

February 9, 2006

Oil Field Services Industry Forum for
Radiation Safety and Security
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Attn: Richard L. Arsenault

To: Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration
Mail Stop T6-D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Radiation Source Protection and Security Task Force; Request for Public
Comment - RSPS-TF

Dear Sirs,

The member companies of the Oil Field Services Industry Forum for Radiation Safety and Security (Forum) have reviewed the ten topics listed in the Radiation Source Protection and Security Task Force: Request for Public Comment. Our comment for each topic follows.

Topic No. 1 – The list of radiation sources requiring security based on potential attractiveness of the source to terrorists and the extent of the threat to public health and safety.

The commitment by the United States to adopt the IAEA Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct) along with its implementation is a step in the right direction. However, we are seeing slow implementation to adopt and implement the Code of Conduct by other member states.

Topic No. 2 – The national system for recovery of lost or stolen radiation sources.

There is an old saying that an ounce of prevention is worth a pound of cure. Taking a proactive approach better than a reactive approach. The Establishment of the Off-Site Recovery Project (OSRP) has been a step in the right direction to address this issue.

Topic No. 3 – Storage of radiation sources that are not used in a safe and secure manner

The NRC and Agreement State regulations are quite clear on what the requirements are in these situations. More enforcement may be necessary to correct the behavior of licensees possessing radiation sources that are not used in a safe and secure manner.

Topic No. 4 – The national source tracking system for radiation sources

On August 29, 2005 the Oil Field Services Industry Forum for Radiation Safety and Security formally commented on the National Source Tracking of Sealed Sources Proposed Rule – RIN 3150-AH48. This formal comment should be on file.

Inserted below is the discussion from this formal comment:

“The member companies of the Oil Field Services Industry Forum for Radiation Safety and Security (Forum) support the implementation of a national source registry for category 1 and category 2 radioactive sources since this is consistent with the recommended actions of the International Atomic Energy Agency's (IAEA) Code of Conduct. However, the proposed rule, RIN 3150-AH48, includes proposed requirements that we believe are well beyond the requirements of the IAEA Code of Conduct and that will not be useful in advancing security for these sources. We specifically have concerns regarding the reporting requirements for category 2 sources, the possible inclusion of category 3 sources and the possible inclusion of expanding the reporting requirements to the movements of source to and from temporary job-sites.

The member companies of the Oil Field Services Industry Forum for Radiation Safety and Security have for many decades provided excellent security for many hundreds of category 2 and 3 radioactive sources under their care. Individual Forum members operate throughout the United States and possess multiple licenses from the NRC and Agreement States. The Forum members routinely move these sources from one authorized company facility to another authorized company facility. These facilities may be covered by the same license or covered by separate licenses. The proposed rule would require the reporting of these transfers for category 2 sources by the close of the next business day. The Forum cannot comment on whether this reporting requirement is appropriate for category 1 sources, but strongly believes the close of the next business day requirement is not appropriate for category 2 sources.

For the members of the Forum movement of category 2 sources from one location to another is a very frequent activity with many members doing one or more transfers per day on average. A very high percentage of the movements that would be reported would involve transfers from one location to another where the source remains in the custody of a single company, even though this frequently does involve multiple licenses that are issued to the same company. Reporting these movements, would not add anything to the physical security of the source, as the NRC states in RIN 3150-AH48, where the NRC writes,

"National source tracking is part of comprehensive radioactive source control program for radioactive materials of greatest concern. Although neither a national source tracking system nor source registry can ensure the physical protection of sources, it will

provide greater source accountability which will foster increased control by licensees."

Nor would reporting these movements improve the response time of authorities in the event a source were stolen. In fact, licensees are already required to immediately report a theft or loss of a source by 10 CFR 20.2201. These reports will not increase physical security of the source or improve the response time of authorities in the event a source were stolen, then the close of the next business day reporting requirement is a requirement without value in two major considerations for these movements.

The Forum does acknowledge that some movements involve the use of freight carriers other than the licensee. However, even for these movements licensees are already required to immediately report a theft or loss of a source by 10 CFR 20.2201. Here again these reports will not increase physical security of the source or improve the response time of authorities in the event a source were stolen. Thus also for these movements, the close of the next business day reporting requirement is a requirement without value and would be extremely burdensome.

In RIN 3150-AH48, the NRC writes, "*National source tracking is part of comprehensive radioactive source control program for radioactive materials of greatest concern. Although neither a national source tracking system nor source registry can ensure the physical protection of sources, it will provide greater source accountability which will foster increased control by licensees.*" This statement appears to indicate that the NRC believes that licensees have not provided adequate accountability or control for these sources in the past. Not only does the Forum disagree with this and believes this is contrary to the excellent record of the Forum's members, we believe this is beyond the scope of what the IAEA Code of Conduct recommends.

We believe that the close of the next business day reporting requirement is without value for enhancing security and response to thefts and thus is overly burdensome. However, we support the implementation of a national source registry for category 1 and category 2 radioactive sources and suggest the following alternate requirements:

- 1) Licensees be required to maintain a record of the present location of the category 1 and 2 sources they possess;
- 2) Licensees be required to make a monthly report of movements to ensure that the national source registry is maintained. We emphasize that the ease of the use of the web-based tracking system is paramount and that dial-up users must be considered;
- 3) Licensees be required to notify the planned recipient licensee whenever a source is sent to them with the information to include: the name of the freight carrier, expected ETA and carrier tracking information; and
- 4) That the reporting requirements of 10 CFR 20.2201 be expanded to require licensees to report within 24 hours category 1 or 2 sources in transit that cannot be located by the freight carrier. This 24-hour reporting requirement would provide timelier reporting since the periods between the end of one business day and the close of the next consecutive business day frequently is 72 hours and periodically is 96 hours.

