



International Isotopes Inc.

October 17, 2011

ATTN: Document-Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

NRC Docket No. 40-9086

Subject: Submittal of Responses to Requests for Additional Information (RAI)
 TAC L32739

To Whom it May Concern,

The following document is provided as a response to the US Nuclear Regulatory Commission RAIs pertaining to the International Isotopes Fluorine Products Inc. December 30, 2009 application to license a depleted uranium hexafluoride de-conversion and fluorine extraction process facility.

(1) Official Responses to Final RAIs

Please contact me by phone at 208 524-5300 or email at jjmiller@intisoid.com if you have any questions regarding this letter or require additional information.

Sincerely,

John J. Miller, CHP
Radiation Safety Officer

JJM-2011-55

Enclosure as Stated

cc: Dr. Matthew Bartlett
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RESPONSES TO FINAL RAIs

Human Factors:

In order to demonstrate compliance with the acceptance criteria in NUREG-1520 Revision 1, Appendix E to Chapter 3, please provide the following information.

FRAI-1. *The LA Sections 3.1.4.4 and 3.1.4.5 of the HFE IP provide a number of references to human factors standards including NUREG/CR-3331, MIL-STD-1478 and MIL-HDBK-46855A, and IEEE-1023, with respect to standards to be referenced for the Task Analysis, Functional Requirements, and HSI Design elements of the HFE IP. The references to these standards in the application use the phrases “similar to” and “or equivalent guidance.” The NRC staff understands that significant portions of the guidance documents listed above do not apply to a Part 40 Deconversion facility (e.g., IIFP) which is not a nuclear power plant. Therefore a commitment to the entire standard is not appropriate. The NRC staff does need adequate assurance that all appropriate portions of the guidance will be implemented. Therefore for each of the three standards listed above, replace the phrase “similar to” with a commitment to implement portions of the guidance used to meet the acceptance criteria listed in NUREG-1520 Appendix E. Also, remove the reference to equivalent guidance.*

***Example:** HFE-IP section 3.1.4.4 (last paragraph): “IIFP intends to use applicable standards as guidance for the functional allocation analysis process. The FAA will utilize description analysis methods drawn from NUREG/CR-3331- ~~similar to that described in~~ consistent with the sections needed to demonstrate compliance with the acceptance criteria in NUREG-1520 Appendix E of NUREG/CR-3331-~~or equivalent guidance~~”*

RESPONSE: IIFP will strengthen the language in Chapter 3 of the License Application, (Sections 3.1.4.4 and 3.1.4.5) which refers to standards to reflect that applicable portions of these standards will be used to demonstrate compliance with acceptance criteria in NUREG-1520 Appendix E.

License Documentation Impact (1): In the IIFP License Application, Chapter 3 Section 3.1.4.4, the third paragraph under “Functional Allocation Analysis – Implementation Actions” will read as follows:

IIFP intends to use applicable standards as guidance for the functional allocation analysis process. The FAA will utilize applicable description analysis methods drawn from ~~similar to that described in~~ NUREG/CR-3331-~~or equivalent guidance~~ consistent with the sections needed to demonstrate compliance with the acceptance criteria in NUREG-1520 Appendix E.

License Documentation Impact (2): In the IIFP License Application, Chapter 3 Section 3.1.4.4, the second paragraph under “Task Analysis – Implementation Actions” will read as follows:

IIFP intends to use applicable standards as guidance for the task analysis process. The Task Analysis will utilize applicable task description analysis methods drawn from ~~similar to that described in~~ MIL-STD-1478 ~~or~~and/or MIL-HDBK-46855A consistent with the sections needed to demonstrate compliance with the acceptance criteria in NUREG-1520 Appendix E. ~~or equivalent guidance~~

License Documentation Impact (3): In the IIFP License Application, Chapter 3 Section 3.1.4.5, the second paragraph under “HSI Design – Implementation Actions” will read as follows:

