September 8, 1998

FOR: The Commissioners
FROM: L. Joseph Callan /s/

Executive Director for Operations

SUBJECT: PROPOSED AGREEMENT WITH THE STATE OF OHIO AND COMPATIBILITY REQUIREMENTS OF 10 CFR PART 20, SUBPART E

PURPOSE:

To request the Commission's approval of the staff position that Ohio's approach to decommissioning, which differs from NRC requirements but does not create a significant conflict, is compatible with NRC's program.

BACKGROUND:

On January 23, 1998, the State of Ohio submitted a draft of its forthcoming request for an Agreement with the Commission pursuant to Section 274b of the Atomic Energy Act. Subsequently, on July 31, 1998, the formal request for an Agreement by Governor Voinovich was received. The staff has conducted a review of the draft pursuant to the Commission policy statement "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement" (46 FR 7540, as amended by 46 FR 36969 and 48 FR 33376). The staff has also considered whether the proposed Ohio program meets the criteria set out in the Policy Statement on Adequacy and Compatibility of Agreement State Programs and associated implementing procedures.

One element (see the Policy Statement on Adequacy and Compatibility of Agreement State Programs for explanation of the term "element") of the proposed Ohio program concerning decommissioning actions has been identified as differing from, and possibly being inconsistent with, the equivalent NRC materials program element. Under the proposed Ohio program, a materials license would be terminated only if the residual contamination at the licensed site were reduced sufficiently to meet the criteria for unrestricted release. Under NRC's program, a license could also be terminated under restricted conditions at a site that does not meet the criteria for unrestricted release, provided the additional regulatory requirements in 10 CFR 20.1403 or 20.1404 were met.

In 1995, the Ohio General Assembly enacted into State law the then current NRC definition of the term "decommissioning," which envisioned license termination only if the licensed site was decontaminated to levels permitting release for unrestricted use (i.e., the site would be suitable for future use without restrictions for purposes of radiological protection). Ohio interprets this statutory definition to effectively prohibit the termination of a license for a site with residual contamination greater than that acceptable for unrestricted release. Staff provided comments to Ohio on the draft legislation on March 20, 1995, recommending adoption of the NRC definition in effect at the time.

On July 21, 1997, NRC published the final rule on Radiological Criteria for License Termination (Subpart E of 10 CFR Part 20), which amended NRC's definition of decommissioning to include license termination under restricted conditions. Ohio is in the process of adopting the requirements of subpart E by reference, except for the single provision in 20.1403 for license termination under restricted conditions. In place of license termination with restrictions, the Ohio program would convert a materials license to a special "decommissioning-possession only" license to be consistent with State law. Ohio is adopting all of the requirements for license termination in 20.1403, (e.g., institutional controls, financial assurance, and public participation) and would apply those requirements to the license conversion process. Ohio is also adopting 20.1401(c) by reference, along with a requirement that the provisions of 20.1401(c) be incorporated into each "decommissioning-possession only" license, through a specific license condition therein.

The NRC license termination rule became effective for NRC licensees on August 20, 1997, and was assigned to compatibility division 2 (see below) under the Office of State Programs (OSP) Internal Procedure B.7 in effect at the time. In September 1997, the Commission implemented the new policy on Agreement State compatibility, and a revised B.7 Procedure. The rules in Subpart E have been assigned to compatibility category C (see below) under the new policy and revised procedure.

DISCUSSION:

1. Criteria for Compatibility Category C

In the Policy Statement on Adequacy and Compatibility of Agreement State Programs, (compatibility policy) published September 3, 1997 (62 FR 46517), the Commission sets out five categories into which program elements, such as regulations, should be assigned. The categories correlate generally to the potential for differences between the Agreement State regulation, or other program element, and the equivalent NRC regulation or other program element to create a conflict, duplication, gap or other condition that would jeopardize an orderly pattern in the regulation of materials on a nationwide basis, or endanger public health and safety.

