



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

June 19, 2018

Kevin Walsh, Executive Director  
Yankee Aircraft Museum  
47884 D Street  
Belleville, MI 48111-1126

SUBJECT: YANKEE AIRCRAFT MUSEUM – INFORMATION REGARDING RADIUM  
GAUGES AND DIALS

Dear Mr. Walsh:

I am writing to inform you that our records indicate that the property at Yankee Air Museum Collections & Exhibits Bldg., 47884 D Street, Belleville, Michigan, is a site that is currently being used to store aircraft instrumentation that may contain radium-226. If you are not the current contact for the museum, please let us know whom we should contact. Radium-226 is a radioactive isotope that, in certain quantities, may pose a risk to public health and safety. Radium-226 is regulated by the U.S. Nuclear Regulatory Commission (NRC).

Information provided to us by the State of Michigan indicates that aircraft gauges containing luminous radium were previously stored on the property. Therefore, we request that you contact us at your earliest convenience (no later than **30 days** after the date of this letter) to discuss the current inventory and status of any gauges or instruments previously painted with luminous radium.

Please note that in accordance with the regulations in Title 10 of the *Code of Federal Regulations* Section 31.12 (10 CFR 31.12), *General license for certain items and self-luminous products containing radium-226*, a general license is issued to any person who acquires, receives, possesses, uses, or transfers radium-226 contained in certain products manufactured prior to November 30, 2007. These items include certain watches, dials, and gauges, within certain limits. If you possess these products you are a general licensee under 10 CFR 31.12(a). As a general licensee, under 10 CFR 31.12(c) there are certain requirements that must be followed, which include that you:

- (1) Shall notify the NRC should there be any indication of possible damage to the product so that it appears it could result in a loss of the radioactive material. A report containing a brief description of the event, and the remedial action taken, must be furnished to the Director of the Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001 within 30 days.
- (2) Shall not abandon products containing radium-226. The product, and any radioactive material from the product, may only be disposed of according to 10 CFR 20.2008, *Disposal of certain byproduct material*, or by transfer to a person authorized by a specific license to receive the radium-226 in the product or as otherwise approved by the NRC.

- (3) Shall not export (i.e., transfer to a person or an international organization in a foreign country) products containing radium-226 except in accordance with 10 CFR Part 110, *Export and Import of Nuclear Equipment and Material*.
- (4) Shall dispose of products containing radium-226 at a disposal facility authorized to dispose of radioactive material in accordance with any Federal or State solid or hazardous waste law, including the Solid Waste Disposal Act, as authorized under the Energy Policy Act of 2005, by transfer to a person authorized to receive radium-226 by a specific license issued under 10 CFR Part 30, *Rules of General Applicability to Domestic Licensing of Byproduct Material*, or equivalent regulations of an Agreement State, or as otherwise approved by the NRC.
- (5) Shall respond to written requests (including this request) from the NRC to provide information relating to the general license within 30 calendar days of the date of the request, or other time specified in the request. If you cannot provide the requested information within the allotted time, you shall, within that same time period, request a longer period to supply the information by providing the Director of the Office of Nuclear Material Safety and Safeguards, by an appropriate method listed in 10 CFR 30.6(a), a written justification for the request.

The enclosed Site Summary Report provides all of the information that the NRC has concerning historical radium storage at your property, which was provided by the State of Michigan or found through a search of publicly available information. The enclosed Backgrounder provides more detail on the history of radium use and its potential health effects. The enclosed brochure provides an overview of the NRC; copies of the NRC regulations referenced in this letter are enclosed and are available on the NRC's website at <http://www.nrc.gov/reading-rm/doc-collections/cfr/>. The NRC's website at <http://www.nrc.gov/materials/radium.html> provides additional information regarding the NRC's implementation of its jurisdiction over radium.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

We would like to work with you to answer any questions you might have. At your earliest convenience, please contact Mr. Stephen Koenick, Chief, Materials Decommissioning Branch, Division of Decommissioning, Uranium Recovery and Waste Programs, Office of Nuclear Materials Safety and Safeguards, at (301) 415-6631, or Mr. Jeffrey Whited, Project Manager, at (301) 415-4090.

Sincerely,

*/RA/*

John R. Tappert, Director  
Division of Decommissioning, Uranium Recovery  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 03039084

Enclosures:

1. Site Summary Report
2. Radium Backgrounder
3. U.S. Nuclear Regulatory Commission *Overview*
4. Copy of Applicable NRC Regulations

REGISTERED LETTER – RETURN RECEIPT REQUESTED

SUBJECT: YANKEE AIRCRAFT MUSEUM – INFORMATION REGARDING RADIUM  
GAUGES AND DIALS, DATED JUNE 19, 2018

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**OFFICIAL RECORD COPY**

**Yankee Aircraft Museum: Site Summary**

**Prepared by  
Oak Ridge Associated Universities  
Under NRC Contract Number HQ-50-17-A-0001**

**March 23, 2018**

**Prepared for  
U.S. Nuclear Regulatory Commission**

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## Yankee Aircraft Museum: Site Summary

The following information was extracted from public records.