Human factors design relative to HSI will be established using proven HFE principles, guidelines and experience gained from similar facilities and design review criteria derived from published standards as guidance. The HSI design process will utilize applicable methods ~~similar to that described in~~ drawn from IEEE-1023 “IEEE Recommended Practice for The Application of Human Factors Engineering to Systems, Equipment and Facilities of Nuclear Power Generating Stations and Other Nuclear Facilities” consistent with the sections needed to demonstrate compliance with the acceptance criteria in NUREG-1520 Appendix E. ~~2004 or equivalent guidance.~~

FRAI-2. *The original HFE RAI-1(a) response (Revision A) contained the following two sentences, “Human factors and human-system interface were considered as part of the accident analysis review and discussion process. However, these considerations of human factor aspects were not done at the level and structure of the current NUREG- 1520, Appendix E because the accident analysis and PHA information used in developing the IIFP License Application was conducted and completed prior to the revisions to NUREG-1520, Revision I Appendix E, criterion E.”*

This text was not included in the second HFE-RAI response (Revision B). Please incorporate a similar statement into LA Section 3.1.4, or other location as appropriate. This information is needed to clarify that the human system interface was evaluated as part of the accident analysis.

RESPONSE: The human system interface was evaluated in the original accident analysis using the “what if” methodology. However, this evaluation did not include the level of detail and documentation as is now required to demonstrate compliance with acceptance criteria in NUREG-1520 Appendix E.

License Documentation Impact: In the IIFP License Application, Section 3.1.4.2, a new fourth paragraph will be added under “ISA Team and Qualifications” to read as follows:

Human factors and human-system interface were considered as part of the accident analysis review and discussion process following NUREG-1520. However, these considerations of human factor aspects were not done at the level and structure of the current NUREG- 1520, Appendix E because the accident analysis and PHA information used in developing the IIFP License Application was conducted and completed prior to the revisions to NUREG-1520, Revision I Appendix E, criterion E.

FRAI-3. *License Application Section 11.1.3, titled “Configuration Management Controls on the Design Requirements” contains a commitment to conduct design verification. Provide a cross reference in the HFE-IP which refers to LA Section 11.1.3 and states that this design verification will also be applied to human factors. This information is needed to clarify that the design verification will be applied to human factors.*

RESPONSE: A cross reference to the IIFP LA, “Management Measures”, Section 11.1.3 will be made to clarify that design verification will be applied to human factors.

License Documentation Impact: In the IIFP License Application, Section 3.1.4.9, the paragraph under “HFE Design Verification” will be revised to read as follows:

HFE design verification is used to determine whether HFE has been used in the design of HSI. Sections 11.1.2 and 11.1.3, Chapter 11 of the IIFP License Application, “Configuration Management Controls on the Design Requirements” contain the commitment to conduct design verification. The commitment will also apply to human factors involved in HSI.

FRAI-4. *For RAI HF-F2-1 License Documentation Impact 4 through 8 indicate the HFE Expert will be incorporated into the ISA Team. For clarity, add a statement or cross reference in HFE-IP section 3.1.4.2 which indicates the HFE Expert will be part of the ISA team. This information is needed to ensure consistency between LA section 3.1.4.2 and the ISA Summary Table 5-2.*

RESPONSE: As specified under “HFE Expertise” in Section 3.1.4.2 of the IIFP LA, the HFE professional will be added to the project prior to beginning design of IROFS SSCs. At that time, he/she will become involved in subsequent reviews and updates of accident analyses and he/she will join the ISA Team and work with both this team and the design team to ensure that HFE and human-system interface requirements are met.

License Documentation Impact: In the IIFP License Application, Section 3.1.4.2, the second paragraph under “HFE Expertise” will read as follows:

This arrangement and approach provide for the HFE professional to advise on HFE related matters, to become involved in subsequent accident analyses and to ensure continuity of HFE considerations by the detail design team as the project progresses. The HFE professional will become part of the ISA Team and will work with other members of ISA Team and with the detail design team to ensure that HFE and human-system interface (HSI) requirements are being met.

