November 2, 2007

SUBMITTED BY E-MAIL

Larry Camper
Director Division of waste Management and
Environmental Protection
Office of federal and State Materials and
Environmental Management Programs
US Nuclear Regulatory Commission
Washington, DC, 20555

Dear Mr. Camper:

By e-mail dated September 26, 2007, we asked the NRC for its view on whether NRC had authorized blending for the Molycorp Washington site to meet off-site waste acceptance criteria (WAC). Since the e-mail does not appear to be in ADAMS, we have attached a copy. We had been informed that NRC was working on our request. We now understand that in order for the NRC to process our request, we must submit a letter request. Accordingly, we are submitting this letter.

The premise of our request is that authorization is required before a licensee blends material to reduce its concentration in order to meet off-site disposal WACs. We have attached excerpts from various NRC documents that form the basis of our understanding.

By this letter we are renewing our request to learn if NRC has authorized blending at the Molycorp site to meet off-site WACs. In addition please inform us if our understanding is not correct that licensees must obtain NRC approval before blending radioactive material to achieve off-site WACs.

Please call us if you have any questions on this response. We will be pleased to meet with you at your convenience.

Sincerely,

John Greeves
greevesj@aol.com

Jim Lieberman
jxlrc@comcast.net

cc: J. Webb
R. Radesse

Enc: a/s

Subject: Molycorp
From: Jim Lieberman <jlieberman@talisman-intl.com>
Date: Wed, 26 Sep 2007 08:06:05 -0400
To: jxw2@nrc.gov
CC: rxt@nrc.gov, John Greeves <greevesj@aol.com>

Jim

We tried calling you yesterday. We want to follow up on our past conversations with you concerning whether the NRC has authorized Molycorp to blend contaminated material to achieve a concentration of source material below .05% by weight. This would allow the resulting material to be considered an unimportant quantity and disposed of at certain RCRA sites. We read sections 17.1.3 and 15.13 of NUREG 1757 as requiring NRC prior approval to allow blending. As noted in the proposed rulemaking on transfer of source material, intentional dilution requires NRC approval if it is not authorized in a license as provided in 10 CFR 40.41(c). 67 FR55175, 55176(August 28, 2002).

Our client is interested in providing services to Molycorp and wants to be assured that there is authorization for blending. We could not find on ADAMS any indication that blending was authorized other than the recent amendment that addressed gravel. Thus, we are asking NRC to confirm whether it has granted authorization to Molycorp for blending to reduce concentrations to exempt levels to achieve waste acceptance criteria (WACs) at RCRA sites.
If so, please let us know where it (the request and the subsequent authorization) is in ADAMS so we can advise our client. You should be aware that we have heard that Molycorp is blending material to achieve WACs at RCRA sites but we have no firsthand information to confirm that.

Time is of the essence on this request. If you have any questions on this request, please call Jim Lieberman at 301-526-4790 or John Greeves at 301-452-3511.

We look forward to your prompt reply. Thank you in advance.

Jim and John

--
Best Regards

Jim Lieberman Regulatory and Nuclear Consultant Talisman International LLC
Maryland Office: 301-299-3607 Talisman Office 202-471-4244
Cell: 301-526-4790 e-mail: jlieberman@talisman-intl.com
The information contained in this message from Jim Lieberman and any attachments are confidential and intended only for the named recipient(s). If you have received this message in error, you are prohibited from copying, distributing or using the information. Please contact the sender immediately by return email and delete the original message.

NRC statements on mixing to meet WAC

Excerpts from RIS2004

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555-0001
May 28, 2004

NRC REGULATORY ISSUE SUMMARY 2004-08
RESULTS OF THE LICENSE TERMINATION RULE ANALYSIS

....

e. Appropriateness of Allowing Intentional Mixing

....

The staff concluded that the use of intentional mixing of contaminated soil to meet the waste acceptance criteria (WAC) of off-site disposal facilities, to facilitate meeting the LTR release criteria on a case-by-case basis, is consistent with current Commission practice. Existing Commission policy and practices are also consistent with consideration of intentional mixing of contaminated soil, in limited circumstances, on a case-by-case basis, to meet the release criteria of the LTR.

