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BEFORE THE SECRETARY

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

In the Matter of)
Pa'ina Hawaii, LLC) Docket No. 030-36974
)
Materials License Application) ASLBP No. 06-843-01-ML
)

APPLICANT PA'INA HAWAII, LLC'S ANSWER TO INTERVENOR
CONCERNED CITIZENS OF HONOLULU'S AMENDED ENVIRONMENTAL
CONTENTIONS # THROUGH #5

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APPLICANT PA'INA HAWAII, LLC'S ANSWER TO INTERVENOR
CONCERNED CITIZENS OF HONOLULU'S AMENDED ENVIRONMENTAL
CONTENTIONS #3 THROUGH #5

- I. ALL OF INTERVENOR'S "NEW" AND "AMENDED CHALLENGES TO THE AUGUST 21, 2007 FINAL ENVIRONMENTAL ASSESSMENT (FINAL EA) SHOULD BE DENIED AND/OR DISMISSED ON THE GROUNDS OF "MOOTNESS," AS WELL AS ON SEVERAL OTHER GROUNDS.

On June 21, 2007 this Board issued an Order which instructed Intervenor CONCERNED CITIZENS OF HONOLULU ("Intervenor") to file "amended" or "new" contentions following the NRC Staff's issuance of its Final Environmental Assessment ("Final EA") and its related Finding Of No Significant Impact ("FONSI"), and the Board instructed Intervenor to file its "amended" or "new" contentions within 21 days of final service of the Final EA upon it.

The Final EA and the related FONSI were issued and served on August 13, 2007.

Intervenor filed its purported "amended" or "new" contentions on September 4, 2007.

Pursuant to the Board's June 21st Order, Applicant PA'INA HAWAII, LLC ("Pa'ina") herein files its Answer to Intervenor's amended or new contentions. Virtually all of the amended or new contentions are "moot" and should be denied and/or dismissed. Several of the amended or new contentions suffer from other legal infirmities and should also be denied/dismissed for those additional reasons.

A. Intervenor Bargained For, And Got, An EA Which Had Well-Known Size And Content Parameters Under CEQ Regulations; Now, Intervenor Seeks To Ignore Those Parameters Because Intervenor Is Unhappy With The Bargained-For EA.

By way of background, on April 27, 2006, this Board approved a Stipulation between Intervenor and the NRC Staff wherein the Staff was to produce an Environmental Assessment. In so negotiating and stipulating, Intervenor and its learned counsel knew and should have known that it was bargaining for a "concise public document." As noted in the "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," the CEQ set forth several parameters for EA's:

". . . An environmental assessment is a concise public document . . . Since the EA is a concise document, it should not contain long descriptions or detailed data which the agency may have gathered. Rather, it should contain a brief discussion of the need for the proposal, alternatives to the proposal, the environmental impacts of the proposed action and alternatives, and a list of agencies and persons consulted. 40 C.F.R Section 1508.9(b)

While the regulations do not contain page limits for EA's, the Council has generally advised agencies to keep the length of EA's to not more than approximately 10-15 pages . . . To avoid undue length, the EA may incorporate by reference background data to support its concise discussion of the proposal and relevant issues."

Here, the Intervenor got what it bargained for, indeed, even more. The Final EA consisted of 13 pages of text, with an Appendix A (design drawings) of 6 additional pages, an Appendix B of 8 additional pages, and an Appendix C of an additional 18 pages, for a total of 45 pages.

What is more, the NRC Staff prepared a 44-page "Final Topical Report" which was served upon the parties on May 7,

2007. The Final Topical Report explored and analyzed in mathematical and scientific detail several of the contentions raised by Intervenor.

A total of 89 pages, for an irradiator that was supposed to be "categorically excluded" from NEPA.

Not only did Intervenor get what it bargained for, it actually received a far longer and much more substantive document than it bargained for.

B. Intervenor's August 21, 2007 Amended And New Contentions Should Be Denied Because Intervenor's Generalized, Formulaic Contentions Fail To Provide A Specific Statement Of The Legal Or Factual Issues To Be Raised.

Intervenor raises at least 25 "new" or "amended" contentions in its September 4, 2007 filing. The 25 "new" or "amended" contentions are designated by the use of "bullets" on Pages 9-11 of Intervenor's September 4th filing.

Intervenor's "cookie cutter" presentation of the 25 new "bullets" bears some scrutiny and should result in dismissal/denial. First, Intervenor's 25 "bullets" are written in a very mechanical and formulaic manner, characterized by the fact that almost every "bullet" begins with identical or similar terminology. Using that identical or similar terminology, Intervenor critiques in general terms the Final EA, successive paragraph by successive paragraph.¹ The critiques are vague factual questions or conclusory legal statements.

¹ Formulaic recitations of a cause of action "will not do." Bell Atl. Corp. v. Twombly, 127 S. Ct. 1955, 1965 (2007)(formulaic allegations insufficient, case dismissed for failure to state claim).

The overall effect of Intervenor's methodology was that Intervenor simply but improperly "heaved the entire contents of a pot against a wall in the hopes that something would stick." Independent Towers of Washington v. Washington, 350 F. 3d 925, 929 (9th Cir. 2003) (allegations dismissed); see generally Chevron USA, Inc. v. Vermillion Parish School Board, 215 F.R.D. 511, 514 (DC La. 2003)

Thus, in its September 4th filing, Intervenor simply "heaved the entire contents of a pot against a wall" hoping that some of its generally-worded, conclusory contentions would "stick." However, each of those generalized, formulaic contentions should be dismissed/denied because they violate the NRC's pleading requirements. 10 C.F.R. Sec. 2.309(f)(1)(i)-(vi).

C. All Of Intervenor's "New" Or "Amended" Environmental Contentions Were Filed Too Late, All The Relevant Information Was Previously Available, And There Is No Materially-Different New Information.

