provisions to subcontracts at any tier to which the Contractor determines such requirements apply.

CLAUSE 5.12 - FAR 52.242-15 STOP-WORK ORDER (AUG 1989) ALTERNATE I
(APR 1984) (DEVIATION)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the Parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the Parties shall have agreed, the Contracting Officer shall either,

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in Clause 13.2, Termination.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an adjustment in any of the terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly.

(c) If a stop-work order is not canceled and the work covered by the order is terminated by the Government in accordance with Clause 13.2, Termination, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

CLAUSE 6.7 - DEAR 970.5204-2 INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO PLANNING AND EXECUTION (JUN 1997)

(a) For the purposes of this clause, safety encompasses environment, safety and health, including pollution prevention and waste minimization; and employees include subcontractor employees.

(b) In performing work under this contract, the Contractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment and shall be accountable for the safe performance of work. The contractor shall exercise a degree of care commensurate with the work and the associated hazards. The Contractor shall ensure that management of environment, safety, and health (ES&H) functions and activities becomes an integral but visible part of the Contractor's work planning and execution processes. The Contractor shall, in the performance of work, ensure that:

(1) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those Contractor and subcontractor employees managing or supervising employees performing work.

(2) Clear and unambiguous lines of authority and responsibility for ES&H are established and maintained at all organizational levels.

(3) Personnel possess the experience, knowledge, skills and abilities that are necessary to discharge their responsibilities.

(4) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.

(5) Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that the employees, the public, and the environment are protected from adverse consequences.

(6) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

(7) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the Contractor. These agreed upon conditions and requirements are requirements of the contract and binding upon the Contractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.

(c) The Contractor shall manage and perform work in accordance with a documented Safety Management System (System), that fulfills all conditions in paragraph (b) above at a minimum. Documentation of the System shall describe how the Contractor will:

(1) Define the scope of work;

(2) Identify and analyze hazards associated with the work;

(3) Develop and implement hazard controls;

(4) Perform work within controls; and

(5) Provide feedback on adequacy of controls and continue to improve safety management.

(d) The System shall describe how the Contractor will establish, document, and implement safety performance objectives, performance measures, and commitments in response to DOE program and budget execution guidance while maintaining the integrity of the System. The System shall also describe how the Contractor will measure system effectiveness.

(e) The Contractor shall submit to the Contracting Officer documentation of its System for review and approval. Dates for submittal, discussions, and revisions to the System will be established by the Contracting Officer. Guidance on the preparation, content, and review and approval of the System will be provided by the

Contracting Officer. On an annual basis, the Contractor shall review and update, for DOE approval, its internal safety performance objectives, performance measures, and commitments consistent with and in response to DOE's program and budget execution guidance and direction. Resources shall be identified and allocated to meet the safety objectives and performance commitments as well as to maintain the integrity of the entire System. Accordingly, the System shall be integrated with the Contractor's business processes for work planning, budgeting, authorization, execution, and change control.

(f) The Contractor shall comply with, and assist DOE in complying with, all applicable laws, regulations, and DOE Directives. The Contractor shall cooperate with regulatory authorities having jurisdiction over ES&H matters under this contract.

(g) The Contractor shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements and the System. If the Contractor fails to provide resolution or if, at any time, the Contractor's acts or failure to act cause substantial harm or an imminent danger to the environment or health and safety of employees or the public, the Contracting Officer may issue an order stopping work in whole or in part. Any stop work order issued by a Contracting Officer under this clause (or issued by the Contractor to a subcontractor) shall be without prejudice to any other legal or contractual rights of the Government. In the event that the Contracting Officer issues a stop work order an order authorizing the resumption of the work may be issued at the discretion of the Contracting Officer. The Contractor shall not be entitled to an extension of time or additional fee or damages by reason of, or in connection with, any work stoppage ordered in accordance with this clause.

(h) The Contractor is responsible for ensuring compliance with the ES&H requirements applicable to this contract at the facilities identified in Clause 6.1, Laboratory Facilities, regardless of the performer of the work. To the extent permitted by law, this paragraph is not intended to attribute any liability to the Contractor in the absence of a specific finding of fault on the part of the Contractor.

(i) The Contractor shall include a clause substantially the same as this clause in subcontracts involving complex or hazardous work on-site at a DOE-owned or DOE -leased facility. Such subcontracts shall provide for the right to stop work under the conditions described in paragraph (g) above. Depending on the complexity and hazards associated with the work, the Contractor may require that the subcontractor submit a Safety Management System for Contractor's review and approval.

CLAUSE 6.8 - DEAR 970.5204-29 PERMITS OR LICENSES (APR 1984) (DEVIATION)

(a) As part of the Contractor's obligation to comply with all applicable laws and regulations under Clause 5.5, Laws, Regulations and DOE Directives, and Clause 6.7, Integration of Environment, Safety and Health into Work Planning and Execution, the Contractor's obligations include, but are not limited to, the identification of required permits and licenses, the compilation of information and data required for applications for permits and licenses, and the provision of any supplemental information required by law or regulation as requested by the regulatory authority having jurisdiction. The Contracting Officer shall promptly inform the Contractor of any required permit or license of which DOE is aware or becomes aware.

(b) The Parties commit to full cooperation with regard to acquiring any necessary permits or licenses. It is recognized that certain permits will be obtained jointly and others will be obtained by either Party individually.

CLAUSE 6.9 - FAR 52.223-2 CLEAN AIR AND WATER (APR 1984)

(a) Definitions.

(1) "Air Act," as used in this clause, means the Clean Air Act (42 U.S.C. §§7401 et seq.).

(2) "Clean air standards," as used in this clause, means:

(i) Any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, work practices, or other requirements contained in, issued under, or otherwise adopted under the Air Act or Executive Order 11738;

(ii) An applicable implementation plan as described in Section 110(d) of the Air Act (42

U.S.C. §7410(d));

(iii) An approved implementation procedure or plan under Section 111(c) or Section 111(d) of the Air Act (42 U.S.C. §7411(c) or (d)); or

(iv) An approved implementation procedure under Section 112(d) of the Air Act (42 U.S.C. §7412(d)).

(3) "Clean water standards," as used in this clause, means any enforceable limitation, control, condition, prohibition, standard, or other requirement promulgated under the Water Act or contained in a permit issued to a discharge by the Environmental Protection Agency (EPA) or by a state under an approved program, as authorized by Section 402 of the Water Act (33 U.S.C. §1342), or by local government to ensure compliance with pretreatment regulations as required by Section 307 of the Water Act (33 U.S.C. §1317).

(4) "Compliance," as used in this clause, means compliance with:

(i) Clean air or water standards; or

(ii) A schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency, or an air or water pollution control agency under the requirements of the Air Act or Water Act and related regulations.

(5) "Facility," as used in this clause, means any building, plant, installation, structure, mine, vessel or other floating craft, location, or site of operations, owned, leased, or supervised by a contractor or subcontractor, used in the performance of a contract or subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the Environmental Protection Agency, determines the independent facilities are collocated in one geographical area.

(6) "Water Act," as used in this clause, means Clean Water Act (33 U.S.C. §§1251, et seq.).

(b) The Contractor agrees:

(1) To comply with the requirements of Section 114 of the Clean Air Act (42 U.S.C. §7414) and Section 308 of the Clean Water Act (33 U.S.C. §1318), and all regulations and guidelines issued to implement those acts;

(2) That no portion of the work required by this contract will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities unless and until the EPA eliminates the name of the facility from the listing;

(3) To use best efforts to comply with clean air standards and clean water standards at the facility in which the contract is being performed; and

(4) To insert the substance of this clause into any nonexempt subcontract, including this subparagraph (b)(4).

CLAUSE 6.10 - FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997) (MODIFIED)

(a) The Contractor shall submit a Material Safety Data Sheet (Department of Labor Form OSHA-20), as prescribed in Federal Standard No. 313B, for all hazardous material, whether or not listed in Appendix A to that Standard. This obligation applies to all materials delivered under this contract which will involve exposure to hazardous materials or items containing these materials.

(b) "Hazardous material," as used in this clause, is as defined in Federal Standard No. 313B, in effect on the date of Supplemental Agreement.

(c) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(d) Nothing contained in this clause shall relieve the Contractor from complying with applicable federal, state, and local laws, codes, ordinances, and regulations (including the obtaining of

licenses and permits) in connection with hazardous material.

(e) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate, and disclose any data to which this clause is applicable. The purposes of this right are to (i) apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous material; (ii) obtain medical treatment for those affected by the material; and (iii) have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (e)(1) above, notwithstanding any other clause of this contract providing for rights in data.

(3) To use similar or identical data acquired from other sources.

(f) (1) The data to which the Government has the rights described in paragraph (e) above, shall not be duplicated, disclosed, or released outside the Government, in whole or in part for any acquisition or manufacturing purpose, if the following legend is marked on each piece of data to which this clause applies:

This is furnished under United States Government Contract No. _____ and shall not be used, duplicated, or disclosed for any acquisition or manufacturing purpose without the permission of _____. This legend shall be marked on any reproduction of this data.

(End of legend)

(2) The Contractor shall not place the legend or any other restrictive legend on any data which (i) the Contractor or any subcontractor previously delivered to the Government without limitations or (ii) should be delivered without limitations under the conditions specified in the clause at FAR 52.227-14, Rights in Data - General.

(g) The Contractor shall insert this clause, including this paragraph (g), with appropriate changes in the designation of the parties, in subcontracts at any tier under this contract involving hazardous material.

CLAUSE 6.11 - FAR 52.223-10 WASTE REDUCTION PROGRAM (MAY 1995)

(a) "Waste reduction," as used in this clause, means decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of Section 701 of Executive Order 12873, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. Any such program shall comply with applicable federal, state, and local requirements.

Oak Ridge Operations Office
Response to DNFSB Questions

October 1997

memorandum

DATE: October 10, 1997


REPLY TO

ATTN OF: SE-33:McBride

SUBJECT: **OAK RIDGE OPERATIONS RESPONSE TO THE DEFENSE NUCLEAR FACILITIES
SAFETY BOARD QUESTIONS ON CONTRACT ADMINISTRATION**

to: Richard Crowe, Director, Safety Management Implementation Team, DP-3, HQ/GTN

Attached is the Oak Ridge Operations response to the Defense Nuclear Facilities Safety Board questions in their September 15, 1997, letter to the Secretary. If you have any questions, please contact me at 423-576-4442.


Steven D. Richardson
Deputy Manager

Attachment

cc w/attachment:

M. B. Whitaker, Jr., S-3.1/FORS

A. L. Alm, EM-1/FORS

P. N. Brush, EM-2/FORS

M. A. Krebs, ER-1/FORS

T. R. Lash, NE-1/FORS

V. H Reis, DP-1/FORS

OAK RIDGE OPERATIONS

RESPONSE TO

THE DEFENSE NUCLEAR FACILITIES

SAFETY BOARD

SEPTEMBER 15, 1997, LETTER

ON CONTRACT ADMINISTRATION



OCTOBER 10, 1997

Approved by: _____
James C. Hall, Manager

Oak Ridge Operations Response, October 10, 1997

Table of Contents

LIST OF ACRONYMS **4**

INTRODUCTION **6**

 Overview **6**

 Scope of this Response **6**

 Oak Ridge Contract Management **7**

 The Joining of Contract Authority with Safety Management Responsibility **8**

 Contract Incentives for Safe Work Performance **9**

 The Safety Improvement Opportunities of Fixed-Price Contracts **10**

 Authorization Agreements **11**

 Other Factors that Affect Safety Performance **13**

 The Importance of Partnering between ORO and its Contractors **13**

**RESPONSE TO DNFSB QUESTIONS FROM THE 9/15/97 LETTER
TO SECRETARY PEÑA** **15**

 Question A, Contracting Policy and Practices **15**

 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 970.5204-78, how is "list B" initially arrived at for a given contract? **15**

 A2 How does the Contracting Officer become informed regarding the safety requirements of a contract? **18**

Oak Ridge Operations Response, October 10, 1997

A3	By what process or procedures does the Contracting Officer become aware that contract safety requirements have been violated or have not been adequately implemented?	18
A4	What courses of action are available to the Contracting Officer to (a) penalize noncompliance with contract safety requirements, (b) ensure that the noncompliance is promptly corrected, or (c) reward a high level of compliance?	19
A5	When contract safety requirements are violated or improperly implemented, who bears the cost burden of the corrective actions? . .	20
A6	What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety terms and conditions are violated?	20
A7	What are DOE's safety training and qualification requirements for Contracting Officers who are responsible for defense nuclear contracts?	21
A8	What staff support (technical and legal) is provided to the Contracting Officers on a day-to-day basis with respect to contract compliance issues that involve safety?	21
Question B, DOE Review and Approval of Safety Control Measures		23
B1	Referring to Figures 10, 11, and 12 and paragraph 3.3.2.4 of DNFSB/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?	23
B2	What processes and means does DOE use to communicate acceptance of contractors' work-specific safety plans for hazardous work?	28
B3	"Authorization Agreement" has been defined in DNFSB/TECH-16 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:	28
B3.(a)	What referenced standard will be used by DOE to evaluate the adequacy of terms and conditions in Authorization Agreements	

Oak Ridge Operations Response, October 10, 1997

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 970.5204-78? **28**

B3.(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? **28**

B3.(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) site-wide controls, (b) facility controls, (c) activity controls, and (d) task controls. At what level does the DOE role become one of inspection rather than review and approval? **29**

B3.(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? **29**

Question C, Questions for Field Managers Who Have Approved Authorization Agreements **30**

Question D, Contract Violations and Remedies **31**

Oak Ridge Operations Response, October 10, 1997

LIST OF ACRONYMS

ASA	Auditable Safety Analysis
BIO	Basis for Interim Operations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COR	Contracting Officer's Representative
DEAR	Department of Energy Acquisition Regulations
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
DP	Defense Programs
EF	Enrichment Facilities
EM	Environmental Management
EPA	Environmental Protection Agency
ES&H	Environment, Safety, and Health
ETTP	East Tennessee Technology Park
HCA	Head of Contracting Activity
ISMS	Integrated Safety Management System
LMER	Lockheed Martin Energy Research Corporation
LMES	Lockheed Martin Energy Systems, Inc.
M&I	Management and Integration

Oak Ridge Operations Response, October 10, 1997

M&O	Management and Operating
NEPA	National Environmental Policy Act
ORO	Oak Ridge Operations
OSHA	Occupational Safety and Health Administration
OSR	Operational Safety Requirements
PAAA	Price-Anderson Amendments Act
PSO	Program Secretarial Officer
SAR	Safety Analysis Report
SER	Safety Evaluation Report
S/RIDs	Standards/Requirements Identification Documents
TQP	Technical Qualification Program
TSR	Technical Safety Requirements
WSS	Work Smart Standards

Oak Ridge Operations Response, October 10, 1997

INTRODUCTION

Overview

In a letter dated September 15, 1997, the Defense Nuclear Facilities Safety Board (DNFSB) requested that Oak Ridge Operations (ORO) answer a number of questions regarding safety management and contract administration. The purpose of this introduction is to provide a context for understanding how contracts are used by ORO to achieve safety performance. We anticipate that further discussion between ORO and the DNFSB may be needed to adequately understand and address the DNFSB's interests in this area. The DOE:Contractor relationships through the ORO contracts are central to safe work performance.