Therefore, the staff recommended allowing intentional mixing of soil to meet LTR release criteria in limited circumstances, on a case-by-case basis,....

....

From 2002 Proposed RULE SOC

NUCLEAR REGULATORY COMMISSION
10 CFR Part 40 67 FR 55175 (August 28, 2002)
Transfers of Certain Source Materials by Specific Licensees
AGENCY: Nuclear Regulatory Commission.
ACTION: Proposed rule.

Page 55176:
Additionally, NRC does not permit licensees to intentionally dilute licensed source materials without specific approval. Section 40.41(c) states that "each person licensed by the Commission pursuant to the regulations in this part shall confine his possession and use of source or byproduct material to the locations and purposes authorized in the license." Although it is recognized that inadvertent dilution may occasionally occur (*e.g.*, during the

process of preparing contaminated material for shipment, some mixing with cleaner material may result as it is "dug up" and loaded for shipment before sampling), this natural dilution of the concentration of uranium and thorium is in contrast to the intentional dilution of contaminated material for the purpose of reducing its concentration below 0.05 percent which is not acceptable in the absence of prior authorization. Intentional dilution of licensed source material, without prior NRC authorization, would be considered a violation of § 40.41(c).

Excerpts from NUREG-1757, Volume 1

15.13 USE OF INTENTIONAL MIXING OF CONTAMINATED SOIL

15.13.1 INTRODUCTION

As part of the LTR analysis, NRC staff examined the use of intentional mixing of contaminated soil to meet the LTR release criteria as an option to provide flexibility in achieving the goals of the LTR (10 CFR Part 20, Subpart E). The results of the staff's analysis of this issue are in SECY-04-0035 (NRC 2004a). The staff analyzed the possible ways that a licensee could intentionally mix soil to lower its concentration and identified which of these scenarios should be considered further in the analysis. Using these scenarios, the staff evaluated options for allowingintentional mixing[20]. The analysis considered a wide range of relevant information and experience from the NRC and other domestic and international sources.

In SRM-SECY-04-0035 (NRC 2004b), the Commission approved the use of intentional mixing of contaminated soil to meet the LTR release criteria, in limited circumstances, on a case-by-case basis, while continuing the current practice of allowing intentional mixing for meeting waste acceptance criteria (WAC) of offsite disposal facilities and for limited onsite waste disposals at operating facilities (approved under 10 CFR 20.2002).

Intentional mixing has been approved by the NRC staff where homogenous waste streams (for example, soil from two areas of a facility contaminated by similar waste from two different processes) have been mixed to meet the WAC of a disposal facility, as long as the classification of the waste, as determined by the requirements of 10 CFR 61.55, is not altered. NRC staff will continue to consider proposals from decommissioning sites for intentionally mixing contaminated soil (and other homogeneous waste streams) to meet WAC of offsite disposal facilities to aid in the completion of remedial actions at sites undergoing decommissioning. Intentional mixing also has been approved by the NRC staff for limited onsite disposals approved under 10 CFR 20.2002. A decommissioning licensee will normally not seek approval under 10 CFR 20.2002 for an onsite burial (although 10 CFR 20.2002 may be used for disposal at an offsite location). Licensees should be aware that if an onsite disposal under 10 CFR 20.2002 is approved during operations, the onsite disposal will need to be readdressed at the time of license termination, in the evaluation of whether the dose criteria of the LTR are met (see guidance in Section 15.12 of this volume).

This guidance implements the Commission's policy decisions on the use of intentional mixing of contaminated soil and other homogeneous waste streams from decommissioning sites to meet

WAC of offsite disposal facilities and for intentional mixing of soil that remains at the decommissioning site to meet the LTR release criteria.