As will be further discussed in detail below, almost all of Intervenor's 25 new or amended contentions violate the three requirements of 10 C.F.R. Sec. 2.309(f)(2): (i) The information upon which the amended or new contention is based was not previously available; (ii) the information upon which the amended or new contention is based is materially different than information previously available; and (iii) the amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

Here, the location and the design of Pa'ina's proposed irradiator facility have been well known since its Application was filed on June 23, 2005. Nothing has changed. Intervenor in its "amended" and "new" contentions utilized the testimony of the very same experts as it utilized in its original Petition filed October 3, 2005, and its later February 9, 2007 filing.

Practically speaking, it is difficult to imagine how Intervenor and its experts can now make valid "amended" or "new" contentions under the requirements of 10 C.F.R. Sec. 2.309(f)(2).

D. Almost All Of Intervenor's "New" Or "Amended" Environmental Contentions Are "Moot" And Should Be Denied/Dismissed.

Below, Pa'ina will address each of Intervenor's "amended" or "new" contentions seriatim and will show that each of them is now "moot." Wherever applicable, other legal deficiencies in Intervenor's "amended" or "new" contentions will be argued. For accuracy, each of Intervenor's "amended" or "new" contentions will be quoted in full at the beginning of each numbered contention.

1. The Final EA fails to provide - any calculations, analysis or data substantiating its claim "it is highly unlikely that an employee could receive more than the occupational dose limit" or quantification of what it means by "unlikely" (Final EA at 8)

This "new" or "amended" contention by Intervenor should have been asserted on October 3, 2005 in its initial Petition. Sufficiently detailed facts were disclosed in Pa'ina's Application which indicated that employees would be hired to work the irradiator, and from which this

contention regarding employee safety could and should have been asserted. This is especially true because Intervenor's expert, Gordon R. Thompson, expressed great and detailed knowledge of irradiators and "harm to people and/or the environment." However, Intervenor's initial Petition failed to mention either Pa'ina's employees or occupational overdoses. Consequently, this "new" contention is made far too late.

In any event, the Staff's discussion of unlikely occupational radiation overdoses in the Final EA is informative and concise. The Staff's discussion expressly refers to two (2) informative and fact-filled analyses. (See Staff's references to NRC 2003; NRC 2006c) The Staff utilized an actual analysis and investigation performed at CFC in Pennsylvania.

The Staff fulfilled its duty to analyze and briefly summarize the lack of occupational hazards created by the irradiator. The Intervenor's amended or new contention is therefore "moot."

2. The Final EA fails to provide - Any calculations, analysis or data regarding its evaluation of "expected dose rate" outside the irradiator (Id.);

This "new" or "amended" contention by Intervenor should have been asserted on October 5, 2005 in its initial Petition. Sufficient and detailed facts were disclosed which put the irradiator at its Palekona Street site, which raised the possibility of irradiation in the neighborhood. However, Intervenor's initial Petition failed to raise this contention. It should be denied/dismissed because it is untimely.

In any event, the Staff fully analyzed the radiation dosage outside the irradiator, including 20-25 feet from the pool edge, and again referred to its sources. (See Staff's references to NRC 2003, especially Part VI, Radiation Surveys (found at ML033080387); see also NRC 2006c)

Upon completing its analysis, the Staff properly concluded that the irradiator would cause no more radiation than exists in background radiation, and the radiation outside the irradiator would therefore have no significant impact on occupational or public health.

Thus, this "amended" or "new" contention is "moot."

3. The Final EA fails to provide - any calculations, analysis or data substantiating its claim "it is unlikely that a member of the public could receive more than the public limit" or quantification of what it means by "unlikely" (Id.);

This "new" or "amended" contention by Intervenor should have been asserted on October 5, 2005 in its initial Petition. Sufficient and detailed facts were disclosed which put the irradiator at its Palekona Street site, which raised the possibility of irradiation in the neighborhood or in the public sphere around the site. However, Intervenor's initial Petition failed to raise this contention, despite the testimony of Marvin Resnikoff's testimony regarding "risk assessment." This contention should be denied/dismissed because it is clearly untimely.

In any event, through the EA process, the Staff obtained and studied data and reports pertaining to public limits of radiation. The Staff detailed some of the safety features, safeguards and redundant systems within the irradiator facility. (Final EA at 2-6) The Staff also

analyzed several referenced documents and detailed the probable dosages both within the facility and outside the facility, concluding that there would be no impacts beyond "naturally occurring background radiation." (Final EA at 8)

This "amended" or "new" contention is clearly "moot."

4. The Final EA fails to provide - Any calculations, analysis or data substantiating its claim "transportation impacts from normal operations would be small" (Id.);

This "amended" or "new" contention asserted by Intervenor should be denied/dismissed for at least two reasons.

First, the Board dismissed Safety Contention No. 8 on January 24, 2006 by indicating that the transportation of Cobalt-60 to the Pa'ina site was "beyond the scope of" this proceeding. It is the corporation or entity which is licensed to deliver Co-60 which is strictly responsible for the safety and impacts of its delivery, and here that is not Pa'ina. Intervenor's "amended" or "new" contention is therefore beyond the scope of this environmental proceeding.

Second, and in any event, the Staff went "beyond the call" and analyzed the transportation of sealed sources, even under "maximum dose". (RADTRAN 5.3; NRC 2006d) The Staff concluded that transportation of the sources would have "no significant impacts." (Final EA at 8)

Consequently, Intervenor's contention regarding transportation of sources to Hawaii is "moot."

5. The Final EA fails to provide - Any calculations, analysis or data substantiating its claim "[t]he proposed irradiator would potentially have small beneficial impacts to socioeconomics" (id.);

This "amended" or "new" contention is vague and irreconcilably impossible to understand. Is Intervenor actually contending that the beneficial socioeconomic impacts would be "large," or that there would not be any such impacts, or that the impacts would be negative? Because Intervenor has failed to "provide a specific statement of the legal or factual issue," this unspecific contention should be dismissed under the NRC's pleading requirements. 10 C.F.R. Sec. 2.309(f)(1)(i)

Furthermore, Intervenor should have asserted this contention, or any contention about the beneficial or negative socioeconomic impacts of the irradiator, in its initial October 3, 2005 Petition. This is especially true where on October 3, 2005, Intervenor's expert Gordon R. Thompson in his Declaration acknowledged and declared:

"According to the NRC, Pa'ina Hawaii has stated that the proposed irradiator would be used primarily for the irradiation of fresh fruit and vegetables bound for the US Mainland. Other items to be irradiated would include cosmetics and pharmaceutical products"

Thus, from the very outset, it was clear that Pa'ina's irradiator would have socioeconomic impacts. However, Intervenor failed to raise any contentions—good, bad, or ugly—about the socioeconomic impacts. Intervenor's "amended" or "new" contention as stated above—vague and as ambiguous as it is—was therefore raised much too late in these proceedings.

