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LBP-90-45
December 19, 1990

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Before Administrative Judge
Peter B. Bloch

SERVED DEC 19 1990

Technical Advisor: G. A. Linenberger, Administrative Judge

In the Matter of

THE CURATORS OF
THE UNIVERSITY OF MISSOURI

(Byproduct License
No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

Docket Nos. 70-00270
30-02278-MLA

RE: TRUMP-S Project

ASLEP No. 90-613-02-MLA

MEMORANDUM AND ORDER

(Pending Motions, Including Those Related to Possession of ²³⁹Pu)

MEMORANDUM

The Curators of the University of Missouri (Licensee) and The Missouri Coalition for the Environment, the Mid-Missouri Nuclear Weapons Freeze, Inc., and the Physicians for Social Responsibility/Mid-Missouri Chapter and ten named individuals (Intervenors) have filed cross-motions requesting reconsideration of my Memorandum and Order (Licensee's Partial Response Regarding Temporary Stay), LBP-90-38, 31 NRC ____ (November 1, 1990).¹ They also have filed other

¹"Licensee's Motion for Partial Reconsideration of 'Memorandum and Order (Licensee's Partial Response Concerning Temporary Stay),' " November 15, 1990 (Licensee's Partial Reconsideration Motion); "Intervenors' Answer to Licensee's Motion for Partial Reconsideration of 'Memorandum and Order (Licensee's Partial Response Concerning Temporary Stay),' " November 26, 1990 (Intervenors' Answer to Partial Recon-

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motions, with the result that some of the legal arguments that have been raised have been explored in more than one context, assuring more than ample opportunity to address these points.

These filings include a variety of procedural points and they also address a portion of LBP-90-28, slip op. at 4-6, in which I made the following determinations, in the context of a determination concerning the appropriateness of keeping a temporary stay in effect, concerning Licensee's possession of ²⁴¹PU as part of the material that also contains the ²³⁹PU and ²⁴⁰PU that Licensee has been authorized to possess:

. . . [T]he Morris Affidavit provides a detailed analysis of the form of plutonium Licensee possesses, including "New Brunswick Laboratory Certified

sideration Motion); "Intervenors' Motion for Summary Disposition of Part 70 License Amendment," November 14, 1990 (Intervenors' Summary Disposition Motion); "Licensee's Response to 'Intervenors' Motion for Summary Disposition of Part 70 License Amendment," December 3, 1990 (Licensee's Response to Summary Disposition); "Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 (Licensee's Partial Response Concerning Temporary Stay) and Emergency Order that Staff Hold in Abeyance Order of November 1," November 12, 1990 (Intervenors' Motion for Reconsideration of November 1 Order); "Licensee's Response to 'Intervenors' Motion for Reconsideration . . . and Emergency Order . . . Part I," November 16, 1990 (Licensee's Response to Part I of Motion to Reconsider); "Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 . . . Part II," November 16, 1990 (Intervenors' Motion, Part II); "Licensee's Response to 'Intervenors' Motion for Reconsideration . . . Part II," (Licensee's Part II Response). Also relevant is the "NRC Staff Response to Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 and Emergency Order that Staff Hold in Abeyance Order of November 1 (Staff Response).

Reference Materials Certificate of Analysis, CRM 127" (Attachment 1²), a similar analysis by the National Bureau of Standards of a predecessor form of this same material (Attachment 1B), a 1982 analysis of this same special nuclear material by the Los Alamos National Laboratory (Attachment 7) and a calculation deriving the amount of ²⁴¹PU in September 1990 from the Los Alamos analysis (Attachment 6).

At the present time, it appears likely that Licensee can succeed on the merits of each of the following arguments:

- The plutonium that the Licensee has received is a single 5 gram lot of New Brunswick Laboratory (NBL) Certified Reference Material (CRM) 127.³
- A conservative estimate of the total curie content of the 10 gms of plutonium that Licensee is authorized to possess -- including 1.21 curies of ²⁴¹PU⁴ -- is 1.992 curies.⁵

²All Attachments are to the Morris Affidavit.

³Morris Affidavit at 3.

⁴The possession of ²⁴¹PU is not expressly authorized in the license amendment.

