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Rules Review and Directives Branch  
Division of Administration Services  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555-0001

8/29/02  
67FR 55435  
①

**RE:** Response to Notice for Comment, 67 Fed. Reg. 55435 (August 29, 2002);  
Comments on ENVIRONMENTAL ASSESSMENT FOR INTERNATIONAL  
URANIUM (USA) CORPORATION'S WHITE MESA URANIUM MILL SITE, SAN  
JUAN COUNTY, UTAH: IN CONSIDERATION OF AN AMENDMENT TO SOURCE  
MATERIAL LICENSE SUA-1358 FOR THE RECEIPT AND PROCESSING OF THE  
MAYWOOD ALTERNATE FEED.

I. COMMENTS ON 67 Fed. Reg. 55435

1. First, I would like to understand the purpose of this opportunity for comment. The Federal Register Notice (FRN) announcing an opportunity for comment does not indicate whether the FRN is announcing a draft Finding of No Significant Impact (FONSI) or a final Finding of No Significant Impact. The FRN does not state the purpose of soliciting comments from the public at this time. The FRN does not state what will be done with the comments that are received by the NRC. Whatever motion that the Nuclear Regulatory Commission (NRC) is going through by publishing the FONSI for comment is not revealed by the FRN. No references to NRC regulations, manuals, or policy guidances are provided.

Additionally, the FRN states that "members of the public may provide comments on the subject application." The FRN does not indicate whether members of the public may provide comments on the NRC staff's review of the subject application, for example, the FONSI and the Environmental Assessment.

An FRN requesting public comment should provide an explanation as to the purpose of the comments, what exactly is the subject of the comments, and how and NRC staff will address the comments.

2. The FRN should have, but did not, include a statement that the EA and other pertinent documents are available via the NRC Public Electronic Reading Room and provide a reference to the NRC web site and ADAMS. Also, the FRN should have provided the toll free number for the NRC Public Document Room.

Template = ADM-013

E-RTDS = ADM-013  
Call = W. VanTill (RWV)

3. The FRN indicates that a draft EA was sent to the Utah Department of Environmental Quality (DEQ) and the Ute Mountain Utes and was made public. It then states that the NRC staff received multiple comments from the public. The FRN does not mention that the NRC did not solicit any comments from the public on the draft EA, nor was its availability noticed in the Federal Register.

The FRN fails to mention that on July 25, 2002, the NRC sought additional consultation from the U.S. Fish and Wildlife Service, which was copied to the DEQ, the Ute Tribe, and the U.S. Environmental Protection Agency (EPA), Region 8. A pre-decisional draft Environmental Assessment was attached. However, the NRC requested that the FWS not make the new draft EA publicly available. Apparently, the NRC did not want the public to view and make comments on this draft.

## II. COMMENTS ON THE ENVIRONMENTAL ASSESSMENT

### 1. The Cover Letter

The EA states:

*A draft EA was sent to the Utah Department of Environmental Quality (DEQ) by letter dated September 21, 2001, with a copy sent to the Ute Mountain Utes in White Mesa, Utah. This document was placed into the NRC's data management system ADAMs and made publically [sic] available. . . . Comments were received by the Utah DEQ, Ute Mountain Utes, and various groups and members of the public.*

Comment:

Again, the EA does not make clear that the draft EA was not submitted to the public for comment. The NRC never announced to the public that the NRC was taking comments on the draft EA and would respond to those comments

There was a request for public comment published in the Federal Register on August 23, 2001 (66 Fed. Reg. 44384-44385), entitled Notice of Receipt of Request from International Uranium (USA) Corporation to Amend Source Material License SUA-1358 To Receive and Process Alternate Feed Materials from Maywood, New Jersey. The August FRN was a notice of an opportunity for hearing and an opportunity to comment, with a 30-day suspense. Therefore the draft EA was not available for public comment during the comment period. Additional information that was submitted by IUSA to the NRC staff after September 24, 2002 (the suspense date for comment) was also not available. This includes supplements to IUSA's amendment request, dated November 30, 2001, February 15, 2002, March 11, 2002, July 1, 2002, February 15, 2002, and March 11, 2002.

The EA does not mention the comments received by the NRC in response to the August 23 FRN. So, who knows if the EA contains responses to the comments received by the NRC in response to the FRN. What is the story here?

The EA does not mention that the July 25, 2002, draft EA was withheld from the public and that the NRC sought additional comment from the FWS.