In category C, the policy addresses the set of regulations and program elements which are needed to maintain an orderly pattern, but which States do not need to adopt in language that is "essentially identical" to the language in the NRC regulations and program elements. The policy specifies that, for category C, the equivalent Agreement State regulations and program elements should embody the essential objectives of the corresponding NRC regulations and program elements to avoid conflicts, gaps or duplication in the regulation of byproduct material on a nationwide basis. Category C, like Division 2 under the former Commission policy, allows the Agreement States flexibility in language and the option to adopt a different, or more stringent requirement, but does not allow Agreement States the option to adopt requirements that are substantively less stringent.

2. Agreement State Compatibility Requirements for the Radiological Criteria for License Termination Rule (10 CFR Part 20, Subpart E)

In the Statements of Consideration for Subpart E, the Commission noted:

"because the dose criterion in the rule is not a "standard" in the sense of the public dose limits of 10 CFR Part 20 but is a constraint within the public dose limit that provides a sufficient and ample margin of safety below the limit, it is reasonable that the rule would be a Division 2 level of compatibility under the current policy. This means the Agreement States would be required to adopt the regulation but would have significant flexibility in language, and would be allowed to adopt more stringent requirements."

The Statements of Consideration indicated that, until the new compatibility policy became effective, the NRC would continue to apply the then current Agreement State compatibility policy. The new policy has now been adopted, under which the rule has a Category C designation. However, as indicated in the Statements of Consideration, the original Division 2 compatibility designation and the subsequent Category C designation primarily addressed the dose criterion of Subpart E. Specific compatibility discussions for the remainder of Subpart E were not addressed in the Statement of Consideration.

Staff, in accordance with the guidance in Management Directive 5.9, and following review by the Agreement States (All Agreement States Letter SP-97-067, September 15, 1997) has designated these provisions as Category C in the OSP Internal Procedure B.7 rule tables (All Agreement States Letter SP-98-071, August 18, 1998). Staff also notes that in good faith Ohio adopted NRC's previous definition of decommissioning into State legislation.

3. Is Ohio's Proposed Approach to Decommissioning under Restricted Release Conditions Compatible with NRC's Approach?

To assist in evaluating this issue, staff requested further information from Ohio to determine the basis and significance of any differences between the NRC and Ohio programs (see Attachment). Ohio's response indicates that the only area of difference relates to sites which qualify for NRC license termination under restricted release conditions. In such cases, under the proposed Ohio program, the license would be converted to a "decommissioning-possession only" license, rather than terminated. Staff believes that while issuing such a license is different and more stringent than the restricted release/ license termination approach established in 20.1403, the Ohio approach appears to have an end result that would result in potential regulatory conflicts in only a limited number of decommissioning licensing actions.

NRC regulations in Subpart E establish three basic approaches for decommissioning and license termination: a) license termination without restrictions at sites where the residual contamination meets the constraint requirements of 20.1402; b) license termination under restricted conditions at sites where the residual contamination meets the constraint requirements of 20.1403; and c) license termination under alternate constraint criteria as provided for in 20.1404. NRC has also recognized that in some cases continued licensing may be necessary. (SECY-97-046A, page 6, end of first paragraph)

The Ohio program has adopted 20.1402 by reference, thus staff concludes that for sites meeting the Ohio requirements for unrestricted release, the actions of the Ohio and NRC programs would be equivalent. In Ohio, as for NRC, license termination under conditions of unrestricted release is expected to be the approach followed for the majority of licenses. In addition, in the unusual case where NRC would continue a license in effect after decommissioning, staff concludes the Ohio and NRC programs would be equivalent.

However, in those few cases in which decommissioning involved restricted use, the proposed Ohio program would convert the license to a "decommissioning-possession only" license. As described in the Ohio letter (page 5, bottom paragraph), the "decommissioning-possession only" license would be issued only if the licensee met the appropriate requirements of 20.1403 or 20.1404.