The ORO Manager, as the senior DOE Oak Ridge line management official, has lead safety responsibility and contract authority to effectively ensure Oak Ridge contractors safely achieve the DOE mission. The Manager has many avenues available to influence contractor performance, including direct and indirect financial rewards, imposing contract controls and requirements, and making contract extension/competition decisions.

Some contract decisions, such as contracting strategy or extend/compete decisions, are made with input and concurrence/approval by Headquarters offices, including Program Secretarial Officers (PSOs), and by the Secretary. This is an important expression of DOE's line management chain, which extends from the Operations Offices through Headquarters to the Secretary. As the Head of Contracting Activity (HCA) in ORO, the Manager remains the central implementing agent in this chain to ensure that Secretarial Office and overall Department policies, requirements, and expectations are put into action.

Contract rewards, both direct and indirect, involve considerations beyond safety performance. A variety of factors influence contract decisions, including success in achieving the technical mission goals of the DOE Program Offices, aggressiveness and innovation in the cost-efficiency of operations, short and long-term operational effectiveness improvements, initiative in diversity, local community development activities, environmental cleanup and waste management improvement, stewardship of government resources, and maintenance of appropriate safeguards and security. The impact and credibility of safety performance is best understood when that performance is considered in the broader context of these additional factors of effective work accomplishment.

Scope of this Response

Activities at the five major sites with defense nuclear facilities in the ORO complex (the Y-12 Plant, the Oak Ridge National Laboratory, the East Tennessee Technology Park (ETTP, formerly the K-25 Site), and DOE facilities in Paducah, Kentucky, and Portsmouth, Ohio) are covered by four major contracts:

Oak Ridge Operations Response, October 10, 1997

- The Y-12 Plant and environmental management (EM) and enrichment facilities (EF) activities at the ORO sites are managed through a cost plus award fee Management and Operating (M&O) contract with Lockheed Martin Energy Systems, Inc. (LMES).
- Defense nuclear facilities (non-EM) at the Oak Ridge National Laboratory are managed through a cost plus fixed fee M&O contract with Lockheed Martin Energy Research Corporation (LMER).
- Decontamination and decommissioning of three buildings at ETTP are managed through a fixed price contract with BNFL Inc.
- A competitive procurement process is currently underway to set up a new cost plus award fee Management and Integration (M&I) contract, replacing the EM/EF portions of the current LMES contract.

Of these four contracts, the majority of defense nuclear facility activities are currently conducted under the first contract with LMES. That contract will be the main focus of the Oak Ridge response to the DNFSB contract management questions. Additional details on the remaining contracts can be furnished as desired by the DNFSB.

It is anticipated that the new Integrated Safety Management System (ISMS) and "Laws, regulations and DOE directives" DEAR clauses will be incorporated into these contracts by December 31, 1997.

Oak Ridge Contract Management

Oak Ridge contracts address a variety of business, mission deliverable, and environment, safety, and health (ES&H) subjects. It is important to understand that while the contracts convey the fundamental authorities, responsibilities, and requirements for the safe conduct of work, the contract wording itself only sets the framework of the ORO contract management picture.

Contractor safety actions are shaped by the contract provisions and influenced by many ORO contract management functions, for example:

- Direct involvement of ORO staff under the direction of the Contracting Officer's Representative (COR) in oversight of contractor activities to assess acceptability and to formulate technical direction,
- Imposition by ORO staff of work-specific direction and controls,
- Establishment of specific contract clauses that contain authorities, deliverables, and requirements (including ES&H requirements),

Oak Ridge Operations Response, October 10, 1997

- Decisions by ORO on direct financial awards and penalties for work performance,
- Decisions on contracting strategy, including decisions on fixed fee, incentive fee, or fixed price strategies; decisions to extend or re-compete existing contracts; and decisions to implement M&O contracts versus other contract types, and
- Decisions to terminate contracts in whole or in part for cause or in the best interests of the government.

This list shows that just as true safety management encompasses the whole spectrum of safety functions working together in an integrated manner, true contract management requires all the contract management functions working together to achieve success.

The Joining of Contract Authority with Safety Management Responsibility

The ORO Manager has ultimate safety responsibility in ORO and carries out that responsibility through both his contracting and program management roles. The Manager is the senior ORO line official and the HCA within ORO. He has authority to determine award fees and to initiate, modify, or terminate contracts for safety (as well as other) reasons. The Manager approves initial sets of contractually-required safety standards in Standards/Requirements Identification Documents (S/RIDs) and in Work Smart Standards (WSS) sets. The Manager is involved with emerging contractor safety matters and approves contractor ISMS descriptions. The Manager also approves appropriate startups and restarts of facilities.

Day-to-day safety management is conducted by ORO line management organizations that report directly to the Manager. Senior line managers within these organizations are formally designated by the Contracting Officer with authority as CORs to facilitate their interactions with contractors. This designation allows them to formally issue binding technical direction, require specific notifications, impose ORO safety and environmental hold-points, approve certain restarts and startups, and take other necessary safety action. The CORs maintain a close day-to-day involvement with site activities and concur with changes to S/RIDs and WSS sets in accordance with the ORO standards management Order.

A variety of ORO support staff, both onsite and offsite, interact with contractors in support of the COR's responsibilities. Staff support functions include Facility Representative oversight, facility authorization basis technical review, safety and environmental subject matter expert technical support and oversight support, Price-Anderson Amendments Act (PAAA) enforcement coordination, program management support, and general administrative support. These interactions are conducted under the direct control of the COR line managers and are essential to the safe management of contract activities. In addition, Contracting Officers in the Procurement and Contracts Division and CORs in the directives management, financial management, security, and legal groups also provide important support to the line CORs.

Oak Ridge Operations Response, October 10, 1997

ORO COR line managers include Site Managers for the five major ORO sites with defense nuclear facilities, two EM division directors, and the BNFL Decontamination and Decommissioning Project Manager.

Contract Incentives for Safe Work Performance

All the specific ORO contract management activities listed above create performance incentives, some direct and some indirect. These incentives form the basic reward system for safe work performance.

Incentive fee contracts provide direct financial rewards and penalties for specific contract deliverables and performance. In the LMES incentive fee contract, incentive fee is divided into three categories: award fee, fee available for specific performance measures (including safety performance measures), and fee available for completion of specific tasks. Safety performance plays a part in each incentive area, as does mission accomplishment and other factors. The resulting fee is thus a composite of factors which include but are not limited to safety. The ORO Manager as the Fee Determination Official has the authority to adjust the award fee recommendations to emphasize particular accomplishments or problems. This has been done in the past for a variety of issues, including safety performance.

Failure to abide by a specific contract requirement (such as a safety requirement) can directly influence incentive fees, depending on its relative significance. Noncompliance will tend to have more award fee significance if, for example, the failure is tied to a major safety event or near-miss. These are judgements made by the Manager based on recommendations from ORO line managers and support staff. It is important to understand that beyond the incentive fee process, the other contract factors discussed above, including direct involvement of ORO line management in contractor activities and indirect contract incentives, also play important roles in performance.

It is ORO's experience that while incentive fee contracts can and do yield positive safety performance results, motivation from this contracting arrangement has limits. These limits include the tendency of some site work forces to view the current contractor as a transient authority. There is a practical management reality that contractor work force loyalty and allegiance is sometimes greater to individuals and local work groups than to the contracting company running a site. This is particularly true when workers have witnessed several operating companies at their sites and, historically, few incentive fees have directly benefitted the workers. Beyond direct fees, indirect contract incentives must also be used, since they are powerful motivational tools for the work force.

Indirect contract incentives can be financial or non-financial. Indirect financial incentives include decisions to extend or re-compete existing contracts, contractor selection decisions, or decisions to terminate a contract for cause. Indirect non-financial incentives include increases or decreases in contractor freedom of action through imposition of additional or fewer prescriptive work

Oak Ridge Operations Response, October 10, 1997

requirements. It is ORO's experience that contractor workers often view a change to less prescriptive requirements as a vote of confidence in their competence and judgment. Worker pride is positively impacted, and this can generate increased ownership and improved safety performance. Another indirect contract incentive involves changes in ORO oversight frequency and intrusiveness. Contractor initiative in self-assessments can influence this incentive. These indirect factors are particularly important where workplace independence is strongly desired by the contractor work force.

The Safety Improvement Opportunities of Fixed-Price Contracts

Fixed-price contracting has a number of potential safety advantages over traditional cost-type arrangements. In this strategy, contractors and ORO attempt to negotiate a clear set of work scope and standards expectations to establish a low-uncertainty, fixed-price agreement. The result can be a substantial improvement in contractor accountability and safety performance. The potential advantages of fixed-price contracting include:

- Fixed-price agreements can stimulate more effective up-front safety planning because they require a low level of uncertainty.
- Safety standards and work scope must be defined and understood in a disciplined, clear manner.
- When contract requirements are not met, rework and corrective actions generate an automatic, immediate financial penalty for the contractor. This penalty will likely get increased contractor attention at all levels of the organization.

These potential advantages are balanced by certain limitations of fixed-price contracts:

- Uncertainties in some areas of DOE work scope and unanticipated changes to existing safety practices may make fixed-price agreements difficult to implement in a practical fashion (too many scope changes can yield an essentially cost-plus arrangement).
- ES&H standards may require so much additional flexibility that they become a less useful boundary for safe work practice.
- Immediate financial penalties may breed reluctance to report problems to ORO.
- If the fixed-price bid was unrealistically low, it could cause the contractor to "cut corners," thereby reducing safety performance.

Oak Ridge Operations Response, October 10, 1997

Aggressive contract management actions in the contract management functional areas described above can compensate for the limitations of fixed-price contracting as they do with cost-type contracting. ORO is optimistic about fixed price arrangements and is testing the concept in its new fixed price contract with BNFL Inc.

Authorization Agreements

In the DOE system, authorities, responsibilities, and requirements are conveyed by contracts. Within the framework of the contract, formal direction and control comes from Contracting Officers and CORs. Certain additional statements of authority and requirements in regulations and laws elaborate (and in some cases supplement) contract wording. For the case of laws and regulations, ORO contracts require that contractors abide by all applicable laws and regulations, regardless of whether they are explicitly stated in the contracts. Together, these constitute the fundamental authorization agreements between ORO and its contractors.

Currently, ORO does not employ stand-alone authorization agreements. Stand-alone agreements, such as regulatory licenses, can furnish significant safety value in those circumstances when they convey authorities, responsibilities, and requirements that do not already exist through other regulatory or contractual means. In the current ORO system, stand-alone agreements perform neither supplemental authorization nor requirements-setting functions.

ORO uses the key elements underlying authorization agreements as an important double-check that these elements are included in its contractual arrangements. Table 1 lists these elements. The fundamental value of the authorization agreement concept, from ORO's point of view, lies in the emphasis it places on the elements. This emphasis:

- Aids mutual understanding between DOE and its contractors of delegated authorities to conduct DOE activities, assigned responsibilities which accompany those authorities, and agreed-to ES&H requirements established by the contract,
- Emphasizes certain important process controls and operating boundaries, and
- Ensures that binding agreements are made through the contract; whether in separate agreement documents as ORO prefers or in roll up, stand-alone authorization agreements used by certain other Operations Offices; and that these agreements contain mandatory notification and reporting requirements.

Oak Ridge Operations Response, October 10, 1997

**TABLE 1,
KEY ELEMENTS OF AUTHORIZATION AGREEMENTS
(STYLED AFTER REGULATORY LICENSING AGREEMENTS)**

1. Approved Safety Analysis and Controls
 1. Nuclear Hazards
 1. Hazards Analysis
 2. Basis for Interim Operation (BIO)/Safety Analysis Report (SAR) with Operational Safety Requirements (OSR)/Technical Safety Requirements (TSR)
 3. Safety Evaluation Report (SER)
 2. Non-Nuclear Hazards
 1. Hazards Analysis
 2. Auditable Safety Analysis (ASA) with Commitments and/or an OSR
 3. SER
2. National Environmental Policy Act (NEPA)
 1. Environmental Impact Statement
 2. Environmental Assessment
 3. Record of Decision
3. Environmental Permits; Regulator-Issued Orders; and Environmental Compliance Agreements
4. Authorizations from DOE and Contractor Readiness Reviews
5. Reporting Requirements
6. S/RIDs or WSS Sets
7. Approved ISMS Descriptions (Future)
8. Approved PAAA Implementation Plans and Programs
9. Approved Emergency Plan
10. Administrative and Safeguards & Security Orders

Oak Ridge Operations Response, October 10, 1997

Overall, ORO considers the composite of its contracts; its formal direction to its contractors from Contracting Officers and CORs; and existing laws, regulatory permits, other regulatory implementation documents and other regulatory requirements to constitute its "authorization agreements." ORO prefers to maintain its agreement elements separate, rather than formulating a single agreement for a particular site, facility, or activity.

In this way, the authorization agreement elements stay integrated within ORO's contract process, rather than existing as a separate, redundant layer of safety documentation. If problems arise where appropriate agreement elements do not exist or where existing elements are violated, those problems are resolved within the framework of the contract.

Other Factors that Affect Safety Performance

Experience has shown that contract performance, including safety performance, is influenced by many factors. Some factors mold short-term performance, some impact longer-term achievements, and some help manage the uncertainties inherent in evolving operations. The contract relationship shapes these factors and influences safe work accomplishment.

Contract compliance, including the compliance aspects in the DNFSB's questions, address the important and necessary role of safety requirements in work performance. These contract requirements reflect the importance of safety standards in bounding safe work practices. Over the past decade, ORO's contract management activities have placed increasing emphasis on these standards, and the standards themselves have substantially improved in quality and applicability.

However, compliance with safety standards only tells part of the integrated safety (and thus contract) performance story. Current standards are not now, and will probably never be, complete enough to cover the complexity of all aspects of expected safety behavior. Human initiative, inquisitiveness, creativity, knowledge, expertise, and ethics remain important additions to safety standards in the ISMS equation.

No matter what the contract design or contracting strategy, it is unlikely that effective safety management will ever be reduced to a simple calculation of predetermined compliance pluses and minuses. It will require the additional evaluation of other factors by ORO and the contractor to ensure that the ISMS is suitably effective.