Request for Special Authorization:

FRAI-5. **Special Authorization (Has been removed from the RAI questions and will be addressed through separate documentation)**

Seismic:

FRAI-6. *Issue:*
In response to “Follow-Up Clarification to RAI SS-7(5)” the applicant has stated that load combination 4 for “Severe Environmental Load Combinations” has not been used since the operating basis earthquake load (earthquake load for which plant's power production equipment is designed to remain functional without undue risk to public health and safety) is not applicable. The emergency generator and UPS system are designed to remain functional during any postulated natural phenomena hazard event.”

This combination pertains to continued operation of the IROFS structures after earthquakes.

Request:

Expand the justification for not using the Severe Environmental Load Combinations listed in

follow-up RAI response #SS-7-5 section 3(a) #4 , 3(b) #5, and 3(c) #5. Provide a justification based on compliance with 70.61(e) i.e., IROFS remain available and reliable and have management measures (Note: Consider including a cross reference to LA section 3.1.3 (or other sections), which contain a commitment to utilize Management Measures to maintain the IROFS.)

RESPONSE : The response to “Follow-Up Clarification to RAI SS-7(5)” for RAI SS-7-5 sections 3(a) #4, 3(b) #5, and 3(c) #5 has been replaced (red text) with additional and more clear language as follows to provide justification that IROFS remain available and reliable and have management measures.

3. Load Combinations for Process Buildings:

For process buildings and structures which house IROFS equipment, the following load combinations will be considered:

a) Concrete Load Combinations per ACI 349-06 (Combinations are numbered below as listed in the Code):

Normal Load Combinations

1. $1.4 (D + F + Ro) + To$
2. $1.2 (D + F + To + Ro) + 1.6 (L + H) + 1.4 C + 0.5 (Lr \text{ or } S \text{ or } R)$
3. $1.2 (D + F + To + Ro) + 0.8 (L + H) + 1.4 C + 1.6 (Lr \text{ or } S \text{ or } R)$

Severe Environmental Load Combinations

4. **The specific load combination is not needed or used because the process buildings are IROFS that are subject to design verification and are maintained at their design basis integrity through the use of management measures. The process buildings and the IROFS within the process buildings are designed and maintained and have management measures to remain available and reliable during any of the postulated natural phenomena hazard events. IIFP has committed to the use of management measures as stated in the IIFP LA, Chapter 3 Section 3.1.3 and described in detail in LA Chapter 11 “Management Measures”.**
5. $1.2 (D + F + Ro) + 1.6 (L + H + W)$

Extreme Environmental and Abnormal Load Combinations

6. $1.0 (D + F + C + H + Ta + Ra + Es) + 0.8L$
7. Not used since straight wind (W) governs over tornado wind (Wt) for the Facility site due to probability of occurrence.
8. $1.0 (D + F + C + H + Ta + Ra) + 1.2 Pa + 0.8L$
9. Not used since no postulated high energy pipe reaction (Yr), jet impingement (Yj) or pipe missile impact (Ym) are expected during a design basis natural phenomena hazard.

Preliminary analysis has shown that flood load (F) is negligible for the design of the IIFP process buildings.

Ra, Ro and To and Ta are expected to be negligible.

Rain load (L) on process building roofs is negligible, since all process building roofs are sloped metal (5/12) pitch minimum with no parapets or other appurtenances that might inhibit roof drainage.

