Checklist for Evaluating Applications for a Multi-Site License Using the Guidance in NUREG-1556, Volume 20, Section 4.7

Licensee: Pa'ina Hawaii, LLC
License number: 53-29296-01
Docket number: 030-36974
Mail control number: 574603
License reviewer: T7

The following checklist is intended to assist license reviewers in applying the NRC's guidance on evaluating applications for multi-site licenses. Completing this checklist is not mandatory, however, and the decision of whether to use this checklist rests with the NRC license reviewer. In addition, this checklist is not intended to modify or replace any of the guidance in Section 4.7.

General Matters

1. What type of application is involved? Please state the type of licensing action being requested (*e.g.,* new license, license amendment, or license renewal), the type of license involved (byproduct material, source material, *etc.*) and the type of use (*e.g.*, medical use, radiography, well logging).

   Type of licensing action: **License amendment request**
   NRC Form 313 dated March 8, 2011 (ML110670660)
   Geotechnical report (ML110670488)

   Type of license: **Byproduct material (030)**

   Type of use: **Underwater irradiator**
   Program code 03521

2. Does the application involve any of the following categories of licenses: broad-scope, mobile medical service, or master material license; that, by specific license condition, routinely authorizes multiple locations of use?

   No. License 53-29296-01 is not a broad scope license, nor a mobile medical service license, nor a master material license.

3. Does the application seek authorization to perform work at temporary job sites?

   No. The license amendment request is not seeking temporary job site authorization.

4. Does the application involve a category of licenses for which multiple locations of use are routinely authorized? Some examples of multi-site category of licenses are: A) Nuclear pharmacy licensees with multiple radiopharmacy locations on one license; B) Industrial radiography or moisture density gauge licensees with multiple permanent work sites on one license (e.g., field stations); C) Medical licensees with facilities at more than one geographic location; D) Large manufacturers and distributor licensees with facilities at more than one geographic location; and E) Well logger licensees with multiple permanent work sites on one license.

   The NRC Region IV routinely authorizes well loggers and industrial radiography licensees for the possession and use of licensed material in multiple field stations.

   Pa'ina Hawaii, LLC, license category (irradiator, program code 03521) can be authorized on multiple sites. As of April 14, 2011, the NRC has eight active irradiator licenses (program code 03521).

License Number	Docket Number
19-08330-03	030-06931
52-21175-01	030-19882
21-00215-06	030-06958
22-00057-61	030-14999
30-02405-10	030-09345
52-24994-01	030-30578
19-05748-03	030-06929
53-29296-01	030-36974

   Out of these eight licenses:

   A. The number of licenses authorizing two separate irradiators in two locations of use is 1. This is license number 30-02405-10.

   B. The number of licenses authorizing two separate irradiators in one location of use is 2. These are license numbers 22-00057-61 and 19-05748-03.

   C. The number of licenses authorizing one irradiator in one location of use is 4. These are license numbers 19-08330-03, 52-21175-01, 21-00215-06, and 52-24994-01.

   D. One license (Pa'ina Hawaii, LLC, 53-29296-01) is active but no irradiator has been constructed in the location authorized in the license (192 Palekona Street, Honolulu, Hawaii). This licensee has requested an amendment to the

license to add an additional location of use (92-1780V Kunia Road, Kunia, Hawaii) to the license.

E. **Operational experience – A search performed in the NRC's Nuclear Materials Event Database (NMED), which contains events that are required to be reported to the NRC, shows that none of the eight active irradiator licensees had events involving leaking sources or releases to the environment.**

Descriptions of the Proposed Sites

5. Provide the locations of all sites that the applicant seeks to include on the same license, as well as any other relevant information regarding those sites *(e.g.*, proximity to other sites).

   Pa'ina Hawaii, LLC, License 53-29296-01 already authorizes the following location: 192 Palekona Street, Honolulu, Hawaii (see NRC Safety Review dated August 17, 2007, ML072260186). This licensee has requested an amendment to the license to add an additional location of use to the license (92-1780V Kunia Road, Kunia, Hawaii). The proximity between the two locations is about 13.3 miles (straight line) and about 20 miles (travel distance by major roadways).

6. Will the type of licensed material use and licensed operations be the same at each site?

   Yes, the type of licensed material use and licensed operations will be the same.

7. Will the radiation safety program be the same at each site? If not, describe any relevant differences between the programs proposed for each site. Where appropriate, you should refer to pertinent sections of the license application(s).

   The radiation safety program will be the same at each location.

8. Summarize the delegation of responsibility and the lines of communication between employees and management at each of the proposed sites. Please describe not only the relationships between site employees and management, but also the relationships (if any) among employees at the different sites (*e.g.*, will a single employee be serving as radiation safety officer at multiple sites?).

   The delegation of responsibility and lines of communications between employment and management will remain the same as described in the original license application dated June 23, 2005 (ML052060372). The radiation safety officer (RSO) will have direct line of authority with the company president.

Number of Sites

9. Is there any inspection history relevant to assessing whether issuing a license for the requested number of sites would be appropriate?

   There is no NRC inspection history since the irradiator authorized for location 192 Palekona Street, Honolulu, Hawaii, has not been constructed, nor has the NRC received a construction schedule for that irradiator. An evaluation of the proposed construction techniques for both the Palekona Street and Kunia Road irradiators will be reviewed when the NRC receives a construction schedule.

10. Would the licensee's management structure be adequate for the type, scope, and geographic distribution (*i.e.*, both the number of sites and their locations) of its program?