The Importance of Partnering between ORO and its Contractors

In concluding a discussion of ORO contract management, it is important to acknowledge the creative and highly skilled contractor work forces at the ORO sites. These people represent a vast technical resource for the nation. The "safety" ensured by the contract mechanisms is primarily their safety as well as the safety of their friends and families in the surrounding communities. It is the initiative and inquisitiveness of the workers, along with the factors discussed above, that ultimately determine performance.

Oak Ridge Operations Response, October 10, 1997

In recognition of significant value of this worker resource and to achieve the highest levels of safety and efficiency, ORO does more than simply approve standards, impose rewards and penalties, and issue contract direction. The ORO staff actively works together with its contract partners to overcome safety barriers and achieve mission goals in a safe, cost-effective manner. By coupling the ORO technical resources with those of its contractors as a team, safety management problems are solved that much faster.

ORO believes that this partnering relationship complements its line management contract responsibilities, thereby achieving better safety performance at lower cost.

**RESPONSE TO DNFSB QUESTIONS
FROM THE 9/15/97 LETTER
TO SECRETARY PEÑA**

Question A, Contracting Policy and Practices

- 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 970.5204-78, how is "list B" initially arrived at for a given contract?**

Oak Ridge's M&O contracts each contain a directives clause that defines how DOE requirements and standards are imposed for that contract. These clauses, which have been in place for up to six years, are similar in scope but not identical to the DEAR "Laws, regulations, and DOE directives" clause published in June 1997. Contracts with LMER and LMES provide for a directives appendix that covers non-ES&H requirements and S/RIDs or WSS sets for ES&H requirements. Oak Ridge has invested a lot of time and energy working with its contractors to develop a sound standards management program that addresses how ES&H contractual requirements are identified. This program is documented in ORO Order 250, STANDARDS MANAGEMENT.

1. Contract Directives Appendixes. The initial contract directives appendixes were established through a rigorous team process. First, a team of ORO subject matter and line experts reviewed the scope of work and associated hazards for the particular contract and then identified those current DOE directives that appeared to be applicable to that work scope. The resulting list was sent to the contractor, which assembled a similar team to review the list. Differences of opinion on the applicability of certain directives were resolved through a series of meetings between Federal and contractor personnel. In some cases, issues were discussed with Headquarters subject matter and line personnel as well. The resulting list of applicable directives was included in the contract and approved by the ORO Manager, the HCA.

ORO and contractor personnel have a well-established system for keeping the contract appendixes up to date. Depending on the number of new and revised directives, the appendixes may be updated as frequently as once a month or as rarely as once every six months. This system is described below.

- a. ORO subject matter personnel review new and revised directives for an initial determination of applicability to work performed under the contract.

Oak Ridge Operations Response, October 10, 1997

All applicable directives and changes are formally referred to the contractor. The contractor has 30 days to respond. Responses typically fall into one of three categories:

- (1) If the contractor disagrees on applicability, ORO and contractor experts meet to discuss issues and reach resolution. This situation is relatively rare, and it occurs in less than 5% of the directives/changes referred.
 - (2) If the contractor agrees the directive is applicable and determines that implementation will not require significant additional costs, it notifies internal organizations to begin implementation and automatically adds the directive to the directives appendix at its next update. About 60% of all referred directives/changes fall into this category.
 - (3) If the contractor believes implementation would require significant additional costs, it so notifies ORO. ORO then directs the contractor to begin implementation within existing funds, add the directive to the appendix, and prepare a detailed implementation plan within 6 months from the date the directive was initially referred for consideration.
- b. ORO subject matter and line personnel work with contractors during development of the implementation plans and formally review them for adequacy and acceptability. Approved plans provide additional understanding and agreements on the contractual requirements contained in the directives appendix. The implementation plan identifies requirements not fully implemented, actions necessary to implement or exemptions requested, additional costs needed, plans for reallocating existing funds or seeking new funds to meet the additional costs, and any compensatory measures needed to ensure adequate safety before full implementation of the requirements.
2. S/RIDs. LMER and LMES jointly developed S/RIDs that covered ES&H, construction and engineering, emergency management, and safety management systems. These S/RIDs were developed in accordance with instructions and advice from the DOE 90-2 coordinating committee and were completed in Spring 1994. The development effort involved teams of contractor subject matter personnel in the various functional areas who identified DOE directives requirements, laws, regulations, and other standards appropriate to mature functional area programs. The finished S/RID underwent a rigorous review by a team of 24 ORO and

Oak Ridge Operations Response, October 10, 1997

Headquarters personnel from the offices of Defense Programs (DP), Environment, Safety, and Health, Nuclear Energy, EM, and Energy Research. Following this review, the ORO Manager approved the S/RID in accordance with delegations contained in the S/RID development instructions issued in September 1994. Directives dealing with subject matter covered in the S/RIDs were removed from the contract baseline, and the S/RIDs were added as contractual requirements.

Changes to S/RIDs are made in accordance with the ORO standards management Order that is part of the directives appendixes for M&O contracts. Changes to date have focused on streamlining the sets to eliminate duplicate requirements and to track some of the changes made in DOE directives. ORO line managers are required to review and concur with all S/RID change decisions that impact their work.

3. WSS Sets. LMER has developed WSS sets that cover defense nuclear facility activities at the Oak Ridge National Laboratory, except certain waste management work and sets for those are in development. LMES has developed WSS sets covering all its EM/EF work, its construction and engineering work, and its General Manufacturing Organization at the Y-12 Plant. BNFL Inc., has also developed a WSS set for its fixed price contract for decontamination and decommissioning of three buildings at ETTP. Where WSS sets have been developed, they have become the contractual ES&H standards for covered work and hazards.

WSS sets were developed in accordance with DOE M 450.3-1, THE DEPARTMENT OF ENERGY CLOSURE PROCESS FOR NECESSARY AND SUFFICIENT SETS OF STANDARDS, and the ORO standards management Order. The teams that developed the WSS sets were composed of contractor and DOE line managers, subject matter experts, and workers. The WSS sets were "confirmed" by teams consisting of subject matter and operational experts, as well as middle/senior management representatives from ORO and the contractor. The teams confirmed that the Identification Team followed the specified development process and that the proposed WSS set and any implementation assumptions it contained were adequate. Following confirmation, the WSS sets were approved by senior contractor management and the ORO Manager, after which they were incorporated into the contract along with a description of the "boundaries" of each set (i.e., whether it replaced all or a particular portion of an existing S/RID or contract directives appendix, covers a particular site or facility only, etc.).

A WSS change control process has been developed and documented in the ORO standards management Order. As with S/RIDs, ORO line managers are required to review and concur with all WSS change decisions that impact their work.

Oak Ridge Operations Response, October 10, 1997

Several major ORO contracts are in the process of recompetition, including the EM/EF work currently being done by LMES. For these contracts, ORO is committed to incorporation of the new DEAR ISMS and "laws, regulations, and DOE directives" clauses and the continuation of current directives appendixes, WSS sets, or S/RIDs into the contract, subject to existing change control processes outlined in the ORO standards management Order. We also plan to incorporate the new clauses into existing contracts in a timely manner and do not anticipate any difficulties in completing this task since the new clauses are essentially similar to the ones already included in our contracts.

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

A list of safety requirements needed for a particular scope of work is typically developed jointly by subject matter and line experts and included in the Request for Proposal for a new contract. After the major contract is initially signed, the HCA (the ORO Manager) approves the contractor's ISMS description and verification of implementation, including the initial contract directives appendix, S/RID, or WSS set. In approving these specific documents, the ORO Manager relies on line management and ES&H staff advice and reviews performed as part of the development and review processes. Certain responsibilities for making changes to the safety standards have been delegated to lower levels as documented in ORO's standards management Order.

In addition to approval of ES&H standards sets, the Contracting Officer and the CORs responsible for ensuring continuing safety have a number of systems and tools that are available to stay informed about the requirements for specific contractors. These include systems for ensuring that simple changes are reviewed by appropriate subject matter and line officials and that significant changes undergo more detailed and thorough review and higher levels of approval. A key tool available to all ORO personnel is the Directives Management Group home page, which includes lists or links to approved S/RIDs and WSS sets, current contract appendixes for major contractors, on-line directives access, and lists of approved implementation plans.

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

Several mechanisms serve this function. First, the contractor is required to implement a self-assessment program to identify and report to the COR any safety-significant noncompliances with laws, regulations, and/or contractual safety requirements. Secondly, ORO has defined programs for administering the contract and monitoring the contractor's

Oak Ridge Operations Response, October 10, 1997

performance. These include requirements related to quality assurance, occurrence reporting, performance indicators and analysis of operations information, ES&H reporting, oversight and assessment policies, and other monitoring/surveillance activities.

To ensure awareness of contractors' safety programs, CORs and their staffs, as well as members of support organizations, review the following:

- Contractor self-assessments
- Contractor reporting on performance metrics
- Occurrence Reports and reports of PAAA noncompliance, including those in the DOE Noncompliance Tracking System
- Findings reported by Facility Representatives and other ORO personnel during walkthroughs
- Results of evaluations by the Headquarters Office of Environment, Safety, and Health, including PAAA enforcement investigations
- Contractor implementation plans and corrective action plans prepared for specific contractual requirements
- Results of ORO for-cause ES&H reviews and investigations
- Reports and recommendations from external groups, such as the DNFSB, the state, and the Environmental Protection Agency (EPA)

In addition, members of the COR's staff and personnel from support organizations perform periodic formal assessments of the contractor's ES&H performance and participate on Headquarters assessment teams.

Where there are significant ES&H deficiencies, line management briefs the ORO Manager on the issue and corrective actions. Subsequently, the Manager is provided status updates until final resolution is attained.

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

As noted in the introduction, the answer to this question can involve a range of contract management responses depending on contract language and fee arrangement. ORO may choose to impose direct financial penalties for contract noncompliance, or it may take contract action that has indirect, but often more powerful, consequences. Contract actions could include:

- Withholding all or part of an incentive fee, particularly where payment of discrete amounts of fee are tied to safety performance objectives and the completion of

Oak Ridge Operations Response, October 10, 1997

agreed-upon milestones for ES&H work.

- Issuing a stop-work order for all or part of the work performed under contract.
- Directing the contractor to take specific corrective actions
- Terminating the contract in whole or in part.

In addition, DOE contractors are also subject to the PAAA enforcement program if the nuclear safety Rules are violated. In some cases, DOE may refer a matter to the Justice Department for consideration as to whether a criminal violation has occurred. Also, ORO contractors are subject to EPA and state enforcement of environmental permit violations.

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

Under cost reimbursement contracts, DOE would reimburse the contractor for costs incurred in performance of the contract so long as those costs are allowable, allocable, and reasonable. These would generally include corrective actions.

In cases of willful misconduct by managerial personnel (as defined in the contract), corrective action costs may be disallowed. In most routine circumstances, DOE bears the costs of corrective actions, and the contractor incurs the direct and indirect contract management penalties discussed in the Introduction and in the answer to question A4. Additional financial penalty also may be imposed through PAAA or environmental enforcement.

A6 What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety terms and conditions are violated?

When safety terms and conditions in the contract are violated and contractor action is insufficient, the line management COR may direct the contractor to take additional corrective action.

Stand-alone authorization agreements have not been developed under ORO contracts. The response to this question refers to the requirements of the individual key element documents described in Table 1. ORO considers that these documents together under the contract constitute its authorization agreements.

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

Oak Ridge Operations Response, October 10, 1997

As discussed in the Introduction, contract management relating to safety performance is a responsibility of the ORO line managers with Contracting Officer or COR authority. These managers or alternates are subject to DOE's Technical Qualification Program (TQP) requirements for Senior Technical Safety Managers. In addition, they are supported by technical staffs, including qualified Facility Representatives, who are participants in the TQP.

Contracting personnel must comply with certain statutory educational requirements to qualify for performing their duties. These are contained in the Federal Acquisition Reform Act of 1996, Public Law 104-106, and Federal Acquisition Regulation 1.603. Those personnel designated as Contracting Officers must further meet the requirements of DOE Order 541. Training requirements for CORs are also identified in this Order.

A8 What staff support (technical and legal) is provided to the Contracting Officers on a day-to-day basis with respect to contract compliance issues that involve safety?

The entire Operations Office is set up to administer contracts. As such, the ORO Manager is supported by a large number of people with expertise in specific areas. Some of these personnel provide advice directly to the Manager, while others have been officially designated to act for the Contracting Officer in certain specified areas. Designations such as COR are made in writing and include specific instructions regarding the extent to which the representative may take action for the Contracting Officer. These delegations may not involve changes that modify the scope, price, terms, or conditions of the contract.

In ORO, support with respect to contract compliance issues that involve safety is provided through the following groups:

- Line Management CORs — Monitor contractor performance of work and compliance with contract requirements including safety issues, keep the Contracting Officers informed of important issues (e.g., safety violations, work not completed on schedule, over budget, etc.), issue technical direction to contractors (within the scope of the contract), and monitor administrative and funds aspects of the contract by reviewing incurred costs.
- Facility Representatives and Line Management Subject Matter Experts — These people are dedicated to review of contractor performance through monitoring ongoing activities and providing expert technical support. In addition to certain specified stop-work authorities where unsafe conditions exist, they provide advice and input to the line management CORs on contractor ES&H performance.
- The Office of the Assistant Manager for Environment, Safety, and Quality —

Oak Ridge Operations Response, October 10, 1997

Personnel in this organization provide ES&H expert support to the line management CORs. In addition, they provide staff support for overall ORO safety management policies and review of contractor safety management performance.

- **Project Management & Engineering Services Divisions** — These groups provide overall project management for the construction of facilities at the various sites. Also, they provide technical assistance to line management COR and the Contracting Officers in the areas of construction safety, maintenance management, etc.
- **Training & Development Division** — This group provides training courses that meet the regulatory, qualification, and development needs of ORO personnel, and it monitors the performance of contractors' training programs. This group also administers the ORO Technical Qualification Program.
- **Directives Management Group** — Provides assistance/information on standards management, directives, PAAA implementation planning, contract appendixes, S/RIDs, WSS sets, etc.
- **Office of Chief Counsel** — The Office of Chief Counsel is organized by subject matter into four work groups, each under an Assistant Chief Counsel. With respect to "contract compliance issues that involve safety," the Assistant Chief Counsel for Contracts would provide advice to the Contracting Officer on interpretation of contract provisions while the Assistant Chief Counsel for Environment would advise the Contracting Officer with respect to interpretation of applicable safety standards, regulations, and laws.
- **Procurement and Contracts Division** — Provides expertise on contractual provisions, acquisition regulations, and contractual remedies.