Crane load (C) is only applicable in Autoclave Building.

b) Steel Load Combinations Per AISC N690-06 if Load and Resistance Factor Design (LRFD) is used:

Normal Load Combinations

1. $1.4 (D + Ro) + To + C$
2. $1.2 (D + Ro + To) + 1.6L + 1.4C + 0.5 (Lr \text{ or } S \text{ or } R)$
3. $1.2 (D + Ro + To) + 1.6 (Lr \text{ or } S \text{ or } R) + 0.8L + 1.4C$

Severe Environmental Load Combinations

4. $1.2 (D + Ro) + 1.6W + 0.8L + C + 0.5 (Lr \text{ or } S \text{ or } R) + To$
5. This specific load combination is not needed or used because the process buildings are IROFS that are subject to design verification and are maintained at their design basis integrity through the use of management measures. The process buildings and the IROFS within the process buildings are designed and maintained and have management measures to remain available and reliable during any of the postulated natural phenomena hazard events. IIFP has committed to the use of management measures as stated in the IIFP LA, Chapter 3 Section 3.1.3 and described in detail in LA Chapter 11 "Management Measures".

Extreme Environmental and Abnormal Load Combinations

6. $D + 0.8L + C + To + Ro + Es$
7. Not used since straight wind (W) governs over tornado wind (Wt) for the Facility site due to probability of occurrence.
8. $D + 0.8L + C + 1.2 Pa + Ra + Ta$
9. Not used since no postulated high energy pipe reaction (Yr), jet impingement (Yj) or pipe missile impact (Ym) are expected during a design basis natural phenomena hazard.

c) Steel Load Combinations Per AISC N690-06 if Allowable Strength Design (ASD) is used:

Normal Load Combinations

1. $D + L + Ro + To + C$
2. $D + (Lr \text{ or } S \text{ or } R) + Ro + To + C$
3. $D + 0.75L + 0.75(Lr \text{ or } S \text{ or } R) + To + C$

Severe Environmental Load Combinations

4. $D + Ro + W + .75L + C + 0.75(Lr \text{ or } S \text{ or } R) + To$
5. The specific load combination is not needed or used because the process buildings are IROFS that are subject to design verification and are maintained at their design basis integrity through the use of management measures. The process buildings and the IROFS within the process buildings are designed and maintained and have management measures to remain available and reliable during any of the postulated natural phenomena hazard events. IIFP has committed to the use of management measures as stated in the IIFP LA, Chapter 3 Section 3.1.3 and described in detail in LA Chapter 11 "Management Measures".

Extreme Environmental and Abnormal Load Combinations

6. $D + L + C + Ro + To + Es$
7. Not used since straight wind (W) governs over tornado wind (Wt) for the Facility site due to probability of occurrence.
8. $D + L + C + Pa + Ra + Ta$
9. Not used since no postulated high energy pipe reaction (Yr), jet impingement (Yj) or pipe missile impact (Ym) are expected during a design basis natural phenomena hazard.

License Documentation Impact : No additional changes.

ISA :

FRAI-7. *LA section 3.2.4.3, "New Facilities or New Processes at Existing Facilities" contains commitments to implement the Baseline Design Criteria (BDC), consistent with 10 CFR 70.64. The BDC are intended to ensure that a minimum level of good engineering practices, defense-in-depth, and safety considerations are incorporated throughout the facility. The BDC must be applied to the entire facility, including those safety features which are not designated as IROFS. The current commitments in LA section 3.2.4.3 appear to only apply to IROFS. These commitments need to be expanded to also apply to the entire facility, including safety features which are not designated as IROFS. Consistent with the requirements in 10 CFR Part 70.62(a), expand the subsections of 3.2.4.3 including Natural Phenomena Hazards, Fire Protection, Chemical Protection, and Emergency Capability to indicate that the BDC addresses the safety systems throughout the entire facility.*

RESPONSE: The BDC are intended to ensure that a minimum level of good engineering practices, defense-in-depth and safety considerations are incorporated throughout the facility. The following License Documentation Impact describes the changes that will be made to the LA, Chapter 3 to show the commitment that BDC meet the requirements of *10 CFR Part 70.62(a)*.