Finally, and in any event, the Staff clearly analyzed the socioeconomics of the proposed irradiator, expressly citing as data two reports, APHIS 2004 and APHIS 2006. In addition, the Staff had before it the Kohn letter of August 29, 2006, entitled "Honolulu irradiator impacts." The Staff compared the proposed irradiator with other alternative treatments such as methyl bromide and heat treatment, along with the downsides of those treatment methods. The Staff also studied and compared the relative economics of various types of treatments. The Staff concluded that the irradiator was a cheaper and much more effective alternative, and would have "small beneficial impacts on socioeconomics." Intervenor's vague, belated contention is therefore also "moot."

5. The Final EA fails to provide - any justification for focusing its review of potentially significant impacts on "offsite consequences" (Id.);

This "amended" or "new" contention is vague and irreconcilably impossible to understand. Is Intervenor actually contending that the NRC Staff should have focused on "onsite" consequences, or is Intervenor actually contending that the NRC Staff should have focused on "offsite" consequences? Precisely, what is the beef? Because Intervenor has failed to "provide a specific statement of the legal or factual issue," this vague and

nonspecific contention should be dismissed under the NRC's pleading requirements. 10 C.F.R. Sec. 2.309(f)(1)(i)

In any event, the NRC Staff studied both the potential onsite and offsite consequences of Pa'ina's irradiator.

This "amended" or "new" contention ought to be denied/dismissed because it is vague and nonspecific, and it is now also "moot."

6. The Final EA fails to provide - any calculations, analysis or data substantiating its claim "a loss of 6 feet of pool water would result in a dose of approximately 300 millirem/hour" or justification of its assertion that "the increased dose rate will not be sufficient to have a significant environmental effect on the area around the proposed facility" (Id.);

This "amended" or "new" contention by Intervenor should have been raised in its original October 3, 2005 Petition, where the irradiator's design was well known to its expert Marvin Resnikoff (who testified in the CFC irradiator proceeding in "Milford Township, Pennsylvania"), and also to its expert Gordon R. Thompson (who noted the "water-filled pool 22 feet deep"). Thus, at the very outset of this case, the potential problem of loss of shielding water was well-known to Intervenor and its engineering/irradiation experts, but Intervenor did not make the contention. Now, it should be deemed "too late." 10 C.F.R. Sec. 2.309(f)(2)

In any event, the NRC Staff specifically analyzed the situation, referred to scientific data, noted that the radiation would have a "skybeam" (or collimated beam) effect, and concluded that the effects of losing 6 feet of water would not have a significant environmental effect. The contention must be deemed "moot" at this point.

This "amended" or "new" contention of Intervenor should be denied/dismissed.

8. The Final EA fails to provide - Any justification for its decision to analyze only a 6-foot water loss, especially given that the depth of the water table is 2.4 m (8 feet) below the facility floor (Id. See Final Topical Report (ADAMS Accession No. ML071280833) at 1-2);

Taken at face value, this "amended" or "new" contention raised by Intervenor is vague and ambiguous, and appears to ask for the Staff's thought processes in using a 6-foot loss of water as an "example." "Why" the Staff would use an "example" to reflect its analysis fails to present a "specific statement of the legal or factual issue." This vague and abstract contention should be dismissed under the NRC's "specific" pleading requirements. 10 C.F.R. Sec. 2.309(f)(1)(i)

Furthermore, Intervenor should have raised this new contention as far back as December 30, 2005.

Intervenor and its experts had the necessary information from which to raise their contention regarding the interplay between the water table, on the one hand, and possible water loss in the irradiator pool, on the other hand, as early as November 30, 2005, through the Weidig Geoanalysts Report (ML053460276) which reported the water table as "7.8 to 8.6 feet" below the facility floor. Thus, for whatever reason, this contention about possible water loss below the water table is made "too late" and there is no "good cause" for the nearly two-year delay. 10 C.F.R. Sec. 2.309(f)(2)

Giving the Intervenor the benefit of the doubt, there was yet a second opportunity for Intervenor to raise the

issue of the interplay between the water table, and possible water loss in the irradiator pool. Intervenor clearly knew the water table level by May 7, 2007 when the Staff issued the Final Topical Report (ML071280833), which reported the "8.4" water table depth. Thus, Intervenor's "amended" or "new" contention should also have been asserted on or by June 7, 2007.²

In any event, the Staff had before it the detailed Microshield Summary Sheet for the loss of 6 feet of the water pool, in which the Co-60 is located in the 18-foot pool. It also had before it the Microshield Calculation Review (Nov. 27, 2006) and the actual Inspection Report of CFC from Pennsylvania (NRC 2003). Based upon these and other substantial data in the record, the Staff analyzed and concluded that the 6-foot loss of water would not create significant environmental harm, nor cause a significant increase to worker exposure. Since the analysis was done, Intervenor's new contention is now "moot."

Thus, Intervenor's contention is made far too late, and, in any event, it is now "moot."

9. The Final EA fails to provide - Any calculations, analysis or data substantiating its claim "worker doses should not be significantly increased in the area around the pool" in the event of a loss of shielding water or quantification of what it means by "significantly increased" (Final EA at 9);

This "amended" or "new" contention could have been made in Intervenor's initial Petition in October 2005.

² On May 1, 2006 the Board issued an Order requiring that any new or late-filed contentions should be filed by Intervenor on or within 30 days of its discovery of a factual basis for the contention.