The EA does not list the names of the authors and dates of the comments on the EA received by the NRC. The NRC should have done this.

## **2. Section 1.1 — Background and Need for Proposed Action**

A. The EA states:

*The materials are by-products from the processing of thorium from monazite sands and lanthanum from thorium byproducts.*

Comment:

The NRC fails to state that the materials that are to be remediated at the Maywood facility are mixed with various other material not associated with the processing of thorium, because over the years most of the wastes from the processing of thorium at the Maywood Chemical Works were not under regulatory control. Therefore, only some of the materials proposed-to-be-received at the White Mesa Mill are by-products from the processing of thorium.

In IUSA's application, IUSA did not submit information with respect each of the properties that will be remediated, including a characterization of the materials in each of the properties.

B. The EA States:

*IUSA is requesting that the material be received and processed for its source material content.*

Comment:

IUSA requested permission to process the Maywood material for only some of its source material content, i.e., the uranium content. The source material thorium content will remain in the material and be disposed of in the tailings impoundment.

## **3. Section 1.2 — Previous National Environmental Policy Act (NEPA) Actions**

The EA states:

*A Final Environmental Statement (FES) was prepared by the NRC for the license application in May 1979, an Environmental Assessment (EA) was prepared by NRC in September 1985 for license renewal, an EA was prepared by NRC in February 1997 for license renewal, and an EA was prepared for the reclamation plan in February 2000.*

Comment:

The EA fails to state or take into consideration that none of the NEPA actions listed above addressed the environmental effects of the processing of alternate feed material or any materials similar in content to the material proposed to be received from the Maywood site. None of the previous NEPA actions have addressed the cumulative effects of the processing of material other than uranium ore at the White Mesa Mill. For years the NRC issued license amendments to SUA-1358 exempting the proposed amendments to process so-called "alternate feed material" from an environmental assessment process, without taking into consideration the cumulative effects of each of those separate license amendments. This was a violation of the National Environmental Policy Act and NRC regulation.

The NRC now has a license amendment request before them that would authorize the receipt of far more "alternate feed materials" than have ever been processed at White Mesa. For the NRC to not require a Supplement to the 1979 ES for the White Mesa Mill in order to, for the first time ever, fully assess all the ramifications of the processing of materials other than ore and to fully evaluate all the alternatives to that processing (which has never been done) is not in keeping with the intent of the National Environmental Policy Act, as implemented by the NRC.

#### **4. Section 1.3 — Maywood Site Materials**

A. The EA states:

*The radiological portion of the Maywood site is being remediated by the U.S. Army Corps of Engineers.*

Comment:

The NRC makes an egregious error by only stating that the radiological portion of the Maywood site is being remediated by the U.S. Army Corps of Engineers (USACE). Non-radiological portions of the Maywood site are also being remediated by the USACE. The Federal Facilities Agreement (FFA) Under CERCLA Section 120, between the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE), for the Maywood Interim Storage Site, states:

"FUSRAP Waste" shall mean and be specifically limited to all contamination, both radiological and chemical, whether commingled or not, on the MISS [Maywood Interim Storage Site] and all radiological contamination above DOE's action levels related to past thorium processing at the Maywood Chemical Works (MCW) site occurring on any Vicinity Properties. Also included are any chemical or

nonradiological contamination on Vicinity Properties that would satisfy either of the following requirements:

- D. The chemical or nonradiological contaminants are mixed or commingled with radiological contamination above DOE's action levels; or
- E. The chemical or nonradiological contaminants originated in the MISS or were associated with the specific thorium manufacturing or processing activities at the Maywood Chemical Works site which resulted in the radiological contamination.

To the best of my knowledge, the FFA between the EPA and the DOE is still in effect and the USACE and the EPA have not signed a new FFA.

That the NRC staff should make such a statement with respect the USACE's responsibility for the Formerly Utilized Sites Remedial Action Program (FUSRAP) material at the Maywood Superfund Site shows that the NRC has failed to review or has ignored numerous EPA, DOE, NRC, and USACE records pertaining to the Maywood Site.

B. The EA states:

*This site began operations in 1895 and over the years processed monazite sands for thorium, lanthanum from thorium byproducts, and other rare earth elements. Uranium was not extracted and remains in the process residues.*

Comment:

NRC Staff neglects to mention that other materials were processed at the Maywood Chemical Works. For example, NRC records document that Stephan **\*\*Stepan** Company processed coca leaves for the "secret ingredient" to Coca-Cola. Residues from this processing are still on the Stephan Company site.