License Documentation Impact: Consistent with the requirements in 10 CFR Part 70.62(a) and further clarifications, the subsections of the IIFP LA, Section 3.2.4.3 “New Facilities or New Processes at Existing Facilities” are amended as follows:

3.2.4.2 New Facilities or New Processes at Existing Facilities

Baseline design criteria (BDC) that must be used for new facilities are specified in 10 CFR 70.64, “*Requirements for New Facilities or New Processes at Existing Facilities*”, (CFR, 2009e). The ISA accident sequences for the credible high and intermediate consequence events for the IIFP Facility includes accidents defined as design basis events (DBE), which includes seismic and other bounding credible events. The IROFS for these events ensure that the associated BDC are satisfied. The BDC in 10 CFR 70.64 are used as bases for the design of the IIFP Facility as described in the following paragraphs.

Quality Standards and Records

SSCs ~~that are determined by the ISA to be IROFS~~ are designed, fabricated, erected and tested in accordance with the graded levels of the IIFP QAP. Appropriate records of the design, fabrication, erection, procurement and testing of SSCs that are IROFS are maintained throughout the life of the IIFP Facility. Management ~~M~~measures applicable to IROFS are discussed in the IIFP LA Chapter 11.

Natural Phenomena Hazards

~~The IIFP Facility design has been developed with natural phenomena considered such that if an external event should occur, the health and safety of the workforce from licensed material or chemicals produced from licensed material are maintained.~~ SSCs that are determined to be IROFS are designed to withstand the effects of, and be compatible with, the environmental conditions associated with the IIFP Facility operation, maintenance, shutdown, testing and accidents for which the IROFS are required to function.

Fire Protection

~~The IIFP Facility design provides adequate protection from credible fire and explosion accident scenarios by adherence to the requirements of the ISA and recognized codes and standards.~~ SSCs that are IROFS are designed and located so that they can continue to perform their safety functions effectively under credible fire and explosion exposure conditions. Non-combustible and heat resistant materials are used wherever practical throughout the IIFP Facility, particularly in locations vital to the control of hazardous materials and to the maintenance of safety control functions. Fire detection, alarm and suppression systems are designed and provided with sufficient capacity and capability to minimize the adverse effects of fires and explosion on IROFS. The design includes provisions to protect against adverse effects that may result from either the operation or the failure of the fire suppression system.

Environmental and Dynamic Effects

The IIFP Facility design has been developed with dynamic effects considered such that if an external or abnormal event should occur, the health and safety of the workforce from licensed material or chemicals produced from licensed material are maintained. SSCs that are IROFS are protected against dynamic effects, including effects of missiles and discharging fluids that may result from natural phenomena: 1) accidents at nearby industrial, military or transportation facilities, 2) equipment failure and 3) other similar events and conditions both inside and outside the IIFP Facility.

Chemical Protection

The IIFP Facility design provides for adequate protection against chemical risks produced from licensed material. Chemical protection is addressed in the LA, Chapter 6 “Chemical Process Safety”.

~~SSCs that are IROFS are protected against chemical risks directly from licensed material and by hazardous chemicals produced from licensed material that have not been separated from licensed material. Chemical risks from hazardous chemicals are not address as IROFS under the ISA methodology provided IIFP Facility conditions or hazardous chemicals do not affect radiological safety~~

Emergency Capability

The IIFP Facility design provides for emergency capability to maintain control of licensed material and hazardous chemicals produced from licensed material, evacuation of on-site personnel and on-site emergency facilities and services. SSCs that are required to support the IIFP Emergency Plan (EP) (IIFP, 2009b) are designed for emergencies. The design provides accessibility to the equipment of onsite and available offsite emergency facilities and services such as hospitals, fire and police departments, ambulance service and other emergency agencies.

Utility Services

On-site utility service systems required to support the BDC IROFS are provided. Each utility service system required to support IROFS is designed to perform its function under normal and abnormal conditions. Utility systems are described in the ISA Summary.

