

NEW YORK STATE DEPARTMENT OF HEALTH  
84 HOLLAND AVENUE  
ALBANY, NEW YORK

EXEMPTION

AUTHORIZING BURIAL OF RADIOACTIVE WASTES

Application having been made for an exemption from the requirements of Section 16.8 of Part 16 of the New York State Sanitary Code, pursuant to the Public Health Law and Part 16 of the State Sanitary Code and in reliance on statements and representations heretofore made by the applicant designated below, an exemption is hereby granted permitting such applicant to dispose of radioactive materials by burial in the ground. This exemption is subject to all applicable rules, regulations and orders now or hereafter in effect of all regulatory agencies concerned and to the conditions specified below.

1. Applicant Nuclear Fuel Services Inc.
2. Address 1730 K Street, N.W., Washington 6, D. C.
3. Local Address Box 124, West Valley, Cattaraugus County, N.Y.
4. Expiration Date: See condition Number 18
5. Reference Number: COL Application Number: 670

6. Disposal Site:

The authorized place for ground burial of radioactive materials shall be in a plot of land contained within a 3,331 acre tract of land owned by the State of New York in the Town of Ashford, Cattaraugus County, further described in detail in Section II of the Safety Analysis submitted to the New York State Department of Health on July 31, 1962. The plot of land to be used as a burial site is approximately 1,000 feet southeasterly of the site location for the chemical processing plant, 1,500 meters from the nearest tract perimeter and bounded on the east by Erdman Creek and on the northwest by a tributary of Erdman Creek.

7. Radioactive Materials:

Radioactive elements with Mass Numbers 1 through 91, source materials and special nuclear materials in quantities not sufficient to form a critical mass all in various physical and chemical forms associated with solid waste material are authorized for burial at the locations.

8. The applicant and/or a representative of this Department will inspect each new trench before burial operations are started. Such an inspection will be made to ascertain if the soil strata conforms with that described in the application or if there is present a continuous permeable formation, aquifer or water bearing formation in which case burial of wastes shall not be undertaken unless specifically authorized by New York State Department of Health.
9. Radioactive material shall be buried at least four feet below the existing ground surface grade.

10. Water contact with solid wastes in the uncovered trench shall be minimized.
11. At no time shall burial of solid wastes contravene the applicable provisions of Article 12 of the Public Health Law. In the event water accumulates in uncovered trenches, it may be discharged to Erdman Creek or a tributary thereof, providing that before such discharge is permitted, representative samples of the accumulated water are analyzed for radioactivity and for other waste constituents. The water may then be discharged at such a rate that in uncontrolled areas the applicable limits of Part 16 of the State Sanitary Code will not be exceeded. Records shall be maintained of such discharge showing methods, volumes, rates, time and analysis of the wastes.
12. The burial operation will be carried out so as to minimize any dispersion of radioactive materials from weather or from presence of wild life.
13. Nuclear Fuel Services Inc., or its assignees shall maintain records of the burial operation for each trench including the following data:
  - a. Coded reference of concrete cairns at each end of trench.
  - b. Delineation of trench boundaries.
14. Effective procedures shall be developed to minimize soil erosion at the burial site.
15. No conveyance shall leave the burial area if the surface contamination exceeds the following:

500 dpm/100 cm <sup>2</sup>	Alpha
100 cpm/100 cm <sup>2</sup>	Beta-Gamma
0.1 mrem/hour	Beta-Gamma
16. A sampling station shall be maintained downstream from the burial facility. Samples shall be collected routinely and analyzed for radioactivity. Records of the results shall be maintained.
17. The applicant shall bury radioactive materials described in Item 7 of this exemption in accordance with statements, representations and procedures contained in Application for Radioactive Materials License, dated August 23, 1963, Letter dated October 2, 1963 from Dr. Walton A. Rodger, Vice-President, Nuclear Fuel Services, Inc., and "Waste Storage Agreement" between New York State Atomic Research and Development Authority and Nuclear Fuel Services, Inc., except that where such statements, representations and procedures conflict with provision of this exemption such provisions shall take precedence.

18. This exemption authorizing the burial of radioactive materials by Nuclear Fuel Services Inc. is effective immediately and shall expire upon termination of the Lease or Waste Storage Agreement between Nuclear Fuel Services Inc. and the New York State Atomic Research and Development Authority unless otherwise revoked or cancelled as provided by law or regulation.

Date November 7, 1963

FOR THE NEW YORK STATE DEPT. OF HEALTH

Sherrill Davis  
Director, Bureau of Radiological  
Health Services

BUREAU OF RADIOLOGICAL HEALTH SERVICES  
NEW YORK STATE HEALTH DEPARTMENT  
ALBANY, N.Y.

Considerations In Granting The Nuclear Fuel Services Inc.

AN EXEMPTION

From Part 16 of the New York State Sanitary Code  
Authorizing Burial of Radioactive Wastes

On October 2, 1963 the Nuclear Fuel Services Inc., submitted to the State Committee on Licensing of the New York State Office of Atomic Development an application concerning the burial of packaged solid radioactive wastes in a designated burial ground within a site known as the Western New York Nuclear Service Center in the town of Ashford, Cattaraugus County, New York. Nuclear Fuel Services Inc., has leased the site from the New York State Atomic Research and Development Authority which is a public benefit corporation created by the New York State Legislature.

Nuclear Fuel Services Inc., applied in a letter dated October 11, 1963 for variation from the requirements of Section 16.8 (b), Part 16 of Chapter I of the State Sanitary Code. In granting the variation, Nuclear Fuel Services Inc., should be permitted to bury at any one time all radioactive elements with Mass No. 1 - 91 in unlimited amounts of activity and limited amounts of Uranium 233, Uranium 235 and Plutonium.