### Addresses

- Address 1: A Street, Van Buren Charter Township, Michigan 48111
- Address 2: Yankee Air Museum Collections & Exhibits Bldg., 47884 D Street, Belleville, Michigan 48111
- Address 3: Willow Run Bomber Plant, Kirk Profit Drive, Ypsilanti Charter Township, Michigan 48198

### Site Description/History

The Willow Run Airport was built in 1941 by the Ford Motor Company to serve as an airfield for a B-24 Bomber Plant, which mass produced B-24 aircraft until the end of World War II. After the war, the airport was used for passenger flights and air freight in the Detroit Metropolitan area. In 1981, the Yankee Air Force, a group of aviation enthusiasts, acquired one of the original U.S. Army Air Force's hangers and restored it to vintage conditions (at Address 1). This marked the birth of the Yankee Aircraft Museum (Yankee Air Museum 2017). In July of 1992, the State of Michigan surveyed the Museum's inventory and found radioactive gauges. Museum employees were surprised and stated their intention to dispose of the radioactive gauges and no longer accept or install radioactive item donations (NRC 2017).

In October of 2004, the Museum along with all documents and artifacts within the structure were destroyed in a fire. Only the restored B-17, C-47, and B-25 flyable aircraft, on display outside of the structure, survived the fire. Figure 1 shows the Museum before the fire; Figure 2 shows the charred remains after the fire; and Figures 3 and 4 show the site after the land was cleared. In an effort to rebuild, the Museum purchased a nearby building from the Michigan Institute of Aviation and Technology (MichiganAT) in 2009. In 2010, this approximately 47,000-square-foot building became the Yankee Air Museum Collections and Exhibits Building (Address 2), which serves as the "Headquarters" and houses permanent and rotating aviation and historical displays, restoration projects, a retail store, and a movie theatre.

Additionally, a schoolhouse, built by Henry Ford in 1938, was donated in April 2007 and now houses the Yankee Air Museum David and Andrea Robertson Education Center, which serves as the Museum's library and archives center (Yankee Air Museum 2017). The original site, the new Museum building, and the library and archives center are all shown in Figure 5.

In 2011, the Museum began negotiations with RACER Trust and the Michigan Aerospace Foundation for acquiring 144,000 square feet of space within the Willow Run Bomber Plant. A successful fundraiser was held in early 2014, and the historic Willow Run Bomber Plant officially became the new future home for the Museum (at Address 3) on October 30, 2014. Currently, the space is being renovated, with various pieces from the Museum's collection transitioning over as progress is made. It is estimated that the new museum at the Willow Run Bomber Plant, shown in Figure 6, will be fully operational by 2018 (Yankee Air Museum 2017).



**Figure 1. Yankee Aircraft Museum, Address 1, on 11/14/2003 (before fire in 2004)  
(Google Earth Pro 2017)**



**Figure 2. Yankee Aircraft Museum, Address 1, on 03/30/2005 (after fire in 2004)  
(Google Earth Pro 2017)**



**Figure 3. Yankee Aircraft Museum, Address 1, on 08/27/2005 (cleanup after fire in 2004)  
(Google Earth Pro 2017)**



**Figure 4. Yankee Aircraft Museum, Address 1, on 04/07/2017  
(Google Earth Pro 2017)**



**Figure 5. Aerial View of Original Site (Address 1) and Current Site (Address 2) for Yankee Aircraft Museum in 2017 (Google Earth Pro 2017)**



**Figure 6. Future Location of Yankee Aircraft Museum, Address 3, at Willow Run Bomber Plant in 2017 (Google Earth Pro 2017)**

## **Information Regarding Radium Sources/Contamination at the Site**

In July 1992, the State of Michigan surveyed the Museum's inventory at Address 1 and identified "6-8" radioactive gauges. Museum employees were cooperative and stated their intention to dispose of the radioactive gauges in normal trash (one gauge per week) and no longer accept or install radioactive gauges. However, no effort would be made to remove radioactive gauges already installed in the aircraft, if present. The State did not survey these aircraft, so it is unknown whether or not radioactive gauges were installed (NRC 2017). Additionally, it is not known if the 1992 survey included an evaluation of potential alpha and/or beta contamination, or whether it was a gamma-only survey,

Following the fire in 2004, debris from the original site (Address 1) was removed as indicated in Figures 2 and 3. However, no records of subsequent radiological surveys could be found. Therefore, it is possible that radium contamination is present in surface soil.