15.13.2 REVIEW PROCEDURES

The NRC staff will consider proposals to use intentional mixing of contaminated soil (or other homogeneous waste streams) to meet the WAC of an offsite disposal facility to facilitate completion of decommissioning. Licensees should be aware that local and/or State requirements may also apply to waste that is transported to a disposal facility away from the decommissioning site, and that these requirements will have to be met. Approval of a process for a waste stream by the NRC does not imply approval for disposal by the local or State regulators with jurisdiction over the disposal facility. Decisions on approving the use of intentional mixing to

21 The NRC's staff preferred option for decommissioning is to achieve license termination for unrestricted use of sites where possible. NRC may consider remedies that include intentional mixing of contaminated soil to achieve unrestricted use of a site, when other remedies alone would result in restricted use. (For example, NRC staff could consider intentional mixing that uses additional uncontaminated soil from outside the footprint if it will achieve unrestricted use). Intentional mixing also may be used to achieve the restricted use or alternate criteria of the LTR.

meet the WAC of an offsite disposal facility will be performance-based using the appropriate criteria of 10 CFR Part 20 or other NRC regulations, if they apply.

The NRC staff will consider the use of intentional mixing of soil to meet the LTR release criteria (where the mixed soil will be left on the site) only in cases in which an "overall approach" to site cleanup is proposed that includes soil mixing and ALARA principles. Proposals to use intentional mixing should be part of an overall plan for decontamination and decommissioning (presented in a DP or LTP) of a licensee's property, that seeks to achieve unrestricted use of the site [21] and renders doses ALARA, which may include: (1) removal and disposal of contaminated components and equipment; (2) decontamination (and demolition, if appropriate) of buildings; (3) removal and disposal of waste streams remaining onsite from past operations; and (4) excavation and removal of large areas of soil contamination as waste. Intentional mixing should not be proposed as the sole means to achieve the license termination dose criteria, unless it is the only practical means to meet the LTR criteria.

The NRC staff will consider only cases in which this overall approach to site cleanup demonstrates that the removal of soil would not be reasonably achievable. The NRC will consider the same criteria used to determine the eligibility of a site for restricted use (see 10 CFR 20.1403(a)) for determining when removal of soil is not reasonably achievable (i.e., a demonstration that further removal of contaminated soil would result in net public or environmental harm or leaving the soil in place is ALARA). Licensees also should include other considerations (e.g., distance to disposal facility, efficient utilization of available disposal capacity at the offsite facility, unavailability of required treatment options, lack of disposal options other than leaving the contaminated soil onsite, and the need to use funds for remediation of non-radioactive hazards at the same site) in proposals for intentional mixing, if they are applicable and appropriate to a determination of whether the removal of soil for offsite disposal is reasonably achievable.

Decisions on approving the use of intentional mixing of contaminated soil to meet the LTR will be performance-based using the dose criteria of the LTR. Therefore, licensees have flexibility in how intentional mixing may be used together with other remediation activities to achieve the dose criteria. In addition, staff will base the approval decisions using a risk-informed approach.

In their proposal to use intentional mixing of soil, licensees should include all relevant information concerning the risks of using the approach versus other remediation alternatives.

15.13.3 ACCEPTANCE CRITERIA

Information to be Submitted

The information supplied by the licensee should be sufficient to allow the staff to determine that the information adequately describes how the intentional mixing operation will be carried out and that the conditions for approving the use of intentional mixing have been met. In the case where intentional mixing will be used to meet the LTR criteria, the information supplied by the licensee should be sufficient to allow the staff to determine that the limited circumstances, for which mixing will be considered, are present.