C. The EA states:

*The FUSRAP material is currently located on site and is also being cleaned up at off-site properties. Material on the site is licensed by the NRC under STC-1333 for the Stepan Chemical Company.*

Comment:

Apparently, the EPA and the DOE considers both the Stepan Company portion of the Maywood site and the Maywood Interim Storage Site to be "on site."

As for whether the material at the Stepan Company (formerly Stepan Chemical Company) site is licensed by the NRC, the NRC staff should check on this. Based on the publicly available record, it appears that the License No. STC-1333 expired in 1992, no renewal application was submitted to the NRC, and the license was not renewed. So, it is unclear whether the site is still "licensed" by the NRC.

D. The EA States:

*The Maywood material has been classified as byproduct material under Section 11e.(2) of the Atomic Energy Act of 1954, as amended (NRC, 2001).*

Comment:

This is a very curious decision on the part of the Commission, in that for about 20 years the NRC denied that it had any regulatory responsibility for the materials outside of the 3 licensed burial pits. Now that the NRC, as a concession to Envirocare, claims that the Maywood tailings (not the "Maywood material") is 11e.(2) byproduct material, one wonders why the NRC has not taken regulatory responsibility for all the Maywood tailings, in accordance with the requirements of the Atomic Energy Act of 1954, as amended.

There is also the fact that the tailings from the processing of thorium at the MCW are commingled with other materials that are not associated with the processing of thorium. The Commission's decision to designate the Maywood "tailings" as 11e.(2) byproduct material did not address the fact that the tailings were commingled with other materials that are not tailings. Therefore, it is unclear whether all of the materials that are currently designated as FUSRAP waste are 11e.(2) byproduct material (this includes non-radiological materials at the MISS site that might not be associated with the processing of thorium.) This needs clarification.

For some reason the EA does not state whether the Maywood material is "source material ore." The NRC made a determination that so-called "alternate feed material" to be received and processed at White Mesa from Molycorp, Inc., Mountain Pass, California, facility was "source material ore." Why is the Maywood material not "source material ore?"

I respectfully request that the NRC make a statement regarding whether the Maywood material is "source material ore."

If the Maywood material is 11e.(2) byproduct material, when does it become "ore." If and when it becomes "ore," will it be "source material ore," or just plain old "ore?"

E. The EA states:

*The average uranium content, based on 4000 samples, ranges from non-detectable to 0.06 weight percent, with an average grade of 0.0018 percent uranium.*

Comment:

This statement, following in the same paragraph just after a discussion of the 3 Stepan burial pits, would lead one to believe that the NRC staff is discussing the uranium content of the 3 burial pits. This, of course, is not the case. In fact, no samples from the burial pits have been taken. Therefore, there has been no assessment of the radiological and non-radiological contents of the materials that were placed in the burial pits in the late 1960s. At least, not an assessment based on actual samples of the material in the pits.

NRC staff does not identify where the Maywood samples were taken and how many of the samples were taken in areas that have already been remediated and how many were taken from each of the approximately 24 properties that have yet to be remediated. These facts should be presented in the EA.

F. The EA states:

*However, IUSA is proposing to only receive material that contains higher than 0.01 percent uranium.*

Comment:

The EA does not discuss how materials with less than 0.01 percent uranium will be separated from the material with less than that amount and on what level that assessment will be made. Will each truckload be assessed, each site, or portions of each site? How will this separation be accomplished? What separation plan has been found to be acceptable to the USACE?

G. The EA states:

*The thorium content of the material ranges from non-detectable to 3,800 pCi/g with an average of 970 pCi/g. The thorium content is relatively low due to thorium extraction at the Maywood site.*

Comment:

Here, the NRC does not indicate whether the average thorium content they are referring to is thorium-232, or a combination of thorium-232 and its decay product, thorium-228. Usually, if the isotopes are in equilibrium, the total (source material) thorium content is determined by combining the values of both thorium-232 and thorium-228. The NRC staff should clarify this. However, I will assume herein that NRC is referring to the total thorium content.

NRC staff should also make clear whether they are referring in any manner to thorium-230, a decay product of uranium-238.

IUSA has stated that the average thorium content of the material received from the Heritage Minerals site was 1,190 pCi/gram. IUSA received only about 2,910 tons of material from Heritage (approximately 1 truckload). However, the thorium level in that material was enough to trigger the use of IUSA's Standard Operating Procedures (SOPS) for High Thorium Content (HTC) Ore Management (December 18, 2000) for the receipt, processing, and disposal of the Heritage materials.