As of August 2017, it is suspected that the only intact radioactive items, if any, possessed by the Museum (Address 2) would be located within the restored B-17, C-47, and B-25 aircraft. However, it is possible that the Museum acquired additional radium gauges or other radium containing items since the 2004 fire.

## **Summary of Current Radium Levels**

As of August 2017, it is not known if radium sources and/or radium contamination are present at the sites.

## **Location and Population Near the Sites**

The Township of Ypsilanti is located in Washtenaw County. According to the 2010 U.S. Census, the population of Van Buren charter township was 28,821; the 2016 population estimate for the township was 28,032 (United States Census Bureau 2017). Figure 7 shows the location of the facility (Address 1 and 2) within the local community.

## **Current State/other Federal Involvement**

An extensive internet search of public records did not reveal any information concerning recent State and/or Federal involvement with properties previously occupied by the Museum. The 1992 investigation by the State of Michigan provides the only record of a connection between radium containing devices and previous Museum activities (NRC 2017). No records of disposal for the known radioactive items could be located.

## **Current Access and Activities at the Site**

The Museum is currently in the process of transferring all assets to the Willow Run Bomber Plant building located along Kirk Profit Drive at the Willow Run Airport. Access to the cockpits of the B-17, C-47, and B-25 aircraft is likely restricted with low occupancy based on posted flight schedules, but access and occupancy information for the remainder of the facilities/inventory is unknown. No access controls are apparent at the original site, though limited occupancy is suspected in the abandoned lot (as currently configured).



**Figure 7. Aerial View of Surrounding Areas for Yankee Aircraft Museum (Addresses 1 and 2) in 2017 (Google Earth Pro 2017)**

The current owner of the areas occupied by the Yankee Aircraft Museum (and all Willow Run Airport property) is the Wayne County Airport Authority located at 1 Detroit Metro Airport, Detroit, Michigan 48242.

### **Existing Engineering and Administrative Controls**

No engineering or administrative controls are known to exist at original or current locations associated with the Museum.

### **Prioritization Ranking**

NRC assigns a prioritization ranking for each site based on two factors. The first factor relates to whether or not the historical record confirms the presence of radium and there is no documentation that the radium contamination was previously remediated. The second factor considers the potential for human exposure. Based on these factors, the site is assigned Tier 1, 2, 3, or 4 using the following criteria:

- Tier 1 = the historical record confirms the presence of radium, the building or adjacent lands are occupied or frequented by visitors, and site access is not controlled.
- Tier 2 = the historical record confirms the presence of radium, the building or adjacent lands are not occupied or frequented by visitors, and site access is weakly controlled.

- Tier 3 = the historical record confirms the presence of radium, the building or adjacent lands are not occupied or frequented by visitors, and site access is strongly controlled.
- Tier 4 = the presence of radium is suspected but not confirmed by the historical record.

Radioactive gauges were previously identified in the Museum's inventory as determined from the State of Michigan's 1992 survey. Based on the responses from Museum staff in 1992, and the extent of destruction caused by the fire in 2004, it is likely that the only possible intact radioactive gauges associated with the original Museum would be located within the restored B-17, C-47, and B-25 aircraft. The photographic record suggests that all materials burned in the 2004 fire were removed, though it is unknown if radioactive materials were removed before the fire or as part of site cleanup activities after the fire. Radium is confirmed to have been present at the original site (Address 1) (NRC 2017), but the site does not appear to be occupied or frequented by visitors. Therefore, the Museum's sites and property are classified as Tier 3.

## References

Google Earth Pro 2017. Software Version 7.3.0.3830 (32-bit), accessed August 2017.

NRC 2017. *Letters from the State of Michigan re: Non-Military Radium Program*, prepared by the State of Michigan under Cooperative Agreement with the Nuclear Regulatory Commission, Regional Offices and the Office of Nuclear Materials Safety and Safeguards. July 7, 2017. (Agencywide Documents Access and Management System [ADAMS] Accession No. ML16288A777)

United States Census Bureau 2017.

<https://www.census.gov/quickfacts/fact/table/vanburenchartertownshipwaynecountymichigan/RHI605210>, accessed August 2017.

Yankee Air Museum 2017. <http://yankeeairmuseum.org/our-history/>, accessed August 2017.

## Radium

Radium was one of the first radioactive elements ever discovered. Marie and Pierre Curie unlocked the atom's secrets in 1898, opening the door for important innovations using radioactivity in medicine and industry. Radiation quickly became a consumer and medical sensation and radium was the posterchild. Experts concluded radiation was a lifesaver after finding it reduced tumor growth and was present in the waters at some health spas. Soon there were many radium products on the market that purported to improve health and vitality. But tragic stories began to emerge of the health impacts. Perhaps the most well-known is the "radium girls," who painted watch faces with glow-in-the-dark radium paint and developed infections and jaw cancer from licking their brushes into fine points.

