November 6, 1998

Ms. Diane Zekind Vice President CMI-Tech Center, Inc. 1600 West Eight Mile Road Ferndale, MI 48220

SUBJECT: NRC INSPECTION REPORT 030-90032/98001(DNMS)

Dear Ms. Zekind:

This refers to the survey and inspection of portions of the former Ethyl Corporation site at Ferndale, Michigan, on September 11, 1998, and the assessment of the results of radioanalysis of the wipe samples collected during the inspection. This refers also to the telephone conversation with you, on November 5, 1998, discussing the analytical results obtained from the analysis of the samples collected. A copy of the report of this inspection is enclosed for your information.

These facilities were licensed by the Atomic Energy Commission (AEC) for the possession of tritium and carbon-14, under AEC License No. 21-0641-01 from 1956 through 1958. During a review of the files for these licenses, NRC determined that there were no documented closeout radiation surveys conducted to determine that residual radioactivity on these sites was within the NRC guidelines for unrestricted release. Therefore, a scoping survey was conducted to ensure the residual radioactivity was within NRC guidelines.

Based upon the results of this scoping survey, NRC has determined that your facility does not have residual radioactive material in excess of the NRC unrestricted release guidelines. No residual radioactivity was detected. NRC has no further concerns regarding these facilities.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

Should you have any questions regarding the inspection, please do not hesitate to contact Mr. Ed Kulzer at (630) 829-9875, Dr. Peter Lee at (630) 829-9870 or myself at (630) 829-9615.

Sincerely,

/s/ Bruce Jorgensen

Bruce L. Jorgensen, Chief Decommissioning Branch

Docket No. 030-90032 License No. 21-0641-01

Enclosure:

Inspection Report 030-90032/98001(DNMS)

cc w/encl:

N. Zotos, Dykema Gossett

C. Denton, Ethyl Corporation

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# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket No:

030-90032

License No.

21-0641-01

Report No:

030-90032/98001(DNMS)

Licensee:

**Ethyl Corporation** 

Facility:

**CMI-Tech Center** 

Location:

1600 Eight Mile Road

Ferndale, Michigan

Dates:

September 11, 1998

November 5, 1998

Inspectors:

E. L. Kulzer, CIH, CSP, Radiation Specialist

P. J. Lee, Ph.D., Radiation Specialist

Approved By:

Bruce L. Jorgensen, Chief

Decommissioning Branch

Division of Nuclear Materials Safety

#### **EXECUTIVE SUMMARY**

# Ethyl Corporation NRC Inspection Report 030-90032/98001(DNMS)

This was a survey and inspection of the Ferndale, Michigan site. The Ethyl Corporation had a license to use carbon-14 and tritium to conduct tracer studies of combustion of fuels and lubricants in engines. The site is now owned by CMI-Tech Center. Ethyl Corporation through Mr. Zotos had contacted former employees to determine where these studies took place. Mr. Zotos found that three rooms had been used and were still in their original condition. These rooms were Room C-12 (Cold Room), and Labs; Dan 3, and Dan 7. Surveys of these rooms showed no detectable radioactivity. A total of eight wipe samples were collected in these rooms and were found to be below the NRC's release guidelines for unrestricted use; no radioactivity was detectable on any of the wipe samples.

## Report Details

## 1.0 Background

The Atomic Energy Commission (AEC) authorized Ethyl Corporation to use carbon-14 (20 millicuries) and tritium (4,000 millicuries) in conducting tracer studies on fuels and lubricants. The license was issued on May 17, 1956, and expired on July 12, 1958. A file review of old license files recently disclosed that this file lacked evidence of any closeout radiation surveys to ensure any residual radioactivity met acceptable levels for unrestricted release.

# 2.0 Independent Measurements

#### a. Inspection Scope (87104)

The NRC survey included direct scanning of at least 30 percent of each of the three rooms that were identified as having been used under the license. The NRC inspectors used a Ludlum Model 2241 meter with a Model 44-9 pancake probe. Wipe samples were collected because the tritium can not be detected by any portable instruments.

#### b. Observations and Findings

The background reading using these instruments was approximately 40 counts per minute (cpm). Radiation levels in these areas were indistinguishable from background.

Eight wipe samples were collected in these rooms. All wipes samples analyzed had contamination levels which were below the NRC release guidelines for unrestricted use, in that no radioactivity was detectable on any of the samples.

#### c Conclusions

The surveys and results of the wipe samples collected showed that the residual radioactive materials in the former Ethyl Corporation facility were within the NRC guidelines for release for unrestricted use.

#### 3.0 Exit Management Meeting

At the conclusion of the onsite inspection of the sites, the preliminary results of the inspection were discussed with the individuals identified below. A telephone conversation with Ms. Zekind was also made on November 5, 1998, to discuss the results of the wipe samples.

# PARTIAL LIST OF PERSONS CONTACTED

- \*M. Harvey, ATS
- \*J. Norton. CMI
- \*\*D. Zekind, Vice President, CMI-Tech Center
- \*N. Zotos, Dykema Gossett
- \*Attended onsite exit meeting conducted September 11, 1998.
- \*\*Via telephone conversation of November 5, 1998, discussing the sample results.

# INSPECTION PROCEDURE USED

IP 87104: Decommissioning Inspection for Materials Licensees