The average concentration of the thorium in the Maywood materials is only slightly less than the average concentration of thorium for the Heritage materials, and the amount of the Maywood materials proposed to be received at White Mesa is from 161 to 288 times the amount of the Heritage materials.

Clearly, tens of thousands of tons of the Maywood materials (and thousands of container-loads) will have a thorium concentration greater than the average thorium concentration of the Heritage materials. Much of the Maywood material has a thorium content above the amount that previously triggered the use of the HTC SOPS.

For some inexplicable reason, neither IUSA, nor the NRC, mentions the use of the SOPS for HTC material for any Maywood materials that will have a high thorium content level. There is no mention of testing at the Maywood site or later at the White Mesa Mill to determine whether a specific container-load of material warrants the use of the HTC SOPS for the handling of that particular container.

Unfortunately, neither IUSA, nor the NRC has indicated a specific radiation level for thorium-232 and thorium-228 that would trigger the use of the HTC SOPS.

The NRC staff should require the use of the SOPS for HTC material for containers that have been determined to contain materials with a high thorium content. There should be an SOP or sampling protocol for determining the thorium content of the material at the Maywood site and a specific level that would trigger the use of the HTC SOPS at White Mesa. Failure of the NRC to require the use of the HTC SOPS is a grievous oversight, with serious health and safety implications.

Also, at White Mesa, HTC materials should be separated from other materials, so that, after processing and disposal of the HTC materials, the proper SOPS will be used to prevent the escape of thoron into the atmosphere from the impoundment.

## **5. Section 1.4 — Review Scope**

Comment:

The information contained in this EA does not substantiate that the NRC reviewed sufficient information related to the Maywood FUSRAP/Superfund Site in order to support a finding of no significant hazard.

## **6. Section 3.0 — OPERATIONS**

The EA states:

The EA states:

*The facility is currently in operation and since early 1997, the mill has processed 58,403 tons from several additional alternate feed stocks.*

Comment:

Here is data that shows that the proposed action would amount to the processing of from eight times to 14 times the total "alternate feed material" that has previously been processed at the White Mesa Uranium Mill. Moreover, very little of the material that has **\*\*previously** been processed as "alternate feed material" consists of wastes from the processing of thorium-232.

The processing of such a large amount of alternate feed material that consists of wastes from the processing of ore that is totally unlike the materials (either ore or non-ore material) previously processed at White Mesa is a major licensing action, which has not been examined by previous NEPA documents. The present EA does not provide an adequate and complete assessment of the proposed action. A supplement to the 1979 ES is warranted.

#### **7. Section 4.1 — Transportation Considerations**

If the NRC does not know exactly how much material will be shipped, how the material will be shipped, and what routes would be used for shipment, how can the NRC effectively evaluate potential environmental effects from the transportation of the materials?

The number of intermodals to be shipped from Maywood within 7 years is to be from 8 to 14 times the number of intermodals that have arrived by rail at Cisco, Utah, for transport through Cisco, down (for the most part) a narrow dirt road for a number of miles to Interstate 70, west on Interstate 70 for about 20 miles to Highway 191, south on Highway 191 through the towns of Moab, Monticello, and Blanding to White Mesa, in the previous 7 years.

The EA fails to indicate and take into consideration the fact that the amount of truck traffic that is to be generated by the receipt of the material from Maywood would, in sum, be 8 to 14 times greater than all the truck traffic generated by the truck traffic from all of the shipments of so called "alternate feed material" to the White Mesa Uranium Mill.

That amounts to a huge increase in the amount of truck traffic in Cisco, for a period of years. There is currently very little other truck traffic (if any) in Cisco.

The NRC improperly fails to evaluate the transportation of many trucks over a bridge in Cisco that is not designed to receive the weight of the trucks. The NRC has failed to evaluate the transportation and intermodal-storage situation in the very small, isolated community of Cisco. The NRC has failed to evaluate the impacts during the

summer of the greatly increased truck traffic on the people who use the narrow, dirt road through Cisco for recreation access to the Colorado River.

NRC has failed to evaluate the increase in truck traffic through the Highway 191 corridor during the various seasons of the year. During the winter, there is very little truck traffic on Highway 191, so that the amount of traffic from the Maywood intermodals would present a considerable increase in large, heavy truck traffic.