### Early regulation

When evidence of harm began to emerge in the early 1900s, the states each made their own decisions about how to regulate. Courts also took varying approaches on victim compensation. The federal government took action to guard against false advertising and regulate mail shipments, conducted studies, and organized some voluntary protections.

As radioactive materials became more widely available following World War II, they remained largely under state control. Radium use declined in medical and consumer products in favor of other safer materials.

### Regulation today

Work on securing radioactive materials took on new urgency following the terrorist attacks on the United States in September 2001. Those attacks prompted the International Atomic Energy Agency to develop a code of conduct in 2004 to limit the potential for malicious acts. That code places one form of radium, known as radium-226, and other radioactive materials into categories based on their quantity and potential hazard.

The NRC has specific security requirements tied to these categories. As support for the IAEA code grew, Congress passed the Energy Policy Act in 2005, giving the NRC authority over radium-226. This law marked the first time the federal government had a comprehensive role in ensuring the safe use of radium-226.

Many states had developed strong programs for regulating radium and other naturally-occurring radioactive materials and it took time to transition authority. The NRC had regulations in place and fully assumed oversight in 2009. Initially, NRC staff worked exclusively with the military to identify sites

where radium might be present. These discussions made clear that the NRC's role would include ensuring that sites where radium was used are maintained in a way that protects public health and safety.

In 2016, the NRC and Department of Defense signed a [Memorandum of Understanding \(MOU\)](#) describing roles in the cleanup of radium and other unlicensed radioactive materials at military sites. The MOU and a [Regulatory Issue Summary](#) clarify NRC's jurisdiction over military radium. In late 2016, the NRC began monitoring two sites under the MOU: Treasure Island Naval Station in San Francisco and Dugway Proving Ground in Utah.

In 2013, the agency learned of two commercial sites where radium-226 had been found and other federal agencies had gotten involved. The Environmental Protection Agency was overseeing portions of the Waterbury Clock Company in Connecticut. The National Park Service was overseeing Great Kills Park in New York.

NRC staff is working with the current owner of the Waterbury Clock Company site. Contaminated areas of the site are under EPA oversight through its Brownfields Program, which provides assistance to clean up contaminated properties. NRC staff is working with EPA to clarify oversight roles and responsibilities under that program.

In 2016, NRC staff began developing an MOU with the National Park Service that will also clarify the NRC's jurisdiction over radium at Great Kills Park. The NRC is monitoring cleanup activities that the Park Service is implementing under Superfund, more formally known as the Comprehensive Environmental Response, Compensation and Liability Act.

Those projects prompted a search to identify sites in NRC's jurisdiction where radium was used, and to find out how much, if any, cleanup was done. This search was not a result of any known health and safety issues. Rather, because of its mandate to protect public health and safety, the NRC wanted to be sure there were no additional sites that might pose a risk.

With the help of the Oak Ridge National Laboratory, the NRC began to develop a fuller picture of commercial radium use. The lab produced a [catalog](#) of the various products developed and sold to the public in the early 20<sup>th</sup> century. By reviewing publicly available records, Oak Ridge identified sites where radium may have been used to make consumer goods. Then the lab looked for any cleanup records. Oak Ridge transmitted the results to the NRC in November 2015. Since that time, the agency has been working on plans to gather more information about those sites.

The NRC is working with state and local governments to identify any additional records that may help clarify whether any site cleanup has taken place. The goal is to ensure that public health and safety is adequately protected at these sites.

**October 2016**

## OTHER KEY OFFICES

- ◆ The **Office of Enforcement** develops policies and programs to enforce NRC requirements. Enforcement action is used as a deterrent to emphasize the importance of compliance with regulatory requirements and to encourage prompt identification and prompt, comprehensive correction of violations. The office manages major enforcement actions against licensees, and assesses the effectiveness and uniformity of enforcement actions taken by NRC regional offices. Enforcement powers include notices of violations, fines, and orders to modify, suspend or revoke a license. Two separate offices are responsible for investigations.
- ◆ The **Office of Investigations** conducts investigations of licensees, applicants, contractors and vendors. The office investigates all allegations of wrongdoing by individuals or organizations other than NRC employees and NRC contractors. In addition, the office keeps abreast of inquiries and inspections and advises on the need for formal investigations. It also keeps other components of the agency informed of matters under investigation as they affect safety.
- ◆ The **Office of the Inspector General** is a statutory post mandated by the Inspector General Amendments Act of 1988. The office conducts independent reviews and appraisals of internal NRC programs and conducts investigations of alleged wrongdoing by NRC employees and contractors.

