

September 23, 1996

80-33606

MEMORANDUM TO: John P. Potter, Chief  
Materials Licensing/Inspection Branch, RII

FROM: Michael F. Weber, Chief [Original signed by]  
Low-Level Waste and Decommissioning Projects Branch  
Division of Waste Management, NMSS

SUBJECT: RESPONSE TO TECHNICAL ASSISTANCE REQUEST FOR REVIEW OF  
TENNESSEE VALLEY AUTHORITY REQUEST FOR TERMINATION OF BY-  
PRODUCT LICENSE 41-25047-02

This memorandum responds to your Technical Assistance Request (TAR), dated August 8, 1996, for review of Tennessee Valley Authority's (TVA) request for termination of by-product license 41-25047-02. NRC's Division of Industrial and Medical Nuclear Safety forwarded your TAR to the Division of Waste Management (DWM) for review on August 23, 1996.

DWM staff has reviewed the information submitted by TVA in support of its request to terminate by-product license 41-25047-02 and release the site for unrestricted use. Under this license, small amounts of H-3 and C-14 were introduced as part of a natural-gradient groundwater tracer test. TVA estimated total annual doses from consumption of groundwater based on occupational dose limits. We made independent calculations based on the more stringent dose limits for individual members of the public. We find that the highest reported groundwater concentrations for H-3 and C-14 down-gradient from the test site yield internal doses less than 0.6 mrem/yr and 6 mrem/yr respectively, which are small fractions of the applicable standard of 100 mrem/yr (10 CFR Part 20.1301).

Therefore, we agree with your assessment that based on the information presented, the amount of tritium and C-14 remaining in the ground at the site will not pose a significant radiological risk to members of the public. The potential doses are well below NRC's public dose limit in 10 CFR 20.1301. Therefore, we concur with your recommendation to terminate the license and release the site for unrestricted use.

License No. 41-25047-02

Contacts: John Buckley  
301-415-6607  
Tim Johnson  
301-415-7299

TICKET NO.: DWM-028

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\*see previous concurrence

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Therefore, we agree with your assessment that based on the information presented, the amount of tritium and C-14 remaining in the ground at the site is below the regulatory limits, and therefore, we concur with your recommendation to terminate the license and release the site for unrestricted use.

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Therefore, we agree with your assessment that based on the information presented, the amount of tritium and C-14 remaining in the ground at the site is below the regulatory limits, and therefore, we concur with your recommendation to terminate the license and release the site for unrestricted use.

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ACNW: YES ☐ NO ☐  
IG : YES ☐ NO ☐  
LSS : YES ☐ NO ☐

Delete file after distribution: Yes ☐ No ☐