The NRC improperly fails to address in any manner the fact that just to the north of Moab is a uranium mill site that might be undergoing remediation that would entail the trucking of thousands of truckloads of uranium mill tailings (over 11 million tons worth) that will be entering from a side road onto the very same route (Highway 191) that IUSA plans to use for the transportation of the Maywood material.

There is no mention of the possible interface of the Maywood truck traffic on Highway 191 north of Moab and the Utah Department of Transportation (DOT) planned major construction on that route

The EA fails to take into consideration the transportation issues related to the possible rail car transportation of intermodals that are not sealed in the narrow, twisting canyon that parallels the edge of Colorado River west of Denver, Colorado. The NRC does not consider the fact that, if there were a derailment in this long, narrow section of the rail route, the intermodals would probably drop straight down into the Colorado River. There is no where else for them to go. The NRC has not done any sort of transportation risk assessment for the transportation of intermodals on this route. There was no information provided by the licensee, or assessed by the NRC with respect the timeliness and effectiveness of any emergency response in the event that there is a spill of the contents of an intermodal into the Colorado River. Note that there is no highway for many miles where the Colorado River and the railroad share a narrow canyon.

The NRC has not provided any information regarding which rail routes have been used in the past to transport FUSRAP materials from the East Coast to Cisco. The 1979 Environmental Statement for the White Mesa Mill did not assess the transportation routes that would be used for the transport of so-called "alternate feed material" to White Mesa.

Therefore, there is never been a comparison of the various possible routes, an identification of the potential problems associated with the various potential routes, an identification of the possible means to mitigate such problems.

Contrary to NRC staff's assertion, one can expect there to be significant impacts from the transportation of the Maywood materials. The NRC has just chosen not to evaluate these impacts. Instead it relies on vague statements about what "may be similar," is "more likely," "expected," or "anticipated."

Therefore, based on the numerous potential impacts from this tremendous increase in the amount of "alternate feed material" from the East Coast, it is reasonable to presume that there will be measurable and preventable adverse environmental impacts.

## **8. Section 4.2 — Handling and Processing at the Mill Site**

The EA makes no mention of the fact that the material to be processed is material that will contain materials that are not contained in uranium ore, for which the White Mesa Mill was designed.

The NRC does not mention whether or not IUSA will use the SOPS for HTC material for the receipt, handling, processing, and disposal of the Maywood materials. As discussed in Comment 4.G. above, there will be thousands of container-loads of material coming from Maywood that have a thorium content greater than the average thorium content of the Heritage materials. Shipment of these HTC materials should trigger the use of the HTC SOPS. Failure of the NRC to require the use of the HTC SOPS is a grave error, with serious health and safety implications.

It is especially important that the high thorium content materials, and maybe even low thorium content materials be placed in small piles that are covered, because there is no way of determining at this time how long the material will be stored at White Mesa. There have been numerous reports of dust swirling from the ore storage area. Often wind storms occur at night and it is not clear how, in the middle of the night, dust from the storage piles, the tailings impoundments, and the site is controlled.

Thorium decay products are shorter lived and hotter than the decay products of thorium, therefore, extra precautions are needed.

The NRC does not address how IUSA will meet the requirements for protection against thorium and thorium progeny that are set forth in 40 C.F.R. Part 192, Subpart E.

IUSA and the NRC provide no evaluation regarding how the processing of materials containing thorium-232 and its decay products will be affected by the processing that will take place in the mill. IUSA and the NRC do not discuss the possibility of increased solubility or bioavailability of the thorium and thorium decay products due to the uranium extraction process.

The EA does not discuss how long the Maywood material will be stored at White Mesa before processing. Will the materials be accumulated for the period of 7 years before being processed? Is there some limit on the amount or length of time that materials can be accumulated at White Mesa?

## **9. 4.3 — Control of Airborne Contamination**

The EA states:

*The NRC does not anticipate any unusual or extraordinary airborne contamination dispersion when processing this material. The contamination potential is expected to be comparable to the processing of conventional ores which has been evaluated under previous NEPA actions.*

Comment:

The NRC did not receive extensive information from IUSA pertaining to the constituents of all the various materials that make up the Maywood, New Jersey site. The information included in IUSA's application was, for the most part, incomplete and outdated. There was extensive additional data on the Maywood site that was available, but was not submitted to the NRC as part of IUSA's application. So, it is hard to understand how the NRC can make a determination with respect airborne contamination when the NRC does not even know exactly what the material being processed consists of. There has been no analysis of the materials in the 3 pits at the Stepan Company site.