## Office of Public Affairs

Washington, DC 20555-0001

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Website: [www.nrc.gov](http://www.nrc.gov)

## Regional Public Affairs Offices



### Region I

2100 Renaissance Blvd., Suite 100  
King of Prussia, PA 19406-2713  
(610) 337-5330 or 337-5331



### Region II

245 Peachtree Center Ave., NE., Suite 1200  
Atlanta, GA 30303-1257  
(404) 997-4417 or 997-4416



### Region III

2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352  
(630) 829-9663 or 829-9662



### Region IV

1600 E. Lamar Blvd.  
Arlington, TX 76011-4511  
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NUREG/BR-0099, Rev. 14  
June 2016

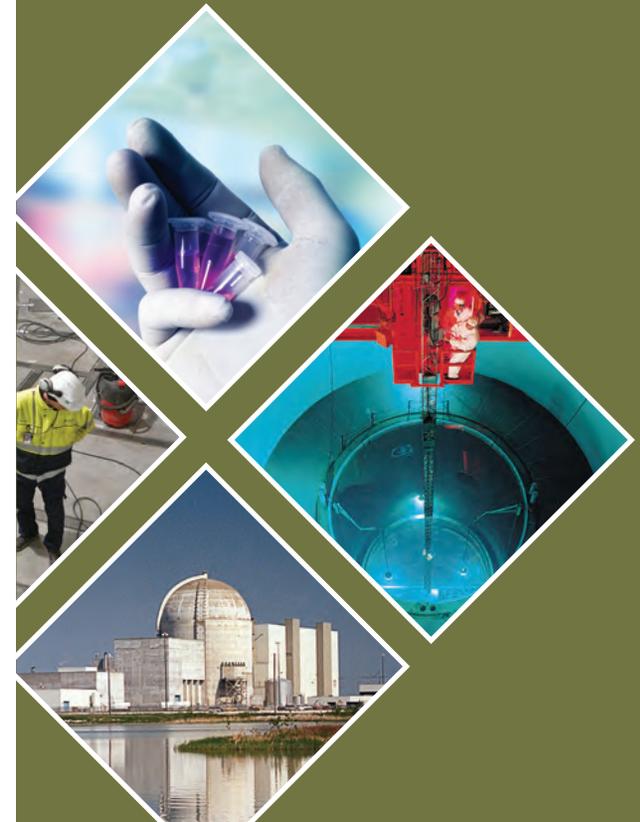
## STAY CONNECTED



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## U.S. Nuclear Regulatory Commission Overview



## NRC MISSION

The NRC licenses and regulates the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment. Specifically, the NRC regulates commercial nuclear power plants; research, test and training reactors; nuclear fuel cycle facilities; and the use of radioactive materials in medical, academic and industrial settings.

The agency also regulates the transport, storage, and disposal of radioactive materials and waste, and licenses the import and export of radioactive materials. While the NRC only regulates industries within the United States, the agency works with agencies around the world to enhance global nuclear safety and security.

## STATUTORY AUTHORITY

The Energy Reorganization Act of 1974 created the NRC from the Atomic Energy Commission. The new agency was to oversee — but not promote — the commercial nuclear industry. The agency began operations on January 18, 1975. The NRC's regulations can be found in Title 10, "Energy," of the *Code of Federal Regulations* (10 CFR).

The NRC, its licensees (those licensed by the NRC to use radioactive materials), and the Agreement States (States that assume regulatory authority over use of certain nuclear materials) share a responsibility to protect public health and safety and the environment. Federal regulations and the NRC's regulatory program are key, but the primary responsibility for safely handling and using these materials lies with the licensees.



## ORGANIZATIONS AND FUNCTIONS

The NRC's Commission is made up of five members nominated by the President and confirmed by the U.S. Senate for 5-year terms. The President designates one member to serve as Chairman. The Chairman acts as the principal executive officer and spokesperson of the agency. The members' terms are staggered so that one Commissioner's term expires on June 30 every year. No more than three Commissioners can belong to the same political party.

The Commission formulates policies and regulations governing nuclear reactor and materials safety, issues orders to licensees, and adjudicates legal matters. The Executive Director for Operations carries out the policies and decisions of the Commission, and directs the activities of the program and regional offices. The NRC has about 3,600 employees and an annual budget of about \$1 billion.

The NRC is headquartered in Rockville, Md., and has four regional offices. The **Regional Offices** conduct inspection, enforcement (in conjunction with the Office of Enforcement), investigation, licensing, and emergency response programs. At least two NRC employees, called Resident Inspectors, are assigned to, and work out of, each nuclear power plant. The NRC also has a Technical Training Center in Tennessee.

The major program offices within the NRC include:

- ◆ **The Office of Nuclear Reactor Regulation.** Handles all licensing and inspection activities for existing nuclear power reactors and research and test reactors.
- ◆ **The Office of New Reactors.** Oversees the design, siting, licensing, and construction of new commercial nuclear power reactors.
- ◆ **The Office of Nuclear Security and Incident Response.** Oversees agency security policy for nuclear facilities and users of radioactive materials. It provides a safeguards and security interface with other Federal agencies and maintains the agency's emergency preparedness and incident response program.