⁵The amount is derived from the Los Alamos analysis (Attachment 7), adjusted according to Licensee's estimate (Attachment 6) and summarized in Morris Affidavit, Table 1, at 6 -- adjusted by subtracting alpha activity attributed to americium. (If the americium is included the total curie content is 1.992, which is still less than 2. However, I find that it is not necessary to include the americium in computing the amount of plutonium.)

I note also that the Statement of Considerations to 10 CFR Parts 30, 40, and 70, "Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees," April 7, 1989, 54 Fed. Reg. 14051 at 14052 states that the table of quantities in Part 30 "includes all alpha emitters listed on any license for which the quantity to theoretically deliver a 1-rem effective dose equivalent would be less than 2 curies." It therefore appears that the NRC did not intend to include ²⁴¹PU, which is a beta emitter, in the 2 curies of

- The biological effectiveness of 1.21 curies of ²⁴¹Pu is the same as .0242 curies, or 24.25 millicuries, of an equivalently effective alpha-emitter.⁶
- Although it would have been preferable to disclose this quantity of material as a significant contaminant under the regulations, since it is equivalent to a millicurie quantity of an alpha emitter, this omission is not fatal to the application.⁷ . . .⁸

plutonium listed in the regulations as the threshold for emergency planning.

⁶Morris Affidavit at Finding 29, p. 12 (citing 10 Part 71, Table A-2. The derivation of millicurie is m,

⁷Regulatory Guide 10.3, "Guide for the Preparation of Applications for Special Nuclear Material Licenses of Less Than Critical Mass Quantities," Section 4.3 provides: . . . the special nuclear material requested should be identified by isotope; chemical or physical form; activity in curies, millicuries, or microcuries; and mass in grams. Specification of isotopes should include principal isotope and significant contaminants. Major dose-contributing contaminants present or expected to build up are of particular interest." [Emphasis added.]

Note that the Nuclear Material Transaction Report through which Licensee received the special nuclear material from Rockwell International Corp. disclosed that it contained trace amounts of Pu-241 and Pu-240. Morris Affidavit, Attachment 3.

Note also that Intervenors have stated on several occasions that Licensee has permission to possess .7 curies of plutonium. That does not appear to be the case. Their permission is to possess 10 gms of "Plutonium-239/Plutonium-240" in accordance with its application and three specified letters. SNM-247, Amendment No. 12, Docket 070-00270 (March 19, 1990). I find that they can also possess the associated ²⁴¹Pu.

⁸A sentence in the original order, purporting to authorize the Staff of the Commission to issue a license amendment, was deleted by subsequent order.

- The failure of Licensee to disclose the presence of 1.21 curies of ²⁴¹PU -- the equivalent in biological effectiveness of alpha radiation equal to .0242 curies -- in the licensed amount of plutonium does not cast doubt on its competence or on the competence of its personnel. Although I consider this to be a mistake, it is a mistake without any serious safety significance.

In the set of motions I am reviewing, several questions that are primarily legal in nature are fully briefed and are therefore ripe for determination. These questions are:

- 1) To what extent is it appropriate to permit Licensee to file material in this case that expands upon the material already filed in its application for a license?
- 2) How do 10 CFR §§ 30.32(i)(1), 70.22(i), and 30.35(c), 70.25(c) affect this proceeding?
- 3) Should Licensee have disclosed the presence of ²⁴¹PU in the plutonium material that it is using for the TRUMP-S project?
- 4) Should Licensee have disclosed the presence of ²⁴¹americium in the plutonium material that it is using for the TRUMP-S project?

I. Governing Law

A. Appropriate Relief

Intervenors have argued that a deficiency in fully disclosing relevant isotopes in an application for a special nuclear material license should invalidate the license. This is similar to Intervenors' earlier argument, which stated that a license application must stand on its own and

must not be supplemented in the course of a hearing. Interveners said:

What is to be litigated in this proceeding is whether there is "any deficiency or omission in the license application." 10 CFR § 2.1233(c). If there is, then the license is to be set aside.

* * *

. . . The entire proceeding becomes a perfect circle if the Interveners intervene, point out that the license application is deficient, obtain a finding that it is deficient, and then confront a ruling that the application will be "considered to be amended to contain" the isotopes and curies omitted, and authorizes the amendment which was not requested.⁹

The ruling is even more incomprehensible in view of the Licensee's contention that the application is sufficient, and need not be amended. See Licensee's Submittal of October 30, 1990.