Again, we get vague words like "expected" and "comparable." How can the NRC determine whether the contamination potential can be expected to be comparable to the processing of conventional ores, when there is no information provided by IUSA such that a comparison can be made?

The NRC ignores the provisions in IUSA's SOPS for High Thorium Content Ore Management for the assessment and control of radiation during storage, processing and disposal. Since much of the Maywood materials are of HTC, there will be higher concentrations of thoron and other radiological dangers during HTC material storage, processing, and after disposal. This is also discussed above at Comments 4.G. and 8.

Because the Maywood materials will contain thorium-232 and its decay products, which are not present in uranium ore from the Colorado Plateau or previously processed "alternate feed material" (except for the Heritage material), the airborne contamination from the Maywood materials will present unusual and extraordinary airborne contamination that is not comparable to the contamination from uranium ore or the "alternate feed material" previously processed at White Mesa.

IUSA and the NRC, as set forth in the HTC SOPS, have already determined that materials, such as the Maywood material, that contain thorium-232 and its decay products "require special procedures be followed, which are over and above those required for conventional ores or other alternate feed materials." This statement is in direct contradiction to the statement in the EA, quoted above.

The HRC SOPS specifically establishes additional protective procedures for controlling the airborne radioactive contamination from materials containing thorium-232 and progeny, which brings calls into question the veracity of the statement in the EA quoted above.

Again, the NRC must establish a conservative level of thorium content in the Maywood materials that will trigger the use of the HTC SOPS at White Mesa. The NRC must direct IUSA to establish an effective procedure that will be used to test the Maywood materials for HTC, to be used for each container load of materials.

## **10. Section 4.4 — Groundwater Effects**

A. The EA states:

*Material would be handled on the ore pad in a similar manner to conventional ores and other approved alternate feed materials.*

Comment:

NRC staff does not discuss the length of time the Maywood materials will be stored on the ore pad. Will the material accumulate for 7 years? Will the material be processed at intervals throughout the 7-year shipping period? How long is "temporary storage?" IUSA and the NRC should address how long the material will be stored on the pad.

IUSA's SOPS for HTC materials require that each stockpile will not exceed 200 tons and that each stockpile will be covered with reinforced plastic. There is no mention in the EA of these requirements and the fact that the level of thorium in much of the Maywood materials will be equal to or greater than the average thorium content of the Heritage materials, which were stored at White Mesa using the HTC SOPS.

Again, this is a grievous oversight. Apparently, the NRC staff is not interested in effectively mitigating the obvious environmental impact that will accrue from the receipt, processing, and disposal of the Maywood material with a high thorium content.

B. The EA states:

*Potential environmental effects to groundwater have already been evaluated for operations at the mill in previous NEPA documents.*

Comment:

No previous NEPA document has examined the potential environmental effects to groundwater from tens of thousands of tons of wastes from the processing of thorium ores, the processing history of which is murky, and which have been dispersed over the years such that the wastes have become commingled with other, non processing materials and wastes.

C. The EA states:

*Material from Maywood does not contain any additional chemicals that would pose an increase in threat to the groundwater resources above conventional ore.*

Comment:

IUSA's application did not contain the most recent information regarding the chemicals that might be contained in the Maywood materials. There is no information about how materials at Maywood that contain levels of chemical contaminants that are hazardous waste will be separated from the other materials being shipped to White Mesa.

Section VI ("Findings of Fact") of the 1992 FFA, at (18) and (19), states:

(18) The soils analyzed in 1986 by Ebasco from the Vicinity Properties exhibited elevated concentrations of volatile organics (methylene chloride, acetone, methyl ethyl ketone (MEK), benzene, toluene, and ethylbenzene in the ppm range), acid extractables, and six metals (As, Cd, Cr, Pb, Be and Ni varying in concentrations up to several hundred ppm). In addition, nine pesticides (Dieldrin, Lindane, Endosulfan I, Endosulfan sulfate, Aldrin, alpha-BHC, DDE, DDD, and DDT) were detected in various levels up to several hundred ppb. Some soil borings also exhibited the presence of gasoline and fuel oil components, various methylated benzenes, caffeine and the essential oils alpha-pinene and d-limonene.

(19) Many of the substances referred to in the preceding paragraph are hazardous substances within the meaning of Section 101(14) of CERCLA, 42 U.S.C. 9601(1).