Inspection, Testing, and Maintenance

SSCs are inspected, tested and maintained in accordance with the graded levels of the IIFP QAP. SSCs that are determined to be IROFS have applicable management measures applied as discussed in IIFP LA, Chapter 11. ~~are designed to permit inspection, maintenance, and testing.~~

Instrumentation and Controls

Instrumentation and control systems are provided to monitor variables and operating systems that are significant to safety over anticipated ranges for normal operation, abnormal

operation, accident conditions and safe shutdown. These systems ensure adequate safety of process and utility service operations in connection with their safety function.

The variables and systems that require surveillance and control include process systems having safety significance requiring or involving IROFS including overall confinement system, confinement barriers and their associated systems, and other systems. Controls shall be provided to maintain these variables and systems within the prescribed operating ranges under normal conditions. Instrumentation and control systems are designed to fail into a safe state or to assume a state demonstrated to be acceptable on some other basis if conditions such as disconnection, loss of energy or motive power or adverse environments are experienced.

Defense-in-Depth Practices

The IIFP Facility and system designs are based on defense-in-depth practices. The design incorporates a preference for engineered controls over administrative controls to increase overall system reliability. Furthermore, the engineered controls preference is for use of passive engineered controls over active engineered controls. The design also incorporates features that enhance safety by reducing challenges to IROFS. The IIFP Facility and system IROFS are identified in the ISA Summary.

Exemption Request for Financial Assurance:

FRAI-8. *By letter dated August 12, 2011 (ML112351140) INIS submitted an exemption request to 10 CFR 40.36(e) for financial assurance. Specifically the exemption requested a modified timeframe for submitting financial assurance for decommissioning which states, “provide the financial assurance instruments to the NRC 6 months prior to operations and to fund the instruments 21 days prior to operations.*

In a phone conversation held September 16, 2011 (ML112700375) the NRC expressed concern that INIS may receive contaminated equipment during construction as part of their purchase of equipment from the Sequoyah Fuels former uranium deconversion facility. The exemption mentions that decommissioning costs may be required for this contamination, but does not include the decommissioning cost analysis or funding mechanism required by 40.36. In subsequent phone conversions, the NRC staff has come to understand that the contamination consists of source material (UF4) and would not exceed 15 lbs. This information has not been provided formally to the NRC.

Consistent with the regulatory requirements in 40.14 and 40.36, provide additional information in the exemption request on the type, quantity, and chemical form of “contamination” which may be received on site during construction. Specify how the material will be licensed and whether or not it needs to be addressed as part of the financial assurance exemption request. If the material is part of the exemption request (e.g., not licensed under a general license), address the decommissioning costs associated with this “contamination.” If the intent is to limit the “contamination” below a regulatory threshold during construction (e.g., a general license, 40.22 or 40.36(b)), provide a commitment in the license application which specifies the material will not exceed the threshold and summarize the basis for not providing financial assurance during construction.

RESPONSE: The subject “request for exemption” has been re-written to further clarify the request and will be included in the IIFP LA, Chapter 1 as described in the License Documentation Impact below.

License Documentation Impact: A new Section 1.5.2 will be added to Section

1.5 Special Exemptions and Special Authorizations

1.5.2 Exemption from Certain Provisions of 10 CFR 40.36, “Financial Assurance and Recordkeeping for Decommissioning, Paragraph (d)”.

In accordance with 10 CFR §40.14 (CFR, 2011), "Specific exemptions," IIFP requests an exemption from certain provisions of 10 CFR 40.36 (CFR, 2011), "Financial assurance and recordkeeping for decommissioning," paragraph (d). Specifically, 10 CFR 40.36(d) requires that "...the decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning...."

As stated in Section 1.2.2 *Financial Qualification* of the License Application; “IIFP presently intends to utilize a surety bond and Standby Trust Fund method to provide reasonable financial assurance of decommissioning funding will be available at the time of decommissioning the facility. At least six months prior to the receipt of licensed material in quantities and form requiring decommissioning funding, IIFP will provide NRC the financial assurance instrument that IIFP intends to execute. Upon finalization of the specific funding instrument to be used and at least 21 days prior to the commencement of operations, IIFP will supplement its application to include the signed, executed documentation.”

