Regulatory Evaluation Summary
Reporting of Medical Treatment of a Contaminated Individual

1.0 Overview of the Issue

The purpose of the proposed regulatory initiative is to address situations involving the following NRC regulations:

10CFR70.50 "Reporting requirements"

(b) Twenty-four hour report. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(3) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

10CFR40.60 "Reporting requirements"

(b) Twenty-four hour report. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(3) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

Specifically, the industry is seeking clarification in the interpretation of the following:

- "medical treatment"
- "medical facility" (*onsite vs. offsite*)
- "with spreadable radioactive contamination"

In addition the industry is seeking a regulatory framework that will ensure consistent interpretation.

2.0 Purpose Statement

2.1 "**Medical Treatment**"

The industry interprets the definition "medical treatment" to align with OSHA guidelines. As stated in OSHA regulation 29 CFR 1904.7(b)(5) medical treatment does not include:

1. A visit to a physician or other licensed health care professional (e.g., nurse) solely for observation or counseling, or
2. The conduct of diagnostic procedures, such as x-rays and blood tests, including the administration of prescription medications used solely for diagnostic purposes (e.g., eye drops to dilate pupils); or
3. First aid [*further clarified in 29 CFR 1904.7 (b)(5) (ii)*

NOTE: This interpretation would not remove the requirement to notify the NRC for offsite medical treatment of an individual who has spreadable contamination on their clothing or body. The industry recognizes the importance of informing the NRC of any interaction of a "contaminated" individual with the general public.

2.2 "Medical Facility"

The NRC's interpretation requires the industry to provide a 24 hour report to the NRC regardless of whether the medical treatment facility is located offsite or on the licensee property.

For facilities with medical treatment capabilities (*as discussed above*) onsite and with processes in place for managing potential contamination this interpretation has led to the reporting of multiple low significance incidents necessitating the commitment of significant resources to event notifications followed by written reports.

This interpretation is inconsistent with the reporting requirement for 10 CFR 50 licensees (see below) which requires reporting (within 8 hours) only if the facility is located offsite.

10CFR50.72 "Immediate notification requirements for operating nuclear power reactors"

(3) Eight-hour reports. If not reported under paragraphs (a), (b)(1) or (b)(2) of this section, the licensee shall notify the NRC as soon as practical and in all cases within eight hours of the occurrence of any of the following:

xii) Any event requiring the transport of a radioactively contaminated person to an offsite medical facility for treatment.

The industry seeks to change the interpretation of "medical facility" so that reporting would apply only to "offsite" medical facilities.

2.3 "With Spreadable Radioactive Contamination"

The interpretation of the term "with spreadable radioactive contamination" appears to be inconsistent. For example a Notice of Violation (Inspection Report Number 70-143/2014-003) was issued based upon a regional interpretation that *"the contamination on the skin of a person is not fixed, but spreadable due to the process during which the external layers of skin die and fall off*."

This interpretation is inconsistent with standard health physics professional practices which recognize that "spreadable/removable" contamination is characterized by the ability to physically transfer the material via contact with another medium.

This reality is central to the internationally recognized technique by which contamination is determined to be "fixed/non-transferable" or "loose/spreadable." The surface of the contaminated material is rubbed with a medium such as cloth or filter paper. If the contamination is detected on the medium, the contamination is considered "loose/spreadable."

3.0 Implementation Challenges

3.1 Anticipated Improvements

The development of Notification Reports to the NRC is, rightly, a very serious issue and involves a significant amount of licensee time and resources. Licensees typically commit at least 60 person-hours directly in generating the notification and nominal costs of $100,000 per notification are not uncommon. Included in these estimates are the time and resources required to:

- develop the initial written notification and associated 30 day follow-up report
- perform subsequent investigations
- enter the incident into a corrective action system
- implement the corrective action, as needed
- perform management reviews of each action
- revise procedures, as needed
- develop material and train/re-train staff, as needed

Additional costs can include associated NRC inspection charges for closing the issue and licensee developed media support for addressing perceived negative public perception associated with the notification.

The proposed resolutions will not negatively impact the health and safety of workers, the public, or the environment and is certainly consistent with the focus of addressing the cumulative impact of regulatory requirements.

3.2 Anticipated Challenges

There are no readily apparent challenges from the industry perspective. Revisions to procedures and training material will be required but the benefits gained will overshadow the effort involved.

From a regulatory perspective the development of the appropriate guidance document must be considered.

4.0 Interactions

Note: information contained within this section is preliminary and may change as the project progresses.

The Nuclear Energy Institute (NEI) will serve as the industry point of contact for this issue. NEI will solicit and coordinate industry input into the development and review of materials.