Intervenor knew the location of the irradiator, its proposed function to irradiate a number and variety of products, and the fact that it would use employees and workers. However, as noted in Sections D.1 and D.2 above, the terms "employee" and "worker" are missing from the initial Petition, despite Intervenor's presentation of its expert testimony which involved radiation and its effects on humans.

In any event, the Staff studied the potential problems. The Staff utilized a variety of documents and analyses (i.e., E-mail from E Keegan to M. Blevins, ML063480293; See Staff's references to NRC 2003, especially Part VI, Radiation Surveys (found at ML033080387)), the Staff applied the regulations governing pool-type irradiator design, and the Staff concluded that worker doses would not be significantly increased. Thus, the contention is now "moot."

10. The Final EA fails to provide - any analysis to justify its assumption that "debris around the pool" would prevent "inadvertent access to areas of elevated radiation directly above the pool" (Id.);

This "amended" or "new" contention should have been asserted in Intervenor's initial October 3, 2005 Petition. The pool design, the fact that it was to be located within a building, and the Co-60 sources located at the bottom of the pool, were well known to Intervenor and its experts. Indeed, more than a year after Intervenor filed its Petition, Intervenor's own experts referred to "debris," "flying debris," and "columns and girders." (Declaration of Mete A. Sozen, filed herein on February 9, 2007) It is far too late to raise this contention at this time.

Furthermore, and in any event, the Staff took into account the structure of the irradiator pool and its building, along with Intervenor's own claims that debris would be left around the irradiator facility if an event caused the pool level to diminish. The Staff properly concluded that the debris would also assist in barring persons from accidentally approaching the pool site (from which the skybeam might be emanating).

Intervenor's contention about "debris" helping to prevent accidental exposure to radiation is therefore moot.

11. The Final EA fails to provide - any calculations, analysis or data substantiating its claim "[i]t is unlikely that a Co-60 sealed source would be breached in the event than an aircraft crashes into the proposed facility" or quantification of what it means by "unlikely" (Id. at 10)

Again, Intervenor could and should have raised this particular contention in its initial October 3, 2005 Petition. Both Intervenor and its experts professed substantial and detailed knowledge of the design of an irradiator and its sources. Intervenor and its experts were also aware of the possibility of air crashes, in fact, Intervenor made airplane crashes a central feature of its initial environmental contentions. However, at no time in its October 3, 2005 Petition did Intervenor or its experts contend that an aircraft crash might or would breach a sealed source. (Original Petition of Intervenor, filed

herein October 3, 2005 (ML052970026)) Now, the contention is made too late. 10 C.F.R. Sec. 2.309(f)(2)

Intervenor's "amended" or "new" contention is also a direct challenge to 10 C.F.R. Sec. 36.21, which established the shock and impact requirements for a source assembly. Challenges to the NRC's regulations are impermissible during a materials licensing procedure.

Notably, Intervenor's experts present no calculations, no formulas, and no mathematical conclusions establishing just what amount of shock or pressure would be exerted on the sealed sources which might cause a breach. 10 C.F.R. Sec. 2.309(f)(1)(iii) and (iv) require "specific sources" and "sufficient information" to create genuine dispute of fact. Here, Intervenor's bare statement is unsupported by any specific information which creates a genuine dispute. The purported contention ought to be denied/dismissed.

In any event, the Staff analyzed the (highly improbable) likelihood of the sealed sources being "breached" by an airplane crash, and included the materials in its May 2007 Topical Report. (See also Registry of Radioactive Sealed Sources and Devices, Safety Evaluation of Sealed Sources No: NR-0220-S-103-S, MDS Nordion, January 23, 2002) The sealed sources comply with all applicable NRC regulations. The Staff properly concluded that a breach of the sealed sources would be "unlikely." "Unlikely" is defined by the Staff to represent "a

qualitative description of probability used to indicate a low probability of occurrence based on staff experience and the scenarios reviewed." (Final EA at C-13)

Thus, this contention is made much too late, it impermissibly challenges an NRC regulation, it is unsupported by any specific or sufficient expert testimony, and, in any event, the contention is "moot."

12. The Final EA fails to provide - Any analysis of the potential for physical destruction of the sources as a result of an aviation accident to contaminate the pool water or allow dispersal of pulverized Co-60 via breaches in the pool lining (See 2/7/07 Resnikoff Report at 20-21; 8/24/07 Resnikoff Dec. Para. 9);

This "amended" or "new" contention is subject to the same deficiencies as are noted in #11 immediately above. Thus, this contention is made much too late, it impermissibly challenges an NRC regulation, it is unsupported by any specific or sufficient expert testimony showing how the Co-60 was to be pulverized, and, in any event, the contention is "moot."

13. The Final EA fails to provide - Any calculations, analysis or data substantiating its claim that minimal water evaporation would occur in a jet fuel fire.

Likewise, this contention should have been raised at the very outset of this proceeding, and Intervenor raises it "too late" in these proceedings. Pa'ina's plans were on file early in this matter, Intervenor knew that Co-60 was to be utilized, that it lay in the pool water, and that jet fuel might be present. Intervenor had retained its

experts. Consequently, this contention is raised "too late" and ought to be dismissed.

Furthermore, and in any event, NRC Staff analyzed the possible (and very unlikely) consequences of a plane crash into the irradiator facility, and studied the very unlikely potential for jet fuel to contaminate and/or engulf the irradiator's water pool. (NRC 2004; MDS 2002; Turns 2000; Bolz and Yuve 1973) The Staff properly concluded that there would be "no significant impacts" on public health and safety.

The Intervenor is unhappy with the Staff's methodology and conclusion, BUT the fact remains that the Staff conducted the analysis, reached its conclusions, and kept its conclusions concise.

This contention is made too late, and in any event it is moot.