Oak Ridge Operations Response, October 10, 1997

Question B, DOE Review and Approval of Safety Control Measures

- B1 Referring to Figures 10, 11, and 12 and paragraph 3.3.2.4 of DNFSB/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?**

The following table shows the relationship between facility hazard and the required ORO authorization basis documents. The safety analyses demonstrate that the offsite public has relatively low risk from ORO's defense nuclear facilities. There are no Category 1 defense nuclear facilities.

Decisions on the extent of ORO's control over the safety planning and control processes are made considering the extent of hazard being evaluated and guidance contained in industry standards and in DOE Orders and Policies, plus applicable laws and regulations. The measures that ORO tightly controls parallel the "macro-level" protective measures discussed in section 3.3.1.2 of DNFSB TECH-16 for nuclear hazards. The following table furnishes more detail on those controls and on required ORO approvals.

In addition to these general statements about control, specific formal controls are appropriately applied to individual tasks if they are judged to be needed by ORO line management. These controls vary and are based on the assessed hazard level or uncertainty in anticipated hazard level. In addition to formal controls, ORO personnel are involved on a continual basis with contractor work and frequently establish less formal agreements with contractors for lower hazard work controls.

Oak Ridge Operations Response, October 10, 1997

TABLE 2. AUTHORIZATION BASIS CONTROLS

Formal Authorization Basis Analyses and Authorization-Basis-Derived Controls Required by Contract, Law, or Regulation	Required for Defense Nuclear Facilities		Required for Radiological Facilities	Required for Non-Nuclear Facilities with Chemical Hazards Only		Required for Facilities with only Standard Industrial Hazards
	Category 2	Category 3		Moderate Hazard	Low Hazard	
Hazard Analysis for protection of workers, the public, and the environment	Yes, approved by ORO in SAR or BIO	Yes for LMES DP activities at Y-12 and all LMER, approved by ORO in SAR or BIO LMES EM/EF requires Auditable Safety Analysis (ASA), approved by ORO	Yes, contractor approved	Yes, in SAR or ASA for LMES DP activities at Y-12, approved by ORO	Yes, in SAR or ASA for LMES DP activities at Y-12, approved by ORO	No
Formal SAR or BIO for Nuclear Facilities	Yes, approved by ORO	Yes for LMES DP activities at Y-12 and all LMER, approved by ORO ASA required for LMES EM/EF activities, approved by ORO	N.A.	N.A.	N.A.	N.A.
OSR or TSR	Yes, approved by ORO	Yes, approved by ORO LMES EM/EF requires ASA	No, ASA commitments may implement similar controls	Yes (or in the form of ASA commitments), approved by ORO	Yes (or in the form of ASA commitments), approved by ORO	No

Oak Ridge Operations Response, October 10, 1997

Formal Authorization Basis Analyses and Authorization-Basis-Derived Controls Required by Contract, Law, or Regulation	Required for Defense Nuclear Facilities		Required for Radiological Facilities	Required for Non-Nuclear Facilities with Chemical Hazards Only		Required for Facilities with only Standard Industrial Hazards
	Category 2	Category 3		Moderate Hazard	Low Hazard	
ASA or SARs for Non-Nuclear Facilities	N.A.	N.A.	No for LMES DP activities at Y-12 and all LMER ASA required for LMES EM/EF activities, contractor approved	Yes, in DP activities at Y-12, approved by ORO	Yes, in DP activities at Y-12, approved by ORO	No
Risk Assessments, with action decisions, when required by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulations	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO
Process Safety Management and Risk Management Programs for chemical hazards, when required by the Occupational Safety and Health Administration (OSHA) and EPA regulation	Yes, contractor approved	Yes, contractor approved	Yes, contractor approved	Yes, contractor approved	Yes, contractor approved	Yes, contractor approved

Oak Ridge Operations Response, October 10, 1997

Formal Authorization Basis Analyses and Authorization-Basis-Derived Controls Required by Contract, Law, or Regulation	Required for Defense Nuclear Facilities		Required for Radiological Facilities	Required for Non-Nuclear Facilities with Chemical Hazards Only			Required for Facilities with only Standard Industrial Hazards
	Category 2	Category 3		Moderate Hazard	Low Hazard		
Radiation Protection Program required by 10 CFR 835 (ORO approves these controls if approval authority has been delegated by the PSO. If not, these are approved in Headquarters)	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	N.A.	N.A.	N.A.	N.A.
Quality Assurance Program and Implementation Plan for 10 CFR 830.120 (ORO approves these controls if approval authority has been delegated by the PSO. If not, these are approved in Headquarters)	Yes, approved by ORO	Yes, approved by ORO	N.A.	N.A.	N.A.	N.A.	N.A.
Environmental Permits, when required by state regulation	Yes, signed by ORO and/or contractor	Yes, signed by ORO and/or contractor	Yes, signed by ORO and/or contractor	Yes, signed by ORO and/or contractor	Yes, signed by ORO and/or contractor	Yes, signed by ORO and/or contractor	Yes, signed by ORO and/or contractor
Timely evaluation and input for DOE's NEPA process	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ISMS. These systems will be required in the future.	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO	Yes, approved by ORO
Readiness evaluations required prior to conducting work as part of the ISMS process that will be implemented and approved by ORO	Yes	Yes	Yes	Yes	Yes	Yes	Yes, incorporated into work planning processes

Oak Ridge Operations Response, October 10, 1997

Formal Authorization Basis Analyses and Authorization-Basis-Derived Controls Required by Contract, Law, or Regulation	Required for Defense Nuclear Facilities		Required for Radiological Facilities	Required for Non-Nuclear Facilities with Chemical Hazards Only		Required for Facilities with only Standard Industrial Hazards
	Category 2	Category 3		Moderate Hazard	Low Hazard	
Emergency Plan, a site plan is required, approved by ORO	Yes	Yes	Yes	Yes	Yes	No
Health & Safety Plan when required by OSHA regulations	Yes	Yes	Yes	Yes	Yes	Yes

Oak Ridge Operations Response, October 10, 1997

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

ORO line management communicates acceptance of contractor controls, such as those in Table 2, within the framework of the contract with documented correspondence from either the ORO Manager or the line COR. This direction generally applies to site-wide or facility-wide controls. ORO prepares formal SERs for key contractor safety analyses and controls. The same communication process is used in cases where additional activity- or task-level controls are warranted.

Most routine work-specific communications with contractors are conducted via routine Facility Representative reviews of ongoing activities and critiques.

B3 "Authorization Agreement" has been defined in DNFSB/TECH-16 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:

B3.(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 970.5204-78?

The standards used by ORO for the elements in its authorization agreements (as defined in the Introduction) are derived from DOE policies and from DOE guidance (such as selected DOE Safety Orders). Some elements of the authorization agreements are also derived from laws and regulations.

This frame of reference is tied to the contract through S/RIDs and WSS sets, consistent with DEAR clause 970.5204-78. In the future, formally approved ISMS descriptions will also be used, consistent with DEAR clauses 970.5204-78 and 970.5204-2.

B3.(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?

Contractor manuals of practice are subject to ORO review and to DOE compliance enforcement action. They are not, in general, approved by ORO.

Oak Ridge Operations Response, October 10, 1997

B3.(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) site-wide controls, (b) facility controls, (c) activity controls, and (d) task controls. At what level does the DOE role become one of inspection rather than review and approval?

ORO considers the existing formal approvals required by its contracts, additional requirements imposed by its line management CORs, and requirements from laws and regulations to constitute its "authorization agreements." These agreements most often apply at a site or facility level. Authorization agreement controls can also be applied at an activity or task level by ORO line management, as needed.

The term "inspection" is not commonly used in ORO administrative processes. Additional reviews, over and above the major "review and approval" actions, are conducted by ORO staff on a continuing basis. Operational awareness reviews include Facility Representative reviews, safety reviews by other ORO staff members, and for-cause safety reviews and investigations.

B3.(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?

ORO line organizations are assigned safety and environmental responsibility within the scope of their missions to ensure that contractors comply with contractual requirements, laws, and regulations. Ultimate safety responsibility rests with the ORO Manager, as the senior ORO line official and the HCA. The Manager ensures that ES&H responsibilities within ORO are clear and effectively implemented.

Oak Ridge Operations Response, October 10, 1997

Question C, Questions for Field Managers Who Have Approved Authorization Agreements

ORO understands that this question is directed at those Field Managers who have approved, stand-alone authorization agreements.

Oak Ridge Operations Response, October 10, 1997

Question D, Contract Violations and Remedies

Section D addresses several scenarios and poses questions pertaining to whether the scenarios describe a contract violation, what contractual remedies or sanctions are available, who in DOE is responsible for taking contract actions, and whether or not the contractor is financially responsible for the action. The questions asked do not contain enough detailed information to enable us to provide an accurate response. Therefore, the information below is provided as a general discussion of contract violations and remedies and pertains to a cost-type, incentive fee M&O contract with incentivized performance measures.

Contractual Remedies:

There are several contractual remedies available whenever the contractor fails to perform in accordance with the terms and conditions of the contract.

In an egregious situation, the performance of work under the contract may be terminated in whole or in part whenever the contractor defaults in performance and fails to cure the fault within a period specified by the Contracting Officer. The contract may also be terminated for any reason if the termination is in the best interest of the government. This allows DOE maximum flexibility to achieve correction of deficiencies.

There are contract provisions that specifically disallow any costs which result from willful misconduct or lack of good faith on the part of any of the contractor's managerial personnel (as defined in the contract). Some examples of these unallowable costs are:

- Losses or expenses that result from willful misconduct or lack of good faith on the part of any of the contractor's managerial personnel (as defined in the contract);
- Third party liabilities that result from willful misconduct, lack of good faith, or failure to exercise prudent business judgement on the part of the contractor's managerial personnel (as defined in the contract) unless the contractor can demonstrate that the managerial personnel's action was not the cause of the loss.

Other disallowed costs are fines and penalties, unless with respect to civil fines and penalties only, the contractor demonstrates that they were incurred as a result of compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer.

The contract provisions specify that the contractor shall be responsible for and compensate the government for the loss or destruction of, or damage to, government property unless the contractor demonstrates that the loss, damage, or destruction was not caused by willful misconduct, lack of good faith, or failure to exercise prudent business judgment on the part of the contractor's managerial personnel; failure of the contractor to comply with written direction from

Oak Ridge Operations Response, October 10, 1997

the Contracting Officer to safeguard high-risk property or classified materials; or failure of the contractor to establish or properly maintain an approved property management system.

Additionally, the award fee process allows the HCA, acting as the Fee Determination Official, the opportunity to penalize the contractor for poor performance by a reduction in the rating given to the contractor, thereby reducing the amount of fee earned in the rating period.

The LMES contract is performance-based and includes incentivized performance measures in the award fee process for fiscal year 1998. ES&H is specifically included as a performance objective. The contractor has potential fee at risk if the performance objectives are not met.

Enforcement measures are available to DOE under PAAA. That Act authorizes the Department to issue notices of violation and/or to assess civil penalties when the contractor violates a nuclear safety regulatory requirement. In some cases, the Department may also recommend a case to the Department of Justice for consideration on taking criminal action against the contractor.

Richland Operations Office
Response to DNFSB Questions

October 1997

United States Government

Department of Energy

memorandum

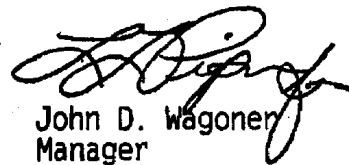
Richland Operations Office

DATE: OCT 15 1997
REPLY TO:
ATTN OF: ESH:MCH/97-ESH-060
SUBJECT: DEFENSE NUCLEAR FACILITIES SAFETY BOARD (DNFSB) QUESTIONS ON CONTRACT ADMINISTRATION

TO: Richard Crowe, Director
Safety Management Implementation Team
DP-3, HQ

In response to your memorandum to the Operations Office Managers, dated September 18, 1997, same subject as above, attached is the Richland Operations Office response to the list of questions contained in the DNFSB letter to Secretary Peña dated September 15, 1997.

Please contact me or your staff may contact Charlie A. Hansen, Assistant Manager for Waste Management, at (509) 376-7434, or Michael C. Humphreys of the Office of Environment, Safety and Health, at (509) 376-2014, if you have any questions.


John D. Wagoner
Manager

Attachment

Richland Operations Office Responses to Defense Nuclear Facilities Safety Board (DNFSB) Memorandum (dated September 15, 1997)

The scope of this response has been limited to the scope of work under the Project Hanford Management Contract (PHMC), and as such does not address the Pacific Northwest National Laboratory, the Environmental Restoration Contract, the Hanford Environmental Health Foundation, or Tank Waste Remediation System Privatization contracts. This approach was taken to keep the responses from getting overly complicated, and because the PHMC includes those facilities identified as priority facilities by the DNFSB. RL responses are shown in underlined text.

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 §970.5204-78, how is "List B" initially arrived at for a given contract?

Applicability of a DOE directive is determined by the applicability, scope, and purpose section of the directive as applied to a given site, facility, or operation. The Contracting Officer relies upon input from both the responsible line organizations and the Environment, Safety and Health (ES&H) organization for these identifications. The "List B" in the PHMC has been derived over a number of years. The initial list included in the PHMC contract awarded in August 1996 was based on an updating of the directives that were applicable under the then current Westinghouse contract.

The PHMC includes Standards/Requirements Identification Documents (S/RIDs) for Hazard Category 2 nuclear facilities, developed and approved by RL in accordance with the approved S/RIDs process. For each such facility, the contract stipulates that the S/RID supersedes the ES&H directives included in Part III, Section J, Appendix

C, "List B", in accordance with the 48 CFR §970.5204-78 clause.

When the Source Evaluation Board (SEB) for the PHMC was established, a representative from EH, DOE-HQ, as well as the RL Director of the Office of Environment, Safety and Health, were made full voting members of the SEB to assure that safety was appropriately included in the Request For Proposal and the resultant contract.

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

Contracting Officer Representatives (CORs) have been designated at RL to provide technical direction regarding the contractual scope of work and requirements. These CORs are senior level managers who support the Contracting Officers in managing the contract, including issues of safety. The CORs rely upon input from the responsible line organizations and the ES&H organization with respect to the content and applicability of the safety requirements of a contract. The RL Head of Contracting Authority (HCA) approves all authorization basis documents, and each S/RID document for nuclear facilities. Prior to approval, the HCA is briefed by the staff regarding the content and review process associated with the preparation of the S/RID or authorization basis document.

- 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?

