



NPRA

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January 18, 2011

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC
Attn: Rulemakings and Adjudications Staff

DOCKETED
USNRC

January 18, 2011 (4:30 pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

RE: NPRA Comments on Docket ID NRC-2008-0120—Physical Protection of Byproduct Material

NPRA, the National Petrochemical & Refiners Association, appreciates the opportunity to provide comments on the “Physical Protection of Byproduct Material” Notice (75 FR 33902, June 15, 2010). Many NPRA members use radioactive gauges and sources; therefore we have considerable interest in this issue.

The proposed rule would require any licensee that is authorized to possess certain quantities of radioactive material to implement a Background Investigations and an Access Authorization Program, which would include finger printing and FBI background checks for all employees that have unescorted access to radioactive sources. The proposed rule would also require the development and implementation of a security plan that may include the construction of additional security devices around radioactive sources, such as cages and locks.

The quantities that would trigger applicability of the proposed rule are referred to in the rule as “Category 1” and “Category 2” quantities, and are described more specifically in the rule.

The proposed rule has the potential to impose additional regulatory burden on NPRA member facilities that, as explained below, do not add to radioactive material security at these facilities.

1) The IAEA Source Categorization

The final rule should adopt the entire categorization of radioactive sources provided in the International Atomic Energy Agency (IAEA) Safety Guide No. RS-G-1.9 – Categorization of Radioactive Sources. It should also limit the applicability of the proposed

Template = SECY-067

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rule to source quantities characterized as Category 1 and Category 2 in the IAEA Safety Guide.

NRC explained in the preamble to the proposed rule that the agency adopted the IAEA Category 1 and Category 2 threshold quantities in the proposed rule. However, the IAEA Safety Guide provides a more robust, risk-based categorization of quantities than the categorization provided in the proposed rule. The IAEA Safety Guide describes five different categories that differentiate sources possessed by various licensees based on quantity as well as use.

The IAEA Safety Guide characterizes the types of sources used in refineries and petrochemical plants as Category 3. Thus, according to the IAEA Safety Guide, the types of sources used in refineries and petrochemical plants present less risk than the source quantities in Category 1 and 2. For the reasons set forth in the IAEA Safety Guide No. RS-G-1.9, as well as the reasons set forth below, the proposed rule should adopt the entire categorization of radioactive sources provided in the IAEA Safety Guide and limit the applicability of the proposed rule to source quantities characterized as Category 1 and Category 2 in the IAEA Safety Guide.

Additional security measures addressing radioactive materials are not necessary in the refining or petrochemicals industry due to the location, lack of accessibility, source holder design, and currently applicable security requirements.

- a. For security purposes, sources are continually monitored by process control systems. If they were to go off-line, there would be immediate response, due to process safety concerns.
- b. The location of sources within a refinery or petrochemical facility mitigates the need for additional security measures. In most chemical and refining facilities, sources are contained within source holders. These source holders are located within the various operating unit locations and attached to different equipment. Production units are typically scattered over several acres. Source holders are typically bolted individually to a process column or equipment and are not aggregated. Accordingly, aggregation of source material is rare and would only occur if the facility was to conduct a massive overhaul of the entire facility at once or if the facility is undergoing decommissioning.
- c. Source holders used in the refining and petrochemical industries also mitigate the need for additional security measures. As noted above, sources are contained within source holders. The source holders used in the refining and petrochemical industries



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are typically very large, heavy, cumbersome metal containers. These sources are typically sealed inside a source holder that is bolted in place. Thus, due to the nature of the source holders, it would be very difficult to aggregate source material.

d. The inaccessibility of source material within a refinery or petrochemical plant also mitigates the need for additional security measures. Source holders are usually bolted onto the process unit. Sources are usually located at 30, 40, or even 50 foot tall columns or at upper levels of a production unit. To remove the source holders requires tools, cranes, hoist or scaffold support because of their weight and position on the process equipment. Accordingly, the lack of accessibility and weight mitigates the need for additional security measures.

e. In the event of aggregation due to decommissioning or a massive overhaul, currently applicable security requirements such as MTSA, CFATS, etc. would adequately address security concerns. Aggregation of source material in those cases would trigger the Increased Control requirements mandated by NRC Order EA-07-305 or appropriate State regulation would take effect. The Order and subsequent regulations require increased security and a personnel reliability program when aggregated stored source activity exceed applicable quantities.