14. Final EA fails to provide - Any analysis of the potential for an aviation accident to breach the irradiator pool, allowing shielding water to escape and burning jet fuel to come into contact with the sources (See 2/7/07 Resnikoff Report at 19-21; 8/24/07 Resnikoff Dec. Para. 11)

This contention should have been raised at the very outset of this proceeding, and Intervenor raises it "too late" in these proceedings. Pa'ina's plans were on file early in this matter, Intervenor knew that Co-60 were to be utilized, and Intervenor had its experts retained. For example, Marvin Resnikoff expressly referred to the "pool liner" to be damaged by a dropped cask, and he also referred to "the loss of aircraft fuel" in case of a crash. However, Resnikoff did not tie together a break in the pool liner to spilled aircraft fuel. (Resnikoff Declaration,

found at ML052970026). Consequently, this contention is raised "too late" and ought to be dismissed. 10 C.F.R. Sec. 2.309(f)(2)

In any event, the Staff analyzed relevant burning temperatures, found that Co-60 melts at 2,723 degrees Fahrenheit, and (along with other reasons) concluded that jet fuel's highest burning temperature of 2,200 degrees would not have any significant impacts on public health and safety.

This contention is made too late, and in any event, it is moot.

15. Final EA fails to provide - Any calculations, analysis or data substantiating its apparent assumption that a jet fuel fire could not damage the sources, even though the Final EA acknowledges that the average temperature at which jet fuel burns (1,814 degrees F) exceeds by hundreds of degrees the temperatures that sources must withstand for an hour to comply with 10 C.F.R. Sec. 36.21(b) (1,112 degrees F) or that sources from Nordion can withstand for an hour (1,475 degrees F) (Final EA at 10; see also 2/7/07 Resnikoff Report at 19, 21; 8/24/07 Resnikoff Dec. Para. 12);

For the same reasons set forth in #14 immediately above, this contention should have been raised at the very outset of this proceeding, and Intervenor now raises it "too late." Pa'ina's plans were on file early in this matter, Intervenor's experts mentioned jet fuel, and they knew that Co-60 were to be utilized in the irradiator. However, neither Intervenor nor its experts contended that there was any connection between jet fuel burning temperatures, and Cobalt-60's melting temperatures. Marvin Resnikoff failed to mention or raise any contention about

so-called "adiabatic" jet fuel flame temperature. Consequently, this "amended" or "new" contention is raised "too late" and ought to be dismissed.

In any event, the Staff on the basis of "good science" analyzed the (unlikely) possibility of a jet fuel fire and concluded that the sources would not likely be damaged by high temperatures, and the public health would suffer no significant impacts upon public health and safety.

This contention is made too late, and in any event, it is now moot.

16. Final EA fails to provide - Any analysis of the potential for burning jet fuel to approach the maximum ("adiabatic") flame temperature for jet fuel (3,100 degrees F) which greatly exceeds the melting point of cobalt (2,723 degrees F) (Final EA at 10; see also 8/24/07 Resnikoff Dec. Para. 12);

This contention should have been raised at the very outset of this proceeding, and Intervenor now raises it "too late" in these proceedings. Pa'ina's plans were on file early in this matter, Intervenor knew that Co-60 were to be utilized, and Intervenor had its experts retained at the very outset of this case. Airports, jets, crashes, jet fuel and potential fires were known "givens" from the very outset. However, Marvin Resnikoff failed to raise or even mention any contention about so-called "adiabatic" jet fuel flame temperatures. Consequently, this contention is raised "too late" and ought to be dismissed.

Intervenor's challenge to the required temperature limits of Co-60 sources is actually an impermissible challenge to 10 C.F.R. Part 36.

In any event, the Staff analyzed the most likely scenarios arising from a jet crash and fuel fires, and properly drew its conclusions. (See "Fire Dynamics Tools Quantitative Fire Hazard Analysis Methods, NUREG-1805" which utilized a "conservative method for estimating fire risk") The fact that Intervenor at this late date is dissatisfied with the Staff's methodology and conclusions does not create a valid contention.

This "amended" or "new" contention was made too late, it directly challenges Part 36, and in any event the contention is moot.

17. Final EA fails to provide - Any calculations, analysis or data substantiating its claim "a seismically-induced radiological accident is considered "negligible" (Final EA at 10);

This contention should have been "specifically" raised at the very outset of this proceeding, and therefore Intervenor raises it "too late." Pa'ina's plans were on file early in this matter, Intervenor knew that Co-60 were to be utilized, and Intervenor had its experts retained at the very outset of this case. Earthquakes and seismically-induced effects were known by Intervenor from the very outset. Consequently, this "specific" contention is raised "too late" and ought to be dismissed.

In any event, the irradiator's design was considered in detail by the Staff, the horizontal ground motions at the site were analyzed, the forces of seismic activity were considered by the Staff, and the manner of Co-60 source installation was considered. The Staff also considered mitigation measures. The Staff properly concluded that the chances of a seismic incident would be "negligible." It

appears that Intervenor simply disagrees with the Staff's methodology and its conclusions.

This contention is made too late, and in any event, it is moot.

18. Final EA fails to provide - any calculations, analysis or data substantiating its claim that "effects of seismic activity would be mitigated by compliance with the International Building Code" or description of the nature of, such minimization (Id.);

The proposed irradiator itself has already been issued a FONSI, meaning that the project will have no significant environmental impacts.

Nevertheless, the Staff noted further mitigation measures and techniques as set forth in the International Building Code. This is simply a "common sense" point and, of course, a legal requirement for construction.

This new contention should have been raised earlier in these proceedings. The Staff referred to the International Building Code in its May 7, 2007 Topical Report, relating to the design basis for seismic compliance with the IBC. If Intervenor desired to further question or discuss the design basis for seismic compliance by Pa'ina under the IBC, it should have filed a new or amended contention by June 7, 2007.³ Intervenor's September 4th filing of this new contention is simply too late.

³ The Board's May 1, 2006 Order required new or amended contentions to be made within 30 days of the information coming forth. That standing order was not altered until the Board's June 21, 2007 Order. Intervenor's new contention was due on June 7, 2007 or two weeks before the Board's June 21, 2007 Order.

19. Final EA fails to provide - Any calculations, analysis or data substantiating its claim the source design would "minimize the amount of force that could be transferred to the source" or description of the nature of, or quantification of the extent of, such minimization (Id.)