* * *

Interveners have been unable to locate any regulation which confers on the Presiding Officer the authority to "consider the license application to be amended" to correct deficiencies he has ruled do indeed exist in the application as submitted. Since it is the sufficiency of the license application which we are litigating, it seems abundantly clear that the Presiding Officer has no authority to rewrite the application retroactively. If there were any regulation authorizing such action, it would be a flagrant denial of due process of law. Rewriting the license application retroactively, for the applicant (over the objection of all parties), by the Presiding Officer, deprives the pub-

⁹This portion of Interveners' argument addresses a portion of an earlier decision in which I authorized a license amendment in what I came to believe was a premature ruling, which I subsequently withdrew. There was, at that time, inadequate opportunity to argue the merits of such an amendment. This does not mean, however, that I could not issue such an amendment at the close of the proceeding if it were justified and germane to the notice of hearing.

lic of any opportunity to participate, to be heard, to present evidence, and to explain why the newly "deemed" application is insufficient. The Presiding Officer is not to do the applicant's job for it, when the applicant has failed to do it; he is to rule whether the applicant has submitted a proper application.¹⁰

Despite Intervenor's eloquent plea, however, both the regulations and NRC practice suggest that the Presiding Officer has great latitude in fashioning an appropriate remedy within the scope of the Notice of Hearing. As Intervenor's Motion for Summary Disposition correctly states, at page 2, this question arises in the context of Subpart L of the procedural rules, particularly 10 CFR § 2.1233(c), which says:

In a hearing initiated under § 2.1205(c), the initial written presentation of a party that requested a hearing or petitioned for leave to intervene must[: 1.] describe in detail any deficiency or omission in the license application, with reference to any particular section or portion of the application considered deficient, [2.] give a detailed statement of reasons why any particular section or portion is deficient or why an omission is material, and [3.] describe in detail what relief is sought with respect to each deficiency or omission. [Emphasis added.]

This section of the regulations determines that the question of relief is to be resolved as a matter of argument

¹⁰Intervenor's Motion for Reconsideration of Memorandum and Order of November 1, 1990 at 7-8. Note that Intervenor uses the term "applicant" to refer to the party that I refer to as "Licensee."

and proof, which is consistent with prior NRC practice.¹¹ Intervenor's have the burden of going forward to describe what relief they consider appropriate; in this instance, they have stated that rescission of the license is appropriate.¹² Once they have stated their position, the burden of persuasion lies (as is customary with each element of the case) with the licensee, who may demonstrate by a preponderance of the evidence that some lesser relief is appropriate. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-763, 19 NRC 571, 577 (1984), review declined CLI-84-14, 20 NRC 285 (1984).

In this case, I will not determine the appropriate relief, if any, until after all the written filings have been made. Until that has occurred, it will not be possible to place issues in the full context of the admitted areas of

¹¹See Texas Utilities Generating Company, et al. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-83-81, 18 NRC 1410 (1983) at 1452-1456 (discussion of appropriate relief in light of Board findings that quality assurance for design had been inadequate); General Public Utilities Nuclear Corporation, et al. (Three Mile Island Nuclear Station, Unit 2, LBP-89-7, 29 NRC 138 (1989) at 141-142, 190. (Intervenor's argued that they should prevail because the Staff's preliminary environmental impact statement was deficient; the Board ruled it would decide the issue on the entire evidentiary record before it not just based on the corners of the environmental impact statement.)

¹²One alleged ground for denying the license is that the Staff has failed to fulfill its obligations. For this proposition, there is no regulatory support. Other than in certain limited contexts involving the National Environmental Policy Act, it would be improper to deny a license that has been properly applied for and that is merited on the ground that the Staff has made some error.

concern¹³ and to determine the seriousness of alleged deficiencies in light of other allegations of deficiency. Hence, until that time I will not know what relief -- if any -- is appropriate.

Parties have permission to add their evidentiary filings on this question to filings yet to be made. (Intervenors may, however, have a right of rebuttal if new information is submitted in Licensee's last filing.)

B. Applicability of 10 CFR §§ 30.32(i), 70.22(i), 30.35(c), 70.25(c)

1. Regulations Concerning Emergency Planning

Intervenors have argued that Licensee must comply with regulatory requirements concerning either an evaluation of dose effects or an emergency plan. These requirements may be found in 10 CFR §§ 30.32(i)(1) and 70.22(i).