Intentional Mixing to Meet Waste Acceptance Criteria

The staff's review should verify that the following information is included in the sections of the DP, corresponding to the sections of the Volume 1 of this NUREG report (indicated in parentheses), for decommissioning sites proposing to use intentional mixing to meet the WAC of an offsite disposal facility:

C Information on the intentional mixing activities to be conducted by the licensee or contractors, including the machinery to be used and the methods to be employed with the equipment to achieve a homogeneous mix of soil. Information should be included on important features and parameters of machinery operation that control the homogeneity of the resultant mix, such as mixing time, discharge time, number of mixing blades or paddles, and the maximum particle size. (Section 17.1.3)

C Information on any slag or other larger non-soil like waste materials that will be included in the soil that is intentionally mixed, and how it will be rendered compatible with the mixing machinery (e.g., maximum particle size), if necessary. Information should also be included on non-soil like waste materials that are included in the mixed soil, but which are not compatible with the mixing machinery, and how it is compatible with the WAC of the disposal facility. (Section 17.1.3)

C Information on the method to be used to ensure that the mixing operation has resulted in a sufficiently homogeneous mixture to achieve the requirements of the disposal facility. This should include any instrumentation that may be used in support of the machinery used for mixing, as well as any proposed surveying and/or sampling and analysis that is employed. (Sections 17.1.3 and 17.3.1.7)

C Information on how soil following intentional mixing is controlled (e.g., temporary storage), in accordance with the licensee's program for management of volumetrically contaminated materials to ensure it maintains its required properties, if appropriate. (Section 17.5.1)

C Information on how the soil following the intentional mixing operation will meet the WAC of the disposal facility. (Section 17.5.1)

Intentional Mixing to Meet the License Termination Rule

The staff's review should verify that the following information is included in the sections of the DP, corresponding to the sections of the Volume 1 of this NUREG report (indicated in parentheses), for sites proposing to use intentional mixing to meet the release criteria of the LTR:

C A summary discussion of the overall decommissioning of the site that includes the use of intentional mixing in a comprehensive cleanup approach, including how the licensee will

complete interrelated decommissioning activities and the timeframes for completing the activities. This discussion should describe how the intentional mixing proposed helps achieve the goal of unrestricted use, how it is risk-informed, and the reasons that removal of all contaminated soil is not reasonably achievable. (Section 17.1)

C Information on the locations of surface and subsurface contamination that define the areas of contamination for which intentional mixing will be utilized. (Section 16.4.3 and 16.4.4)

C Information on the configuration of the "footprint" of the areas of contamination prior to the mixing operation and the final area comprised of the intentionally mixed soil. (Section 17.1.3)

C Information on any locations of uncontaminated surface or subsurface soil that will be incorporated into the footprint. (Sections 16.4.3 and 16.4.4)

C Information on the intentional mixing activities to be conducted by the licensee or contractors, including the machinery to be used and the methods to be employed with the equipment to achieve a homogeneous mix of soil. Information should be included on important features and parameters of machinery operation that control the homogeneity of the resultant mix, such as mixing time, discharge time, number of mixing blades or paddles, and the maximum particle size. (Section 17.1.3)

C Information on any slag or other larger non-soil like waste materials that will be included in the soil that is intentionally mixed, and how it will be rendered compatible with the mixing machinery (e.g., maximum particle size), if necessary. Information should also be included on non-soil like waste materials that are included in the mixed soil but which are not compatible with the mixing machinery and how it contributes to the overall plan for decommissioning. (Section 17.1.3)

C Information on the method to be used to ensure that the mixing operation has resulted in a sufficiently homogeneous mixture to achieve the goals of the decommissioning project. This should include any instrumentation that may be used in support of the machinery used for mixing, as well as any proposed surveying and/or sampling and analysis that is employed. (Sections 17.1.3 and 17.3.1.7)

C Information on the final configuration and design attributes of the area containing the intentionally mixed soil, including a soil cap if it is employed. (Section 17.1.3)

C Results of and information that contributes to the ALARA analysis relating to the use of intentional mixing, considering the criteria used to determine the eligibility of a site for restricted use (see 10 CFR 20.1403(a)). (Section 17.4.1)

C Information on how soil following intentional mixing is controlled (e.g., temporary storage) in accordance with the licensee's program for management of volumetrically contaminated materials to ensure it maintains its required properties, if appropriate. (Section 17.5.1)