Again, this new contention should have been raised at the very outset of this proceeding, and Intervenor now raises it "too late." Pa'ina's intent to use Co-60 sources in compliance with Part 36 were legal requirements since the very beginning of its Application. Intervenor knew that Co-60 sources were to be utilized, and Intervenor had retained its nuclear engineering expert (Gordon Thompson) at the very outset of this case. To raise a contention at this late date questioning "source design" is far too late.

Furthermore, this new contention constitutes a fundamental challenge to the validity of 10 CFR Part 36, which established the design parameters for Co-60 encapsulated sources. This is an impermissible challenge in this licensing proceeding. If Intervenor does not like the Part 36 design parameters, it should petition the NRC to change Part 36.

Furthermore, and in any event, the Staff had analyzed detailed mathematical and seismic data prior to reaching its conclusion.

Intervenor's new contention is made too late, it directly challenges the applicable NRC regulations, and it is "moot" because the Staff analyzed the appropriate source materials. This new contention ought to be denied.

20. Final EA fails to provide - Any calculations, analysis or data used in the stylized fluid dynamic calculations that purportedly quantify tsunami and hurricane risk (Id.);

In any event, the Staff used a most traditional and commonly-known methodology ("stylized fluid dynamics") to accomplish its calculations, and reach its conclusions that the waves caused by hurricanes or tsunamis would have no significant public health or safety effects. The salient facts, calculations and drag forces are set forth in some detail in the Final Topical Report filed May 7, 2007, at pages 3-4 to 3-6. Intervenor's experts disagree on the methodology and the conclusions used by the Staff, albeit too late since Intervenor's should also have filed this new or amended contention on or by June 7, 2007.

However, despite the disagreement of Intervenor's experts, the Staff's analysis based upon "good science" has been accomplished, and this contention is now moot.

21. Final EA fails to provide - Any calculations, analysis or data quantifying hurricane storm surge risk (Id. at 11);

This new contention should also have been raised by June 7, 2007 at the very latest, since the Staff set forth in detail its analysis and data regarding storm surge in the May 7th Final Topical Report. (See Final Topical Report, May 2007, at pages 3-4 to 3-11)

To raise a new contention at this late date questioning the Staff's chosen methodology or conclusions regarding hurricane storm surge risk is far too late.

In any event, this new contention is "moot" because the analysis and conclusions have been fully accomplished by the Staff.

22. Final EA fails to provide - Any calculations, analysis or data substantiating its assertion that the "possibility of a terrorist attack . . . is believed to be low" or quantification of a "low" probability (Id. at B-7);

This new contention should have been raised at the very outset of this proceeding, and Intervenor raises it "too late" in these proceedings. Pa'ina's location was known from the date it filed its Application, the Intervenor could have raised the "degree" of likelihood of a terrorist attack at the inception of this case on October 3, 2005 (but failed to do so), and the NRC has its own analysis of threat levels. To raise a new contention at this late date questioning the Staff's chosen methodology or conclusions is far too late.

Furthermore, Intervenor fails to back up its purported new contention with any "facts or expert opinions" which support Intervenor's supposed new contention, in violation of 10 C.F.R. Sec. 2.309(f)(1)(iii). Intervenor's purported new contention also fails to contain any information "demonstrating that a genuine dispute exists in regard to a material issue of fact" as required by 10 C.F.R. Sec. 2.309(f)(1)(iv).

Further, as noted in Pa'ina's March 8, 2007 "Answer" filed herein, Intervenor still fails to describe a "pathway" or "nexus" between the sealed sources secured in

the 18-foot pool, and the manner in which nefarious persons would use their hands or other instruments to make their "dirty bomb." Without this nexus, Intervenor fails to state a recognizable cause of action.

Finally, this new contention is "moot." The NRC has directly addressed the issue of "terrorism" by means of its Appendix B "Consideration of Attacks On The Proposed Pa'ina Hawaii, LLC Irradiator." The NRC in its Consideration even assumed for the sake of argument that a terrorist attack is carried out, but concluded that the environmental impact would not be significant:

"The NRC Staff concludes that the construction, and operation, of the Pa'ina irradiator facility, even when potential terrorist attacks on the facility are considered, will not result in a significant effect on the human environment. NRC safety and security requirements, imposed through regulations and orders, and implemented by the licensee, in combination with the design requirements for panoramic and underwater irradiators, provide adequate protection against successful terrorist attacks on irradiator facilities." (Pages B-7-8)

Thus, the new contention is made too late, it fails to state a cause of action, the term "low" is easily understandable,⁴ and the new contention is now "moot."

23. Final EA fails to provide - Any calculations, analysis, or data substantiating its claim the risk of terrorist attack has been reduced "to an acceptable level" or discussion of the quantification of what is considered an "acceptable level" of risk (Id.);

This claim is "moot" because, as noted in the prior quotation from the NRC "Consideration," the Staff even assumed a successful terrorist attack on the facility.⁵

⁴ The 9th Circuit in Environmental Protection Information Center v. Klamath Forest Alliance, 451 F. 3d 1005, 1013 (2006) approved the use in an EA of terms such as "negligible" and "immeasurable" where those terms are used in the proper context.

24. Final EA fails to provide - Any calculations, analysis, or data substantiating its claim "the likelihood of accidents involving exposure of workers to lethal doses from this specific irradiator design is expected to be low" or quantification of what it means by a "low" likelihood (Id. at C-10)

This new contention by Intervenor should have been asserted on October 3, 2005 in its initial Petition. Sufficiently detailed facts were disclosed in Pa'ina's Application from which this contention regarding employee safety could and should have been asserted, especially where Intervenor's expert, Gordon R. Thompson, touted his knowledge of nuclear matters, irradiators and resulting "harm to people and/or the environment." However, Intervenor almost completely failed to mention the term "employee" in its initial Petition. This new contention is made far too late.

Pa'ina's irradiator fulfills all of the design criteria set forth in 10 C.F.R. Chapter 36. Thus, Intervenor's challenge to the irradiator design (and its lack of potential to harm employees) is actually a challenge to the regulations, a challenge which is not permitted in this licensing proceeding.

