



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

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70-36, SNM-93  
70-820, SNM-777

Gulf United Nuclear Fuels Corporation  
ATTN: Mr. Peter Loysen, Manager  
Nuclear & Industrial Safety Depart.  
P.O. Box 603  
New Haven, Connecticut 06503

Gentlemen:

Paragraph 20.1(c) of Title 10, Code of Federal Regulations, Part 20 was amended on January 2, 1971, to provide that licensees should make every reasonable effort to maintain radiation exposures and releases of radioactive materials in effluents to unrestricted areas as far below the limits specified in Part 20 as practicable. The term "as far below the limits as practicable" means as low as practicably achievable taking into account the state of technology and the economics of improvements in relation to benefits to the public health and safety and in relation to the utilization of atomic energy in the public interest.

In order for us to evaluate the efforts being made and those planned to meet the objective of 10 CFR 20.1(c) by licensees authorized to conduct fuel processing and fabrication operations, we request that you submit information on your current and planned waste management program within 90 days from the date of this letter. The enclosed outline should be followed in supplying the requested information. Seven copies should be submitted.

Sincerely,

A handwritten signature in cursive script, reading "Richard E. Cunningham", is written over the typed name.

Richard E. Cunningham  
Acting Director  
Division of Materials Licensing

Enclosure:  
Outline for Description of  
Waste Management program

D-54

## **OUTLINE FOR DESCRIPTION OF WASTE MANAGEMENT PROGRAM**

### **I. WASTE IDENTIFICATION AND CHARACTERIZATION**

- A. Identification of each building or area on site where radioactive waste is generated, stored and treated.**
- B. Identification of sources of radioactive waste and description of waste streams including:**
  - 1. Schematic diagram of processes which generate radioactive waste.**
  - 2. Categorization as to solid, liquid or gas.**
  - 3. Identity, physical and chemical form and quantities and concentrations of radionuclides in each type of waste.**
  - 4. Average and maximum rates of generation of each waste stream.**
  - 5. Approximate inventories of stored waste including, for liquids, the number of gallons and concentration of radioactivity, and for solids the number of cubic feet and quantity of radioactivity (Ci).**

### **II. TREATMENT AND HANDLING**

- A. For each waste stream to be released to unrestricted areas, describe the method of pre-release treatment to reduce the quantity and concentration of radioactivity to the lowest practicable level, including the efficiency of the method.**
- B. Equipment used to control liquid waste such as hold-up ponds, tanks, etc.**
- C. In-line monitoring and diversion equipment.**

### **III. DISPOSITION**

- A. For each category of waste, state its disposition, e.g., released to unrestricted areas, stored on site (indicate interim or long term), buried on site, transferred to commercial waste disposal company, other.**

- B. For each effluent stream released to unrestricted areas, state the total quantity and the maximum and average concentrations of radioactivity at the point of release to the unrestricted area or natural bodies of water. This should be based on 1970 data.
- C. A description of the area surrounding the facility as it pertains to possible exposure of individuals and population groups to effluent releases. This should include information such as general population distribution, type of occupancy and use of land adjacent to restricted areas, mean seasonal meteorological conditions based on the best available data, mean seasonal flow rate of streams or rivers receiving radioactive effluents (both inside and outside the restricted area), types of use of bodies of water receiving radioactive effluents, possible effect of plant operation on local water supplies, etc.

#### IV. FUTURE PLANS

- A. Plans for modifications to further reduce quantities and concentrations of radioactivity released to unrestricted areas, including schedule and expected results.