## COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF WASTE, AIR, RADIATION AND REMEDIATION BUREAU OF RADIATION PROTECTION HARRISBURG, PA 17101

September 4, 2015

### **BRP INFORMATION NOTICE 2015-03**

SECURITY ADVISORY FOR LICENSEES THAT POSSESS, USE, SHIP, OR RECEIVE RISK-SIGNIFICANT RADIOACTIVE MATERIALS

### ADDRESSEES

All Pennsylvania Department of Environmental Protection (DEP) Increased Control Licensees and Specific Licensees of Category 1 and Category 2 Radiation Sources within a 50-mile radius around Philadelphia.

### PURPOSE

The DEP is issuing this Information Notice (IN) to bring to the attention of PA licensees a security advisory from the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Homeland Security (DHS). The DHS has designated the 2015 World Meeting of Families on September 25-27, 2015 – as a National Special Security Event (NSSE).

## BACKGROUND

As a prudent precautionary measure, the NRC is requesting selected licensees who may possess certain risk-significant radioactive materials maintain heightened vigilance for potential security threats during the period surrounding the 2015 World Meeting of Families event. It should be noted to date, there has been no specific, credible threat toward any licensee of radioactive materials during this period.

## DISCUSSION

On the days of the 2015 World Meeting of Families event, licensees are asked to consider implementing certain security measures to avoid receiving and shipping radionuclides of concern. If a licensee determines that such a shipment must proceed through the area of concern during this period, the Department requests that the licensee notify the Bureau of Radiation Protection or the Pennsylvania Emergency Management Agency (PEMA) of such shipment plans as soon as possible. The Department will coordinate with the licensee, NRC, DHS regarding the possible implementation of supplemental security measures for such shipments.

For questions regarding this NSSE review the attached NRC document "Security Advisory for Licensees that Possess, Use, Ship or Receive Risk-Specific Radioactive Materials."

# CONTACT

This Information Notice requires no specific action or written response. If you have any questions about the information in this notice, please contact the Radiation Control Division at 717.787.3720.

Issued By: David J. Allard, CHP, Director Bureau of Radiation Protection

#### **OFFICIAL USE ONLY - SECURITY-RELATED INFORMATION**



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

September 3, 2015

### SECURITY ADVISORY FOR LICENSEES (NRC AND AGREEMENT STATE) THAT POSSESS, USE, SHIP, OR RECEIVE RISK-SIGNIFICANT RADIOACTIVE MATERIALS

#### SA 2015-07

### SUBJECT: NATIONAL SPECIAL SECURITY EVENT FOR THE 2015 WORLD MEETING OF FAMILIES

The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Homeland Security (DHS) are working together to enhance the ability to prevent, protect against, prepare for, and, if necessary, respond to and recover from terrorist attacks during periods of heightened alert.

The Secretary of DHS has designated the 2015 World Meeting of Families—occurring in and around the city of Philadelphia, PA, on September 25–27, 2015—as a National Special Security Event (NSSE). To date, the NRC has received no information concerning a specific, credible threat toward any U.S. nuclear facility or to licensed material during this period.

As a prudent precautionary measure, the NRC is requesting selected NRC and Agreement State licensees who may possess certain risk-significant radioactive materials and are located within an approximate 80-kilometer (50-mile) radius of the NSSE (area of concern) to maintain heightened vigilance for potential security threats during the period surrounding the 2015 World Meeting of Families event. The NRC recommends that licensees consider implementing elevated protective measures as outlined in the following:

- Regulatory Issue Summary (RIS) 2002-12C, Revision 1, "Decommissioning Power Reactors and Independent Spent Fuel Storage Installations Using Wet Storage: NRC Threat Advisory and Protective Measures System";
- RIS 2002-12L, Revision 1, "Panoramic and Underwater Irradiators: NRC Threat Advisory and Protective Measures System"; and
- RIS 2002-12M, Revision 2, "Manufacturing and Distribution Licensees: NRC Threat Advisory and Protective Measures System," as appropriate.

Licensees who find that these guidance documents do not apply to their facilities should consider implementing the security measures in Enclosure 1.

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For shipments of radioactive material in excess of 100 times the minimum levels specified for the radionuclides listed in Table 1 of the enclosure, consider implementing elevated protective measures as outlined in RIS 2005-12, Revision 1, "Transportation of Radioactive Material Quantities of Concern: NRC Threat Advisory and Protective Measures System."

On the days of the 2015 World Meeting of Families event, licensees are asked to consider implementing certain security measures to avoid receiving and shipping radionuclides of concern. If a licensee determines that such a shipment must proceed through the area of concern during this period, the NRC requests that the licensee notify the NRC Headquarters Operations Center of such shipment plans as soon as possible. The NRC will coordinate with the licensee, DHS, and affected States regarding the possible implementation of supplemental security measures for such shipments.

The NRC is advising affected licensees to consider implementing the recommendations of this advisory, which incorporates and supplements those advisories the NRC previously issued to materials licensees. This advisory also applies to all affected licensees who possess, use, ship, or receive quantities of radioactive material, including sealed radioactive sources, equal to or exceeding the minimum levels specified for those radionuclides listed in Table 1 of this advisory (Enclosure 2).