Intervenors are incorrect in both of these assertions because the sections involved both became effective on April 7, 1990 (54 Fed. Reg. 14,051) and are only applicable to applications filed after that time. In this instance,

¹³As Licensee points out in Licensee's Response to Intervenors' Motion for Reconsideration, at 7-8, Licensee's possession of ²⁴¹PU is not itself an area of concern, but it may be relevant to other concerns, including 4 (emergency planning), 1 (consequences of a fire) and 3 (adequacy of administrative procedures).

Licensee not only filed its application before that time but had its licenses granted before that time.

Because of Intervenor's argument that these sections should be applied to this case during the pendency of this hearing, I requested to be briefed on the subject. LBP-90-38, slip op. at 8 (Nov. 1, 1990). However, I am wholly persuaded by Licensee's argument, which relies on the specific wording of these sections. The argument I adopt as my own (as applicable both to § 30.32(i)(1) and to § 70.22(i)) is:¹⁴

Section 30.32(i)(1) is a carefully crafted regulation which explicitly states:

Each application to possess radioactive materials in unsealed form, on foils or plated sources, or sealed in glass in excess of the quantities in § 30.72, "Schedule C -- Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release," must contain either:

(i) An evaluation showing that the maximum dose to a person offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or 5 rems to the thyroid; or

(ii) An emergency plan for responding to a release of radioactive material.

10 C.F.R. § 30.32(i)(1)(1990) (emphasis added). This regulation did not become effective until April 7, 1990. 54 Fed. Reg. 14,051 (Apr. 7, 1989).

Thus, as explicitly adopted by the Commission, this regulation did not apply to anyone or to any "application" before April 7, 1990. Since Licen-

¹⁴Excerpted from Licensee's Written Presentation at 18-22, 23.

see's application relating to americium was filed on March 12, 1990, and the amendment was issued by the NRC on April 5, 1990, the requirements of § 30.32(i) were not yet applicable and the application could not have been deficient.

* * *

. . . As of April 7, 1990, § 30.32(i) does not impose any direct obligations on licensees; it explicitly affects only the required contents of pending and future "applications." If the Commission had intended to impose any immediate obligations upon holders of licenses as of April 7, 1990, it could have done so explicitly. In fact, it has done so in other instances in the past when it wished to impose obligations on licensees. See, e.g., 10 C.F.R. §§ 70.25(c)(2), (c)(3)(1990) requiring holders of specific licenses issued before July 27, 1990, to submit certifications of financial assurance or a decommissioning funding plan on or before July 27, 1990).

This does not mean that holders of licenses as of April 7, 1990 will never have to comply with § 30.32(i) (i.e., will never have to submit either an emergency plan or an evaluation demonstrating low potential offsite exposures). Such licensees will, at some point, have to submit "applications" for renewals of their licenses and will have to comply with § 30.32(i) in such "applications." That this was the Commission's intent was explained when the regulation was adopted in the discussion of the applicability of the rule to existing licensees who had previously developed emergency plans under separate orders. If § 30.32(i) had been intended to apply to all licensees -- rather than to "applications" -- obviously such licensees would have had to comply on or before April 7, 1990. However, as the Commission pointed out, such licensees were not required to submit a new plan until their "regular five-year license renewal application was due." See 54 Fed. Reg. at 14,058. Then, and only then, would there be an "application" which would trigger the applicability of § 30.32(i). . . .

Accordingly, I conclude that Licensee is not now subject to the provisions concerning emergency planning or

evaluations of dose effects that became effective on April 7, 1990.

2. Regulations Concerning Decommissioning

"Intervenors' Motion for Order Admitting Area of Concern Respecting Financial Assurance of Decommissioning," November 26, 1990, requested that we admit a new area of concern with respect to Licensee's alleged failure to comply with 10 CFR §§ 30.32(h), 70.22(h), requiring a showing with respect to financial assurance of decommissioning. However, Licensee is correct in arguing in response that:¹⁵

The pertinent NRC regulations (§§ 30.35(c) and 70.25(c))¹⁶ did not require that financial assurance for decommissioning be provided as part of the license amendment applications and considered as part of issuing such license amendments; instead, they required that such financial assurance be provided no later than July 27, 1990. . . . Whether or not Licensee has properly complied with the financial assurance requirements of the regulations subsequent to the issuance of the license amendments is a compliance or enforcement question. . . .