◆ **The Office of Nuclear Material Safety and Safeguards.** Regulates activities and oversees the regulatory framework for the safe and secure production of commercial nuclear fuel and the use of nuclear material in medical, industrial, academic and commercial applications; uranium recovery activities; and the decommissioning of previously operating nuclear facilities. It regulates safe storage, transportation, and disposal of high- and low-level radioactive waste and spent nuclear fuel. The office also works with Federal agencies, States, and Tribal and local governments on regulatory matters.

- ◆ **The Office of Nuclear Regulatory Research.** Provides independent expertise and information for making timely regulatory judgments, anticipating problems of potential safety significance, and resolving safety issues. It helps develop technical regulations and standards and collects, analyzes, and disseminates information about the safety of commercial nuclear power plants and certain nuclear materials.

Three independent groups serve the Commission:

- ◆ **Advisory Committee on Reactor Safeguards,** mandated by statute, is a committee of scientists and engineers independent of NRC staff. They review and make recommendations to the Commission on all applications to build and operate nuclear power reactors, the safety aspects of nuclear facilities and the adequacy of safety standards. This includes update license amendments and license renewals.
- ◆ **Advisory Committee on the Medical Uses of Isotopes** is made up of physicians and scientists who consider medical questions and, when asked, give expert opinions to the NRC on the medical uses of radioactive materials.
- ◆ **Atomic Safety and Licensing Board Panel** provides a way for the public to get a full and fair hearing on civilian nuclear matters. Individuals who are directly affected by licensing action involving certain facilities producing or using nuclear materials may submit a request to participate in a hearing before these independent judges.



Home > NRC Library > Document Collections > NRC Regulations (10 CFR) > Part Index > § 20.2008 Disposal of certain byproduct material.

## **§ 20.2008 Disposal of certain byproduct material.**

(a) Licensed material as defined in paragraphs (3) and (4) of the definition of *Byproduct material* set forth in §20.1003 may be disposed of in accordance with part 61 of this chapter, even though it is not defined as low-level radioactive waste. Therefore, any licensed byproduct material being disposed of at a facility, or transferred for ultimate disposal at a facility licensed under part 61 of this chapter, must meet the requirements of § 20.2006.

(b) A licensee may dispose of byproduct material, as defined in paragraphs (3) and (4) of the definition of *Byproduct material* set forth in § 20.1003, at a disposal facility authorized to dispose of such material in accordance with any Federal or State solid or hazardous waste law, including the Solid Waste Disposal Act, as authorized under the Energy Policy Act of 2005.

[72 FR 55922, Oct. 1, 2007]

*Page Last Reviewed/Updated Tuesday, August 29, 2017*



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## **§ 31.12 General license for certain items and self-luminous products containing radium-226**

(a) A general license is hereby issued to any person to acquire, receive, possess, use, or transfer, in accordance with the provisions of paragraphs (b), (c), and (d) of this section, radium-226 contained in the following products manufactured prior to November 30, 2007.

(1) Antiquities originally intended for use by the general public. For the purposes of this paragraph, antiquities mean products originally intended for use by the general public and distributed in the late 19th and early 20th centuries, such as radium emanator jars, revigators, radium water jars, radon generators, refrigerator cards, radium bath salts, and healing pads.

(2) Intact timepieces containing greater than 0.037 megabecquerel (1 microcurie), nonintact timepieces, and timepiece hands and dials no longer installed in timepieces.

(3) Luminous items installed in air, marine, or land vehicles.

(4) All other luminous products, provided that no more than 100 items are used or stored at the same location at any one time.

(5) Small radium sources containing no more than 0.037 megabecquerel (1 microcurie) of radium-226. For the purposes of this paragraph, "small radium sources" means discrete survey instrument check sources, sources contained in radiation measuring instruments, sources used in educational demonstrations (such as cloud chambers and spinthariscopes), electron tubes, lightning rods, ionization sources, static eliminators, or as designated by the NRC.

(b) Persons who acquire, receive, possess, use, or transfer byproduct material under the general license issued in paragraph (a) of this section are exempt from the provisions of 10 CFR parts 19, 20, and 21, and § 30.50 and 30.51 of this chapter, to the extent that the receipt, possession, use, or transfer of byproduct material is within the terms of the general license; provided, however, that this exemption shall not be deemed to apply to any such person specifically licensed under this chapter.

(c) Any person who acquires, receives, possesses, uses, or transfers byproduct material in accordance with the general license in paragraph (a) of this section:

(1) Shall notify the NRC should there be any indication of possible damage to the product so that it appears it could result in a loss of the radioactive material. A report containing a brief description of the event, and the remedial action taken, must be furnished to the Director of the Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001 within 30 days.