IUSA did not submit any data to the NRC regarding the levels and extent of contamination from the substances listed above (which are not constituents of so-called "conventional ore"), based upon the most recent data on the Maywood site. IUSA did not submit data to the NRC regarding the groundwater contamination (either radiological or chemical) that has occurred as a result of the presence of the Maywood wastes at the various Maywood properties over the years. The chemical and radiological characteristics of the material in the 3 Stepan Company burial pits have not been determined.

Therefore, it is a leap of faith for the NRC to reach the conclusion that Maywood material does not contain any additional chemicals that would pose an increase in threat to the groundwater resources above conventional ore. There is no basis for this conclusion.

This is particularly so since the chemical constituents in the Stepan Company burial pits have not been determined.

D. The EA states:

*Tailings from the Maywood material processing will be disposed in the lined tailings cells along with other process tailings.*

Comment:

As discussed above, IUSA and the NRC have failed to address the need for the use of the SOPS for high thorium content material during the disposal of the Maywood material in the tailings impoundments. This is a serious error.

## **11. Section 4.6 — Cumulative Impacts**

The EA states:

*NRC staff has found no other activities in the area that could result in cumulative impacts.*

Comment:

The NRC has never identified and evaluated the cumulative impacts from the processing and disposal of "alternate feed material" at the White Mesa Uranium Mill.

## **12. Section 5.0 — ALTERNATIVES**

Comment:

There is no NEPA document for the White Mesa Uranium Mill that examines in any manner the alternatives to the processing of all or any "alternate feed material" at the White Mesa Mill. NEPA requires that alternatives to the proposed action be identified and evaluated. In the 1979 ES for the White Mesa Uranium Mill, the NRC identified and examined the alternatives to the processing the ore from the mines on the Colorado Plateau at White Mesa. After evaluating the alternatives, they determined that the alternatives to building and operating a uranium mill at White Mesa, which would involve the shipping of the ore to other, more distant mills, would not be feasible.

However, the NRC has never examined the alternatives to processing "alternate feed material" (or any particular "alternate feed material") at White Mesa. The NRC has never explained why it was not feasible to ship ore from the Colorado Plateau to other, more distant mills, but it is now feasible to ship "alternate feed material" 2,000 miles from Maywood, New Jersey, to White Mesa. The present EA also fails to examine the actual alternatives to the proposed action. The NRC only examines the alternatives with respect NRC staff's response to the proposed action.

This is an error in interpretation of NEPA and 10 C.F.R. Part 51. The NRC staff should have examined the alternatives to the proposed action and the environmental impacts associated with those alternatives. NRC Staff has improperly failed to examine the alternatives to the receipt and processing of the materials from the Maywood FUSRAP/Superfund site at White Mesa. IUSA and NRC have failed to properly identify and evaluate the other sites that might receive or receive and process those materials.

## **13. Section 6.0 — FINDING OF NO SIGNIFICANT IMPACT**

Comment:

NRC staff's FONSI is inadequate because it is based on outdated and limited information regarding the materials that will be cleaned up at the Maywood

FUSRAP/Superfund Site. For example, NRC staff did not examine the information contained in the Pre-Design Investigation Report for the 12 clusters of 24 commercial and government properties that will be remediated under Phase II of the remedial action.

Apparently the NRC has not reviewed the Proposed Plan for the Clean Up of the Maywood Site that was released in August 2002.

IUSA submitted a September 1995 "Engineering Evaluation/Cost Analysis [EE/CA] for the Cleanup of Residential and Municipal Vicinity Properties at the Maywood Site, Bergen County, New Jersey." This document is not an EE/CA that applies to the cleanup of the properties at Maywood that will provide the materials that IUSA proposes to receive at White Mesa. The EA/CA for the cleanup of the properties that are yet to be cleaned up has not been issued by the USACE. There is no EE/CA for the 3 burial pits on the Stepan Company property. The Administrative Record for the Maywood Site is not complete. There are numerous documents that are part of the Maywood Administrative Record that the NRC has not examined.

The issuance of a FONSI for the proposed action is premature. The issuance of the license amendment to IUSA's license approving the proposed license amendment before the USACE issues the final Record of Decision for the Maywood Site and before NRC staff reviews all pertinent Maywood Administrative Record documents is also premature. The issuance of the FONSI and the proposed license amendment before the USACE has taken physical possession of the 3 burial pits at the Stepan Company site and the material in the burial pits has actually been characterized (through sampling and analysis of the material) is premature.

