



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 20, 2004

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-04-0226

TITLE: DENIAL OF PETITION FOR RULEMAKING (PRM-20-22)  
SUBMITTED BY THE NORTHEAST OHIO REGIONAL  
SEWER DISTRICT

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of December 20, 2004.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in cursive script, appearing to read "Annette Vietti-Cook".

Annette L. Vietti-Cook  
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
OGC  
EDO  
PDR

SECY NOTE: TO BE MADE AVAILABLE TO THE PUBLIC 5 WORKING DAYS AFTER DISPATCH  
OF THE LETTER TO THE PETITIONER.

VOTING SUMMARY - SECY-04-0226

RECORDED VOTES

|                  | APRVD | DISAPRVD | ABSTAIN | NOT<br>PARTICIP | COMMENTS | DATE     |
|------------------|-------|----------|---------|-----------------|----------|----------|
| CHRM. DIAZ       | X     |          |         |                 | X        | 12/15/04 |
| COMR. McGAFFIGAN | X     |          |         |                 | X        | 12/17/04 |
| COMR. MERRIFIELD | X     |          |         |                 | X        | 12/9/04  |

COMMENT RESOLUTION

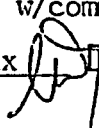
In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on December 20, 2004.

SECY NOTE: TO BE MADE AVAILABLE TO THE PUBLIC 5 WORKING DAYS AFTER DISPATCH OF THE LETTER TO THE PETITIONER.

NOTATION VOTE

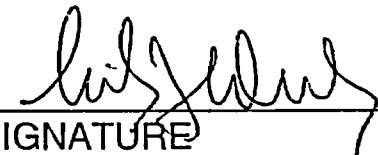
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: CHAIRMAN DIAZ  
SUBJECT: **SECY-04-0226 - DENIAL OF PETITION FOR  
RULEMAKING (PRM-20-22) SUBMITTED BY THE  
NORTHEAST OHIO REGIONAL SEWER DISTRICT**

Approved xx <sup>w/comments</sup>  Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_  
Not Participating \_\_\_\_\_

COMMENTS:

See attached comments.

  
\_\_\_\_\_  
SIGNATURE

Dec 15, 04  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

**Chairman Diaz's Vote on SECY-04-0226  
Denial of Petition for Rulemaking (PRM-20-22)  
Submitted by the Northeast Ohio Regional Sewer District (NOTATION VOTE)**

I approve denial of the petition for rulemaking, submitted by the Northeast Ohio Regional Sewer District (NORS) on August 2, 1993, and the publication of the *Federal Register* notice announcing the denial. While an extended period of time was required to resolve the technical issues raised by the petitioner and the U. S. Government Accountability Office, the study results support the current regulatory basis for the applicable NRC requirements and no relaxation of those requirements, as suggested in the petition, is warranted.

A handwritten signature in black ink, appearing to be "WJ", is located to the right of the text block.

NOTATION VOTE

RESPONSE SHEET


TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MCGAFFIGAN  
SUBJECT: **SECY-04-0226 - DENIAL OF PETITION FOR  
RULEMAKING (PRM-20-22) SUBMITTED BY THE  
NORTHEAST OHIO REGIONAL SEWER DISTRICT**

Approved  Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

I approve the proposed denial and concur with the comments of the Chairman and Commissioner Merrifield with the attached edits.

  
\_\_\_\_\_  
SIGNATURE

December 17, 2004  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

sanitary sewer systems. In addition, there is no justification on how the notification would be used at the wastewater treatment plant to affect treatment operations in response to a discharge of licensed material to ensure protection of health and safety.

Finally, several commenters stated that it would be impractical, if not impossible, for all licensees to provide advance notices to the appropriate sewage treatment plant because of the nature of the process involved. Very small quantities of radioactive materials are continuously used at certain licensed facilities, such as drug research and development companies, and these radioactive materials are continuously discharged into sanitary sewer systems. Discharges from clinics and hospitals would have many fluctuations depending on the number of patients treated and the types of treatment used. It would be unreasonable to expect licensees to notify the sewage treatment facility prior to each discharge. It would also be equally unreasonable, in some cases, to expect licensees to collect discharges in order to schedule for a batched discharge.