(2) Shall not abandon products containing radium-226. The product, and any radioactive material from the product, may only be disposed of according to § 20.2008 of this chapter or by transfer to a person authorized by a specific license to receive the radium-226 in the product or as otherwise approved by the NRC.

(3) Shall not export products containing radium-226 except in accordance with part 110 of this chapter.

(4) Shall dispose of products containing radium-226 at a disposal facility authorized to dispose of radioactive material in accordance with any Federal or State solid or hazardous waste law, including the Solid Waste Disposal Act, as authorized under the Energy Policy Act of 2005, by transfer to a person authorized to receive radium-226 by a specific license issued under part 30 of this chapter, or equivalent regulations of an Agreement State, or as otherwise approved by the NRC.

(5) Shall respond to written requests from the NRC to provide information relating to the general license within 30 calendar days of the date of the request, or other time specified in the request. If the general licensee cannot provide the requested information within the allotted time, it shall, within that same time period, request a longer period to supply the information by providing the Director of the Office of Nuclear Material Safety and Safeguards, by an appropriate method listed in § 30.6(a) of this chapter, a written justification for the request.

(d) The general license in paragraph (a) of this section does not authorize the manufacture, assembly, disassembly, repair, or import of products containing radium-226, except that timepieces may be disassembled and repaired.

[53 FR 19246, May 27, 1988; 72 FR 55927 Oct. 1, 2007; 79 FR 75739, Dec. 19, 2014]

*Page Last Reviewed/Updated Tuesday, August 29, 2017*



Home > NRC Library > Document Collections > NRC Regulations (10 CFR) > Part Index > § 30.6 Communications.

## § 30.6 Communications.

(a) Unless otherwise specified or covered under the regional licensing program as provided in paragraph (b) of this section, any communication or report concerning the regulations in parts 30 through 37 and 39 of this chapter and any application filed under these regulations may be submitted to the Commission as follows:

(1) By mail addressed: ATTN: Document Control Desk, Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

(2) By hand delivery to the NRC's offices at 11555 Rockville Pike, Rockville, Maryland.

(3) Where practicable, by electronic submission, for example, via Electronic Information Exchange, or CD-ROM. Electronic submissions must be made in a manner that enables the NRC to receive, read, authenticate, distribute, and archive the submission, and process and retrieve it a single page at a time. Detailed guidance on making electronic submissions can be obtained by visiting the NRC's Web site at <http://www.nrc.gov/site-help/e-submittals.html>; by e-mail to [MSHD.Resource@nrc.gov](mailto:MSHD.Resource@nrc.gov); or by writing the Office of the Chief Information Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. The guidance discusses, among other topics, the formats the NRC can accept, the use of electronic signatures, and the treatment of nonpublic information.

(b) The Commission has delegated to the four Regional Administrators licensing authority for selected parts of its decentralized licensing program for nuclear materials as described in paragraph (b)(1) of this section. Any communication, report, or application covered under this licensing program must be submitted to the appropriate Regional Administrator. The Administrators' jurisdictions and mailing addresses are listed in paragraph (b)(2) of this section.

(1) The delegated licensing program includes authority to issue, renew, amend, cancel, modify, suspend, or revoke licenses for nuclear materials issued pursuant to 10 CFR parts 30 through 36, 39, 40, and 70 to all persons for academic, medical, and industrial uses, with the following exceptions:

(i) Activities in the fuel cycle and special nuclear material in quantities sufficient to constitute a critical mass in any room or area. This exception does not apply to license modifications relating to termination of special nuclear material licenses that authorize possession of larger quantities when the case is referred for action from NRC's Headquarters to the Regional Administrators.

(ii) Health and safety design review of sealed sources and devices and approval, for licensing purposes, of sealed sources and devices.

(iii) Processing of source material for extracting of metallic compounds (including Zirconium, Hafnium, Tantalum, Titanium, Niobium, etc.).

(iv) Distribution of products containing radioactive material under §§ 32.11 through 32.30 and 40.52 of this chapter to persons exempt from licensing requirements.

(v) New uses or techniques for use of byproducts, source, or special nuclear material.

(2) *Submissions.* (i) *Region I.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region I non-Agreement States and the District of Columbia: Connecticut, Delaware, and Vermont. All mailed or hand-delivered inquiries, communications, and applications for a new license or an amendment, renewal, or termination request of an existing license specified in paragraph (b)(1) of this section must use the following address: U.S. Nuclear Regulatory Commission, Region I, Nuclear Material Section B, Region I, 2100 Renaissance Boulevard, Suite 100, King of Prussia, PA 19406–2713; where email is appropriate it should be addressed to *RidsRgn1MailCenter.Resource@nrc.gov*.

