

DOCKET NO: 70-00008

LICENSEE: Battelle Memorial Institute  
The Battelle Columbus Laboratories  
505 King Avenue  
Columbus, Ohio

SUBJECT: REVIEW OF RADIOLOGICAL CONTINGENCY PLAN

1. Background

The Battelle Columbus Laboratories is the holder of Materials License SNM-7 and Byproduct Materials License No. 34-6854-5. Licensed activities are conducted at two locations; 505 King Avenue, Columbus, Ohio; and West Jefferson, Ohio, about 17 miles west of Columbus. At the King Avenue site only laboratory scale operations are conducted with special nuclear materials and byproduct materials. The vast majority of SNM and byproduct materials processing is conducted at the Nuclear Sciences Area located at the West Jefferson Site. The Radiological Contingency Plan (RCP) contained herein addresses only those licensed activities at the Nuclear Sciences Area at West Jefferson, Ohio. This RCP addresses onsite contingency planning for the following facilities located at the Nuclear Sciences Area:

- o Battelle Hot Cell Laboratory
- o Building JN-2 Unirradiated SNM Vault and
- o Building JN-3 (Retired Research Reactor) Plutonium Waste Storage Area

Radiological contingency planning for the Nuclear Sciences Area has been predicated upon an analysis of the risks associated with activities at the Hot Cell Laboratory, special nuclear materials vault at Building JN-2, and Plutonium waste storage at Building JN-3 (Retired Research Reactor.)

On February 11, 1981 the NRC issued an Order to Battelle Memorial Institute to prepare and submit a Radiological Contingency Plan for its Columbus Laboratories in accordance with a standard format and content (Enclosure 1 to the Order) or, alternatively, to reduce their possession limits below those listed in Enclosure 2 to the Order. On January 28, 1982, the licensee submitted a preliminary copy of the subject Radiological Contingency Plan in accordance with the February 11, 1981, Order. Five additional review copies of the Plan were subsequently submitted and were docketed March 5, 1982.

## II. Discussion

The Radiological Contingency Plan submitted March 5, 1982, is adequate to demonstrate that the licensee has accomplished the purposes of radiological contingency planning, viz, assuring (1) that his plant is properly configured to limit releases of radioactive materials and radiation exposures in the event of an accident, (2) that a capability exists for measuring and assessing the significance of accidental releases of radioactive materials, (3) that appropriate emergency equipment and procedures are provided onsite to protect workers against radiation hazards that might be encountered following an accident, (4) that notifications are promptly made offsite to Federal, State and local government agencies, and (5) that necessary recovery actions are taken in a timely fashion to return his plant to a safe condition following an accident.

The licensee's Radiological Contingency Plan serves those purposes adequately by satisfactorily meeting the necessary planning objectives:

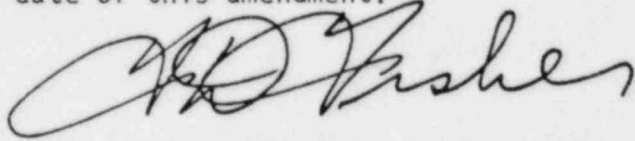
1. Confinement systems for radioactive material provide a proper level of protection against accidental releases, radiation alarms are used to detect accidental releases, and appropriate means exist for limiting accidental releases.
2. The responsibilities of the various supporting organizations are specifically established, and a requisite number of staff is designated to respond initially and continuously throughout any emergency that might occur.
3. On-shift licensee responsibilities for emergency response are unambiguously defined, adequate staffing is provided to assure that key functional areas will continuously operate, and the interfaces among various onsite response activities and any offsite support and response activities are specified.
4. Arrangements are made for requesting and effectively using assistance resources, and other organizations capable of augmenting the planned response are identified.
5. The standard emergency classification and action level scheme is in use by the licensee.
6. Procedures have been established for notification of State and local response organizations and for notification of emergency personnel by the licensee and for assuring that messages concerning emergencies are unambiguously communicated to these individuals.

7. Provisions exist for prompt communications to State and local response organizations, to other organizations and to emergency personnel.
8. Adequate emergency facilities and equipment to support the emergency response are provided and maintained.
9. Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite releases of radioactive materials are in use.
10. Means for controlling radiological exposures, in a emergency, are established for emergency workers.
11. Arrangements are made for medical services for injured individuals who are contaminated.
12. General plans for recovery and reentry are developed.
13. Periodic exercises are conducted to evaluate major portions of emergency response capabilities, periodic drills are conducted to develop and maintain key skills, and deficiencies identified as a result of exercises and drills are corrected.
14. Radiological emergency response training is provided to those who may be called on to assist in an emergency.
15. Responsibilities for plan development and review and for distribution of plans are established, and the planners are properly trained.

III. Conclusions and Recommendations

The Battelle Columbus Laboratories license should be amended to incorporate the revised Radiological Contingency Plan as a condition of the license. The proposed amendment should have no adverse effect on the public health and safety or on the quality of the environment and should improve Battelle's ability to protect against, respond to and mitigate the consequences of an accident involving radioactive materials.

So as to afford the licensee sufficient time to implement the Plan, it is recommended that the effective date for implementation should be 90 days subsequent to the date of this amendment.



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