In summary, NRC has concluded that the petitioner's rationale, public comments, data, analyses, <sup>and reports</sup> do not <sup>justify</sup> support the petitioner's request for a rulemaking to amend the regulations in 10 CFR 20.2003 to require that all licensees provide no less than 24 hours advance notification to the appropriate sewage treatment plant before releasing radioactive material into a sanitary sewer system. Such a rulemaking would impose unnecessary regulatory burden on licensees and does not appear to be warranted for the adequate protection of public health and safety and the common defense and security. Therefore, NRC is denying the petitioner's request to amend 10 CFR 20.2003. X

With respect to the petitioner's request to amend 10 CFR 20.2004, NRC has reviewed the petitioner's rationale, the public comments on the petition, and the regulatory history on the requirements for NRC approval for incineration. NRC regulations in 10 CFR 20.2004 apply to either an NRC or an Agreement State licensee and generally do not apply to a POTW or its

NOTATION VOTE

RESPONSE SHEET

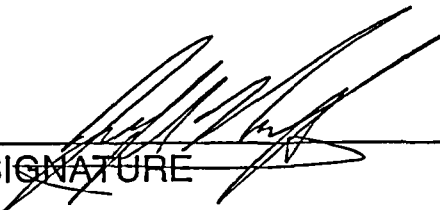
TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MERRIFIELD  
SUBJECT: **SECY-04-0226 - DENIAL OF PETITION FOR  
RULEMAKING (PRM-20-22) SUBMITTED BY THE  
NORTHEAST OHIO REGIONAL SEWER DISTRICT**

Approved  Disapproved  Abstain

Not Participating

COMMENTS:

*See attached comments.*

  
SIGNATURE

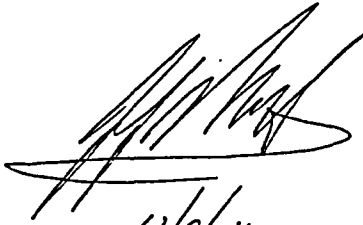
*12/5/04*  
DATE

Entered on "STARS" Yes  No

Comments from Commissioner Merrifield on SECY-04-0226:

I approve the staff's denial of the petition for rulemaking submitted by the Northeast Ohio Regional Sewer District in SECY-04-0226 with the attached revisions to the Federal Register Notice and the letter to the petitioner. These revisions provide clarification with respect to the issue on incineration of the sludge and the possibility that a Publically Owned Treatment Works (POWT) will possess an NRC license. I will note the letters to appropriate members of Congress will require revision to be consistent with the Federal Register Notice and the letter to the petitioner.

As a side note, staff will need to be more conscientious of their choice of words in Commission papers. The Commission paper states "It is expected that denying this petition will further the NRC's effectiveness goal to 'ensure that NRC actions are effective, efficient, realistic, and timely', ...". The petition was filed in August 1993 and in December 2004 the NRC is finally making a decision. I realize that considerable work was required to address this situation, including interactions with other Federal agencies and extensive surveys. All of that work had to be completed to reach a realistic conclusion. But, it does not pass the "giggle test" to assert that an 11 year schedule is timely or efficient. In reality, it is neither.



12/9/04



Since there were concerns raised on a broader issue of long-term effects of releases of radioactive materials into sanitary sewer systems, resolution of the petition was deferred until studies are conducted regarding potential radioactive contamination in sewage sludge. Since 1994, NRC conducted several studies and participated in the Interagency Steering Committee on Radiation Standards (ISCORS). NRC has co-chaired, with the Environmental Protection Agency, the ISCORS Sewage Sludge Subcommittee to coordinate and facilitate a systematic and thorough study of potential concerns related to radioactive materials in sewage sludge. Mr. Tom Lenhart from the District is a member of the ISCORS Sewage Sludge Subcommittee. He has participated in meetings, evaluated survey data, reviewed dose modeling, and assisted in preparing the associated reports.

In November 2003, the results of the survey were published in NUREG-1775, "ISCORS Assessment of Radioactivity in Sewage Sludge: Radiological Survey Results and Analysis." Based on the survey report, most of the survey samples collected were at, or near, the detection limits, with the exception of naturally occurring radioactive materials (NORM). Draft report, NUREG-1783, "ISCORS Assessment of Radioactivity in Sewage Sludge: Modeling to Assess Radiation Doses" and draft final report, EPA 832-R-03-002B, "ISCORS Assessment of Radioactivity in Sewage Sludge: Recommendations on Management of Radioactive Materials in Sewage Sludge and Ash at Publicly Owned Treatment Works" were made available to the public for comment as announced in the *Federal Register* (68 R 66503; November 16, 2003). ISCORS is currently finalizing these two reports. There are no widespread public health and safety concerns identified by the survey and dose modeling due to releases of licensed material into sanitary sewer systems. The results indicated that radioactivity was primarily attributable to NORM rather than licensed material. These findings are significant because regulatory requirements for NRC licensees do not pertain to NORM. In addition, the concentrations found in sewage sludge were generally low compared to background and dose limits; they do not pose an undue risk to the public health and safety.

