

# United States Department of the Interior

U. S. GEOLOGICAL SURVEY Interior Region 7 Upper Colorado Basin Box 25046 M.S. 974 Denver Federal Center Denver, Colorado 80225

Monday, August 17, 2020

Attn: Document Control Desk

U.S. Nuclear Regulatory Commission

Washington, D.C. 20555-0001

SUBJECT: U.S. Geological Survey TRIGA Reactor, Docket Number 50-274, License Number

R-113, License Amendment Request 2020-01, Supplemental Information Provided in Response to NRC Project Manager Phone Call on 2020-08-11 at 0900 MT and

Organizational Chart Update.

# **Purpose**

By way of this letter, the U.S. Geological Survey (USGS) is providing supplemental information requested by NRC via phone call made 11 August 2020 regarding a license amendment request by the USGS TRIGA Reactor facility and an Organizational Chart update.

## **Discussion**

Two items of concern were identified by the phone call detailed above and will be responded to below in order:

- 1. At the end of technical specification 6.7.2 subitem 1.h, a period is needed to properly terminate the specification statement. It is hereby requested that said period be added appropriately.
- 2. A change to the organizational chart, Figure 6.1 in the technical specifications, is submitted for approval and acceptance. This change provides two major items.
  - a. First, a new communication line is drawn between the Reactor Health Physicist and the Reactor Administrator (Level 1). This change is being made to address a perceived conflict of interest resulting from a lack of communication between the two positions. Several reports including a TRTR community peer review and Department of Interior investigations have made recommendations for an additional path of communication between the Reactor Health Physicist and entities besides the Reactor Supervisor (Level 2) to prevent the potential coercion by the latter and obeyance of illegal orders by the former. By instituting an additional official pathway, the Reactor Health Physicist is able and encouraged to voice concerns as necessary. An internal organizational chart has also been updated to reflect such preventive measures.

b. Second, directional arrows have been added to the organizational chart to clarify the reporting and communication hierarchy. This was a suggestion by members of the GSTR Reactor Operations Committee and determined to assist in interpreting the intent of the chart. Reporting lines have been kept single ended to demonstrate the intended chain of command and expected direction of information between lower levels and higher levels, as entities are not always placed on lower / higher levels with respect to one another. However, reporting lines also intrinsically represent a two-way path of communication, as superiors and subordinates must be able to converse for the organizational structure to be effective.

Communication lines have been made double ended to show the two-way nature intended by those relationships and represent no explicit reporting requirements.

# **Contact**

If you have any questions regarding this matter, please contact me at (303) 236-4726.

# **Affirmation**

I declare under penalty of perjury that the foregoing is true and correct.

Jonathan Wallick, Reactor Director

# Copied to:

Dr. Robert Horton, Reactor Administrator, USGS Geoffrey Wertz, Project Manager, US NRC Craig Bassett, Inspector, US NRC

### Attachments:

- (1) Original Technical Specification 6.7.2 subitem 1.h.
- (2) Original Technical Specification Figure 6.1, Organizational Chart
- (3) Proposed Technical Specification Figure 6.1, Organizational Chart

# Attachment 1 Original Technical Specification 6.7.2 subitem 1.h.

8. Results of fuel inspections (when performed).

# 6.7.2 Special Reports

In addition to the requirements of applicable regulations, and in no way substituting therefore, reports shall be made by the Reactor Supervisor to the NRC as follows:

- 1. A report within 24 hours by telephone, confirmed by digital submission or fax to the NRC Operations Center if requested, and followed by a report in writing to the NRC, Document Control Desk, Washington, D.C. within 14 days that describes the circumstances associated with any of the following:
  - a. Any release of radioactivity above applicable limits into unrestricted areas, whether or not the release resulted in property damage, personal injury, or exposure;
  - b. Any violation of a safety limit;
  - c. Operation with the actual safety system setting less conservative than the LSSS;
  - d. Operation in violation of a Limiting Condition for Operation;
  - e. Malfunction of a required reactor safety system component which renders or could render the system incapable of performing its intended safety function unless the malfunction or condition is caused by maintenance, then no report is required;
  - f. Any unanticipated or uncontrolled change in reactivity greater than \$1.00. Reactor trips resulting from a known cause are excluded;
  - g. An observed inadequacy in the implementation of either administrative or procedural controls, such that the inadequacy causes or could have caused the existence or development of a condition which results or could result in operation of the reactor outside the specified safety limits; or
  - h. Abnormal and significant degradation in reactor fuel, cladding, or coolant boundary
- 2. A report within 30 days in writing to the NRC, Document Control Desk, Washington, D.C. of:
  - a. Permanent changes in the facility organization involving Level 1-2 personnel; or
  - b. Significant changes in the transient or accident analyses as described in the Safety Analysis Report.

Attachment 2
Original Technical Specification Figure 6.1, Organizational Chart

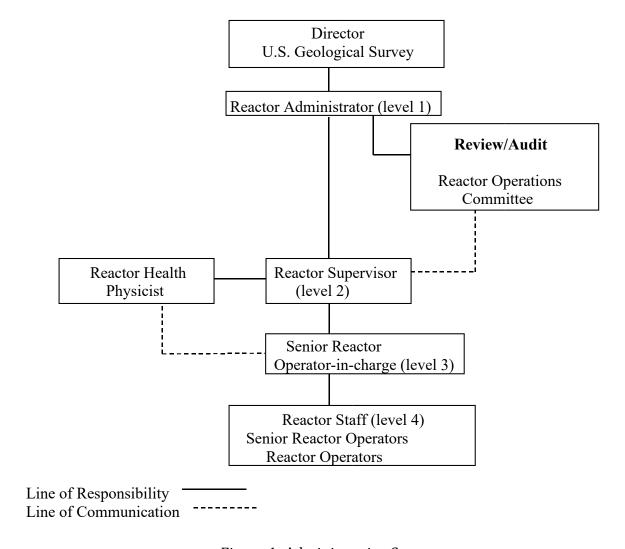


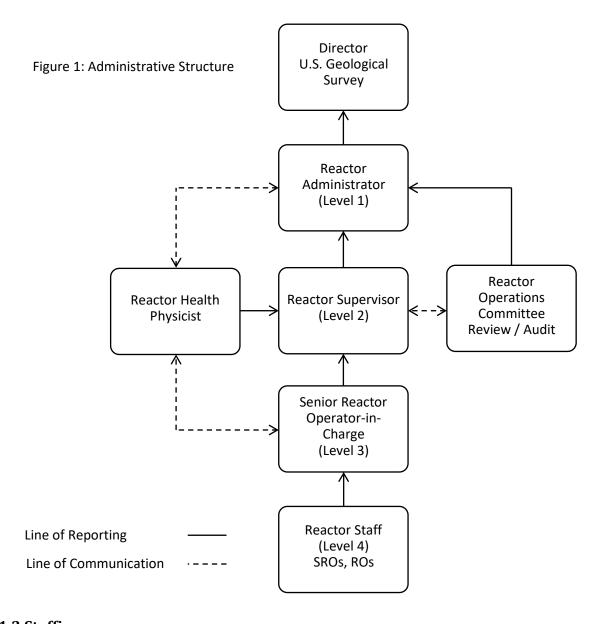
Figure 1: Administrative Structure

# 6.1.3 Staffing

- 1. The minimum staffing when the reactor is not secured shall be:
  - a. A Licensed Operator in the control room;
  - b. A second person present within the Denver Federal Center who is able to carry out prescribed instructions;
  - c. If neither of these two individuals is a Senior Reactor Operator, a Senior Reactor Operator shall be readily available on call. Readily available on call means an individual who:
    - i. Has been specifically designated and the designation is known to the operator on duty;

# **Attachment 3**

Proposed Technical Specification Figure 6.1, Organizational Chart



# 6.1.3 Staffing

- 1. The minimum staffing when the reactor is not secured shall be:
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