(ii) *Region II.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region II non-Agreement States and territories: West Virginia, Puerto Rico, and the Virgin Islands. All mailed or hand-delivered inquiries, communications, and applications for a new license or an amendment, renewal, or termination request of an existing license specified in paragraph (b)(1) of this section must use the following address: U.S. Nuclear Regulatory Commission, Region I, Nuclear Material Section B, Region I, 2100 Renaissance Boulevard, Suite 100, King of Prussia, PA 19406–2713; where email is appropriate it should be addressed to *RidsRgn1MailCenter.Resource@nrc.gov*.

(iii) *Region III.* (A) The regional licensing program for mining and milling involves all Federal facilities in the region, and non-Federal licensees in the Region III non-Agreement States of Indiana, Michigan, Missouri and the Region III Agreement States of Minnesota, Wisconsin, and Iowa. All mailed or hand-delivered inquiries, communications, and applications for a new license or an amendment, renewal, or termination request of an existing license specified in paragraph (b)(1) of this section must use the following address: U.S. Nuclear Regulatory Commission, Region III, Material Licensing Section, 2443 Warrenville Road, Suite 210, Lisle, IL 60532–4352; where e-mail is appropriate it should be addressed to *RidsRgn3MailCenter.Resource@nrc.gov*.

(B) Otherwise, the regional licensing program involves all Federal facilities in the region and non-Federal licensees in the Region III non-Agreement States of Indiana, Michigan, and Missouri. All mailed or hand-delivered inquiries, communications, and applications for a new license or an amendment, renewal, or termination request of an existing license specified in paragraph (b)(1) of this section must use the following address: U.S. Nuclear Regulatory Commission, Region III, Material Licensing Section, 2443 Warrenville Road, Suite 210, Lisle, IL 60532–4352; where e-mail is appropriate it should be addressed to *RidsRgn3MailCenter.Resource@nrc.gov*.

(iv) *Region IV.* (A) The regional licensing program for mining and milling involves all Federal facilities in the region, and non-Federal licensees in the Region IV non-Agreement States and territory of Alaska, Hawaii, Idaho, Montana, South Dakota, Wyoming and Guam and Region IV Agreement States of Oregon, California, Nevada, New Mexico, Louisiana, Mississippi, Arkansas, Oklahoma, Kansas, Nebraska, and North Dakota. All mailed or hand-delivered inquiries, communications, and applications for a new license or an amendment, renewal, or termination request of an existing license specified in paragraph (b)(1) of this section must use the following address: U.S. Nuclear Regulatory Commission, Region IV, Division of Nuclear Materials Safety, 1600 E. Lamar Blvd., Arlington, TX 76011–4511; where email is appropriate, it should be addressed to *RidsRgn4MailCenter.Resource@nrc.gov*.

(B) Otherwise, the regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region IV non-Agreement States and territory: Alaska, Hawaii, Idaho, Montana, South Dakota, Wyoming, and Guam. All mailed or hand-delivered inquiries, communications, and applications for a new license or an amendment, renewal, or termination request of an existing license specified in paragraph (b)(1) of this section must use the following address: U.S. Nuclear Regulatory Commission, Region IV, Division of Nuclear Materials Safety, 1600 E. Lamar Blvd., Arlington, TX 76011–4511; where email is appropriate, it should be addressed to *RidsRgn4MailCenter.Resource@nrc.gov*.

[48 FR 16031, Apr. 14, 1983, as amended at 49 FR 19630, May 9, 1984; 49 FR 47824, Dec. 7, 1984; 50 FR 14693, Apr. 11, 1985; 51 FR 36000, Oct. 8, 1986; 52 FR 8241, Mar. 17, 1987; 52 FR 38392, Oct. 16, 1987; 52 FR 48093, Dec. 18, 1987; 53 FR 3862, Feb. 10, 1988; 53 FR 43420, Oct. 27, 1988; 58 FR 7736, Feb. 9, 1993; 58 FR 64111, Dec. 6, 1993; 59 FR 17465, Apr. 13, 1994; 60 FR 24551, May 9, 1995; 62 FR 22880, Apr. 28, 1997; 68 FR 58803, Oct. 10, 2003; 70 FR 69421, Nov. 16, 2005; 71 FR 15007, Mar. 27, 2006; 72 FR 33386, Jun. 18, 2007; 73 FR 5717, Jan. 31, 2008; 74 FR 62681, Dec. 1, 2009; 75 FR 21980, Apr. 27, 2010; 75 FR 73942, Nov. 30, 2010; 76 FR 72085, Nov. 22, 2011; 77 FR 39905, Jul. 6, 2012; 77 FR 43689, Jul. 25, 2012; 78 FR 17006, Mar. 19, 2013; 78 FR 32338, May 29, 2013; 79 FR 75739, Dec. 19, 2014; 80 FR 74979, Dec. 1, 2015]

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