Finally, the contention is "moot" since the NRC Staff carefully analyzed the possible protections against accidental radiation overdose. The Staff described and

⁵ What is particularly troubling to Pa'ina is the "blueprint" that Intervenor apparently seeks to provide to terrorists through this ostensibly-NEPA litigation. Thus, Intervenor complains that it wants the NRC Staff to provide in the EA the "physical vulnerabilities" of the proposed irradiator, it wants the NRC Staff to provide the irradiator's "specific features" which are susceptible to attack, and it wants the NRC Staff to provide the "likely modes of attack" that terrorism could use. (Intervenor's September 4, 2007 Amended Environmental Contentions #3 to #5, at page 22) Not only is this deeply troubling to Pa'ina, but if Intervenor and its "experts" wish to change NEPA and/or the NRC's regulations pertaining to terrorist attacks, they should properly seek relief in Congress or before the NRC.

noted protections and redundant systems to prevent accidental radiation overdose. (Final EA, pp. 2-6) Further facts and radiation design safeguards for employees are specifically described by the Staff. (Id., at 8)

This contention of accidental employee radiation overdose is made far too late, it is actually a direct challenge to the regulations which govern irradiator design, and the contention is "moot" because the Staff discussed substantial data and reached its FONSI conclusion. This new contention ought to be denied/dismissed.

25. Final EA fails to provide - Any calculations, analysis or data to back up its speculation that "there is no reason to believe the irradiator would have any effect" on tourism (Id. at C-12) support its conclusion that there would be no significant effect on tourism.

Intervenor fails to back up this "new" contention with any "facts or expert opinions" which support Intervenor's supposed new tourism contention, in violation of 10 C.F.R. Sec. 2.309(f)(1)(iii). Intervenor's purported new contention also fails to contain any information "demonstrating that a genuine dispute exists in regard to a material issue of fact" as required by 10 C.F.R. Sec. 2.309(f)(1)(iv).

This new contention by Intervenor should have been asserted on October 3, 2005 in its initial Petition. Sufficiently detailed facts were disclosed in Pa'ina's Application from which this contention regarding "tourism" could and should have been asserted, especially where Intervenor's expert, Gordon R. Thompson, expressed

knowledge of irradiators and "harm to people and/or the environment."

Moreover, the initial Petition referenced Pa'ina's geographical site near "the hub of Hawaii's transportation system," as if a challenge based upon tourism was forthcoming, but instead the Petition veered off to mention military locations, i.e., Hickam Air Force Base and Pearl Harbor.. (October 3, 2005 Petition, at p. 21) Indeed, in its initial Petition, Intervenor failed to even mention the term "tourism." Consequently, this new contention is made far too late.

In any event, the NRC Staff studied the tourism issue, and concluded that the irradiator facility would be visibly "indistinguishable" from the industrial buildings surrounding it; the irradiator would provide a small benefit to tourism by enhancing Hawaii's agriculture and Hawaii's fight against invasive species which threaten Hawaii's "native ecology" upon which much of Hawaii's tourism industry is built. Consequently, this tourism contention is now "moot."

E. Any Claim Arising Out Of "Irradiated Food" Is Beyond The Scope Of This Proceeding And Should Be Addressed In Another Forum.

This Board has already dismissed Intervenor's contentions based upon the propriety or impropriety of irradiating, and then eating, foods.

This contention should be denied, again.

F. The EA Properly Addressed All Reasonable Alternatives.

First, Intervenor's mere mention of an "e-beam irradiator" is utterly unsupported by any meaningful manufacturing,

scientific or economic testimony whatsoever, showing that it is appropriate for irradiating uneven foods of various and large thickness. See, e.g., Kelley v. Selin, 42 F. 3d 1501, 1521 (6th Cir. 1995) (NRC did not consider alternatives, since alternatives neither sufficiently demonstrated nor practicable for use; EA nevertheless approved)⁶

Similarly, Intervenor again repeats its earlier contention (first raised in its February 9, 2007 filing) that the EA fails to discuss "alternative sites" for the irradiator. However, for over two years Intervenor has failed to itself identify even one specific site on Oahu--or in the State of Hawaii, for that matter--which is currently suitable for Pa'ina's irradiator. Intervenor's own failure to specifically identify even one suitable alternative site--suitable under current zoning and land

⁶ The regulations of the Council of Environmental Quality (CEQ) did not require the Staff to consider "e-beam irradiation" as an alternative technology. The Staff is governed by 46 Fed. Reg. 18,026, 18,027 (March 23, 1981) which contains the definition of "reasonable alternatives": "Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense" In light of the CEQ's definition, it is noteworthy that Intervenor's mere mention of "e-beam technology" is unsupported by any expert testimony that e-beam/x-ray technology is "practical" or "feasible" or makes "common sense" where fruits, vegetables and other products of wide or varying thicknesses are being treated. Intervenor's "experts" have repeatedly avoided this particular topic.

During the public comment period, the NRC Staff received the following un rebutted facts about so-called "electron-beam irradiation technology": (1) the e-beam/x-ray manufacturer, Surebeam, filed for bankruptcy a year before Pa'ina's June 2005 Application herein; (2) the Big Island e-beam/x-ray facility had to financially reorganize under new ownership; (3) 93% of Hawaii's very expensive, oil-based electricity is lost in heat during conversion from electron beam to X-ray, raising the cost per pound of treated product to a prohibitive 4 cents; (4) the Big Island e-beam/X-ray technology has frequently broken down, and has caused massive losses of product and monies and raised serious questions about facility reliability; (5) e-beam/x-ray technology has only one fixed production capacity, and its inflexibility causes waste; (6) the cost of constructing this type of unreliable facility is estimated at \$6.5 million, or about double the cost of Pa'ina's proposed cobalt-60 facility; and (7) e-beam is not used anywhere in the world for irradiating fruit and products the size and variety set forth by Pa'ina. (ML070600583)

These strikingly negative facts, clearly justified the NRC Staff in disregarding the supposed alternative. It would defy "common sense" to force the Staff, Pa'ina, or any proposed irradiator operator for that matter, to consider an inefficient, unreliable and inappropriate technology which would likely force that operator into bankruptcy. Consequently, when the Staff disregarded Intervenor's unsupported suggestion of a failing technology, the Staff was fully complying with the CEQ's definition of "reasonable alternatives" as set forth in 46 Fed. Reg. 18,026, 18,027 (Mar. 23, 1981).

