Department of Energy
Washington, DC 20585

August 4, 1997

MEMORANDUM TO PROGRAM SECRETARIAL OFFICERS
FIELD ELEMENT MANAGERS

FROM: FEDERICO PEÑA

SUBJECT: DOE RESPONSE TO THE MAY 14, 1997 EXPLOSION AT HANFORD'S PLUTONIUM RECLAMATION FACILITY

I am in receipt of the Accident Investigation Board Report for the May 14th explosion in the Plutonium Reclamation Facility (PRF) at Hanford, and have determined that corrective action is warranted throughout the DOE complex. This explosion was a serious event and a warning of the potential for more serious accidents. If personnel were in the room when it occurred, there could have been fatalities. If the explosion had been more forceful, it could have released much more nuclear material. The fact that the event occurred in an inactive facility only further emphasizes that hazards still exist as we move from production to deactivation and decommissioning.

- The event underscores the hazards inherent in maintaining facilities in a shutdown or standby mode without full deactivation.
- It raises concerns about whether DOE and its contractors are maintaining the level of vigilance, knowledge and inquisitiveness needed to manage and oversee our operations.
- It calls into question the adequacy of facility and site safety management systems.
- It demonstrates that we still have serious unanalyzed hazards and have not followed up sufficiently on major hazard remediation initiatives, such as our own complex-wide vulnerability studies.
- It reinforces the need to make progress on the "Materials in Inventory Initiative" to dispose of materials for which there is no clear programmatic need.

The fundamental issue raised in the Hanford PRF report is how we manage safety. For our federal and contractor managers to manage safety, they must understand and control the hazards we face across DOE. The lessons of this accident must be addressed in a lasting way. Even with our best efforts, major vulnerabilities will exist at DOE sites for many years. These sites must be appropriately managed while the vulnerabilities are being eliminated.

Therefore, I am charging you to implement the following broad initiatives, and to report to me on your progress at the end of the year. Program Secretarial Officers should work with Operations and Field Office Managers to develop the report for each site to be submitted by the Operations or Field Office Manager.

- DOE site contractors must scrutinize their use or storage of any chemicals that have the potential for explosion, fire, or significant toxic release, and must promptly dispose of

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unneeded chemicals in accordance with safety requirements and environmental regulations. DOE field offices should develop an approval process to assure the disposal or safe and environmentally compliant storage and handling of such chemicals that are retained.

- DOE field offices must reassess known vulnerabilities (chemical and radiological) at facilities that have been shutdown, are in standby, are being deactivated, or have otherwise changed their conventional mode of operation in the last several years, and report status to their Program Secretarial Officers and the Assistant Secretary for Environment, Safety and Health within 120 days. Facility operators must evaluate their facilities and operations for new vulnerabilities on a continuing basis.

- DOE and contractor field organizations with operational responsibilities must assess the technical competence of their staffs to recognize the full range of hazards presented by the materials in their facilities, act on results, and implement training programs where needed.

- DOE field offices must assess their site Lessons Learned and Occurrence Reporting programs to assure that 1) outgoing information is well characterized and properly summarized, and 2) incoming information is thoroughly evaluated, properly disseminated, appropriately implemented, and tracked through formal management systems.

The emergency management of the PRF accident is the subject of a separate assessment by the Richland Operations Office. Results to date reveal deficiencies and lessons that may be applicable at other sites. I have asked the Offices of Nuclear Nonproliferation and National Security, and Environment, Safety and Health (EH) to evaluate those lessons and propose appropriate actions. This matter may be the subject of separate correspondence.

In closing, I want to reemphasize the importance of the EH Safety Alert issued on May 22nd. The Alert and other Lessons Learned notifications issued pursuant to this explosion advised facility managers and Operations and Field Office Managers to review their vulnerability assessment corrective action plans, the issues in the Alert, and surveillance data to ensure that they have a good understanding of the hazards associated with their chemical inventories and are responding appropriately. You should already have these activities underway. Our response to this event must be aggressive and reflect our commitment and responsibility to protect the safety of the workers and the public near our sites.

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