To ensure the security of high-risk sources, please treat this advisory as sensitive information and share it only with authorized personnel who have a need-to-know. This information should not be released to the public.

The NRC will continue to monitor threat-related reporting and other relevant developments and will coordinate its assessment activities with other Federal and State agencies for any indication of a threat to licensees.

Any information regarding threats or suspicious activities should be reported promptly. Licensees are requested to contact each of the listed organizations or agencies, as needed, in the following order:

- local Federal Aviation Administration contact (if an aircraft incident)
- local law enforcement agency
- local Federal Bureau of Investigation field office
- the NRC Headquarters Operations Center at 301-816-5100
- the appropriate Agreement State Official (for Agreement State licensees)

If the NRC receives additional information concerning site-specific or general threats involving radioactive material, the agency may revise this guidance, advise licensees, or take additional action, as appropriate. If you have any questions concerning this advisory, contact the NRC Headquarters Operations Center.

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**Paperwork Reduction Act Statement**: This security advisory does not contain information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (Title 44 *United States Code* 3501, *et seq.*).

This security advisory expires on September 28, 2015.

Approved by

Michael C. Layton, Director Division of Security Operations Office of Nuclear Security and Incident Response

**Technical Contact:** 

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Enclosures:

1. Security Advisory Actions

2. Table 1: Radionuclides of Concern

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#### Security Advisory Actions

The following actions have significant value in increasing security of radioactive sources and protecting against threats. The U.S. Nuclear Regulatory Commission (NRC) recommends that NRC and Agreement State licensees who have in their possession quantities of radioactive material in excess of the minimums specified for the radionuclides listed in Table 1 of Enclosure 2 to this advisory provide increased security and control over that material. The increased security and control are intended to prevent unauthorized access and to limit the potential for theft, diversion, or sabotage of the material. To accomplish this, the NRC is urging licensees to consider putting into place the following specific steps:

1. For facilities or all areas where the radioactive materials are used and stored:

- a. Maintain inventory of material in these areas and tighten the controls on movement of material into and out of the established use and storage areas.
- b. Consider implementing further controls, such as a two-person (line-of-sight) rule for all personnel in security zones if advised of a potential insider threat at a particular facility.
- 2. Be extra sensitive to the presence of any suspicious persons or packages transported or observed in the vicinity of the facility.
- 3. Be cautious about granting vehicles access into, or close to, your facility or near areas where the radioactive materials are used or stored.
- 4. Consider eliminating unnecessary stops en route to temporary job sites.
- 5. Avoid receiving or shipping radioactive material in excess of the minimum quantities specified for the radionuclides listed in Table 1 during this period.

The NRC notes that these security advisory actions do not supersede any applicable NRC regulations or orders or U.S. Department of Transportation requirements found in Title 49 of the *Code of Federal Regulations*, "Transportation."

Enclosure 1

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#### Table 1: Radionuclides of Concern

Below are the radionuclides of concern and their quantities mentioned in the previous section of this document.

Radionuclide	Quantity of Concern Terabecquerels (TBq)	Quantity of Concern Curie (Ci)
Am-241	0.6	16.2
Am-241/Be	0.6	16.2
Cf-252	0.2	5.4
Cm-244	0.5	13.5
Co-60	0.3	8.1
Cs-137	1	27.0
Gd-153	10	270
lr-192	0.8	21.6
Pm-147	400	10,800.0
Pu-238	0.6	16.2
Pu-239/Be	0.6	16.2
Ra-226	0.4	10.8
Se-75	2	54.0
Sr-90 (Y-90)	10	270
Tm-170	200	5,400 .0
Yb-169	3	81.0

This security advisory applies to sources of radioactive material as follows:

- Covers any single source greater than the quantity of concern in Table 1
- Covers multiple collocated sources of the <u>same radionuclide</u> in which the combined quantity aggregate activity exceeds the quantity of concern in Table 1

Note: The regulatory standard values to be used are given in TBq. The table provides Ci values for convenience, which are rounded after conversion.

Enclosure 2

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If several radionuclides are present, the sum of the fractions of the activity of each radionuclide must be determined. If the calculation of the ratio, using the following equation, is greater than or equal to 1.0, then the facility or activity meets or exceeds the thresholds of Table 1. Using the equation below, licensees should calculate the ratio by inserting the actual activity of each radionuclide as the numerator and the corresponding activity limit in Table 1 as the denominator. Ensure the numerator and the denominator are in TBq.

 $R_1$  = the aggregate activity for radionuclide number 1

 $R_2$  = the aggregate activity for radionuclide number 2

R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>.....Rn (where n is the total number of radionuclides in the source(s))

AR<sub>1</sub> = activity limit for radionuclide number 1

AR<sub>2</sub> = activity limit for radionuclide number 2

AR<sub>3</sub>, AR<sub>4</sub>, AR<sub>5</sub>.....ARn

Rn <u>R₂</u> AR₂ <u>\_R</u>₃ AR₃ <u>≥</u>1  $R_1$ **AR**₁ AR<sub>n</sub>

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