The justification to provide the financial assurance instruments to the NRC 6 months prior to operations and to fund the instruments 21 days prior to operations is to allow issuance of the license so construction can commence without accruing costs associated with funding the financial assurance mechanism while at the same time providing the NRC with a sufficient amount of time to review the financial assurance instruments before licensed material would be brought on site.

Uranium contaminated equipment obtained from the Sequoyah Fuels facility will be decontaminated prior to transfer to the construction site. If residual uranium contamination, as uranium tetrafluoride or uranium oxides, associated with Sequoyah Fuels equipment cannot be decontaminated to unrestricted use levels, then this equipment will be received on-site and controlled in accordance with New Mexico Administrative Code, 20.3.3.304 B. *Small Quantities of Source Material*. This equipment has been included in the decommissioning cost estimate and will be funded for decommissioning when the financial assurance mechanism is implemented as described above.

Therefore, IIFP specifically requests an exemption from the 10 CFR 40.36(d) (CFR, 2011) requirement that the “decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning and a signed original of the financial instrument obtained to satisfy the requirements of paragraph (e) of this section”; and alternatively that IIFP can provide the financial assurance instruments to the NRC 6 months prior to the receipt of licensed material in quantities and form requiring decommissioning funding and to fund these instruments 21 days prior to the receipt of licensed material in quantities and form requiring decommissioning funding.

Consistent with §40.14(a);

Granting the exemption is authorized by law;

The decommissioning liability associated with a site that does not possess licensed material, as would be the case during construction, should be considered zero. This is consistent with the Prepayment funding mechanism described in §40.36(e)(1) which states (emphasis added); “*Prepayment is the deposit prior to the start of operation into an account segregated from licensee assets and outside the licensee’s administrative control...*”. This method of funding is also consistent with International Isotope Inc. License SUB-1587 Amendment 1 (Docket No. 40-9058) Block 17.

Granting the exemption will not endanger life or property or the common defense and security;

Delaying the funding of financial assurance until the receipt of licensed material in quantities and form requiring decommissioning funding does not endanger life or property or the common defense and security because the cost associated with decommission the facility during the construction phase is considered zero. Financial assurance for decommission will be in place prior to the receipt of licensed material in quantities and form requiring decommissioning funding when the decommission liability costs would be assured.

Granting the exemption is otherwise in the public interest;

A requirement for funds to be set aside for the cost of decommissioning the facility prior to the receipt of licensed material in quantities and form requiring decommissioning funding presents an undue financial burden on IIFP. The decommissioning liability associated with the IIFP facility during the construction phase is considered to be zero. The cost associated with maintaining financial assurance instruments during the construction phase of the project is not warranted, these costs could be allocated toward construction activities which provide employment opportunities to the local community which is in the public interest.

Granting the exemption meets the categorical exclusion criteria cited in §51.22(c)(25)(vi)(H) and (I) and therefore does not require a revision to the Environmental Report submitted with the License Application or a standalone environmental review.

FRAI-9. *The current language in the exemption request contains a number of phrases which do not provide an adequate scope to define the extent of the exemption. The original exemption request contains several different phrases including, “prior to operations,” “prior to start-up,” “prior to licensed operations,” “provide reasonable financial assurance,” etc. These phrases are not well defined.*

Consistent with the requirements in 40.36(d), clarify the meaning of the phrases “operations” and “start-up” to be the receipt on site of radioactive material under the proposed license. Replace the phrase “reasonable financial assurance” with “financial assurance in the amount of the cost estimate”

RESPONSE: The response is incorporated as part of the response to FRAI-8 above.

License Documentation Impact: See License Documentation Impact for FRAI-8 above.