C If intentional mixing is used to meet the restricted use criteria, information on advice from affected parties concerning the use of intentional mixing as part of the remediation of a site. (Sections 17.7.5 and M.6)

15.13.4 EVALUATION FINDINGS

Approval Conditions

The NRC staff will consider approval of proposals to use intentional mixing from decommissioning sites to meet the WAC of offsite disposal facilities. For these cases, the mixture should be comprised of soil or other homogeneous waste streams and should not result

in lowering the classification of the wastes (in accordance with 10 CFR 61.55). Proposals to use mixing to meet WAC of an offsite disposal facility should not use clean soil or non-contaminated materials similar to the waste stream to lower the concentrations of a mixture.

NRC staff will consider approval of intentional mixing to meet the release criteria of the LTR for soils left onsite, in which:

1. The intentional mixing is part of the proposed overall approach to site cleanup. The overall approach also includes application of the ALARA principle.
2. The area containing the mixed contaminated soil after license termination will be equal to or smaller than the footprint of the zones of contamination before decommissioning begins.
3. Clean soil, from outside the footprint of the area containing the contaminated soil, should generally not be mixed with contaminated soil to lower concentrations. Staff will consider use of clean soil only in cases where the licensee has demonstrated that: (a) the only viable approach to achieving the dose criteria of the LTR is to use clean soil from outside the contaminated area footprint; or (b) the only viable approach to achieving the unrestricted use criteria (when other remedies would only achieve the restricted use criteria) is to use clean soil from outside the contaminated area footprint.

Proposals to use intentional mixing of soil to meet the LTR criteria will be approved only if the area of land containing the intentionally mixed soil following remediation is no larger than the total of the areas of contaminated soil before remedial actions began. It is reasonable to include some portions of uncontaminated land within the footprint of contaminated areas, where an area encompassing several "zones" of contamination is designated as the footprint to be mixed. To

22 Staff would consider non-soil materials to be incidental if, for example, a few pieces of small equipment, building rubble, or non-soil waste (e.g., slag) were discovered that required disposal following completion of waste shipping campaigns, or where a waste were most effectively managed (e.g., to avoid a technical difficulty that would increase worker dose) if it were included in the mixed soil.

include them, however, the uncontaminated areas should be small in comparison to the areas that are contaminated.

The NRC staff analysis of the use of intentional mixing contemplated circumstances where a contaminated soil was mixed with a contaminated soil of lower concentrations to achieve a mixture that allowed the dose criteria of the LTR to be met. The use of clean soil to achieve the goals of intentional mixing should be limited to the circumstances just described. Any uncontaminated soil that is utilized in the mixing operation should normally be included within the footprint of the contaminated zones that are to be mixed. Staff will consider the inclusion of uncontaminated soil that comes from outside of the footprint of the contaminated zones only in cases where its use is the only viable approach for meeting the dose criteria of the LTR. If a licensee proposes intentional mixing using offsite clean soil to meet the LTR criteria, the NRC staff will consult with the Commission on the acceptability of the proposal.

The staff will also consider the inclusion of uncontaminated soil that comes from below the contaminated zones within the footprint as long as it is consistent with the overall approach described for achieving license termination and considers the impacts associated with an increased depth of disposal (e.g., affect on groundwater).

The staff will consider the inclusion of a limited volume of non-soil materials (e.g., slag or concrete rubble) within the mixed soil as part of remediation, as long as analysis is presented demonstrating that the release criteria of the LTR are met and that inclusion in the mixed soil is

consistent with the overall approach to site cleanup in the DP or LTP. In order to be consistent with the overall approach, the non-soil materials to be included in the mixed soil should be incidental to the excavation and removal of buildings, equipment, and major waste streams to be managed at the decommissioning site.[22] Intentionally mixing a significant non-soil like waste stream resulting from the activities that were conducted at the site during operations (e.g., slag) that is easily removed from the site (e.g., in a pile on the soil surface) should not be included in a proposal for intentional mixing to meet the LTR release criteria.

