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RECORD #189

TITLE: Transfer of Exempt Quantities of By-product Material From  
a Nuclear Power Plant

FICHE:

JUL 15 1987

MEMORANDUM FOR: Attached List

FROM: LeMoine J. Cunningham, Acting Chief  
Radiation Protection Branch  
Division of Radiation Protection  
and Emergency Preparedness  
Office of Nuclear Reactor Regulation

SUBJECT: TRANSFER OF EXEMPT QUANTITIES OF BY-PRODUCT  
MATERIAL FROM A NUCLEAR POWER PLANT FOR PURPOSES  
OTHER THAN WASTE DISPOSAL

Enclosed for your information are memoranda, to and from OGC, on this subject.  
These two memoranda will be added to the Health Physics Positions database.

Original signed by LeMoine J. Cunningham

LeMoine J. Cunningham, Acting Chief  
Radiation Protection Branch  
Division of Radiation Protection  
and Emergency Preparedness  
Office of Nuclear Reactor Regulation

Enclosures:

1. Memo fm. L. J. Cunningham, NRR,  
to R. L. Fonner, OGC dtd. 5/7/87
2. Memo fm. R. L. Fonner, OGC, to  
L. J. Cunningham, NRR, dtd. 6/30/87

Contact: John D. Buchanan, NRR  
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Memorandum dated JUL 15 1987

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

MAY 07 1987

MEMORANDUM FOR: Robert L. Fonner  
Deputy Assistant General Counsel  
for Rulemaking and Fuel Cycle  
Office of the General Counsel

FROM: LeMoine J. Cunningham, Acting Chief  
Radiation Protection Branch  
Division of Radiation Protection  
and Emergency Preparedness  
Office of Nuclear Reactor Regulation

SUBJECT: TRANSFER OF EXEMPT QUANTITIES OF BYPRODUCT MATERIAL FROM A  
NUCLEAR POWER PLANT FOR PURPOSES OTHER THAN WASTE DISPOSAL

In the review of documents to be summarized in the Health Physics Positions database, we found documents that gave conflicting opinions regarding the transfer of exempt quantities of byproduct material, for purposes other than waste disposal, from a nuclear power plant to persons not holding a specific license authorizing them to receive the material.

In more specific terms, the question has been whether samples containing exempt quantities of byproduct material could be transferred from a nuclear power plant to a laboratory that does not hold an NRC or Agreement State license authorizing it to receive the samples.

Enclosure 1 provides an affirmative answer to this question. This answer is supported by the Statement of Consideration for 10 CFR 30.18 (35 FR 6426, 4/22/70) which includes the following:

"Persons holding an AEC or an Agreement State byproduct material license authorizing manufacture, processing, or production of byproduct material are authorized under the exemption to make transfers, on a noncommercial basis, of exempt quantities of byproduct material possessed under the license, on an exempt basis. This provision is designed to accommodate the occasional transfers between laboratories of small quantities of byproduct material in tissue samples, bioassay samples, tagged compounds, counting standards, etc., which involve negligible risks."

Essentially the same statement also was included in the Statement of Considerations for the proposed rule change (33 FR 11414, 3/10/68).

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Enclosure 2 provided a negative answer to the question on the basis that "there is no minimum level of radioactivity that may be released from a nuclear power reactor facility for unrestricted use."

Enclosure 3 also provide a negative answer but the basis in this case was the known presence in the particular sample (primary reactor coolant) of alpha-emitting radionuclides that either are not byproduct material or that are not byproducts covered by the exemption Schedule B of 10 CFR 30.71.

After reviewing the enclosed documents and the applicable regulations, we believe the following position is correct. The transfer of exempt quantities of byproduct material from a nuclear power plant to a non-licensee is permissible provided all of the following general conditions are met.

1. The transfer meets all of the applicable requirements of 10 CFR Parts 20-71.
2. The transfer also meets all applicable radioactive material transportation requirements of the U.S. Department of Transportation (49 CFR 100-178) and the U.S. Postal Service (39 CFR 124).
3. The transfer does not violate any applicable state regulations.

In more specific terms, the transfer pursuant to 10 CFR 30.18 must meet all of the following conditions:

1. The transfer must not be for purposes of waste disposal (See enclosed memorandum from J. G. Partlow, IE, to W. J. Olmstead, OGC, 1/7/87, and response from R. L. Fonner, to J. G. Partlow, 1/30/87.)
2. The transfer must not be for purposes of commercial distribution except in accordance with a license issued under 10 CFR 32.18 that states that the byproduct material may be transferred to persons exempt under 10 CFR 30.18 or the equivalent regulations of an Agreement State. [10 CFR 30.18(c), (d)]
3. The material transferred must not contain special nuclear material or byproduct material other than that included in 10 CFR 30.71 Schedule B. Because primary reactor coolant water is known to contain alpha-emitting radionuclides that are either special nuclear material or byproduct material other than that included in 10 CFR 30.71 Schedule B, the reactor licensee making the transfer of exempt quantities of byproduct material must provide reasonable assurance that material transferred does not also contain radionuclides that are not included in 10 CFR 30.71 Schedule B.

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Is there any legal objection to this position?

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LeMoine J. Cunningham, Acting Chief  
Radiation Protection Branch  
Division of Radiation Protection  
and Emergency Preparedness  
Office of Nuclear Reactor Regulation

Enclosures:

1. Ltr. fm. A. F. Gibson, RII, to  
H. B. Tucker, Duke Power Co.,  
dtd. 3/20/84
2. Ltr. fm. L. J. Cunningham, IE, to  
B. R. Zibung, Dairyland Power Cooperative,  
dtd. 5/13/82
3. Memorandum fm. L. J. Cunningham, IE, to  
L. R. Greger, RIII, dtd. 11/3/81
4. Memorandum fm. J. G. Partlow, IE, to  
W. J. Olmstead, OGC, dtd. 1/7/87
5. Memorandum fm. R. L. Fonner, OGC, to  
J. G. Partlow, IE, dtd. 1/30/87

Distribution:

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RPB:DRPEP  
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5/6/87



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

JUN 30 1987

**MEMORANDUM FOR:** LeMoine J. Cunningham  
Acting Chief, Radiation Protection Branch  
Division of Radiation Protection and  
Emergency Preparedness  
Office of Nuclear Reactor Regulation

**FROM:** Robert L. Fonner  
Deputy Assistant General Counsel for  
Rulemaking and Fuel Cycle  
Office of the General Counsel

**SUBJECT:** TRANSFER OF EXEMPT QUANTITIES OF BYPRODUCT  
MATERIAL

In your memorandum of May 7, 1987, you requested my view on the legal correctness of your reading of various documents dealing with the transfer of byproduct materials pursuant to 10 CFR 30.18 and the conclusion to be drawn for the application of section 30.18 to nuclear power plants. The documents relied upon in your memorandum correctly reflect the applicability of section 30.18, and your conclusions as to the regulation's application at nuclear power plants are legally sound. Therefore, there are no legal objections to the positions outlined in your memorandum. These positions are:

1. The transfer must not be for purposes of waste disposal.
2. The transfer must not be for purposes of commercial distribution except in accordance with a license issued under 10 CFR 32.18.
3. The material transferred must not contain special nuclear material or byproduct material not included in 10 CFR 30.71, Schedule B.

*Robert L. Fonner*

Robert L. Fonner  
Deputy Assistant General Counsel for  
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