The Contracting Officer is advised through the results of contractor self-assessments, RL assessments or investigations, EH-22 independent assessments, and regulatory inspections. RL assessments include DOE Facility Representative audits and surveillances, Conduct of Operations assessments, and Operational Readiness Reviews. Deficiencies are also identified as a result of employee safety concerns or grievances and the resulting reviews, and the occurrence reporting process. Evaluations of contractor performance on ES&H related contractual fee incentive mechanisms provide direct input on specific performance issues.

- 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?

With regard to items (a) and (c), the PHMC contains specific provisions which penalize the contractor for noncompliance but reward the contractor for performance:

- Clause H-47 sets forth minimum requirements to be met for the contractor to receive otherwise earned fee. (1) There must be a comprehensive ES&H

Program consistent with the Integrated ES&H Management System Plan. The Contractor must meet the minimum performance requirements of the Program to receive otherwise earned fee, profit, or share of cost savings. (2) The Contractor must meet 76 percent or more of all individual performance expectations. (3) In addition, if the Contractor causes, through negligence or misconduct, a catastrophic event as set forth in the contract, the Manager may reduce, in whole or in part, otherwise earned fee.

- Specific performance objectives and expectations (set forth in Section J of the Contract) regarding ES&H have fee directly attached. If the contractor fails, fee is not earned; if the contractor achieves, fee is earned. Thus, the Contractor is positively incentivized through payment of fee for accomplishing safety objectives.
- Clauses H.3 and H.10 provide that costs resulting from civil and criminal penalties (including Price-Anderson Amendments Act penalties), excepting certain pre-existing conditions, are unallowable.
- Clause H.40 delineates what costs resulting from whistleblower actions are allowable/unallowable.
- Clause I.84 addresses termination of the work under the contract, in whole or in part, for the contractor's failure to make progress in the work so as to endanger performance.

With regard to (b) above, the PHMC has several mechanisms to ensure noncompliance is promptly corrected. In general, this is accomplished through Contracting Officer direction for corrective actions, fee incentives noted above, and the possibility of invoking Clause H-47, also set forth above. The Clauses set forth below contain specific mechanisms for correction of non-compliance issues. It should be noted that, if invoked, these clauses also have restrictions on payment and fee, thus penalizing non-compliance.

- Clause H-5 requires the Contractor to "promptly correct any noncompliance with applicable environmental or safety and health requirements" upon written notice from DOE. If the Contractor fails to take corrective action, the Contracting Officer may stop work in whole or in part. The Contractor is not entitled to an extension of time or additional fee or damages for any work stoppage ordered pursuant to Clause H-5.
- Clause H-12 provides immediate shutdown authorization to facility line management, DOE Facility Representatives, operators, or facility health and safety personnel for a specific imminent environmental health or safety hazard and to recommend shutdown for a non-imminent hazard.

- Clause I.73 sets forth the FAR 52.242-15 Stop Work authority.
- Clause E.2 sets forth FAR 52.246-5 - Inspection of Services also sets forth remedies for noncompliance. Pursuant to this clause, if any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by re-performance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce any fee payable under the contract to reflect the reduced value of the services performed. If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances or (2) terminate the contract for default.

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

If the costs associated with the non-compliance are determined to be unallowable under the terms of the contract (see A4 above), the contractor bears the cost burden. Otherwise, DOE 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 agreed-upon safety terms and conditions are violated?

Although RL has not yet signed an Authorization Agreement, the answer should be the same as for the contract, see items A4 and A5 above.

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

Contracting personnel (GS-1102 series) must comply with certain statutory educational requirements to qualify for the series. See Federal Acquisition Reform Act of 1996, P.L. 104-106 and FAR 1.603. Those personnel also designated as contracting officers must further meet the requirements of DOE O 541. Training requirements of contracting officer's representatives are also identified in this order. The order requirements principally focus on contracting, business, pricing, and contract law matters. There are no specific safety training requirements for Contracting Officers. Contracting Officers rely on qualified ES&H professionals for technical advice and guidance as well as line program managers who are CORs.

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

As discussed in A3, the CORs support the Contracting Officer in managing the contract, including issues of safety. The Contracting Officers and CORs rely upon input from the Procurement Services Division, the responsible line organizations, the ES&H organization, and the Office of Chief Counsel with respect to contract compliance issues on a daily or as-needed basis.

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 DOE. 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 work-specific terms and conditions mutually agreed upon by DOE and the contractor. As illustrated by Figures 10, 11 and 12 of DNFSB/TECH-16, contractors can proceed with (a) highly hazardous operations entailing potential risk to all sectors (public, workers, environment) only after mutually agreed-upon 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/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

Approval at the macro (facility) level is in accordance with DOE Order requirements. RL approves the authorization basis for nuclear facilities, approves the S/RIDs for nuclear facilities, and approves the Auditable Safety Analyses for moderate or high hazard non-nuclear facilities. Approval at the micro (activity) level is not controlled for any specific activities (other than control effected via the USQ process), but is applied to the micro level through 1) RL review and approval of the FDH Integrated Environment, Safety and Health Management System (ISMS) Plan (recently approved), and 2) RL verification of ISMS implementation at priority, and possibly all, nuclear facilities. Exactly how many RL facilities will undergo formal DOE verification has not been decided. The FDH ISMS Plan lays out expectations for the work management and hazard identification, analysis, and mitigation processes at both the facility (macro) and activity (micro) level. The ISMS verification process provides DOE the mechanism for review and acceptance of those processes. The

rationale for this demarcation is that it is consistent with contractual DOE Order requirements and it makes sense in terms of a graded approach.

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

As discussed above, approval at the micro (activity) level is not generally controlled for specific activities, but rather through the RL verification of ISMS implementation.

- B3. "Authorization Agreement" has been defined in DNFSB/TECH-16 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 970.5204-78?

No referenced Standard exists currently within DOE. The DOE Safety Management Implementation Team is working to prepare guidance regarding Authorization Agreements. RL would expect that the terms and conditions for an Authorization Agreement would directly reference the applicable contractual ES&H requirements. For nuclear facilities, a facility S/RID will be referenced.

- (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?

In general, the contractor's procedures are not subject to DOE review and approval. The contents of those procedures are subject to compliance oversight actions to the extent that they a) represent commitments made in a facility's Authorization Basis, b) represent S/RID Implementing Procedures, or c) represent mechanisms by which a facility fulfills expectations from the FDH ISMS Plan.

- (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) site-wide 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?

There is no "site" authorization basis component. As discussed above, formal DOE approval is generally limited to facility level controls, recognizing that the approved facility level controls still apply at the task level, directly for some tasks, and may apply to worker protection. As discussed above, the process of verifying ISMS implementation will result in a significant level of inspection at the activity and task level.

- (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?

RL believes that this is an issue for authorization protocol, but more generally for implementation of an effective ISMS as well. The RL responsibilities associated with the ISMS will be contained within an ISMS RL Implementing Directive and/or the RL Functions, Responsibilities, and Authorities Manual.

- 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 H-Canyon)

General

- C1. What is the status of the implementation of DEAR clauses 970.5204-2 and 970.5204-78 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 self-identifies a violation of the Agreement?
- C4. All approved Authorization Agreements lack a commitment to a contractor self-assessment 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

DOE-Albuquerque Manager:

- C6. The new Order DOE O 452.2, *Safety of Nuclear Explosive Operations* requires the use of the safety analysis and activity-specific 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?

DOE-Oakland 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 agreed-upon (and DOE-approved) 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.

DOE-Rocky 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?
The answer to this questions depends on whether the contractor's decision to commence the ORR at that time was contrary to the terms of the contract. If so, then the contractor has violated a term of the contract.
- b) What contractual remedies or sanctions are available?
See item A.4 above. The nature of the remedy or sanction would depend upon the seriousness of the violation, and related judgments about whether the associated work was allowable, and whether fee should be reduced.
- c) Who in DOE is responsible for taking contract actions?
The Contracting Officers have the direct responsibility for taking appropriate actions. The CORs, line management and support staff all have responsibilities to support the Contracting Officers.
- d) Does DOE or the contractor bear the unnecessary added expense of the ORR?
It would depend on whether the contractor violated the "prudent business" rule in determining when to conduct the ORR. If there was a violation, then the costs would not be allowable, and the contractor would bear the 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?
Yes - the statement given above says that the contractor failed to meet contractual requirements. RL does not make a distinction between the terms "a failure to meet contractual terms and conditions," and "a violation of the contract."

- b) What contractual remedies or sanctions are available?
See item A.4 above. The nature of the remedy or sanction would depend upon the seriousness of the violation, and related judgments about whether the associated work was allowable, and whether fee should be reduced.
- c) Who in DOE is responsible for taking contract actions?
The Contracting Officers have the direct responsibility for taking appropriate actions. The CORs, line management and support staff all have responsibilities to support the Contracting Officers.
- d) Who pays for repairing the damage caused by the fire?
It would depend on whether the contractor violated the "prudent business" rule. If there was a violation, then the costs would not be allowable, and the contractor would bear the expense of repair.

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?
Yes, the clause H.14 of the PHMC includes "Federal, state, and local laws and regulations, unless relief has been granted in writing by the appropriate regulatory agency; ..."
- b) Will contract remedies also be invoked for the violation?
Possibly, depending on the severity of the violation, see A.4 above.
- c) Will the civil penalty impact financial incentives under the contract?
It could, again depending upon the severity of the fine - if the fine is unallowable under the contract, it would have a financial impact on the contractor. The cost associated with responding to the fine may also be unallowable.
- d) Who bears the cost of correcting the conditions leading to the penalty?
It would depend upon whether there was a failure to meet the "prudent business" rule.

- 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?
Assuming the same contractual terms in the prime contract apply, the same answers given above in D.2 apply.

- 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?
If the contractor has failed to meet a contractual (Order) requirement as a result of failure to follow work practices and procedures, then the contractor has violated a term of the contract.
- b) What measures could be taken to bring the contractor into compliance with its own practices and procedures?
See item A.4 above.

- 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?
Yes, if conformance with that implementation plan is itself a requirement which has been applied contractually. If not, but the terms of the implementation plan are determined to be within the contractual scope of work, then failure to live up to the terms is a performance issue.
- b) What contractual remedies or sanctions are available?
If the implementation plan is itself a contractual requirement, or if the failure to meet the terms of the implementation plan is a contractual performance issue, then one or more of the sanctions outlined in item A.4 are potentially available.

- c) Who in DOE is responsible for taking contract actions?
The Contracting Officers have the direct responsibility for taking appropriate actions. The CORs, line management and support staff all have responsibilities to support the Contracting Officers.

ESH/MCH/10/13/97

Rocky Flats Field Office
Response to DNFSB Questions

October 1997

United States Government

Department of Energy

memorandum

Rocky Flats Field Office

DATE: October 10, 1997

REPLY TO

ATTN OF: AMPA:PMM:06075

SUBJECT: Rocky Flats Field Office Response to DNFSB Contract Questions

TO: Richard C. Crowe, Associate Deputy Assistant Secretary, Military Application and Stockpile Management, HQ, DP-20

The Rocky Flats Field Office (RFFO) and Kaiser-Hill, L.L.C. operate the Rocky Flats Environmental Technology Site per the terms and conditions delineated in a Performance Based Integrating Management Contract. The questions posed by the Defense Nuclear Facilities Safety Board provide a wide base for discussion dependent on specific circumstances. The RFFO is afforded a range of remedies through the contract and applied commensurate with action desired. The answers, particularly those that are scenario based are not intended to represent a hard and fast policy, but rather demonstrate how some of the available contract tools can be applied.

*Signed by Joseph D. Wienand
for*

Patrice M. McEahern, Acting Assistant Manager
Performance Assessment

Attachment

cc w/Att:

J. Roberson, OOM, RFFO

K. Klein, DAMTP, RFFO

D. Lowe, AME, RFFO

AMPA Reading File

RFFO Responses to DNFSB Questions

These responses should not be considered dispositive of the degree or range of discretion that may be exercised by the Department of Energy in carrying out its Atomic Energy Act and other responsibilities through management and operating or performance based integrated management contracts at the Rocky Flats Environmental Technology Site (RFETS). In particular, the Rocky Flats Field Office (RFFO) does not intend its response to the questions posed by the Defense Nuclear Facility Safety Board (DNFSB) to be interpreted inconsistent with the positions of the United States and the Department of Energy regarding the limited waiver of sovereign immunity under the Federal Tort Claims Act or other federal laws, or the claims or defenses in any case or controversy to which the Department of Energy is a party or has an interest.

The RFFO believes it is helpful to put the issues raised by the DNFSB into the perspective of the current legal, contractual and regulatory framework that applies to contractors at the RFETS.

1. The Department of Energy has exclusive jurisdiction, including certain enforcement authority, over nuclear safety, radiation safety and occupational safety pursuant to the Atomic Energy Act.
2. Other regulatory agencies have exclusive jurisdiction or shared jurisdiction over protection of human health and the environment pursuant to a variety of Colorado and federal laws. These laws include the Resource Conservation and Recovery Act, the Colorado Hazardous Waste Act, the Comprehensive Environmental Response, Compensation and Liability Act, and the Clean Water Act.
3. Although State and federal laws that are designed to protect human health and the environment are typically considered to be focused on protecting the general public and the environment, they are firmly grounded in control, safe operation and maintenance of plant systems to prevent releases or threats of releases of hazardous substances, including hazardous wastes, to the environment. In addition, the Department of Energy, and in certain instances the contractor, have entered into permits, Settlement Agreements and consent orders with Colorado and the Environmental Protection Agency pursuant to Colorado and federal environmental laws. The compliance requirements of these permits, Agreements and orders are subject to enforcement by Colorado and the Environmental Protection Agency.
4. The contractor and its employees are subject to Colorado and federal law requirements including civil and criminal liability and coercive or punitive enforcement actions in the same manner and to the same extent as any private enterprise. Except for the Price-Anderson Amendments Act (PAAA) indemnification for a nuclear incident, the Department of Energy does not indemnify the contractor for any liability that may be incurred for its conduct of the contract scope of work at Rocky Flats, subject to

certain equitable considerations regarding pre-existing conditions. Fines and penalties levied by the State against the contractor, for example, would in most instances not be an allowable cost under the contract.

The Manager of the Rocky Flats Field Office as the Senior DOE RFFO line management official and Head of Contracting Activity (HCA) at the Site, has lead safety responsibility and contract authority to ensure RFETS contractors achieve the mission safely and efficiently. The Manager carries out this responsibility through the support of the RFFO technical, administrative and legal staff. In addition, the Manager may draw upon additional technical and legal staff support as requested from Headquarters.