Evaluation Criteria

The staff should verify that the information summarized under "Information to be Submitted," above, is included in the licensee's descriptions of the surface and subsurface soil contamination, the soil decommissioning activities, instrumentation, control of contaminated material, ALARA evaluation, and stakeholder involvement (if necessary). The staff should verify that intentional mixing of contaminated soil is part of an overall approach to site remediation in which it is demonstrated that removal of the soil to be mixed is not reasonably achievable. The staff should verify that the descriptions of the mixing operation, the use of machinery, and the methodology

for ensuring that the mixture is homogeneous are sufficiently detailed to allow the staff to understand the manner in which the licensee will ensure that the expected properties of the mixed soil have been achieved. The staff should ensure that the area containing mixed soil is no greater than the footprint of contaminated areas defined at the start of remediation. The staff should also ensure that the use of uncontaminated soil in mixing is limited only to cases where it is the only viable approach to meeting the LTR criteria. If a licensee proposes intentional mixing using offsite clean soil to meet the LTR criteria, the NRC staff will consult with the Commission on the acceptability of the proposal. The staff should ensure that any operation to mix contaminated soil to meet WAC of an offsite disposal facility does not result in lowering the classification of the waste in accordance with 10 CFR 61.55.

Sample Evaluation Findings

None required. The staff should combine the assessment of a DP proposing the use of intentional mixing with the findings on the Sections corresponding to the sections in parentheses above.

References

C NRC 2004a. SECY-04-0035, "Results of the License Termination Rule Analysis of the Use of Intentional Mixing of Contaminated Soil," March 1, 2004.

C NRC 2004b. SRM-SECY-04-0035, "Staff Requirements – SECY-04-0035 – Results of the License Termination Rule Analysis of the Use of Intentional Mixing of Contaminated Soil," May 11, 2004.

17.1.3 SOIL

The purpose of the review of the description of the planned decommissioning activities for soil is to allow the staff to fully understand what methods and procedures the licensee will undertake to remove or remediate the surface and subsurface soil at the site. This will allow the staff to evaluate the licensee's methods and procedures to qualitatively assess if they can be performedsafely and in compliance with NRC requirements. This information may also aid the staff in

evaluating the estimates of radioactive waste that will be generated during decommissioning, the cost estimates for the decommissioning, and the ALARA evaluations developed by the licensee to support the decommissioning. Additional guidance on the use of intentional mixing of soil to remediate surface and subsurface soil at the site is provided in Section 15.13.

ACCEPTANCE CRITERIA

Regulatory Requirements

10 CFR 30.36(g), 40.42(g), and 70.38(g)

Information to be Submitted

The information supplied by the licensee should be sufficient to allow the staff to fully understand what methods, procedures, and techniques the licensee intends to use to remove or remediate contaminated soil at the site. In addition, the information should be sufficient to allow the staff to determine if the licensee's radiation safety procedures are appropriate, given the level of contamination in the soil and proposed method(s) for removal or remediation. The staff's review should verify that the following information is included in the description of soil decommissioning activities in the facility DP:

C a summary of the removal/remediation tasks planned for surface and subsurface soil at the site in the order in which they will occur, including which activities will be conducted by licensee staff and which will be performed by a contractor;

C a description of the techniques that will be employed to remove or remediate surface and subsurface soil at the site;

C a description of the radiation protection methods (such as PPE, or area exit monitoring) and control procedures (such as the use of HEPA vented enclosures during excavation or covering soil piles to prevent wind dispersion) that will be employed during soil removal/remediation (The staff's technical review of the adequacy of the licensee's radiation safety procedures should be performed pursuant to the criteria in Section 17.3 of this NUREG. In this section, the staff should make a qualitative assessment of the adequacy of the radiation protection and control methods proposed by the licensee to determine if the procedures described in the Radiation Safety and Health section of the DP have been followed.);

C a summary of the procedures already authorized under the existing license and those for which approval is being requested in the DP;

C a commitment to conduct decommissioning activities in accordance with written, approved procedures;

C a summary of any unique safety or removal/remediation issues associated with remediating the soil; and

C for Part 70 licensees, a summary of how the licensee will ensure that the risks addressed in the facility's Integrated Safety Analysis will be addressed during decommissioning.