The Bureau of Radiological Health Services has carefully reviewed the following documents as they pertain to the description of this site, operational procedures, maintenance of grounds and the environmental monitoring program to be instituted by Nuclear Fuel Services, Inc.

1. Application for agreement materials license dated August 23, 1963 together with Supplements "A" and "B"; and the statement entitled "Supplement Statement supplied to New York State Coordinating Council on Atomic Energy in support of an application to operate a waste burial site at West Valley, Cattaraugus County, New York".

2. A letter addressed to Mr. Robert D. Vessels, Secretary, Atomic Energy Coordinating Council, Committee on Licensing, State of New York, P. O. Box 7036, Albany, New York, from Walton A. Roger, Vice-President, Research and Development, Nuclear Fuel Services Inc., dated October 2, 1963. The letter was made in acknowledgment to Mr. Vessels' letter dated September 26, 1963.
3. "Waste Storage Agreement" between the New York State Atomic Research and Development Authority and Nuclear Fuel Services Inc.
4. A series of reports dated April 3, 1962, July 10, 1962, and September 20, 1963 prepared by Herbert Stewart, Geologist of the U. S. Geological Survey.
5. Report on Western New York Nuclear Fuel Services Center, Environmental Survey prepared by Bureau of Radiological Health Services, Division of Environmental Health, New York State Department of Health, dated September 1962.

Representatives of the Bureau of Radiological Health Services inspected this site on October 15, 1963 and conferred with Mr. Herbert Stewart, Geologist, United States Geological Survey and representatives of Nuclear Fuel Services, Inc., Cattaraugus County Health Department, and Office of Atomic Development.

Details of this project have been discussed with representatives of the United States Public Health Service during the past year.

In light of the information submitted and as a result of the site inspections made by members of this Department, a variation to Section 16.8 of the State Sanitary Code has been granted permitting Nuclear Fuel Services to operate a burial ground in accordance with the procedures outlined in their application and in compliance with the conditions stipulated in this Department's exemption.

The favorable geological and hydrological characteristics of the site and the precautions to be taken by Nuclear Fuel Services will insure that radioactive wastes will not migrate from the burial grounds. An adequate monitoring program shall be carried out to continually observe radiation levels, both on-site and off-site. Finally, adequate records will be maintained describing the specific location and inventory of radioactive wastes which have been buried in the burial grounds.

The Bureau of Radiological Health Services of the New York State Health Department finds that the burial facility can be developed and maintained in a manner which will not result in any undue danger to life and property from radiation hazards.

For The New York State Department of Health

*Stewart Davis*  
Director, Bureau of Radiological Health Services

Dated *November 7, 1963*

**Historical Note**

Sec. added, filed July 16, 1962 to be eff.  
Oct. 15, 1962.

**16.8 Disposal of radioactive material.** (a) *Overall disposal requirements.* No person shall dispose of any radioactive material except by transfer to an authorized recipient as provided in this Part, or as authorized in subdivisions (b) and (c) of this section, or subdivision (b) of section 16.7; provided, however, that such authorization shall not include treatment or disposal of such radioactive material by incineration.

(b) *Burial in soil.* No person shall dispose of any radioactive material by burial in soil, unless:

- (1) the total quantity of any radioactive material so buried at any one location and time will not, at the time of such burial, exceed 1,000 times the quantity thereof set forth in Table 4 [see Appendix 1];
- (2) each such burial is at a minimum depth of four feet, and is separated from each preceding such burial by a distance of at least six feet;
- (3) the number of such burials will not exceed 12 in any calendar year; and
- (4) there has been filed with the department, at least 30 days prior to the first burial at any location, a written notification describing the location of such burial and the types and quantities of material to be buried.

(c) *Release into sanitary sewer system.* Except for any material contained in excreta from any patient undergoing diagnosis or therapy by a professional practitioner, no person shall dispose of any radioactive material by release into any sanitary sewer system, unless such radioactive material is readily soluble or dispersible in water, and the total quantity of radioactive material released by such person:

- (1) in any day does not exceed the larger of the following:
  - (i) that quantity which, if diluted by the average quantity of sewage released into such system by such person in any day, would result in an average concentration equal to the limit thereof set forth in Table 3, Schedule I, Column 2 [see Appendix 1]; or
  - (ii) ten times the quantity thereof set forth in Table 4 [see Appendix 1];
- (2) in any month does not, if diluted by the average quantity of water released into such system by such person in any month, result in an average concentration that would exceed the limit thereof set forth in Table 3, Schedule I, Column 2 [see Appendix 1]; and
- (3) in any year does not exceed one curie.

**Historical Note**

Sec. added, filed July 16, 1962 to be eff.  
Oct. 15, 1962.

**16.9 Professional practitioners and related provisions.** (a) Nothing in sections 16.6 through 16.16 shall limit any human use of radiation pursuant to section 16.19 provided that with respect to use on humans of agreement material, such use is in accordance with a license issued under this Part, or an exemption therefrom.

(b) Each professional practitioner who treats or diagnoses any radiation illness or radiation injury, except that referred to in section 16.19, shall report in writing to the health officer having jurisdiction within seven days after such treatment or diagnosis, the fact thereof and the full name, address and age of such individual.

<sup>8</sup> All discharges of wastes to the environment are subject to the provisions of the State Public Health Law and pertinent regulations of the department. Note particularly article 12, Water Pollution Control, and article 12-A, Air Pollution Control, of the Public Health Law.