NRC is denying your request to amend 10 CFR 20.2003 to require that all licensees provide no less than 24-hour advance notification to the appropriate sewage treatment plant before releasing radioactive material to the sanitary sewer system because a review of the relevant data, analyses, comments, and reports does not support such a requirement. Radioactive materials discharged to sanitary sewer systems are already adequately controlled and managed as a result of the 1991 changes to 10 CFR 20.2003 and by NRC guidance. The majority of detectable radionuclides at sewage facilities are attributable to NORM and are not subject to NRC regulations proposed in this petition. In addition, any advance notice is impractical, especially for continuous or frequent batched discharges. NRC has concluded that the requested rulemaking would neither increase radiation safety nor reduce radiation exposure; therefore, the rulemaking would result in a significant regulatory burden, with no additional protection of health or safety.

NRC is also denying your request to amend 10 CFR 20.2004 to no longer require prior NRC approval for incineration of licensed radioactive materials that enter the sanitary waste stream under 10 CFR 20.2003. NRC regulations in 10 CFR 20.2004 apply to either an NRC or an Agreement State licensee and generally do not apply to a POTW or its operations. POTWs are not required to obtain NRC approval for incineration of their sewage sludge, unless the sewage sludge contains licensed radioactive material. Studies, surveys, and modeling efforts conducted to date indicate that releases of radioactive material from licensed facilities in accordance with 10 CFR 20.2003 generally do not reconstitute in sewage sludge in sufficient

they possess an NRC or Agreement State license for possession of licensed radioactive material in the sewage sludge.

W. B. Schatz

and thus it is unlikely that a POWT  
will be required to possess an NRC  
license for its sludge.  
3

concentrations to pose risk to public health and safety. Therefore, a change to 10 CFR 20.2004 regulations is not needed. If a licensee incinerates licensed material, NRC continues to believe that the NRC approval requirements are necessary to have reasonable assurance that the public health and safety are adequately protected.

NRC has considered your petition and the stated rationale. For the reasons provided in the attached *Federal Register* notice, NRC is denying your petition. The *Federal Register* notice for denying the petition is being transmitted to the Office of Federal Register for publication.

Sincerely,

Annette Vietti-Cook  
Secretary of the Commission

Enclosure: *Federal Register* Notice

*if they possess an NRC or Agreement State license for possession of licensed radioactive material in the sewage sludge.*

operations. POTWs are not required to obtain NRC approval for incineration of their sewage sludge, unless the sewage sludge contains licensed radioactive material. Studies, surveys, and modeling efforts conducted to date indicate that releases of radioactive material from licensed facilities in accordance with 10 CFR 20.2003 generally do not reconstitute in sewage sludge in sufficient concentrations to pose risk to public health and safety. Therefore, a change to 10 CFR 20.2004 regulations is not needed.

*and there it is unlikely that a POTW will be required to possess an NRC license for its sludge.*

If a licensee incinerates licensed material, the staff continues to believe that the NRC approval requirements are necessary to have reasonable assurance that the public health and safety are adequately protected. Hazards associated with incinerating licensed material will highly depend on the specific characteristic of the matrix containing the licensed material. If a licensee incinerates the licensed material contained in the sewage sludge, many factors would have to be considered because the sewage sludge could potentially have a broad spectrum of radionuclides from various sources and a wide range of concentration levels. The potential hazards also highly depend on the case-specific incinerator design and site-specific exposure to the public and the environment. Even though the discharge requirements for 10 CFR 20.2003 were set to adequately protect public health and safety and the environment, different human exposure scenarios apply to the disposal of licensed material by incineration, even if those materials are discharged in compliance with another section of the regulations. NRC found that the acceptability of incineration as a disposal option, except for exempted quantities of radioactive materials, must be determined on a facility- and site-specific basis. NRC continues to believe that prior NRC approval for incineration is necessary to have reasonable assurance that the public health and safety are adequately protected. Therefore, NRC is also denying the petitioner's request to amend 10 CFR 20.2004 to explicitly exempt radioactive materials that enter the sanitary waste stream under 10 CFR 20.2003 from the requirements regarding NRC approval for incineration.