In consequence of this argument, I rule that the motion to admit a new concern is denied. This ruling does not,

¹⁵Licensee's Response (December 6, 1990) at 3.

¹⁶"Intervenors' Motion for Order Admitting Area of Concern Respecting Financial Assurance of Decommissioning," November 26, 1990, cited 10 CFR §§ 30.32(h), 70.22(h) at page 1 of the Motion. However, § 30.32(h) only became effective on April 7, 1990. 54 FR 14060, April 7, 1989. The reason this section does not affect this case is explained with respect to 10 CFR §§ 30.32(i) and 70.22(i), above. (§ 70.22(h) does not deal with decommissioning.)

however, govern any ruling I may be called upon to make concerning the relevance of this argument to an already-admitted area of concern or the timeliness of evidence on this subject if Intervenor should choose to submit it in the rebuttal written filing that I have authorized.

C. The Two Curies of Plutonium Requirement

A hotly contested matter in this proceeding is whether Licensee should have disclosed in its license application the curie content of ^{241}Pu which is intertwined in its licensed amount of ^{239}Pu and ^{240}Pu . As I have reflected on this matter, I have concluded that the obligation to disclose is closely related to whether or not the amount of ^{241}Pu has any regulatory consequence other than its dose effects.

Under current regulations, which do not affect Licensee, if a licensee possesses two curies or more of plutonium, then it must either demonstrate that the maximum dose to a member of the public offsite would not exceed 1 rem effective dose equivalent or it must have an emergency plan. 10 CFR § 70.22(i). The regulation does not specify that the two curies must consist of alpha emitters or gamma emitters. It is entirely silent on the source of the curies other than that it must come from the plutonium.¹⁷

¹⁷Since the plutonium is a single mass of material, it is also logical to count all sources of radiation in the curie total, including radiation emanating from $^{241}\text{americium}$. That is, I would construe "plutonium" in the current regulations to include significant non-plutonium contaminants; and

Under these circumstances, there are two reasons a contaminant may be significant and may be required to be disclosed: (1) because of the dose consequence, and (2) because of the limit set on the curie content of licensed material before other regulatory provisions become applicable.¹⁶

However, under the regulations applicable to this case, a different set of parameters applies. Licensee is not subject to the 2 curie regulatory requirement (see above, pp. 9-11). Hence, there is no significance to the ²⁴¹PU other than its dose consequence.

D. Isotopes That Must be Disclosed

In LBP-90-38, 31 NRC ____ (November 1, 1990), slip op. p. 6, I stated the following conclusion, which still appears to be correct:

- The biological effectiveness of 1.21 curies of ²⁴¹PU [that is included in the plutonium material that is covered by Licensee's license] is the same

I would consider contaminants significant if the total radiation from the material, when combined with radiation from other contaminants, exceeded 2 curies.

¹⁶The only consequence of including curies derived from beta emitters in the 2 curie count in the current regulations is that an explanation must be provided, it is consistent with the purpose of the regulation to give the words their natural, non-artificial meaning.

as .0242 curies, or 24.25 millicuries, of an equivalently effective alpha-emitter.¹⁹

I also made the following conclusion, which now appears to be incorrect²⁰:

- Although it would have been preferable to disclose this quantity of material as a significant contaminant under the regulations, since it is equivalent to a millicurie quantity of an alpha emitter, this omission is not fatal to the application.

After considering all the arguments on this issue, I conclude that I was incorrect because I believed, at the time of the ruling, that the 2 curie emergency planning regulations affected Licensee. Under that circumstance, it was clear to me that 1.21 curies of ²⁴¹PU was a "significant contaminant" as specified in Regulatory Guide 10.3. Al-

¹⁹Morris Affidavit at Finding 29, p. 12 (citing 10 CFR Part 71, Table A-2. The derivation of millicurie is my own.