#### **14. Section 6.1 — Environmental Justice**

Further evaluation of Environmental Justice concerns, as outlined in Executive Order 12898 and NRC's Office of Nuclear Material Safety and Safeguards Policy and Procedures Letter 1-50, Revision 1, might reveal that the impacts associated with the proposed action constitute disproportionately high and adverse effects and impacts on minority and low-income populations. Additionally, the NRC has never examined the total and cumulative environmental impacts on minority and low-income populations of the processing of "alternative feed material" at White Mesa.

#### **15. Section 7.1 — Public Comments**

##### **A. Comment:**

The NRC Staff failed to identify the date and author of the comments on the EA, which the NRC staff is responding to. The NRC Staff does not explain why it did not notice the EA for public comment.

##### **B. The EA states:**

*Regarding comments on the Maywood material potentially being classified as a hazardous waste, the NRC will not approve the receipt and processing of the Maywood material if it is classified as a hazardous waste when it comes to the Mill.*

Comment:

This is a very vague statement. What constitutes a "hazardous waste" in this statement? Is the NRC staff referring to Resource Conservation and Recovery Act (RCRA) or CERCLA hazardous waste, or both, or some other type of "hazardous waste."

What is meant by "if it is classified as a hazardous waste when it comes to the Mill?" What sort of procedure will be used to determine whether any Maywood material "is classified as a hazardous waste when it comes to the Mill?" The EA should have been more specific and explicit.

Whether the material is hazardous should be determined before it leaves Maywood, not after it arrives at White Mesa.

## **16. Section 7.2 — Utah DEQ Comments**

The EA States:

*DEQ commented on potential hazardous waste issues related to the Maywood material. As mentioned earlier, the NRC staff has determined that the Maywood material is classified as "byproduct" material and therefore, will be excluded by definition as a solid and hazardous waste under RCRA (40 CFR Part 261.4).*

This statement directly contradicts the statement from the EA in Comment 15, (Section 7.1 of the EA), which states that "the NRC will not approve the receipt and processing of the Maywood material if it is classified as a hazardous waste when it comes to the Mill."

If the determination has already been made that the Maywood material is not a solid or hazardous waste, how can it be that there is even the possibility that any of the Maywood material would be "classified as a hazardous waste when it comes to the Mill?"

Additionally, it is unclear whether material that is commingled with the tailings from the processing of thorium at the Maywood Chemical Works can also be defined as 11e.(2) byproduct material (and exempt from definition as solid waste and hazardous waste). It is possible that the commingled materials might be defined as solid wastes and hazardous wastes because they do not meet the definition of 11e.(2) byproduct material.

## **III. ADDITIONAL COMMENT**

The receipt, processing and disposal at the White Mesa Uranium Mill of materials buried in 3 pits at the Stepan Company portion of the Maywood Site, the Maywood Interim Storage Site (MISS), any materials temporarily stored on the MISS site would

violate the conditions of the 1985 Cooperative Agreement between the DOE and the Stepan Company. This agreement is still in effect.

The Cooperative Agreement, Article V (Responsibilities of DOE), at B. (Permanent Disposal of Radioactive Wastes at the Storage Site and the Participant's Site — Phase Two), states:

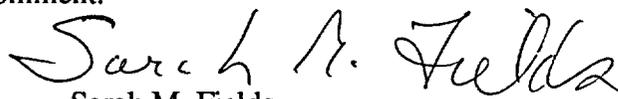
Phase Two begins with the initiation of permanent disposal of radioactive waste at the Storage site and the Participant's site. DOE shall permanently dispose of all radioactive waste on the Participant's site and the storage site by removal to a permanent DOE disposal facility within a reasonable time after such a facility becomes available. In the alternative, DOE may stabilize all such radioactive waste. Permanent disposal shall be at the Department's expense. DOE shall take title to and responsibility for all radioactive waste on the Participant's site at the beginning of Phase Two. [Emphasis added.]

Under Article II (Definitions), the following definitions are pertinent:

- D. The term "Maywood site" means the Participant's site and the storage site . . . .
- E. The term "Participant's site" means that portion of the Maywood site not conveyed to the DOE. . . .
- F. The term "permanent disposal" means the process by which radioactive wastes are brought into compliance with Federal radiation protection standards for permanent management of these materials. Permanent disposal may be performed by removal of the waste and placement in a specially designated disposal facility or by stabilization of the waste.

The White Mesa Uranium Mill is not a "DOE disposal facility."

Thank you for this opportunity to comment.

  
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