The Manager is supported administratively by qualified Contracting Officers to provide expert advice on contract matters and business principals. The Deputy Manager for Technical Programs (DMTP) is qualified as a Senior Technical Safety Manager and provides technical safety expertise. The DMTP is designated as the Contracting Officer's Representative authorized to provide technical direction to the contractor. This authority extends to technical direction not involving change to contract scope, cost or requirements. The DMTP has been delegated in writing certain safety approval authorizations from the Manager and exercises this authority through COR designation. Technical support staff, including safety and health professionals, project managers and Facility Representatives observe, monitor, assess and provide reports and recommendations to the Manager, the DMTP, and contracting and legal officials on contractor performance to ensure the contractor performs within the requirements of the contract. The contract establishes the scope of work to be accomplished, the standard terms and conditions within which work is accomplished, incentives and success criteria. The contract provides many tools with which to influence contractor performance. These range from performance based incentives, indirect financial penalties to stop work or contract termination. The contract defines the relationship/authority of the Field Office with respect to the contractor. Letters of delegation, mission and function statements and the Functions, Responsibilities and Authorities Manual (FRAM) define the responsibilities and authorities within RFFO.

A1. On what basis does the Contracting Officer decide which DOE requirements (other than laws and regulations) and standards should be imposed by contract?

Answer: Prior to the development of a solicitation (Request for Proposals), the Department establishes a Source Evaluation Board (SEB). The SEB voting membership includes a Contracting Officer, as well as senior program, technical or administrative personnel with at least two members from the same program area for which the procurement is being conducted. The SEB is supported by non-voting, ex-officio members and advisors from the RFFO staff. The SEB members and advisors review the scope of work and coordinate the inclusion of safety (and other) requirements and standards into the contract and approved by the RFFO Manager who is also the Head of Contracting Activity at the Site.

After the SEB drafts the solicitation, including the model contract, it undergoes a Headquarters review process as set forth in the Department of Energy Acquisition Guide Chapter 71. This review process includes providing copies to certain DOE program organizations, including Environment, Safety and Health (EH). Reviewers issue comments that must be resolved before the Request for Proposal (RFP) can be issued. A similar review and approval process occurs with the final contract, after negotiations are concluded.

After the contract is awarded, as new laws, regulations, or other requirements are issued or identified, appropriate contract provisions must be negotiated into the contract in bilateral modifications. That is to say, both parties must agree to the modifications. In the case of new laws or regulations, such laws and regulations will apply regardless of whether their implementing clauses are ever incorporated into the contract.

At RFFO, the Standards Division coordinates with subject matter experts to review new Department directives for applicability to our contract. If a new directive is determined to be applicable, it is provided to the contractor for an estimate of the impact the directive may have on cost, scope or schedule, if any. Once the impact is assessed, the Standards Division coordinates with the responsible RFFO program organization to decide whether the directive will be incorporated into the contract. If impacts have been identified, a baseline change proposal must be processed to direct or redirect resources to accommodate the impact.

In terms of the DEAR clause entitled “Laws, regulations and DOE directives,” 48 CFR 970.5204-78, how is “List B” initially arrived at for a given contract?

Answer: As described above, the program or technical personnel work with the Contracting Officer to review the scope of work and develop the initial version of List B.

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

Answer: At RFFO, the Standards Division coordinates with subject matter experts throughout RFFO to review new or revised Department directives for applicability to our contract. The technical staff makes a recommendation to RFFO Senior Management who then determines whether the requirement is applicable and provides direction to the Contracting Officer to negotiate the requirement into the contract. The HCA or Contracting Officer then approves the contract modification.

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?

Answer: The Contractor is required by contract to implement a self-assessment program. Significant safety non-compliances must be reported to DOE through occurrence reporting and the PAAA non-compliance tracking system. Discrepancies that do not individually meet reporting thresholds such as radiological deficiency reports, criticality safety infractions, and self-assessment findings are collected and reported in the monthly safety indicator report or can be obtained/reviewed upon request.

The Field Office directly oversees contractor compliance with safety requirements through the use of numerous types of ES&H assessments and evaluations. In addition, Facility Representatives and program assessment personnel monitor conditions daily and routinely record issues in Preliminary Notifications and formal assessments. Similarly, Headquarters organizations, EH, the DNFSB, and State and federal regulators provide written reports and recommendations. The Contracting Officer's Representative (COR) staff is on distribution for all such data. The data is included in the site assessment database and discussed with the Contracting Officer (CO) monthly.

Communication of safety requirement violations can occur through any number of mechanisms and reporting chains. These include formal and informal communications from the COR or his staff to the CO on compliance issues. Communications can be in the form of electronic mail, memorandum or by phone dependent on urgency or safety significance. Shut down for an imminent hazard requires immediate notification (within 5 minutes) of action; however, written direction from the Contracting Officer follows.

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?

Answer: In the Rocky Flats Field Office Performance Based Integrating Management contract with the Kaiser-Hill Company, L.L.C., (Kaiser-Hill) noncompliance with contract safety requirements can be penalized in a number of ways. First, the Contracting Officer may notify the contractor of noncompliance with applicable safety requirements and issue direction to take corrective action. Other DOE or external oversight officials can also exercise such authority through the Contracting Officer. These same individuals may identify health and safety hazards that do not represent an imminent threat, and can recommend the Contracting Officer issue the contractor direction to stop work or shut down operations. (See Clauses H.13 and H.14 of the contract.) If the contractor fails to take the directed corrective action, the Contracting Officer may issue a stop work

order. If a Facility Representative identifies an imminent health and safety hazard, he or she can immediately issue direction to stop work and/or shut down a facility or work operation. In any case, after a safety-related work stoppage, the contractor may not resume work unless and until the Contracting Officer issues a start order for resumption. (See Clause H.21).

The contractor cannot do work if it cannot be performed safely. Doing work safely means doing it in compliance with agreed upon safety requirements. Because the contractor cannot earn fee if he cannot do work, noncompliance with contract safety requirements clearly affects the contractor's earnings. Shutdowns or Stop Work Orders issued to address safety concerns do not entitle the contractor to any delays or extensions of due dates for performance incentives. Thus, the contractor's profit will be less if the contractor cannot achieve a performance incentive because of safety-related work stoppages. (See Clause H.21).

If the violations represented or contributed to a trend of recurring off-normal events, the Contracting Officer could withhold up to 50% of the incentive fees that would have otherwise been earned during the period in the activities responsible for the violation.

With regard to termination, it is important to note the DOE has the prerogative to terminate a contract in total or in part, thereby affording DOE maximum flexibility to achieve correction of deficiencies and performance failures in areas relating to the safety requirements under the contract.

The PAAA authorizes the Department to issue notices of violation or assess civil penalties when the contractor violates the provisions of 10 CFR 835 and 830.120. For willful and knowing violations, DOE may recommend to the Department of Justice that criminal action be taken against the contractor.

High levels of compliance with safety requirements can be rewarded by the negotiation and incorporation of a performance-based incentive, referred to in the Kaiser-Hill contract as a Performance Measure. (See Clauses B.5 and B.6). At RFETS such a Performance Measure has been used to incentivize continuous improvement in the safety area.

A.5 When contract safety requirements are violated or improperly implemented, who bears the cost burden of the corrective actions?

Answer: In a cost reimbursement contract, such as the Kaiser-Hill contract, the costs of corrective actions would be allowable subject to Federal Acquisition Regulation cost principles, as well as laws prohibiting fraudulent conduct on the part of the contractor. Thus, the Government bears this cost burden; however, the contractor will not be entitled to adjustments in required completion dates for any performance-based incentives or other requirements that may be impacted by such

stoppages or delays resulting from the violation. If the contractor is shown to have performed with willful misconduct or lack of good faith a contractor may be liable for all/part of the cost. At Rocky Flats such a performance measure has been used to incentivize continuous improvement in the safety area.

A.6 What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety terms and conditions are violated?

Answer: A formal Authorization Agreement would be considered an applicable requirement, as that term is used in Clause H.21, Environment, Safety and Health (Government Owned or Leased). If the contractor violates the conditions of an Authorization Agreement or other safety requirements, Clause H.21 provides that the Contracting Officer may notify the contractor of the noncompliance and direct corrective action. If the contractor fails to take the corrective action, the Contracting Officer can issue an order stopping all or any part of the work. The contractor may not resume such work unless and until the Contracting Officer issues a start order for resumption. The contractor will not be entitled to adjustments in required completion dates for any performance-based incentives or other requirements that may be impacted by such stoppages.

A.7 What are DOE's safety training and qualification requirements for Contracting Officers who are responsible for defense nuclear contracts?

Answer: Contracting personnel must comply with certain statutory educational requirements and those delineated in DOE Order 541, "Appointment of Contracting Officers and Contracting Officers Representatives", to qualify as a Contracting Officer. The positive training requirements are focused on business practices and contracting, rather than safety. RFFO does not require safety training and qualification for its Contracting Officers. Those RFFO staff individuals that advise the Contracting Officer on safety requirements are qualified in accordance with the technical qualification program. The Manager, RFFO and the Deputy Manager Technical Programs are qualified as a Senior Technical Managers.

A.8 What staff support, technical and legal, is provided to the Contracting Officer on a day-to-day basis with respect to contract compliance issues that involve safety?

Answer: As noted above, the Field Office Manager acts as the principal Contracting Officer at RFETS, exercising authority as the Head of the Contracting Activity. The Manager has the support of the entire Field Office technical, administrative and legal staff. In addition, the Manager may draw upon additional technical and legal staff support, when requested, from Headquarters technical and legal organizations.

B1. Referring to Figures 10, 11 and 12 and paragraph 3.3.2.4 of DNFSB/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

Answer The DOE control of safety planning processes and controls is commensurate with the importance of the work activity to the DOE mission, as well as the potential hazards of an activity to affect the safety and health of the public, workers and the environment. DOE **tightly** controls (i.e., requires DOE review and approval or concurrence) the following safety planning processes and sets of safety controls. This level is consistent with the integrated safety control set identified in the Macro Level in Figure 10, of TECH-16 and focuses on the Safety and Hazard Analysis, Engineered Design Features, and Administrative Controls depicted in Figure 12 of TECH-16:

- Authorization Agreements
- Authorization Bases (ABs) Documents which include the Site SAR and Facility SARs
- Safety Management Programs (Radiological Protection Program, Criticality Safety Manual, Integrated Safety Management System Description)
- Technical Safety Requirements/Operational Safety Requirements (TSRs/OSRs) changes
- Unreviewed Safety Questions (USQs)
- Justification for Continued Operations (JCOs)
- Operational Readiness Review/Readiness Assessments and corresponding Plan of Actions
- On-Site Transportation Manual
- Corrective Action Plans resulting from DOE Order Exemptions (both temporary and permanent)
- Response to DNFSB Recommendations
- NEPA Documents (EISs/EAs)
- Environmental Permits (air, water, solid wastes)

In addition, the following planning processes and sets of controls which can affect safety are tightly controlled by DOE:

- Life Cycle Baseline
- Detailed Project Baseline Summaries (DPBS)
- Performance Measures (Comprehensive PM includes AB milestones)
- Site Change Control Board Actions

The following safety planning processes and sets of safety controls which can affect safety are tightly controlled by DOE at a level consistent with the integrated safety control set identified in the Micro Level in Figure 10, of TECH-16. These documents for the most part are developed by the contractor using qualified staff and workers as appropriate. These are required to be sent to DOE for

review/information, and the RFFO then determines the level of involvement:

- Implementation Plans
- System Evaluation Reports (SERs)
- Safety Management Program Manuals (e.g., Radcon, Nuclear Safety Manual)
- Criticality Safety Evaluations (CSEs)
- Fire Hazards Analyses (FHAs)
- Nuclear Safety Technical Reports (NSTR)
- Activity Control Envelops (ACEs)
- Auditable Safety Analyses
- Health and Safety Plans (HASPs)

The following list of documents are reviewed by DOE as part of surveillances by technical program personnel, Facility Representatives or other safety SMEs:

- Occurrence Reports
- Procedures
- Integrated Work Control Packages
- Criticality Limits
- Radiological Work Permits
- Job Safety Assessments

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

As described above, the level of the Department's involvement is dependent on the level of control required, determined by the scope and nature of the work. The Department is required to review and formally accept specific safety analysis (SAR, BIO, JCO, USQ), document approval in a Review Report (similar to the Nuclear Regulatory Commission's Safety Evaluation Report) and formally transmit that acceptance by memorandum to the contractor. Contractual agreements such as Authorization Agreements are signed by both parties and result in a formal modification of the contract. In addition to the review of documented plans, new activities undergo a readiness determination in accordance with DOE Order 425.1, "Start up and Restart of Nuclear Facilities", which provides for certain DOE approvals. The RFFO communicates approval by formal memorandum.

B3. "Authorization Agreement" has been defined in DNFSB/TECH-16 as a documented agreement between DOE and the contractor for facilities in which hazardous work is performed that requires preventative 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 the (a) public health and safety, (b) worker safety, and (c) the environment? How will this fame of reference by tied to the requirements of DEAR clause 970.5204-78?

Answer: The nature and scope of Rocky Flats Environmental Technology Site (RFETS) Authorization Agreements developed have been based upon Nuclear Regulatory Commission license models and the philosophy proposed in DNFSB documents Tech 5, 6, and 16. The contract List B identifies specific requirements regarding safety against which requirements within the Authorization Agreements are evaluated. Any deviation from requirements, including exceptions and additions to requirements, in list B are specifically addressed in the Authorization Agreement. The specific terms and conditions in the RFETS Authorization Agreement and Authorization Basis are developed from the contract List B by providing clarification or explanation when a graded approach is appropriate for a given scope of work.

(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?

Answer: The contractor's manuals are not subject to DOE approval unless required by law or contractual agreement. As an example, the Kaiser-Hill, Radiological Protection Program requires approval pursuant to 10 CFR 835. Most changes to contractor manuals or procedures are provided to DOE for information and are reviewed through routine assessment for both programmatic effectiveness and implementation.

(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) site-wide 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?

Answer: As indicated in the response to question B1, site wide and facility controls are documented in Safety Analysis Reports (SARs) and Basis for Interim Operations (BIO) formally approved by DOE. Most routine activity and task controls are documented in activity control envelops, integrated work control packages and operating procedures and are reviewed through assessment and day-to-day oversight.

(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 the responsibility be assigned?

Answer: Responsibility for review, approval, maintenance, and oversight of the contractor's compliance with the Authorization Basis documents and Authorization Agreements is assigned to appropriate DOE management, documented in the FRAM.

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.

Answer: The Rocky Flats agreements acknowledge these safety requirements as a part of the Authorization Agreement and incorporate them by reference into the Agreement. These requirements are specifically invoked if changes to existing contractual requirements are necessary. DOE ensures that the contractual safety requirements are implemented through routine oversight of the contractor's activities. The mechanisms to notify the Contracting Officer of noncompliance and contractual remedies discussed in section A are applicable to the implementation of programmatic safety requirements as well.