²⁰My incorrect interpretation of the effective date seems also to have been shared by Intervenors and Licensee. In my unpublished Memorandum of Conference Call of October 19, 1990, October 30, 1990, I stated, at p. 5 that the following discussion had transpired during that conference call:

The Presiding Officer asked whether the Staff had been informed that the amendment authorizing possession of 25 curies of americium exceeded the amount of americium referenced in § 30.32(i). Mr. Axelrad stated that the Licensee had mentioned this and the applicability of the MURR Emergency Plan to the TRUMP-S work to Region III personnel upon receiving the Staff's affidavit. He also stated that the Licensee can demonstrate that it can satisfy both of the alternative requirements of § 30.32(i), i.e., an acceptable emergency plan or an acceptable evaluation of maximum dose.

though it is not a major dose-contributing contaminant -- in relationship to the dose coming from the remainder of the material -- and is therefore not "of particular interest" for that reason, it was still: (1) a substantial amount of plutonium, and (2) an apparently significant amount because it placed Licensee at the threshold of the regulatory requirement that it, at least, evaluate the maximum dose to a member of the public offsite.

The effective language is "significant contaminant." Necessarily, the decision as to what is significant requires judgment. It is similar to the normative judgment in the law concerning whether behavior is unreasonable and therefore negligent. There is no bright line, and judgment must be used. It is my conclusion that both the 1.21 curies of ²⁴¹PU and -- for similar reasons -- the 70 millicuries of ²⁴¹americium are not significant contaminants and need not be disclosed.²¹ In reaching this conclusion, I am greatly influenced by the inapplicability of the 2 curie emergency planning threshold to this Licensee.

Consequently, I have decided to reconsider that portion of LBP-90-38, 31 NRC ____ (November 1, 1990) in which I con-

²¹"The NRC Staff Response to Intervenors' Motion for Reconsideration, Affidavit of John Glenn" at ¶ 12, p. 7, stated that the ²⁴¹PU in Licensee's material is 1.23 curies, producing a total count -- including the curie activity of ²⁴¹americium -- in excess of 2 curies. For reasons stated in the body of this Memorandum and Order, it seems to be immaterial or legally irrelevant whether the total curie activity is slightly greater than 2 curies.

cluded that Licensee made a mistake in not disclosing the amount of ^{241}Pu and $^{241}\text{americium}$ that was included in the licensed material. Even though the amounts of these materials are substantial, they are not substantial contributors to dose, in light of the far larger dose attributable to ^{239}Pu and ^{240}Pu . Because I also conclude that the total curie count of the radioactive material did not have any significance for this Licensee, the application did not need to include the ^{241}Pu or the $^{241}\text{americium}$ as significant contaminants. Therefore, there was no error in the application.

Licensee's Motion for Partial Reconsideration of LBP-90-38, November 15, 1990, will be granted.

II. Answers to Questions

- A. To what extent is it appropriate to permit Licensee to file material in this case that expands upon the material already filed in its application for a license?

There is no restriction on Licensee filing additional material to contest allegations of Intervenors.

- B. How do 10 CFR §§ 30.32(i)(1), 70.22(i), and 30.35(c), 70.25(c) affect this proceeding?

10 CFR §§ 30.32(i)(1) and 70.22(i) relate to emergency planning and are not applicable in this proceeding because

they apply only to applications filed after April 7, 1990 and Licensee's application was filed earlier than that.

10 CFR §§ 30.35(c) and 70.25(c) relate to financial responsibility for decommissioning and are not applicable in this proceeding because they are obligations of licensees, are not required to be included in an application, and are not relevant to the question of whether or not an application should be granted.

- C. Should Licensee have disclosed the presence of ²⁴¹PU in the plutonium material that it is using for the TRUMP-S project?

Licensee was not required to make this disclosure, as ²⁴¹PU is not a significant contaminant in its licensed material.

- D. Should Licensee have disclosed the presence of ²⁴¹americium in the plutonium material that it is using for the TRUMP-S project?

Licensee also was not required to make this disclosure.

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 19th day of December 1990, ORDERED, that:

1. "Intervenors' Renewed Request for Stay Pending Hearing," October 15, 1990, is denied.²²
2. "Intervenors' Correction," October 25, 1990, is duly noted.
3. "Intervenors' Motion for Summary Disposition and Other Relief," October 25, 1990, is denied.