Staff has outlined below, based on Ohio's June 26, 1998, letter the approach Ohio would follow in cases of restricted release.

- 1. The licensee must determine that 25 millirem as distinguished from background for residual activity *cannot* be met in a plan that the Director (of the Ohio Department of Health) has received and approved.
- 2. The licensee submits a plan to the Director proposing a decommissioning plan that addresses the provisions of 20.1403. The licensee must demonstrate to the satisfaction of the Director that:
 - (a) Further reductions in residual radioactivity would result in net public harm;
 - (b) The licensee has developed a plan for institutional controls at the site so that the TEDE will not exceed 25 millirem as distinguished from background with sufficient financial assurance for an independent third party acceptable to the Director to conduct control and maintenance of the site with funds from a financial instrument acceptable to the Director;
 - (c) The decommissioning plan must indicate that any transfer of ownership or control of the land or a portion thereof which is subject to restrictive conditions must be acceptable to the Director. The Director will find transfer acceptable if the person receiving ownership or control of the property that is subject to restrictive conditions assumes the decommissioning-possession only license and the provisions therein;
 - (d) The licensee must demonstrate to the Director that the licensee has met with members of the community and that the licensee has provided reasonable assurance that the institutional controls and financing of the institutional controls proposed by the licensee will be maintained.
- 3. The licensee may propose to decommission the facility or any portion of the facility to a level that *exceeds* 25 millirem TEDE distinguishable from background up to 100 millirem, or in exceptional circumstances 500 millirem, by meeting the provisions of 20.1404.
- 4. Under paragraphs 2 and 3, after the licensee satisfies all of the decommissioning plan provisions, the Director, pursuant to a request for a license amendment, will issue a decommissioning-possession only license under the authority of OAC 3701-39-021 which incorporates the provisions of the decommissioning plan.

Staff has identified two impacts of the difference between the NRC and Ohio approach. First, for short-lived radionuclides the "decommissioning-possession only" license would remain in effect only until the residual contamination at the site was reduced to the level acceptable for unrestricted use.

However, for long-lived radionuclides, such as uranium and thorium, the license would become essentially perpetual. Secondly, the site license would likely be perceived as an encumbrance to a site owner and could impact the marketability of such a site. The restrictive provisions in the NRC's restricted release approach would also likely be viewed as encumbrances that could affect the marketability of the site, though to a lesser degree than a perpetual license with attendant conditions and long-term license fee obligations. From a licensee's perspective, these two impacts would prevent an Ohio licensee, using the restricted release decommissioning approach, from achieving the same level of finality that can be achieved through application of NRC's regulation. A third impact, potentially applicable to NRC's specific licensee, Shieldalloy, is discussed below.

The Ohio approach raises certain issues that should be noted by the Commission. Both NRC and Ohio appear to use a similar approach to imposing additional (post decommissioning) requirements on licensees or subsequent landowners. Under Ohio's proposed approach, the Director would not require any further decommissioning actions unless such actions were necessary to avert a significant threat to public health and safety. NRC's license termination rule is similar in that the Commission will require additional cleanup only if, based on new information, it determines that the criteria of subpart E were not met and residual radioactivity at the site could result in a significant threat to the public health and safety. Accordingly, in either case, the regulatory agency will employ essentially the same standard for imposing additional requirements on the licensee or subsequent landowner. As such, in practice, the finality afforded by the Ohio approach with regard to the imposition of additional requirements in the future is not significantly different from that of NRC's rule.

The Ohio rules also impose more stringent requirements for the transfer or sale of the site after decommissioning because the Director must approve subsequent sales. The approval serves substantially the same purpose that the deed restrictions and other institutional controls would serve in the NRC context under 20.1403. However, Ohio's requirements may make the sale of the land more difficult in some circumstances. In addition, under Ohio's approach, the licensee may be required to pay additional licensing fees over the course of the license. It is unclear whether this is a significantly different burden beyond the financial assurance requirements imposed by 20.1403 of the Commission's regulations.