C.1 What is the status of the implementation of DEAR clauses 970.5204-2 and 970.5204-78 at your site?

Answer: Our contract includes the April 1984 version of the clause at 970.5204-2. The 970.5204-78 clause has not been incorporated. The RFFO has initiated negotiation of the changes with Kaiser-Hill .

C.2 Do you anticipate any difficulty ensuring that the DEAR clauses and contract requirement flowing therefrom are carried through into subcontracts?

Answer: The existing DEAR clause in the contract requires flow-down. Kaiser-Hill has indicated some concerns with the new DEAR clauses but these concerns seem to be on certain details not concerning integrated safety management. If the concerns cannot be addressed, it may refuse to accept the new clauses.

If the clauses are incorporated into the Kaiser-Hill contract, we anticipate little difficulty with flow-down to appropriate subcontracts.

C.3 Does the Authorization Agreement at your site require the contractor to notify DOE when the contractor self-identifies a violation of the Agreement?

Answer: The contractor is required to report violations through the requirements incorporated into the Authorization Agreement, like occurrence reporting and PAAA.

C.4 All approved Authorization Agreements lack a commitment to a contractor self-assessment and corrective action program. Why is this so in your case?

Answer: The facility specific Authorization Agreements reference the respective Authorization Basis documents for the facility. The Authorization Basis is reviewed and approved by DOE and includes the Safety Management Programs required. This would include the commitment to a contractor self-assessment and corrective action program. For example, Sections 3.2, 3.11 and 3.13.3 of the Building 371 BIO discuss the Integrated Safety Management, Quality Assurance and Nuclear Safety Programs, respectively. These program descriptions require independent assessments, self assessments, audits, feedback processes and improvement processes. In addition, the Integrating Safety Management System process currently being reviewed and approved will be contractually binding and will contain assessment/feedback requirements.

C.5 Is there an incentive clause in the contract addressed specifically to performance of work in conformance with an Authorization Agreement?

Answer: No. The Authorization Agreement becomes a binding part of the contract and is subject to contractual remedy. Compliance with terms and conditions of the contract is required and should not be considered for incentive.

C.10 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.

Answer: The Implementation Plan is referenced in the Building 771 Authorization Agreement. The Implementation Plan includes the deadlines for implementing the Authorization Basis controls and so it was not necessary to repeat in the Agreement. This date cannot be revised without approval of the DOE Manager.

Section D:

As with any hypothetical situation, the answer depends upon the assumptions made. The RFFO does not in general, assume any unusual factual situations that would

trigger an inquiry into an allowable cost issue or fraudulent or illegal contractor conduct. It should also be noted that the contractor may not be responsible for “pre-existing conditions” and although it may not be in compliance with a contract requirement, the contractor is not obligated under the contract to spend its own funds to resolve such conditions. Therefore, corrections of violations of a contract term or condition is at times subject to the availability and allocation of adequate funds.

As previously stated, except for PAAA indemnification, the Department of Energy does not indemnify the RFETS contractor, and the contractor and its employees are subject to a variety of laws, rules, and regulations enforced by State and federal regulatory agencies which could subject the contractor and/or its employees to coercive or punitive penalties. Thus, any necessary contract remedy would consider whether the desired contractor behavior may have been induced or enhanced by these other means.

- 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 off ORRs.**

In this scenario:

- (a) Has the contractor violated a term of the contract?**

Answer: No. DOE Order 425.1 requires performance of an ORR by the contractor prior to declaring its readiness to proceed and initiation of a DOE ORR. It appears that the ORR has served its intended purpose -- it has demonstrated that operations are not warranted without corrective actions, and it has ensured that the corrective actions will be accomplished and a subsequent, successful ORR must be performed before starting operations.

- (b) What contractual remedies or sanctions are available?**

Answer: None. As stated above, no contract terms are violated, so no remedies or sanctions are warranted, unless one considers the corrective actions described in the example to be “remedies or sanctions.” Consequently, this may impact the contractor’s ability to achieve performance based incentives.

- (c) Who in DOE is responsible for taking contract actions?**

Answer: Formally appointed Contracting Officers, Heads of Contracting Activities, or the DOE Procurement Executive (the Deputy Assistant Secretary for Procurement and Assistance Management) are the only individuals with contracting authority in DOE. (See Federal Acquisition Regulation Subpart 1.6, Department of Energy Acquisition Regulation Subpart 901.6, and DOE Order 541.1, Appointment of Contracting Officers and Contracting Officer Representatives).

Contracting Officers may designate other Government personnel to act as authorized representatives for functions such as technical monitoring, inspection, approval of shop drawings, testing, approval of samples, and other functions of a technical nature not involving a change in the scope, price, terms or conditions of the contract. (See Department of Energy Acquisition Guide, Chapter 1, and DOE Order 541.1).

In the case described above, there would be no “contract actions” since there were no contract violations.

(d) Does DOE or the contractor bear the unnecessary added expense of the ORR?

Answer: The additional costs would be allowable under general principles applicable to cost-reimbursement contracts, and in accordance with the Federal Acquisition Regulation cost principles set forth in FAR Part 31, unless additional circumstances exist that would make the costs unallowable, such as willful misconduct or lack of good faith. See response to A5.

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?

Answer: Yes

(b) What contractual remedies or sanctions are available?

Answer: Contractual remedies or sanctions available might include work stoppage, reduction of performance fee, contract termination or imposition of penalties under the PAAA, dependent on circumstances of the incidents.

(c) Who in DOE is responsible for taking contract actions?

Answer: See the answer to D1(c) above, for a general answer regarding contracting authority.

Specific to this case, the Contracting Officer working with the responsible program officials reviewing the cause and circumstances surrounding the fire.

(d) Who pays for repairing the damage caused by the fire?

Answer: If the failure to comply with the contract's fire protection requirements were clearly the result of willful misconduct or lack of good faith on the part of the contractor's managerial personnel, the contractor would be liable for the loss or damage to Government property. The cost of replacing the property would not be an allowable cost under the contract. If this is not the case, the Government would bear cost of repair. Costs resulting from civil fines or criminal penalties are not allowable.

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?

Answer: Yes. Contract Clauses C.4(a) and H.21(b) require the contractor to comply with applicable laws and regulations in the performance of the contract.

(b) Will contract remedies also be invoked for the violation?

Answer: Contract remedies would not be automatic. The penalty imposed through the PAAA is viewed, and has been used as, a remedy. Corrective actions may impact the contractor's ability to achieve performance based incentives. If circumstances warrant, the Contracting Officer imposes additional sanctions as discussed in A5.

(c) Will the civil penalty impact financial incentives under the contract?

Answer: As discussed above, if the Contracting Officer issues a stop work order as a result of the violation, it could impact the contractor's ability to earn performance based incentives.

If the civil penalty exceeds \$100,000, Clause B.6 of the contract, entitled Payment of Base Fee and Performance Based Incentive Fee, would authorize the Contracting Officer to withhold all incentive fees that would have otherwise been earned during the period in the activities responsible for the violation.

Finally, if the violations represented or contributed to a trend of recurring off-normal events, the Contracting Officer could withhold up to 50% of the incentive fees that would have otherwise been earned during the period in the activities responsible for the violation.

(d) Who bears the cost of correcting the conditions leading to the penalty?

Answer: The Government will bear the cost of corrective actions; however, the contractor's ability to earn performance based incentives may be impacted because of a delay in schedule and reduction in fee available for application to such activities.

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?

Answer: It would depend upon the specific circumstance of the violation. Contract remedies or sanctions would not be automatic.

The violation could result in the Contracting Officer issuing a stop work order for affected activities, along with specific corrective actions. Until the contractor completed the corrective actions and the Contracting Officer issued a resumption order, the contractor could not perform the specified activities delineated in the stop work order. This could impact the contractor's ability to achieve performance based incentives.

If the violation were serious enough, the Contracting Officer could issue a termination for default of all or part of the contract effort. This would be an extremely serious action, and would be highly unlikely.

Finally, if the violation represented or contributed to a trend of recurring off-normal events, the Contracting Officer could withhold up to 50% of the incentive fees that would have otherwise been earned during the period in the activities responsible for the violation.

(b) Who in DOE is responsible for taking contract actions?

Answer: See the answer to D1(c) above, for a general answer regarding contracting authority.

Specific to this case, the Contracting Officer (i.e., the RFFO Manager) working with the responsible program officials would decide whether the situation merited any of the contract actions described above.

- 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?**

Answer: Only if by not following its work practices/procedures, the contractor has violated DOE Orders in the contract.

- (b) What measures could be taken to bring the contractor into compliance with its own practices and procedures?**

Answer: The Contracting Officer may notify the contractor of the non-compliance and issue direction to take corrective action. The violation could result in the Contracting Officer issuing a stop work order for affected activities, along with specific corrective actions. Until the contractor completed the corrective actions and the Contracting Officer issued a resumption order, the contractor could not perform the specified activities delineated in the stop work order. This could impact the contractor's ability to achieve performance based incentives.

If the violation represented or contributed to a trend of recurring off-normal events, the Contracting Officer could withhold up to 50% of the incentive fees that would have otherwise been earned during the period in the activities responsible for the violation. The circumstances would also be reviewed for PAAA implications.

- 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?**

Answer: Only if by its actions the contractor has violated the safety order listed in the contract.

(b)What contractual remedies or sanctions are available?

Answer: See response D5(b).

(c)Who in DOE is responsible for taking contract actions?

Answer: See the answer to D1(c) above, for a general answer regarding contracting authority.

Specific to this case, the Contracting Officer (i.e., the RFFO Manager) working with the responsible program officials would decide whether the situation merited specific contract actions.

Savannah River Field Office
Response to DNFSB Questions

October 1997

DOE F 1325 8

United States Government

Department of Energy (DOE)

memorandum

Savannah River Operations Office (SR)

DATE: OCT 14 1997

REPLY TO

ATTN OF: SRD (Dayani/(803) 725-7721)

SUBJECT: Defense Nuclear Facilities Safety Board (DNFSB) Questions on Contract Administration (Your Memo, 9/18/97)

TO: Richard Crowe, Director, Safety Management Implementation Team (DP-3), HQ

The DOE-SR responses to subject questions are attached.

If you have any questions or comments on this subject, please call me or have your staff call

Mosi Dayani at (803) 725-7721.

Mario P. Fiori
Manager

VD-98-0001

Attachment:
Subject Response

cc w/atch:

A. Alm (EM-1), HQ

M. B. Whitaker, Jr. (S-3.1), HQ

Kent Fortenberry, SR

DOE-SR Response
to
DNFSB Questions in the Sept. 15, 97 Letter to DOE

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.

Background on Responses to Section "A" Questions:

The Federal Acquisition Regulation Subpart 2.101, defines the term "contracting officer" as meaning "a person with the authority to enter into, administer and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the contracting officer acting within the limits of their authority as delegated by the contracting officer" (emphasis added). At SR the term includes the Manager, appointed Contracting Officers, and Technical Managers as explained below.

The contract for operation of the Savannah River Site provides a structured framework under which site operations are conducted. The contract document itself establishes the broad work requirements, process structure and terms and conditions under which operation are to be conducted. DOE requirements and standards are conveyed to the contractor through the S/RIDS process and Contract Administration Notices (CANs) under a clause entitled, H. 12 Federal and Departmental Requirements (which will be superseded by the new clause at DEAR 970.5204-78 Laws, Regulations and DOE Directives). Annual work scope and performance expectations are established via the SRS Management Plan which governs the development of an Annual Operating Plan (AOP). This program is incorporated into the contract in the clause entitled, H.33 Performance Direction. These lower level documents tier upward under the Management Plan into the three contractual Task Orders which are signed by a contracting officer and constitute the official authorization to perform work.

For execution of the contract with WSRC, SR uses an integrated management team. The team is lead by the SR Manager as Head of the Contracting Activity (HCA). Under the Assistant Manager for Business and Logistics, the Manager has eight (8) individuals who are appointed as "contracting officers." Each of these individuals meet the criteria set forth in DOE Order 541.1, "Selection, Appointment, and Termination of Appointment of Contracting Officers". These 8 individuals assist the SR Manager by performing day-to-day duties as contracting

officers in administering the contract with WSRC and other contracts with DOE (Wackenhut, University of Georgia, etc.). Day-to-day direction for work performance is provided by the Manager, Deputy Manager, Assistant Managers, and Division Directors, within their respective areas of delegated responsibility. They establish the AOP milestones, goals, objectives, funding, standards and requirements for performance of the work. Most of these positions (Manager, Assistant Managers, Division Directors) are encompassed within the Technical Manager's formal qualification program established by DOE in response to DNFSB Recommendation 93-3. Personnel in these positions are responsible for inspection/acceptance of contractor work and resolution of any technical issues which may arise. Problems involving funding, fees, terms or conditions of the contract, or contractor's rights under the contract are resolved by the 8 contracting officers, in consultation with legal counsel, financial experts, and others functioning as matrix support.

Evaluation of the contractor's performance is performed on a tiered basis with the evaluation of the contractor's performance against the AOP milestones, goals and objectives, and against the safety requirements and controls established through the S/RID. The evaluation is conducted by the Division Director's and their staffs. This is then formally input through the Assistant Manager's to the Award Fee Evaluation Board. The Board, comprised of all Assistant Manager's, evaluates the input received and makes a final written evaluation and fee recommendation to the Manager, as the Fee Determination Official. The Manager assesses the information provided and issues a formal fee determination letter to the contractor.

The responses provided below are provided within the context of the structure outlined above.

- 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 §970.5204-78, how is "List B" initially arrived at for a given contract?

Response to A1:

DOE Requirements are imposed on the contractor in accordance with the contract clause entitled, H. 12 Federal and Departmental Requirements (which will be superseded by the new clause at DEAR 970.5204-78 Laws, Regulations and DOE Directives). For environment, safety and health (ES&H) requirements, these are imposed, pursuant to the clause, through the S/RID process. Non-ES&H requirements are imposed through the CAN process, which is fully described in SR's Directive Implementation Instruction (DII) 251.1.1A. Non-ES&H Orders are forwarded upon receipt by SR to the contractor for evaluation and an implementation plan/determination of non-applicability are made by the contractor and approved by the cognizant DOE technical office. The ES&H requirements, and changes thereto, are processed pursuant to the S/RIDs program.

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

Response to A2:

Safety requirements are conveyed to the contractor via the S/RID process which is incorporated into the contract by reference. Changes to the S/RID are approved by the Operations Office Manager (Senior Contracting Officer). As a result, the Manager stays informed of the requirements and any subsequent changes.

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?