The Forum does not support and strongly objects to the inclusion of category 3 sources in the national source registry for the same reasons already stated. By including category 3 sources in the national source registry, the extremely burdensome reporting requirements suggested for category 1 and 2 sources would increase many times by adding many additional sources to this proposed requirement. In addition, including category 3 sources in the national source registry is beyond the recommendations of IAEA Code of Conduct.

Similarly, the Forum does not support and strongly objects to including the transfers of category 2 sources to temporary job-sites in the reporting requirements. These sources are used at tens of thousands of temporary job-sites annually. The inclusion of these transfers in the reporting requirements would increase the already extremely burdensome proposal by hundreds or thousands of times. In addition, we believe it would be impossible to comply with the requirement because of the frequent re-routing of these sources to cover the fluid business requirements of the oil and gas industry.

The Forum agrees that the national source registry information should be "Official Use Only" and that SGI or SGI-M is not an appropriate level of security for this information. We believe that classification of this information as either SGI or SGI-M would not be necessary and would prove to be onerous.

Finally, it is not clear how the NRC plans to handle changes in serial numbers that occur when a source is installed into a source holder. Frequently, sources used in the oil and gas industry have serial numbers that are assigned by the manufacturer. This source is then permanently installed into a protective pressure vessel and this source holder is given a different serial number consistent with the end-users nomenclature. Once installed, the serial number on the source provided by the manufacturer cannot be verified and is no longer of practical value. Forum members track the source holder by the holder serial number. The proposed rule does not appear to anticipate this and if it does not, serious confusion will result and degrade the stated purpose for a lifetime history of each source. The Forum recommends that the national source registry must allow for these serial number changes in the life of a source."

Topic No. 5 – A national system to provide for the proper disposal of radiation sources.

The forum requests that the threshold for NRC and Agreement States decommissioning financial assurance requirements for sealed sources containing byproduct material for which financial assurance is not required remain as it is presently written. That is, that the thresholds are above the threshold for a Category 1 or Category 2 source and that the threshold continue to be based on the total authorized possession limits and not on individual sources.

The forum also fully supports the DOE's Off-Site Source Recovery Program and feels this is the best solution for removing unwanted sources from the market. The civil penalty of 3 times the disposal cost for improperly disposed sources is more than adequate to discourage such activity. The forum objects to the institution of user fees to provide for the disposal of radiation sources. If a company can get into the business the

company and/or its officers and directors should be held accountable for proper disposal of assets or wastes. Penalizing a group of responsible businesses for the irresponsible actions of a few should not be an option.

Topic No. 6 – Import and export controls on radiation sources to ensure that recipients of radiation sources are able and willing to adequately control radiation sources.

The Forum does not see any need to increase any additional controls as result of the current rule enacted on 28 December 2005.

Topic No. 7 – Procedures for improving the security and control for use and storage of radiation sources.

The Forum does not have any comment on this topic as this matter is already adequately addressed in the new Increased Controls requirements

Topic No. 8 – Procedures for improving the security of transportation of radiation sources.

The forum believes the responsibility for ensuring security of radiation sources during the transportation process, outside the control of the licensees, should be the responsibility of the US DOT, the authorized transporters, freight forwarders, etc. as opposed to the current situation of placing the onus on the licensees as specified in the NRC Increased Controls.

Topic No. 9 – Background checks for individuals with access to radiation sources.

The Forum would like to see a single consistent process across different Federal Agencies involving background checks. Several Forum companies have requirements from the Nuclear Regulatory Commission, Department of Transportation (CDL drivers with Hazardous Material Endorsement) and the Bureau of Alcohol, Tobacco, Firearm and Explosives (Explosive Responsible Persons and Explosive Users). A single process would be more efficient from both a company and Federal perspective.

Topic No. 10 – Alternatives technologies


The Forum fully supports pursuing alternative technologies to replace radioactive sources to make the same types of formation evaluation measurements required by our customers. Pursuing alternative technologies, especially for small companies, is a costly proposition. Sealed radioactive sources have been used in the well logging industry for more than 60 years and very few, if any, alternative technologies have been developed that can provide the same information. Oil & Gas Companies require accurate well logging formation evaluation data to determine oil & gas zones.

An alternatives technologies project should be funded by a federal agency, such as the DOE, to explore viable alternatives to the discrete radioactive sealed sources being utilized at this time.

The following member companies are participating in this Forum comment letter.

- Halliburton Energy Services, Inc.
 - Richard Arsenault, Dwaine Brown, Steve Woods
- Schlumberger
 - Ray Dickes, Tom Wood
- Baker Hughes Atlas/Inteq
 - Jim Elrod, David Huber, Phil Simpkin, Steve Bliven
- ProTechnics, a Division of Core Laboratories
 - Tom Hampton, Larry Stephenson, Whit Hampton, Andrew Allain
- Perf-O-Log, Inc.
 - George Doggett
- Weatherford International
 - Stefan Colhoun, Jeff Pettigrew
- Tucker Energy
 - Randy Nitz, Bill Johnson
- Warrior Energy Services Corp.
 - Donald Babin
- Integrated Production Services
 - Bill McKee
- Analog Services, Inc.
 - Syd H. Levine
- Probe Technology
 - Phillip Phelps
- Gray Wireline Services
 - Eric Rosemann
- Titan Specialities, Ltd.
 - Lacy Ransom

Sincerely,



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