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RECORD #48

TITLE: Browns Ferry Disposal of Waste Oil



UNITED STATES MUCLEAR REGULATORY COMMISSION REGION II

101 MARIETTA ST., N.W., BUITE 3100 ATLANTA, GEORGIA 30303

TANOS 1983

MEMORANDUM FOR: J. M. Puckett, Enforcement Specialist

FROM: B. W. Jones, Regional Counsel

SUBJECT: BROWNS FERRY DISPOSAL OF WASTE DIL

Recently you asked that I review the regulations and answer four questions related to the disposal of waste oil at Browns Ferry Nuclear Power Plant. The questions specifically related to Browns Ferry's disposal of the waste oil, which was slightly contaminated, by sale to an oil recycling facility for processing and release to the general public. I have researched this issue and discussed it with personnel from ELD and NMSS to arrive at the following answers to your questions.

1. Can Appendix B be utilized for disposal of material other than water or air?

Yes. 10 CFR 20.106 references Appendix B in establishing when a licensee may release "radioactive materials" to unrestricted areas. The fact that Appendix B is written in terms of air and water is not inconsistent with a broad interpretation of the term "radioactive materials". Rather, the regulation's reference to Appendix B establishes limits for the discharge of any "radioactive materials" (including waste oil) into either water or air in unrestricted areas.

 Can material such as oil (or water) contained in 55-gallon drums or other tanks be considered as an effluent under 20.106?

The answer to this question, while not completely clear, is that such material would not be an effluent. "Effluent" is not specifically defined in either the regulations or NRC case, law. The dictionary definition of "effluent" is that an effluent is somitiving which flows out. The language of 10 CFR 20.106(b) speaks in terms of flow rates and releases to the air and water, which is consistent with the dictionary definition of "effluents".

The only regulation which references any kind of packaged material when speaking of effluents is $10 \, \text{CFR} \, 50.34 \, \text{a}(b)(3)$, which discusses packaging of solid wastes derived from the treatment of effluents. Thus, this reference to packaging would not indicate that the packaged material itself would be an effluent.

Since the oil is not flowing out of the plant into either air or water, it would not appear that oil (or other materials) which are encased in drums or tanks would be "effluents" within the meaning of 10 CFR 20.106.

J. M. Puckett JAN 00 1983 Under what conditions can a power reactor licensee utilize Part 30 for disposal of byproduct material? Part 30 requires ** licensing of the manufacture, production, transfer. receipt, acquisition, ownership, or possession of byproduct material unless such action falls within one of the exemptions in Part 30 or Part 150 (10 CFR 30.3). Part 150 deals with exemptions relating to activities over offshore waters in Agreement States. Under 10 CFR 150.15(a)(5) the exemption in Part 150 does not apply to the transfer of materials to persons which would be exempt from the requirements of Parts 30 and 40. Similarly, the exemption for "exempt concentrations" found in 10 CFR 30.14 is restricted. 10 CFR 30.14(d) states: "No person may introduce byproduct material into a product or material knowing or having reason to believe that it will be transferred to persons exempt under this section or equivalent regulations of an Agreement State, except in accordance with a license issued pursuant to §32.11 of this chapter or the general license provided in §150.20 of Part 150." The provision for "exempt quantities", 10 CFR 30.18, also provides in subpart (d) that: "No person may, for purposes of commercial distribution, transfer byproduct material in the individual quantities set forth in §30.71 Schedule B, knowing or having reason to believe that such quantities of byproduct material will be transferred to persons exempt under this section or equivalent regulations of an Agreement State, except in accordance with a license issued under §32.18 of this chapter, which license states that the byproduct material may be transferred by the licensee to persons exempt under this section or the equivalent regulations of an Agreement State." The above provisions, when read in conjunction with the licensing provisions of \$32.18, make it clear that the regulations do not contemplate the transfer of byproduct material from a person or group posses ing the material to a person or group exempt from licensing requirements, absent the party with possession obtaining a license. This interpretation is further supported by 10 CFR §30.41 on transfer of byproduct material. That provision provides that a licensee can transfer byproduct material to an exempt party. Thus, unless the transferor has a license it would not appear the regulations allow the transfer of byproduct material, even in exempt quantities or concentrations, to another exempt party.

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A power reactor licensee does not automatically have a license for all actions which would be covered by Part 30, et.al., on byproduct materials. As evidenced by the fact that reactor licenses, including Browns Ferry's licenses, contain specific provisions concerning Part 30 (i.e., specifically authorizing the receipt and use of neutron producing material under Part 30, et.al), it would appear that a reactor licensee is to be treated no differently than any other party handling byproduct material.

4. Did this licensee violate the requirements for disposal of licensed byproduct material?

In the present case the licensee (TVA) relied on 10 CFR 20.106 and Appendix B to Part 20 in transferring waste oil containing radioactive material to the recycling vendor. As discussed above, this does not appear to be an appropriate application of the Part 20 provisions on effluents and the licensee can not rely on those provisions for the disposition of the waste oil.

While the exemption provisions of Part 30 could apply in order to relieve individuals from the requirement of obtaining a license to possess the byproduct material, the provisions dealing with exemptions (including the exemptions in part 150) are clear that the exemptions do not apply to the transfer of byproduct materials to an exempt party. Thus, since the licensee transferred byproduct material (waste oil) to an exempt individual (the recycling company) and the licensee's license for the reactor did not contain a provision allowing such action under Part 30 et.al., the licensee was in violation of the regulations.

There are several ways in which the licensee could cure its violation.

- a. The licensee could obtain a license for the transfer of the byproduct material under 10 CFR 32.11 or 32.18. Such a license could be a general license covering transfer of all byproduct material meeting certain standards (most likely the standards used would be the exempt quantities and concentrations in Part 30) or a specific license covering waste oil disposal only. This would involve NMSS review and approval.
- b. The licensee could amend its reactor license to include within that license a provision for transfer of the byproduct material. This could be done by including authorization in the license to transfer byproduct material under Part 30, et.al. Note that this option would involve NRR approval of the license amendments.
- c. Finally, if the waste oil recylcing facility received a license for possession and/or transfer of byproduct material, the utility could then use the exemption provisions of 10 CFR Part 30, as applicable, since they would no longer be making the transfer to an exempt party. This licensing review would be consucted by NMSS.

If the utility adopts option a. or b., or the recycling facility obtains a license as indicated in option c., the licensee could transfer the waste oil meeting the exemption requirements (or other requirements established in the license) to the recylcing facility without violating the regulations.

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