Response to A3:

The Contracting Officer can be informed of violations or inadequate implementation of contract safety requirements through a number of mechanisms at SR. These include:

Self-reporting by the contractor through the Occurrence Reporting and Processing System (ORPS)

Self-reporting by the contractor through the non-compliance tracking system established for Price Anderson Act (PAA) violations

Day-to-day operational reviews performed by Facility Representatives

Technical assessments performed by Operations Office staff (including reviews of assessments performed by contractor personnel)

Observations stemming from management walk-throughs

Findings or observations from independent reviews (e.g., EH Site Representatives)

Concerns raised by external entities (DNFSB, EPA, SCDHEC, etc.)

Concerns raised through the site employee concerns program, Inspector General's Office, and other avenues established for "whistle-blower protection"

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?

Response to A4:

(a) Noncompliance with safety requirements can be dealt with in a variety of ways, depending upon the nature and magnitude of the infraction and the extent of contractor management involvement with the condition. The options available include: reducing award fee and Performance Based Incentive (PBI) payments; issuance of Stop Work Orders (which could also impact award fee/PBI payments); invoking the provisions of contract clause H.8 Conditional Payment of Fee Or Incentives (Exclusive of Base Fee) [also referred to as the "Killer" Clause] which permits withholding part or all of the award fee/PBI payments; contractor liability for payment of fines and

penalties which is not reimbursable by the Government; disallowance of costs if managerial personnel are involved and acted with willful misconduct or bad faith; the Government electing not to exercise an option to extend the term of the contract; or ultimately, termination of the contract for default. Cases involving violation of Nuclear Safety Rules promulgated by the Department are also subject to the Department's enforcement actions (which could include civil penalties) under the 10 CFR 820.

(b) Once noncompliance is identified, the same remedies outlined in (a) above and methods identified in response to question "A3" are also available for ensuring noncompliance is promptly corrected. A failure by the contractor to correct identified deficiencies would normally result in a higher level of action against the contractor (in terms of further increased reduction of fees or invoking the Killer clause provisions) to, in extreme cases, refusal to exercise a option to extend the contract, or contract termination.

(c) High levels of safe and effective performance can be rewarded with the inverse of the adverse actions outlined above. High levels of performance can result in significant payments made under the award fee program, higher earnings under PBI's, lead to exercising options to extend the term of the contract and result in highly favorable references when the contractor competes for other Departmental contracts.

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

Response to A5:

The cost liability for corrective actions associated with violation or improper implementation of safety requirements is dependent upon the details associated with the incident. As a general rule, the Government is a self-insurer and the Government pays for corrective actions under a cost-reimbursement contract. However, if contractor managerial personnel (as that term is defined in each contract) are guilty of willful misconduct or lack of good faith, or depending upon the incident lack of prudent business judgment, then the contractor can become liable for some or all of the increased costs. In any case, regardless of whether or not contractor managerial personnel were at fault, the contractor's award fee and performance based incentive fees are at risk. In some cases, depending upon the nature and significance of the incident, the loss of fee could theoretically be greater than the cost associated with the incident.

A6. What corrective actions can a Contracting Officer take when some term or condition of a formal Authorization Agreement is violated? When other mutually agreed-upon safety terms and conditions are violated?

Response to A6:

See response to A4(a) above. Actions can range from adverse impacts on fee to termination of the contract.

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

Response to A7:

Contracting Officers are qualified in accordance with DOE Order 541.1. Authorized representatives of the contracting officers, i.e.; Deputy Manager, Assistant Managers, and Division Directors are qualified under the technical qualification program as appropriate. Technical issues are managed on a day-to-day basis by appropriately qualified technical personnel as authorized representative of the contracting officer. On any given day, Departmental Contracting Officers may have to deal with accounting, budgetary, classification, engineering, environmental, labor, legal, safety, security, training, etc. issues. Part of a Contracting Officers training is to obtain advice and consultation with the technical experts involved with a particular issue before making a decision for the Government.

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

Response to A8:

Please refer to the Background section above as well as the responses to questions A3 and A7 above. As indicated, the Contracting Officer receives constant information and support from a wide variety of technical, financial, legal, safety, environmental, and security personnel on a day-to-day basis. In many cases, information obtained on one technical issue may prompt the Contracting Officer to bring other technical personnel into the issue to ensure all contract requirements have been performed in accordance with the contract. What may start out to be an issue regarding cost allowability may result in issues regarding safety or other technical issues - at which time additional qualified personnel are consulted.

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 work-specific terms and conditions mutually agreed upon by DOE and the contractor. As illustrated by Figures 10, 11 and 12 of DNFSB/TECH-16, contractors can proceed with (a) highly hazardous operations entailing potential risk to all sectors (public, workers, environment) only after mutually agreed-upon 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.

Background on Responses to Section "B" Questions:

The contract requires the contractor to adhere to the ES&H requirements delineated in the Site Standards/requirements Identification Document (S/RID) and adhere to the management practices, programs, and procedures that are based upon the S/RID. Development of Authorization Basis (Safety Analysis Reports, Technical Safety Requirements, Basis for Interim Operations, etc.) for nuclear facilities is required by the S/RID. Requirements for DOE-SR approval of documents (such as SARs and TSRs) is also included in the S/RID. The Site S/RID is maintained as a living document and is revised via a formal process based on changes to the site or facilities' missions, hazards, lessons learned, etc.. For example, the S/RID will be revised to include a description of contractor's Safety Management System recently approved by DOE-SR. The S/RID will also be revised to include DOE expectations for development of Authorization Agreements.

- B1. Referring to Figures 10, 11 and 12 and paragraph 3.3.2.4 of DNFSB/TECH-16, what safety planning processes and sets of safety control does DOE tightly control, which less so, and what is the rationale for the demarcation?

Response to B1:

At the "macro" level, SR review and approval of "planning processes" or "safety controls" is dependent upon: (a) the governing requirement or standard selected for application, (b) the hazard of the activity, or (c) negotiated criteria established in the contract. For example, some DOE Directives or regulations invoked by the contract (via the S/RID) require DOE approval of contractor plans or analyses (DOE O 151.1 - Site Emergency Plan, DOE O 470.1 - Site Safeguards and Security Plan, 10 CFR 835 - Implementation Plan, DOE Order 5480.23 - Safety Analysis Report, etc.). Through the S/RID, SR applies the hazard categorization process of DOE-STD-1027 to determine the applicability of key "nuclear" safety Orders and Standards. Dependent upon the hazard categorization of the activity (typically characterized or grouped as "facilities" at SRS), tight DOE control may be exercised or not. For example, DOE approval of the safety analysis report (SAR) and technical safety requirements (TSR) would be required for a nuclear facility. For a lower hazard facility (e.g., radiological), the hazards analysis and safety controls would simply be required to be "auditable", subject to DOE review and assessment. The line of demarcation requiring DOE approval is the hazard of the activity, consistent with the approach advocated by DOE-EM-STD-5502.

Finally, SR and WSRC may have negotiated the level of control exercised by DOE in terms of the contract. For example, the Annual Operating Plan (AOP) identifies

program or project objectives to be achieved and establishes cost, schedule, and performance criteria. The level to which work is tightly controlled and authorized by SR through the AOP varies with respect to the level of scope (i.e., task, project, facility, program), cost, and expectations (performance based incentives, award fee element, etc.). The line of demarcation for DOE approval or other controls is generally discretionary and is a function of the management needs identified by the cognizant program or office (SR and HQ). In our estimation, DOE approved documents would fall in the category of "Macro Level" in Figure 10, "Public Sector" in Figure 11, and "public and Worker Protective Measures" in Figure 12 of the referenced report. Such documents are maintained under a formal change control process.

SR periodically reviews the manuals and procedures which form the architecture of the "macro" processes described above (e.g., Manual 11Q, "Facility Safety Document Manual" which details the rigor of hazards analysis required for a given type of facility and establishes procedural requirements for the Unreviewed Safety Question process). SR does not generally "approve" such governing procedures and manuals, nor the documentation generated as a result of their implementation, unless required by the governing Directive or regulation. SR does not approve contractor plans and controls which implement the set of standards and requirements at the "micro" level. Such plans and controls are subject to periodic reviews and assessments by SR to determine program compliance and effectiveness.

A major focus at SR is to monitor work in progress and measure outcome. As such, the Facility Representative Program provides for real time evaluation of work processes by observing facility evolutions and participating in turnovers, critiques, and work process planning meetings.

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

Response to B2:

Work-specific safety plans are not subject to formal review and acceptance by DOE-SR. These documents are reviewed based on the safety significance of the work and on a sample basis as part of the DOE assessment program. Comments and observations on the quality and adequacy of these plans are communicated to the contractors in a variety of ways based on the schedule of the planned work and safety significance of the findings.

- B3. "Authorization Agreement" has been defined in DNFSB/TECH-16 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:

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 970.5204-78?

Response to Part (a):

The process for development, approval, and maintenance of AAs is currently being proceduralized by both DOE-SR and the contractor based on the guidance being provided in DOE Guide 45.4. At SRS Authorization Agreements consist of a list of commitments imposed through the contract which are applicable to the facility to ensure protection of the public, workers, and the environment. Such documents include SAR, TSR, S/RID, EIS, etc. Criteria for the format and content and process for DOE review and approval of these documents are available in DOE and SR directives, laws and regulations, and the SRS S/RID. Additional facility operational conditions or limits will be added to the list in the AA whenever warranted.

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?

Response to Part (b):

Contractor's manuals of practice are generally not subject to DOE-SR approval. They are however subject to review and compliance oversight actions. Please see response to question "B1" for further information.

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) site-wide 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?

Response to Part (c):

As indicated in the background in response to section "B" and question "B1," site-wide and facility controls are reviewed and approved by DOE-SR. Activity and task controls are reviewed by the DOE technical assessment activities.

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?

Response to Part (d):

Yes, DOE facility line management.

- 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?

Response to B4:

At SRS the requirements for these safety management programs are contained in the S/RID which is incorporated in the contract by reference and is included in the Authorization Agreements.

- 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 H-Canyon)**

General

- C1. What is the status of the implementation of DEAR clauses 970.5204-2 and 970.5204-78 at your site?

Response to C1:

The clause DEAR 970.5204-78 has been sent to the contractor for review. We anticipate incorporating both clauses in the contract by December 31, 1997. We do not anticipate any difficulties incorporating these clauses in the contract as the current WSRC contract clauses were the predecessors to the recent clauses published in the Federal Register Final Rule. Current processes employed at SR are fully compatible with those identified in the final clauses.

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

Response to C2:

Flowdown of contract clauses is a standard practice in the contractor's approved purchasing system. While we do not anticipate any difficulty, we recognize continued vigilance will be needed to ensure effective execution.

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

Response to C3:

Yes, the SRS S/RID which is included in the Authorization Agreements contains the requirements for an Occurrence Reporting (to DOE) and Processing System (ORPS). The S/RID also contains requirements for documentation and correction of non-conformances by the contractor. These documents are also available for DOE review.

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

Response to C4:

The SRS S/RID which is included in the Authorization Agreements contains the requirements for contractor self-assessment and corrective actions program.

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

Response to C5:

As indicated in the "Background on Response to Section A Questions," evaluation of contractor's performance for determination of Performance Based Incentives includes evaluation against the safety requirements and controls. These safety requirements and controls include those identified in the Authorization Agreements. Details (clauses) for DOE and ES&H requirements, performance incentives, and fee determinations are delineated in the section "H" of the contract.

Site Specific

DOE-Albuquerque Manager:

- C6. The new order DOE O 452.2, *Safety of Nuclear Explosive Operations* requires the use of the

safety analysis and activity-specific 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?

DOE-Oakland 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 agreed-upon (and DOE-approved) 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.

DOE-Rocky 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.

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:

Has the contractor violated a term of the contract?

If the underlying deficiencies revealed by the ORR include failure to implement S/RID or other contractual requirements that would represent a violation of contract terms.

What contractual remedies or sanctions are available?

Remedies range from impacting the fee earnings to contractor termination as outlined in the response to A4 above.

Who in DOE is responsible for taking contract actions?

Depending upon the severity of the issue, day-to-day corrective action may be taken by the contracting officer's authorized representatives. As the severity of the issue increases, the issue may be elevated to the contracting officer for action and/or the Manager for either contractual action or impacting fee determinations.

Does DOE or the contractor bear the unnecessary added expense of the ORR?

This depends upon the circumstances surrounding the incident. See response to question A5.

- 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:

Is the contractor in violation of the contract?

Yes.

What contractual remedies or sanctions are available?

Remedies range from impacting the fee earnings to contractor termination as outlined in the response to A4 above.

Who in DOE is responsible for taking contract actions?

Depending upon the severity of the issue, day-to-day corrective action may be taken by the contracting officer's authorized representatives. As the severity of the issue increases, the issue may be elevated to the contracting officer for action and/or the Manager for either contractual action or impacting fee determinations.

Who pays for repairing the damage caused by the fire?

This depends upon the circumstances surrounding the incident. See response to question A5.

- 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:

Is the contractor also in violation of the contract?

Yes.

Will contract remedies also be invoked for the violation?

Assuming the penalty is imposed upon the contractor, costs associated with fines and penalties are unallowable costs under the contract, therefore, the contract remedy already exists. In addition to any penalty the contractor may have to pay, the contractor's fees (award or performance based incentives) may also be impacted, depending upon the severity of the issue.

Will the civil penalty impact financial incentives under the contract?

Depending upon the incident and the circumstances, the financial incentives may be impacted. The civil penalty is determined by the Office of Inspection and Enforcement and independent of financial incentives under the contract.

Who bears the cost of correcting the conditions leading to the penalty?

This depends upon the circumstances surrounding the incident. See response to question A5.

- 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:

What contractual remedies or sanctions are available?

Remedies range from impacting the fee earnings to contractor termination as outlined in the response to A4 above.

Who in DOE is responsible for taking contract actions?

Depending upon the severity of the issue, day-to-day corrective action may be taken by the contracting officer's authorized representatives. As the severity of the issue increases, the issue may be elevated to the contracting officer for action and/or the Manager for either contractual action or impacting fee determinations.

- 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:

Is the contractor in violation of the contract?

Yes, assuming following the work practices and procedures was necessary to ensure compliance with the S/RID or other requirements of the contract.

What measures could be taken to bring the contractor into compliance with its own practices and procedures?

Remedies range from impacting the fee earnings to contractor termination as outlined in the response to A4 above.

- 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:

Has the contractor violated a term of the contract?

Yes.

What contractual remedies or sanctions are available?

Remedies range from impacting the fee earnings to contractor termination as outlined in the response to A4 above.

Who in DOE is responsible for taking contract actions?

Depending upon the severity of the issue, day-to-day corrective action may be taken by the contracting officer's authorized representatives. As the severity of the issue increases, the issue may be elevated to the contracting officer for action and/or the Manager for either contractual action or impacting fee determinations.