use laws--leads a reasonable person to the conclusion that there is no significant impact on the environment resulting from Pa'ina's chosen site. Morongo Band of Mission Indians v. FAA, 161 F. 3rd 569, 576 (9th Cir. 1998) ("[T]he Morongo Band has failed to point to a specific feasible alternative that would have bypassed the Reservation"); Goodman Group, Inc. v. Dishroom, 679 F. 2d 182, 186 (9th Cir. 1982) (compliance with current land-use laws points towards conclusion of no significant impact on environment)⁷

Intervenor's failure to select a "specific" and properly zoned alternate geographic site for the irradiator, along with its failure to suggest any legitimate or appropriate technological alternative, should result in Intervenor's contention based upon "alternatives" to be denied/dismissed.

G. There Is No "Great Controversy" Over Pa'ina's Irradiator.

The 9th Circuit has set parameters for what is "highly controversial" in NEPA challenges. The 9th Circuit has set parameters for what is "highly controversial" in NEPA challenges. Friends of Endangered Species, Inc. v. Jantzen, 760 F. 2d 976, 986 (9th Cir. 1985) Here, as earlier noted by Pa'ina,⁸ at the public hearing held on February 1, 2007, only 9 or 10 persons spoke out against the irradiator, versus 40 or 41 in favor (some testimony

⁷ As noted earlier in this litigation, Intervenor's continual refusal to identify any suitable alternative geographic site, with appropriate current zoning and land use laws in place, presumably arises out of its desire to preserve to itself the right to later challenge any and all sites which Pa'ina or even another irradiator operator might select. Thus, its refusal to identify any specific alternative site in this litigation constitutes a transparent effort to "hedge its bet" on the outcome of this or later threatened litigation. However, in the 9th Circuit as well as in other courts, one who seeks to "hedge his bet" on the merits of a case risks waiving or forfeiting its entire case. See generally Adibi v. California State Board of Pharmacy, 461 F. Supp. 2b 1103, 1111 (DC Cal. 2006)

⁸ See Pa'ina's Answer filed herein on March 9, 2007, pp. 37-40.

was ambiguous, see Transcripts at ML070590710). The opponents displayed an alarming lack of knowledge about radiation in general, and certainly about this irradiator. As noted in the Final EA (at page C-2), Intervenor's side saw 221 identical e-mails submitted in opposition to Pa'ina, so most of the opposition to Pa'ina's irradiator license was presumably choreographed.

The 40-41 individuals who spoke in favor the the license on February 1, 2007 included University of Hawaii professors and deans, a former nuclear submarine commander, UH researchers, farmers, members of the consuming public (even from the Mainland), a former head of 800 employees at Pearl Harbor Shipyard who were responsible for removing spent rods from naval nuclear submarines, etc. (See Transcripts at ML070590710)

Thus, in this case there is no "great controversy" consisting of "knowledgeable individuals." See Friends of Endangered Species, Inc. v. Jantzen, supra, at 986.

II. CONCLUSION.

For the reasons stated hereinabove, this Board should deny and/or dismiss all of Intervenor's "amended" or "new" contentions raised in their September 4, 2007 filing.

As noted, virtually all of the "amended" or "new" contentions are "moot" because they have been studied and addressed by the NRC Staff.

The "amended" or "new" contentions should also be denied and/or dismissed because of the usual garden-variety reasons, i.e., failure to state a specific legal or factual claim, failure to state sufficient information demonstrating that a material issue of fact or law exists, filing of "new" or "amended" contentions far too late in

these proceedings, and raising issues that have already been dismissed and/or that are beyond the scope of these proceedings.

Beyond denial and/or dismissal, Pa'ina prays for any and all other relief, both legal and equitable, to which it may be entitled.

DATED: Honolulu, Hawaii Sept. 19, 2007.

A handwritten signature in cursive script, appearing to read "Fred Paul Benco", written over a horizontal line.

FRED PAUL BENCO
Attorney for Applicant
Pa'ina Hawaii, LLC

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "APPLICANT PA'INA HAWAII, LLC'S ANSWER TO INTERVENOR CONCERNED CITIZENS OF HONOLULU'S AMENDED ENVIRONMENTAL CONTENTIONS #3 THROUGH #5" dated September 19, 2007 in the captioned proceeding have been served as shown below by deposit in the regular United States mail, first class, postage prepaid, this September 19, 2007. Additional service has also been made this same day by electronic mail as shown below:

Administrative Judge
Thomas S. Moore, Chair
Atomic Safety and Licensing Board
Mail Stop: T-3-F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
(e-mail: tсм2@nrc.gov)

Dr. Anthony J. Baratta
Administrative Judge
Atomic Safety and Licensing Board
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DATED: Honolulu, Hawaii, September 19, 2007


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September 19, 2007

Office of the Secretary
U.S. Nuclear Regulatory Commission
ATTN: Rulemakings and Adjudication Staff
Washington, DC 20555-0001
Also Via E-Mail: HEARING DOCKET@nrc.gov

Re: Docket No. 030-36974
ASLBP No. 06-843-01-ML
"Applicant Pa'ina Hawaii, LLC's
Answer To Intervenor Concerned
Citizens Of Honolulu's Amended
Environmental Contentions
#3 Through #5"

Dear Secretary:

I represent the legal interests of Pa'ina Hawaii, LLC, which has applied for a Materials License.

Pursuant to your regulations, please find enclosed an original and two (2) copies of the above document.

This document was e-mailed to your office and to all parties on the Certificate of Service on this date. Hard copies were also mailed to each of the parties on this date.

If you have any questions or comments, please feel free to contact my office. Tel: 808-523-5083; Fax: 808-523-5085; e-mail: fpbenco@yahoo.com. Thank you.

Very respectfully yours,



Fred Paul Benco

Encl.

cc: All parties on Certificate of
Service