    Yes. The licensee's management structure will be adequate for the type and scope of the program because of the unique operation of an underwater irradiator. If the licensee builds a second irradiator, the licensee will need to designate a site radiation safety officer/irradiator operator for the second facility.

Communication

11. Does the proposed management approach involve multiple levels of oversight at the various sites? If so, ensure that that following factors are present. Where appropriate, please cite to the sections of the application(s) that support your conclusion.

    a. Delegation of clear and appropriate levels of authority within the licensed entity, indicating that sufficient organizational freedom exists and management has established prerogative to communicate with, train, and direct personnel according to NRC regulations and/or license provisions;

       The management approach described in the license application does not involve multiple levels of managerial oversight since it is not needed. The site radiation safety officer, who will also be the operator of the underwater irradiator, has direct line of communication with the company president. The RSO has independent authority to stop work due to unsafe conditions. If the licensee builds a second irradiator, the licensee will need to designate a site radiation safety officer/irradiator operator for the second facility.

b. Descriptions of program reviews or audits and the reporting of such activities on a regular basis;

The program reviews or audits and regulatory required reports and notifications remain the same as described in the original license application (ML052060372), tie downs to license condition 22, and NRC safety review dated August 17, 2007 (ML072260186).

c. Mechanisms for addressing urgent situations;

Mechanisms for addressing urgent situations remain the same as described in the original license application (ML052060372), tie downs to license condition 22, and NRC safety review dated August 17, 2007 (ML072260186).

d. Mechanisms in place to inform all personnel of radiation safety program changes;

Mechanisms in place to inform personnel of radiation safety program changes remain the same as described in the original license application (ML052060372), tie downs to license condition 22, and NRC safety review dated August 17, 2007 (ML072260186).

e. Provisions and techniques in the application to make personnel aware of the appropriate representatives to contact at each level of authority;

The scope of work at a single site or at two sites will not require multiple operational levels. The radiation safety officer at each site, who will also be the operator of the underwater irradiator, will have direct line of communication with the company president. Each RSO will have independent authority to stop work due to unsafe conditions.

f. Assurance provided in the application that each level of oversight is available to interact with other levels, authorized users, and supervised workers, both as needed and on a regular basis.

The scope of work at a single site or at two sites will not require multiple operational levels. The radiation safety officer at each site, who will also be the operator of the underwater irradiator, will have direct line of communication with the company president. Each RSO will have independent authority to stop work due to unsafe conditions.

Additional Areas for Review

12. Ensure that the applicant/licensee has addressed the following areas to the extent necessary. Where appropriate, please cite to the sections of the application(s) that support your conclusion.

    a. Transportation of licensed material (including radioactive waste) between authorized sites;

       The licensee will not be transporting licensed material between sites. The licensed material will be transported by the sealed source manufacturer in lead-shielded steel transportation casks. See NRC safety review dated August 17, 2007 (ML072260186).

    b. Applicability of decommissioning requirements;

       The licensee committed to provide the required financial assurance before acquiring licensed material. See NRC safety review dated August 17, 2007 (ML072260186).

    c. Sharing of safety equipment between sites;

       No safety equipment is expected to be shared between sites since most of the equipment will be fixed in place. The only safety equipment expected to be shared is hand held survey meter instrumentation. See NRC safety review dated August 17, 2007 (ML072260186).

    d. Coordination among sites for inventory control of licensed material, with the intended focus of continually monitoring types and quantities of material to ensure that the total possession limits specified in the license are not exceeded.

       The licensee will implement the material accountability program described in the original application dated June 23, 2005 (ML052060372).

    e. Any other area in which the specific multi-site license proposed by the applicant/licensee may raise concerns.

       The licensee stated in his request to add a second location of use at 92-1780V Kunia Road, Kunia, Hawaii, that all conditions of the original license application dated June 23, 2005 will remain the same with the exception of the soil conditions for the proposed additional location, and thus submitted a geotechnical report dated February 17, 2011 (ML110670488).

The geotechnical report was reviewed by an NRC Region IV engineer with expertise in this area. Three clarification questions were asked to the licensee and an adequate response was received. The applicant's proposed process for pool foundation and depth excavation appears to be adequate based on staff assessment of licensee's response. (ML111070003 - non public).

Conclusion

Based on the information described below:

1. **Original license application dated June 23, 2005 (ML052060372),**
2. **Tie downs to license condition 22 (ML072320269),**
3. **The NRC safety review dated August 17, 2007 (ML072260186),**
4. **The licensee's amendment requests dated December 16, 2010 (ML110350544) and March 8, 2011 (ML110670660),**
5. **The licensee's geotechnical report dated February 17, 2011 (ML110670488),**
6. **The licensee's responses to NRC's clarification questions on the geotechnical report (ML111070002) (ML111070005 – non public),**
7. **The NRC's review of the technical report (ML111070003 – non public), and**
8. **NRC's safety review dated May 16, 2011 (ML112060255),**

The NRC staff has determined that adding a second location of use to license number 53-29296-01 can be done consistent with NRC's requirements in 10 CFR Part 20, "Standards for Protection Against Radiation," 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," and 10 CFR Part 36, "Licenses and Radiation Safety Requirements for Irradiators." Based on this review, the staff concludes that a license amendment can be issued to Pa'ina Hawaii, LLC, to add an additional location of use at 92-1780V Kunia Road, Kunia, Hawaii.

/RA/

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Date: May 16, 2011