While, on its face, Ohio's approach appears to be different in several respects from the NRC rules in terms of finality, as discussed above, the differences may not be as significant as they appear at first glance. In those cases involving a restricted release scenario, however, it is clear that Ohio's approach will involve the imposition of more stringent requirements than that of NRC. In addition, if approved for Ohio, it is possible that the approach may be adopted by other Agreement States. Nevertheless, under the NRC rule's Category C designation, States may impose more stringent standards than those imposed by the Commission. The staff notes that in the statement of consideration for the decommissioning rule, the Commission expressed its preference for the unrestricted release of sites because restricted release requires additional precautions or limitations on the use of land at the end of a licensee's operations (62 FR 39069). To the extent that Ohio's approach is more stringent, it will provide additional disincentive to licensees who are considering the option of restricting the future use of their sites. At the same time, Ohio's approach is not so stringent as to preclude the option altogether. As such, the staff believes that Ohio's approach is consistent with the Category C designation and Ohio's approach should be found compatible with that of NRC.

Staff also examined whether the approach adopted by Ohio could lead to a situation in which a single entity, holding separate licenses, one from Ohio and the other from NRC, could be subjected to significantly different decommissioning requirements. One NRC licensee, Shieldalloy Metallurgical Corporation, has a site in Ohio which would transfer to State jurisdiction under the proposed Agreement and another site in New Jersey which would remain under NRC jurisdiction. Both sites are contaminated with uranium, thorium, and their decay products in slag resulting from ferroalloy production. The licensee has discontinued licensed operations in Ohio, but continues operations in New Jersey. Staff has prepared a draft environmental impact statement for the Ohio site, NUREG-1543, which was completed prior to the adoption of Subpart E. However, the licensee has not submitted a proposed decontamination and license termination plan, and staff has not evaluated in detail the possible termination of the license under Subpart E. Staff does not believe there will be significant differences in the decommissioning requirements applied to these sites resulting from the transfer of the Ohio site to the Ohio Agreement State program. From the licensee's perspective, the termination of their license may be an important measure of finality. If the restricted release option were to be chosen by Shieldalloy for both their Ohio and New Jersey sites, their license for the New Jersey site could possibly be terminated without significant offsite disposal costs. On the other hand, if Shieldalloy seeks to decommission its Ohio property for restricted future use, it would have to maintain a possession only license at the site. While the proposed Ohio requirements may be more burdensome to a certain degree, the two sites will require consideration of specific conditions at each site which would, in any case, preclude a uniform (i.e., "one size fits all") approach to decommissioning. Consequently, Ohio's rules do not appear to create a significa

RECOMMENDATION:

The staff recommends that the Commission approve the staff position that the Ohio approach to decommissioning under restricted release conditions does not create a significant regulatory conflict and, therefore, is compatible with NRC's program. This recommendation recognizes that Ohio adopted NRC's 1995 definition of decommissioning through legislation, and that Ohio's approach is not inconsistent with the Commission's position in promulgating NRC's license termination rule that States could impose more stringent standards, i.e., that the rule should be designated Category C. This recommendation is based on the staff assessment that most licensees in Ohio, and possibly all licensees in Ohio, will decommission to unrestricted release conditions. Thus, at most, a few licensees will be required to possess an Ohio decommissioning-possession only license. Further, the likelihood that Shieldalloy will face different decommissioning finality end-points for its sites in Ohio and New Jersey is unknown at this point, since the decommissioning plan for the Ohio site has not been developed and the New Jersey site continues to operate. Staff has not identified any other licensee in Ohio that faces the possibility of having two sites that would have to satisfy different regulatory requirements for restricted release.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

L. Joseph Callan Executive Director for Operations

Attachment: Letter dated June 26, 1998 from R. Suppes to R. Bangart

Richard L. Blanton, OSP 415-2322 CONTACT: