



Nuclear Engineering Company, Inc.

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LOUISVILLE, KENTUCKY 40207 PHONE (502) 426-7160

December 29, 1976

Mr. Bernard Singer
Chief, Radioisotopes Licensing
Branch Division of Fuel
Cycle and Material Safety
Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Application for withholding information in Trenches
14 & 14A application.

Dear Mr. Singer:

In accordance with our understandings reached during our meeting on December 21, 1976, and your confirming letter of December 28, 1976, we are enclosing a revised application for withholding information from public disclosure, together with an affidavit. This application and the accompanying affidavit modify our November 24, 1976 application for withholding information from public disclosure.

If there are any matters which we may clarify or if you have additional questions, please do not hesitate to contact us.

Very truly yours,

A handwritten signature in dark ink, reading "Phillip H. Muir". The signature is written in a cursive style with a long horizontal stroke at the end.

Phillip H. Muir
Vice President, Administration

cc: Leroy Stratton
Associate Director
Department of Public Health
535 W. Jefferson
Springfield, Illinois 62761

PHM/pjs

810 3260522

BEFORE THE UNITED STATES
NUCLEAR REGULATORY COMMISSION

| | | |
|-----------------------------------|---|-------------------------|
| In the Matter of |) | |
| |) | |
| NUCLEAR ENGINEERING COMPANY, INC. |) | Application for Interim |
| (Nuclear Waste Disposal Site, |) | Authorization |
| Bureau County, |) | |
| Illinois) |) | |

APPLICATION FOR WITHHOLDING
INFORMATION FROM PUBLIC DISCLOSURE

On September 3, 1976, Nuclear Engineering Company ("Applicant") filed an Application for Withholding Information from Public Disclosure with respect to its August 30, 1976 application for interim authorization to bury low-level radioactive wastes in Trenches 14 and 14A at Applicant's nuclear waste disposal site in Bureau County, Illinois. On November 4, 1976, Applicant submitted a new application for interim authorization to bury wastes in Trenches 14 and 14A and further amended that application on November 18, 1976. On November 24, 1976, Applicant submitted to the Nuclear Regulatory Commission ("the Commission") a new Application for Withholding Information from Public Disclosure to cover all the information submitted to the Commission on November 4 and November 18. By this filing, Applicant hereby withdraws its November 24 Application for Withholding Information from Public Disclosure except as to the items specified below:

NECO Radiological Controls and Safety for Burial Sites Manual (Document 1)

Section 5 - Burial Site Security

Section 7 - Radiological Control Training
(Subsections 7.5 through 7.7 only)

Section 9 - Environmental Monitoring Program

Section 10 - Burial Site Radiological Control Work
Procedures

Section 11 - Radiation Survey Instruments and
Contamination

"G" Procedures - Procedures G-002, G-003, and G-004,
including enclosures

Site Operations Manual for Low-Level Rad-waste Disposal
at Sheffield, Illinois (Document 2)

Section 4 - Security

Section 5 - Receiving and Disposal Operations
(Subsections 5.2 through 5.9 only, including
CN 1 amendments)

Section 6 - Solidification (including CN 1 amendment)

Section 7 - Encapsulation

Section 8 - Trench Maintenance

Procedures - SI-002, and SI-006.

Geological and Geotechnical Engineering (Document 4)

Section 1.5 - Geotechnical Engineering

Section 2 - Question 4-H and response
Question 1-S and response

November 18, 1976 Houlton to Singer letter - NRC comment
5 and NECO response and NRC comment 6 and NECO response.

This information is owned by NECO and in the opinion of
NECO these documents contain trade secrets and/or privileged
or confidential commercial or financial information.

An attached affidavit executed by the undersigned identifies the documents sought to be withheld from public disclosure by the Commission. The affidavit also addresses the considerations listed in Paragraph (b) (4) of Section 2.790 with specificity.

Respectfully submitted,

NUCLEAR ENGINEERING COMPANY, INC.

By

Phillip H. Muir
Phillip H. Muir
Vice President

Sworn to before me this 29
day of December, 1976

Phillip L. Simpson
Notary Public

My Commission Expires February 11, 1978

BEFORE THE UNITED STATES
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| Illinois) |) | |

AFFIDAVIT

| | | |
|--------------------------|---|-----|
| City of Louisville |) | ss: |
| County of Jefferson |) | |
| Commonwealth of Kentucky |) | |

Phillip H. Muir, being by me duly sworn according to law,
deposes and says:

1. I am Vice President of Nuclear Engineering Company, Inc. ("NECO") and as such, I have the authority to execute this affidavit on behalf of NECO.

2. As Vice President, I have the function of reviewing proprietary information sought to be withheld from public disclosure by NECO in connection with certain activities of the Company. I have personal knowledge of the criteria and procedures utilized by NECO in designating information as a trade secret, or confidential or privileged commercial or financial information.

3. I am making this Affidavit in accordance with 10 C.F.R. §2.790 of the regulations of the Nuclear Regulatory Commission in connection with NECO's application of November 4, 1976, as amended on November 18, 1976, for interim authorization to construct and operate Trenches 14 and 14A at its waste disposal site in Bureau County, Illinois ("Trench 14 Application"). The information which is the subject of this Application to Withhold is set forth below:

NECO Radiological Controls and Safety for Burial Sites
Manual (Document 1.)