²²My reasons, including lack of likelihood of success on the merits, have been discussed in my prior decisions. There is, at this time, no showing of irreparable injury. LBP-90-41, 31 NRC _____ (November 16, 1990), slip op. at 5-9, especially (at p. 8) the following passage:

Because Licensee seems likely to prevail on the merits of its argument that fire with loss of containment is not a credible accident, I am likely to accept Dr. Morris's conclusion, at ¶ 52, that in the event of a hypothetical worst-case accident:

The doses at 100 meters resulting from a hypothetical worst-case accident at the MURR involving actinides are negligible. . . . Actual fractional release factors would be smaller than 1×10^{-6} and no credit is taken for effective emergency response (i.e., extinguishing the fire before the entire working inventory is consumed).

In lay terms, Dr. Morris is testifying that in the event of a worst-case fire incident involving experimental materials, less than one-millionth of the materials involved could be expected to be released to the environment.

4. "Licensee's Related Motion to Strike," November 5, 1990 [combined with Licensee's Response to a motion for reconsideration] is denied, as Intervenors will be permitted to show the relevance of this material to admitted areas of concern.²³

5. "Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 (Licensee's Partial Response Concerning Temporary Stay) and Emergency Order that Staff Hold in Abeyance Order of November 1, Part I," November 12, 1990, is granted to the following extent: (1) I already have rescinded the Staff's authorization to amend the license because I accepted Intervenors' argument that I had acted prematurely,²⁴ and (2) I now conclude that the license authorization is not needed because the amounts of ²⁴¹PU and ²⁴¹americium possessed by Licensee were not significant contaminants and did not need to be disclosed. In all other respects, the Motion is denied.

6. "Intervenors' Motion for Summary Disposition of Part 70 License Amendment," November 14, 1990, is denied.²⁵

²³Relevance does not appear to have been shown at this time, but I prefer deferring the ruling pending the receipt of the additional filings.

²⁴Memorandum and Order (Clarification of LBP-90-39), November 15, 1990, unpublished.

²⁵Intervenors' argument concerning the need to use a thick metal shield to handle americium, is not decided. It shall be part of the decision on the written filings.

7. "Intervenors' Motion for Order Recommending Formal Hearing, or in the Alternative Requiring Oral Presentations," November 14, 1990, is summarily deferred until after all written filings, including the rebuttal and sur-rebuttal, have been received and analyzed.

8. "Licensee's Motion for Partial Reconsideration of Memorandum and Order (Licensee's Partial Response Concerning Temporary Stay)," November 15, 1990, is granted.

9. "Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 (Licensee's Partial Response Concerning Temporary Stay), Part II," November 16, 1990, is denied. In light of my legal rulings in the accompanying memorandum, it is unlikely that small differences in the total quantity of curies will have any significance, but Intervenors may attempt to show differences if they choose. They would be well-advised to offer persuasive evidence concerning the alleged link between "inaccuracies" and incompetence.

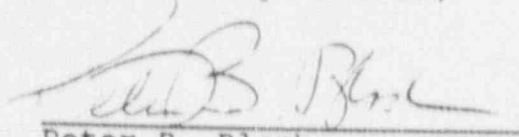
10. "Intervenors' Motion for Order Admitting Area of Concern Respecting Financial Assurance of Decommissioning," November 26, 1990, is denied.

11. "Intervenors' Motion to Strike Irrelevant and Unreliable Matters," November 26, 1990, is denied.

12. This decision supersedes all prior decisions to the extent that they may be inconsistent with this decision.

13. To the extent that conclusions in this opinion are made with respect to motions for reconsideration, those conclusions in this Memorandum and Order are not subject to a motion for reconsideration.²⁶

Respectfully ORDERED,



Peter B. Bloch
Presiding Officer

Bethesda, Maryland

²⁶Even good things can be overdone.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

THE UNIVERSITY OF MISSOURI

(Special Nuclear Materials Lic. 247
Byproduct Mat. Lic. 24-00513-32)

Docket No.(s) 70-270/30-2278-ML4

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB M&O (PENDING MOTIONS, ...
have been served upon the following persons by U.S. mail, first class, except
as otherwise noted and in accordance with the requirements of 10 CFR Sec. 2.712.

Atomic Safety and Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Administrative Judge
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Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Administrative Judge
Gustave A. Linenberger, Jr.
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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Docket No. (s)70-270/30-227B-MLA
LB M&D (PENDING MOTIONS, ...)

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Dated at Rockville, Md. this
19 day of December 1990

Patty Henderson
Office of the Secretary of the Commission