

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19406-1415

August 16, 2004

License No. 01-30362-01

Docket No. 03036499 Control No. 134442

Mark Fellows Vice President Eastern Technologies, Inc. P.O. Box 409 Ashford, AL 36312

SUBJECT: EASTERN TECHNOLOGIES, INC., REQUEST FOR ADDITIONAL INFORMATION CONCERNING APPLICATION FOR NEW LICENSE, CONTROL NO. 134442

Dear Mr. Fellows:

This is in reference to your application dated January 29, 2004 providing financial assurance for decommissioning for Nuclear Regulatory Commission License No. 01-30362-01 and your letter dated June 15, 2004 responding to an NRC request for additional information. In order to continue our review, we need the following additional information:

- 1. The Rad Handling Procedure section of your application states in several areas that if smearable contamination is discovered equaling or exceeding 1,000 dpm/100 cm<sup>2</sup>, the item must be decontaminated to acceptable levels (e.g., <1,000 dpm/100cm<sup>2</sup>) or placed inside a protective covering prior to transfer from contaminated area. Table 1 of NRC Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material (enclosed) lists acceptable surface contamination levels for fixed and removable contamination for release of items from the radiological control area. Please confirm that you will use the Table 1 criteria for free release of items from the radiological control area. In addition, please describe the disposition of the items which are placed inside a protective covering and removed from a contaminated area.
- 2. In Section II.C. of your Decommissioning Funding Plan (DFP) submitted with your license application, Note 2 (at the end of the table) states that certain components will be decontaminated to unrestricted release limits. 10 CFR Part 20, Subpart E, "Radiological Criteria for License Termination," requires that residual contamination of facilities does not exceed 25 millirem total effective dose equivalent to the average member of the critical group. On June 13, 2002, the NRC published acceptable screening values for building surfaces in the enclosed Federal Register Notice, "Use of Screening Values to Demonstrate Compliance with the Final Rule on Radiological Criteria for License Termination" (65 FR 37186). Please confirm that you will use the screening values for building surfaces listed in 65 FR 37186 when estimating the cost of releasing building surfaces for unrestricted use.

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- 3. The site-specific cost estimate required for a DFP should assume that routine facility operations will prevail at the time of decommissioning. NRC believes it is reasonable for decommissioning cost estimates to assume the following:
  - A. Inventories of materials and wastes at the time of decommissioning will be in the amounts consistent with routine facility conditions over time.
  - B. Decommissioning activities take place immediately on cessation of operations without multiyear storage-for-decay periods.
  - C. Work will be performed by an independent third-party contractor.

Your DFP does not provide the assumptions which were used to estimate your decommissioning costs. Please provide a DFP with a cost estimate which is based on the assumptions described above.

- 4. A DFP must address any decommissioning costs associated with final radiation surveys, packing materials, equipment/supplies, laboratory analysis, and disposal of radioactive waste including, but not limited to, lint, sludge, and secondary waste (from decontamination efforts). Your DFP does not address these items. Please provide a DFP with a revised cost estimate that includes the items addressed above. Appendix A of NUREG-1757, Volume 3, "Consolidated NMSS Decommissioning Guidance; Financial Assurance, Recordkeeping, and Timeliness" (enclosed), contains cost estimating tables recommended by NRC for use in DFPs. You may either complete the tables in Sections A.3.9, A.3.14, A.3.15, A.3.16, and A.3.17 and submit these tables with your revised cost estimate or provide the information in a comparable format. NUREG/CR-6477, "Revised Analyses of Decommissioning Reference Non-Fuel-Cycle Facilities," (enclosed) may also be helpful in preparing your response.
- 5. Section II.E. of your DFP provides the estimated weight of radioactive waste for facility components. Normally, waste disposal costs are based on volume and curie content rather than weight. Please provide the estimated volume of the waste to be disposed and the method(s) used to determine the estimated volumes of the radioactive waste.
- 6. It appears that you submitted a draft version of an escrow agreement with your license application. We can issue your license prior to submission and acceptance of the completed financial assurance mechanism. However, you will not be allowed to possess licensed material until we have accepted your complete, formal, submission.

Appendix A, Section A.5.4, of NUREG-1757, Volume 3, contains a model escrow agreement with wording that would meet NRC's requirements and is recommended by NRC. If you choose to submit an escrow agreement which deviates from the wording in the model, please ensure that the requirements in Checklist 5-B of Appendix A are met and the necessary terms and conditions are included.

Please provide an original notarized escrow agreement. In addition, please submit the following documents with your escrow agreement:

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- A. Unexecuted drafts of the Specimen Certificate of Events and the Specimen Certificate of Resolution to Commence Decommissioning. These documents provide the required format for instructing the escrow agent to release monies from the escrow in order to fund decommissioning activities. Models of these documents can be found in Appendix A, Sections A.5.5 and A.5.6 of NUREG-1757, Volume 3.
- B. A completed original Certified Resolution Authorizing the Making and Performance of the Escrow Agreement, which officially certifies that the licensee's Board of Directors has authorized the licensee to enter into the escrow agreement. A model of this document can be found in Appendix A, Section A.5.7 of NUREG-1757, Volume 3.
- C. A completed original Certificate of Names and Specimen Signatures, which presents the names and signatures of the licensee's officers or representatives who are authorized to sign the escrow agreement and notices, instructions and other communications under the agreement. A model of this document can be found in Appendix A, Section A.5.8 of NUREG-1757, Volume 3.
- D. A completed original Certification of Financial Assurance, which certifies that the licensee has obtained financial assurance in the appropriate amount and provides the details needed to verify that the amount is accurate under NRC regulations. A model of this document can be found in Appendix A, Section A.2.4 of NUREG-1757, Volume 3.
- 7. In your letter dated June 15, 2004, Item 5.B. states "Upon termination of the license and release of the facility by NRC, record storage may be terminated or shifted to another entity." Prior to termination, the regulations in 10 CFR 30.36(k)(4) require that you submit to NRC all records required by 10 CFR 30.51(d) and 30.51(f). Please confirm that, prior to license termination, you will forward the records required by 10 CFR 30.51(d) and 30.51(f) to the appropriate NRC Regional Office.
- 8. In your letter dated June 15, 2004, Item 11 describes the wastewater filtration system to be used for liquid radioactive waste. Please describe how treatment of wastewater (e.g., pH adjustment, treatment for high levels of metals, etc.) to be discharged under an NPDES permit may affect radioactivity in the wastewater.
- 9. In your letter dated June 15, 2004, Item 17 states that ETI continuously monitors the breathing air in the Sorting Area and the Washing Area during periods of operation. Please provide the frequency (i.e., daily, weekly, etc.) that you will count the breathing zone and effluent air samples.

In accordance with 10 CFR 2.390, a copy of this letter will be placed in the NRC Public Document Room and will be accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm.html">http://www.nrc.gov/reading-rm.html</a>.

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We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control No. 134442. If you have any technical questions regarding this deficiency letter, please call Donna Janda at (610) 337-5371.

Sincerely,

Original signed by John D. Kinneman

John D. Kinneman, Chief Nuclear Materials Safety Branch 2 Division of Nuclear Materials Safety

Enclosures:

- "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material" (NRC, April 1993)
- 2. 10 CFR Part 20
- 3. Federal Register Notice 65 FR 37186
- 4. NUREG-1757, Volume 3
- 5. NUREG/CR-6477

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