Section 5 - Burial Site Security

Section 7 - Radiological Control Training
(Subsections 7.5 through 7.7 only)

Section 9 - Environmental Monitoring Programs

Section 10 - Burial Site Radiological Control Work
Procedures

Section 11 - Radiation Survey Instruments and Contamination

"G" Procedures - Procedures G-002, G-003, and G-004,
including enclosures

Site Operations Manual for Low-Level Rad-Waste Disposal
at Sheffield, Illinois (Document 2)

Section 4 - Security

Section 5 - Receiving and Disposal Operations
(Subsections 5.2 through 5.9 only, including
CN 1 amendments)

Section 6 - Solidification (including CN 1 amendment)

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Geological and Geotechnical Engineering (Document 4)

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November 18, 1976 Houlton to Singer letter - NRC comment
5 and NECO response and NRC comment 6 and NECO response

4. Pursuant to the provisions of paragraph (b) (4) of
Section 2.79 of the Commission's regulations, the following
is furnished in support of our position that the in-
terest of the public in having this information

disclosed is outweighed by the financial and competitive impact upon the Company from disclosure.

- (i) The information contained in Section 5 of Document 1 and in Section 4 of Document 2 identifies Applicant's procedures for safeguarding low-level nuclear waste material and Applicant's security measures for the physical protection of the Sheffield nuclear waste disposal facility.
- (ii) The remainder of the material listed in Paragraph 3, when taken as a whole, should be withheld by the NRC from public disclosure for the following reasons:
 - (a) NECO was the first commercial company to operate low-level radioactive waste shallow land disposal sites in the entire world, having commenced its operations in the late 1950's. NECO has maintained its preeminent position in the field and today has only one commercial competitor in the United States and no other known commercial competitors in the rest of the free world.
 - (b) In the course of conducting its business, including the preparation of the Trench 14 Application, NECO has developed what it considers to be new and unique techniques for the burial and containment of low-level

rad-wastes. Some of these techniques are described in Documents 3 and 4, and the November 18 letter.

- (c) The information listed in Paragraph 3 is owned by NECO and has been held in confidence by the Company from its initial development.
- (d) The information is of a type customarily held in confidence by NECO and not customarily disclosed to the public because the possession of this proprietary information gives our company a competitive advantage in the domestic and international rad-waste disposal market. The extent to which such information is available to NECO's competitors diminishes our company's ability to sell its products and services involving the use of this information.
- (e) The information contained in the documents listed in Paragraph 3, such as trench construction and maintenance, operating techniques and personnel training programs, and the implementing procedures, were developed by the Company at great expense and effort over several years to improve the Company's techniques and burial efficiency, as well as in response to the Commission's evolving regulatory criteria since the initial filing of this Application in 1975. The use of this information by existing or potential competitors would substantially reduce their expenditure of resources and would

improve their competitive position in the industry at NECO's expense.

- (f) Unrestricted disclosure of this information would jeopardize NECO's potential position in the world market as discussed in greater detail in Paragraph 3(iii)(b), and thereby give a market advantage to NECO's competitors or potential competitors in these countries.

(iii) The information contained in each of the documents listed in Paragraph 3 has substantial commercial value to NECO for the following reasons:

- (a) NECO's "know-how"--i.e., its techniques, and its implementing operating manuals and procedures--are marketable in this as well as other countries.
- (b) NECO has been asked by a foreign government, utilities and industrial interests to enter into joint ventures and other arrangements to establish low-level radioactive waste disposal sites in other countries as well as set up the necessary organizational structure training programs, and implementing operating procedures. .
- (c) The techniques and procedures developed for use at our Sheffield site as reflected in the Trench 14 Application are the very techniques and procedures we are trying to sell overseas. Disclosing this information will prejudice, and in

all likelihood eliminate, NECO's bargaining position in these negotiations.

- (d) Arguably, the individual techniques and procedures described in these documents might not be considered proprietary under the standards of 10 C.F.R. §2.790 as those standards apply to information currently available in this country; nonetheless, in these countries in which we are engaged in negotiations, these techniques and procedures are virtually unknown. The mere collection of these techniques and procedures into manuals, programs and work procedures is of additional value to those countries where this work has not been done before, and, therefore, of unique commercial value to NECO in its foreign negotiations.

5. With respect to Sections 1.5 and 2 of Document 4 and the November 18 letter, I state, in addition to the arguments made in Paragraph 4, as follows:

- (i) At great expense, NECO has developed for the first time in this country, to the best of its knowledge and belief, a method of and procedure for the disposal of low-level radioactive wastes utilizing both an excavation and fill construction technique. As described in our Trench 14 Application, this technique involves the construction of embankments of compacted earthen fill starting from a level slightly below

the natural ground surface. Although this technique has been used for the disposal of other forms of toxic and non-toxic wastes, excavation and fill techniques have never been employed in the commercial nuclear waste disposal industry, and have not utilized the stringent permeability, density and slope characteristics developed by NECO.

- (ii) In our opinion, this method of disposal offers significant economics in land use and cost over other methods of disposal currently employed--economics which will become increasingly important as available land for these sites diminishes. As NECO at present is the sole commercial operator in possession of these procedures, the information contained in Sections 1.5 and 2 (Question 4-H and Response and Questions 1-S and Response) is of significant value to the Company.
- (iii) Public disclosure of this information would cause substantial harm to the competitive position of NECO because it would enable others to use this information without purchasing the right to use it.
- (iv) The development of this information is the result of many years of effort by NECO as well as the expenditure of a substantial amount of money. In order for our competitors to develop this information, similar experimental test programs would have to be performed

and a significant manpower effort would have to be expended.

NUCLEAR ENGINEERING COMPANY, INC.

By Phillip H. Muir
Phillip H. Muir
Vice President

Sworn to before me this 29
day of December, 1976

Phillip J. Simpson
Notary Public

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