For facilities covered under MTSA, these proposed regulations would mean additional burdens, redundancies and confusion. For facilities regulated under DHS/DOT Personnel Surety programs, we suggest that the proposed regulation allow a program of reciprocity, in order to reduce redundancy.

At NPRA member facilities, the Radiation Safety Officer (RSO) and technicians have intimate contact with source holders. NPRA suggests that if this proposed rule is to be implemented, it would be best to be implemented to the RSO and technicians and not to the entire facility population.

2) Disabling of Mobile Sources

The current rule requires the disabling of mobile sources by means other than removing the key to vehicles that contain mobile sources. This requirement presents a safety concern within a refinery or petrochemical plant. Industrial Radiographers or other contractors entering refineries or petrochemical facilities must be able to quickly evacuate the site in the event of an emergency. In addition, unoccupied vehicles must be able to be moved by other evacuees or emergency responders. Requiring a secondary securing device other



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than the key from a vehicle prevents the easy movement of the vehicle and compromises safety in the event of an emergency.

In the scenario where there was a safety issue and a mobile source could not be moved, the mobile source might be compromised in order to gain access to the safety event by emergency responders.

3) Conclusion

- NPRA members fall under Category 3 of the IAEA Safety Guide.
- Sources in refining and petrochemical facilities are continually monitored by process control systems.
- MTSA and CFATS sites already have security requirements including background checks.
- The inaccessibility of source material within a refinery or petrochemical plant also mitigates the need for additional security measures.
- If the rule were to be imposed, it would be best to be implemented to the RSO and technicians and not to the entire facility population.
- Disabling of a mobile source by means other than removing the key to vehicles that contain mobile sources would present a safety concern within NPRA member facilities.

NPRA welcomes the opportunity to work with NRC on these issues and create a program that can be realistically implemented. Please contact me with any questions at 202-457-0480 or at dstrachan@npra.org

Sincerely,

A handwritten signature in cursive script that reads "D.J. Strachan".

Daniel J. Strachan
Director
Industrial Relations & Programs
NPRA

Rulemaking Comments

From: Anna Scherer [AScherer@npra.org]
Sent: Tuesday, January 18, 2011 10:45 AM
To: Rulemaking Comments
Cc: Dan Strachan; David Friedman
Subject: Comments submitted by NPRA on January 18, 2011
Attachments: NRC Comments Jan 18 2011.pdf

To Whom it May concern,

Please see the attached comments submitted by the National Petrochemical and Refiners Association on January 18, 2011.

Anna Scherer, Environmental/Security Programs Coordinator

NPRA

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X-SBRS: None

X-MID: 29823357

X-fn: NRC Comments Jan 18 2011.pdf

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From: Anna Scherer <AScherer@npra.org>

To: "'rulemaking.comments@nrc.gov'" <rulemaking.comments@nrc.gov>

CC: Dan Strachan <DStrachan@npra.org>, David Friedman <DFriedman@npra.org>

Return-Receipt-To: <AScherer@npra.org>

Date: Tue, 18 Jan 2011 10:45:17 -0500

Subject: Comments submitted by NPRA on January 18, 2011

Thread-Topic: Comments submitted by NPRA on January 18, 2011

X-ASG-Orig-Subj: Comments submitted by NPRA on January 18, 2011

Thread-Index: Acu3JzW9scqI+BuUTRuxVHv1+nMevw==

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X-Barracuda-Spam-Status: No, SCORE=-2.02 using global scores of TAG_LEVEL=1000.0

QUARANTINE_LEVEL=1000.0 KILL_LEVEL=9.0 tests=HTML_MESSAGE

X-Barracuda-Spam-Report: Code version 3.2, rules version 3.2.2.52739

Rule breakdown below

pts	rule name	description
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