OCT 2 4 1989

Sigma Chemical Company
ATTN: Mr. Steven Doelger
Vice President of Operations,
Manufacturing
P.O. Box 14508
St. Louis, MO 63178

License No. 24-16607-03 3028992 License No. 24-16273-01 30/07-/6 License No. 24-16607-02 5028932

Gentlemen:

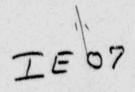
This refers to the routine safety inspection conducted by Ms. B. J. Holt of this office on August 14 through August 16, 1989, of activities authorized by NRC Byproduct Material Licenses No. 24-16607-02, No. 24-16607-03, and No. 24-16273-01, and to the discussion of our findings with you at the conclusion of the inspection.

The inspection of Licenses No. 24-16607-02 and No. 24-16607-03 was an examination of activities conducted under your licenses as they relate to radiation safety and to compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspection consisted of a selective examination of procedures and representative records, observations, independent measurements, and interviews with personnel. The inspection of License No. 24-16273-01 was limited to the review of the circumstances surrounding an event involving a shipment of scintillation waste during July 1988.

During this inspection, certain of your activities under Licenses No. 24-16607-02 and No. 24-16607-03 appeared to be in violation of NRC requirements, as specified in Appendix A. A written response is required. No violations were identified for License No. 24-16273-01.

As previously stated, the inspection also included a review of the circumstances relating to a July 28-29, 1988 incident in which a 30 gallon drum of mixed scintillation waste containing carbon-14 was found to be leaking on its arrival at Adco Services of Tinley Park, Illinois. Although no violations were identified with regards to the event, it is our understanding that you have reviewed your current transportation procedures and have taken the following actions to enhance your program:

- Shipments of liquid waste are now placed in overpacks prior to shipments; and
- Transportation papers now include more descriptive waste classification entries with regard to hazardous and radioactive waste.



We have no further questions regarding the July 1988 incident. Your revised transportation procedures will be reviewed during future inspections.

In addition to discussing the apparent violations with you at the conclusion of the inspection, the inspector expressed concern over the lack of documentation of quarterly radiation safety audits and personnel training under NRC License No. 24-16607-03 and over your management control system that has permitted this and the noted violations to occur. Consequently, in your reply to this letter, please describe those actions taken or planned to improve the effectiveness of your management control over your licensed activities so as to preclude the recurrence of these or similar concerns and violations. Enclosed is Appendix 3, "Management Control" to provide you with some guidance for your response.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter, the enclosures, and your response to this letter will be placed in the NRC Public Document Room.

The responses directed by this letter and the accompanying Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

Bruce S. Mallett, Ph.D., Chief Nuclear Materials Safety Branch

Enclosures:

 Appendix A, Notice of Violation

Appendix B, "Management Control"

cc w/enclosures: DCD/DCB (RIDS) Steve Collins, Illinois Department of Nuclear Safety

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