EVALUATION FINDINGS

Evaluation Criteria

The staff's review should verify that the licensee has described the remediation activities and associated safety precautions in sufficient detail to allow the staff to determine if the proposed activities can be conducted safely and in compliance with NRC requirements. The staff should verify that the information summarized under "Information to be Submitted," above, is included in the licensee's description of the decommissioning activities portion of the DP. The staff should make a qualitative assessment of the adequacy of the licensee's proposed remediation methods and procedures to accomplish the remediation objectives in a manner that is protective of workers and the public and in compliance with NRC requirements. Detailed technical review of the safety precautions and procedures should be conducted pursuant to the criteria in Section 17.3 of this volume.

Sample Evaluation Findings

None required. The staff should combine the evaluation finding for the licensee's description of decommissioning activities for soil with the findings for the remaining areas in this NUREG volume (see Section 17.1.1).

Gillian letter indicating NRC approves Blending case by case

letter from Dan Gillen, NRC to Colonie FUSRAP about waste blending
SECY-04-0035 says intentional mixing to meet a disposal facility's WAC is consistent with NRC practice NRC has approved blending of similar waste streams to meet disposal facility WAC to achieve decommissioning-site cleanup goals specific approval was given for Kaiser Aluminum site on 9-15-03
NRC plans soon to approve another similar blending operation
Colonie's proposed approach appears consistent with blending operations that the NRC has approved text of letter:

April 5, 2005

Mr. James Moore, CPG
Project Manager, Colonie FUSRAP Site
Department of the Army
New York District, Corps of Engineers
Jacob K. Javits Federal Building
New York, NY 20278-0090

Dear Mr. Moore:

I am writing to you in response to our telephone conversation of March 9,

2005. In our conversation, we discussed my March 4, 2005, letter responding to your February 2, 2005,letter about waste blending at the Colonie, New York, Formerly Utilized Sites Remedial Action Program (FUSRAP) site.

SECY-04-0035 concluded that the intentional mixing of materials to meet a disposal facility's waste acceptance criteria (WAC) was consistent with the U.S. Nuclear Regulatory Commission (NRC) practice. This was affirmed in the Commission's Staff Requirements Memorandum approving the conclusions in the SECY Paper. The NRC has approved blending of similar waste streams to meet disposal facility WAC to achieve cleanup goals at sites undergoing decommissioning. The NRC approved the blending of similar waste streams to meet disposal facility WAC for the Kaiser Aluminum site on September 15, 2003. We also plan to approve soon another similar blending operation's technical basis, although I cannot specify the facility because the license amendment to approve all of the licensee's actions has not been issued. Although I have not thoroughly reviewed the technical details of the blending of waste streams at Colonie, the proposed approach appears consistent with blending operations that the NRC has approved to meet disposal facility WAC.

I hope this letter clarifies the information provided in my March 4, 2005, response. If I can be of any further assistance, please contact me at (301) 415-7295.

Sincerely,

Daniel M. Gillen, Deputy Director
Decommissioning Directorate
Division of Waste Management
and Environmental Protection
Office of Nuclear Material Safetyand Safeguards

Excerpts from SRM secy 04-0035

May 11, 2004

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary ***/RA/***

SUBJECT: STAFF REQUIREMENTS - SECY-04-0035 - RESULTS OF THE LICENSE TERMINATION RULE ANALYSIS OF THE USE OF INTENTIONAL MIXING OF CONTAMINATED SOIL

The Commission has approved Option 3; the staff can consider the intentional mixing of contaminated soil to meet the release criteria in the License Termination Rule (LTR), on a case-by-case basis while continuing the current practice of allowing intentional mixing for meeting waste acceptance criteria (WAC) at offsite disposal facilities and for limited waste disposals. [as described in the paper it was allwed based on specific approvals]