**DEPARTMENT OF THE ARMY**
**U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND**
**CHEMICAL BIOLOGICAL CENTER**
**8198 BLACKHAWK ROAD**
**ABERDEEN PROVING GROUND, MARYLAND 21010-5424**

April 6, 2022

Betsy Ullrich, Senior Health Physicist
Mail Control No. 629410
U.S. Nuclear Regulatory Commission - Region I
Division of Radiological Safety and Security
2100 Renaissance Blvd, Suite 100
King of Prussia, PA 19406-2713

Dear Ms. Ullrich:

The Combat Capabilities Development Command Chemical Biological Center is responding to your request for additional information below:

1. In accordance with 10 CFR 30.35(e)((2), a decommissioning funding plan (DFP) is required to be resubmitted at the time of license renewal and at intervals not to exceed 3 years, with adjustments as necessary to account for changes in costs and the extent of contamination. Your current DFP is dated May 17, 2019. Please submit your revised DFP for this license. Please do not submit a new Certification of Financial Assurance (CFA) or Statement of Intent (SI) until the cost estimate based on the resubmitted DFP is reviewed and accepted. When our review is completed, a new CFA and SI may be submitted if required at that time.

Please see attachment 1.

2. In accordance with NUREG-1556, Volume 11, Revision 1 “Consolidated Guidance About Materials Licenses, Program-Specific Guidance About Licenses of Broad Scope, (NUREG-1556, Vol. 11, Rev. 1)” Section 8.7.2 “Radiation Safety Committee,” describe which members and the number of members of your Radiation Control Committee (RCC) will constitute a quorum for RCC meetings.

A quorum will be met providing the Chairperson, each RSO, and a representative for each directorate from which specific issues will be discussed are present (members who call into the meeting will count as present). If a quorum cannot be met at the time of the meeting, the meeting will continue with the present members, and the Chairperson will contact each absent member for their required approval in writing and will be attached to the minutes.

3. NUREG-1556, Vol. 11, Rev. 1 allows Type A broad scope licensees to request flexibility to revise a number of areas without amendment of the license, including: audit mechanism, instruments specifications and procedures for calibrations, administrative procedures for control

of procurement and use of licensed materials, personnel monitoring program, safe use and emergency procedures, and survey and leak test programs. If you wish this flexibility, provide the process the RCC will use to revise and implement changes in these areas. The criteria should include: RCC review to ensure that changes will not degrade the effectiveness of the currently approved program; approval by the RCC; training staff before implementing new procedures; and evaluation to ensure that changes are properly implemented by staff and to determine the effectiveness of the changes.

The CBC RCC Charter is attached as a reference, see attachment 2.
The CBC RCC is composed of management level members of each directorate that use radioactive materials at CBC.
The RCC reviews all changes to the radiation safety program to ensure that the changes will not degrade the effectiveness of the currently approved program.
Each member is required to provide approval prior to changes to the program.
Each member is required to provide approval to the appropriate level of training for staff prior to implementing new procedures.
The RCC is required to review program audits and inspection reports to ensure that changes are properly implemented by staff and to determine the effectiveness of the changes. Audits and inspection reports may be for the annual program review, NRC inspections, or other US Army inspections (Chain of Command, IG, etc.)

4. Your leak test program does not state that a leak test must be performed prior to use of a sealed source that has been in storage and therefore not tested routinely for leakage. This is required by the leak test condition on the license. Confirm that you will ensure sources removed from storage are tested for leakage prior to use.

CBC ensures that sources removed from storage status shall be tested for leakage prior to use.

If you have any questions regarding this response, please contact myself at (410) 436-1877 or email address at amy.j.ramsey5.civ@army.mil.

Sincerely,

AMY J. RAMSEY
Radiation Safety Officer, U.S. Army Combat Capabilities Development Command Chemical Biological Center

Enclosures

DEPARTMENT OF THE ARMY
U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND
EDGEWOOD CHEMICAL BIOLOGICAL CENTER
8198 BLACKHAWK ROAD
ABERDEEN PROVING GROUND, MARYLAND 21010-5424

REPLY TO
ATTENTION OF

RDCB-DSR-H

# EDGEWOOD CHEMICAL BIOLOGICAL CENTER
# RADIATION CONTROL COMMITTEE
# CHARTER

1. **Name of Committee:** Edgewood Chemical Biological Center (ECBC) Radiation Control Committee (RCC)

2. **Date Established:** The ECBC RCC, herein identified as the committee, is the successor to the ECBC Ionizing Radiation Control Committee established as a requirement of the Center's Nuclear Regulatory Commission (NRC) Broad-Scope License Number 19-10306-01. The current license has an original issue date of July 20, 2001, as amended May 24, 2016.

3. **Date of Termination:** This committee is a requirement of the ECBC NRC License and as such must remain active until the license is terminated or transferred.

4. **Mission or Purpose:** The ECBC managers/supervisors are obligated by conditions of ECBC's NRC Licenses to ensure that sources of radiation are received, stored, used and disposed of in such a manner to comply with all current regulatory requirements. Furthermore, managers/supervisors are obligated to ensure that occupational exposure to radiation and exposures to the general public and environment are maintained at doses that are as low as is reasonably achievable (ALARA). The committee acts on behalf of the ECBC Director in performing oversight of the Radiation Safety Program (RSP). The committee also advises management on radiation safety matters, reviews proposed operations involving sources of radiation, recommends radiation safety policy, studies accidents/incidents involving radiation sources, and has overall approving authority for activities within the center who wish to incorporate radiation sources into their operations.

5. **Composition:** The committee membership shall be composed of a Chairperson, who may also be the Radiation Safety Officer (RSO), the RSOs, directorate representatives at the management level, and persons trained and experienced in the safe use of radiation sources. The following positions are required:

a. Chairperson: This position will be designated, in writing, by the ECBC Director. The individual designated will have sufficient knowledge of radiation safety issues and the authority by virtue of their position within ECBC to be able to effect change within the Center.

b. Radiation Safety Officers (RSO) at APGEA and DPG: By virtue of his/her duties, is responsible for the day-to-day operation of the RSP. The RSO facilitates the committee by providing topics requiring the committee's attention. The RSO will be designated as the recorder and will be responsible for authorizing and distribution of the meeting minutes.

c. Safety and Health Office Manager (SHO): Is responsible for the operational execution of the day-to-day RSP. The SHO Manager is also responsible for ensuring information is passed to and from the Director of Safety and the committee.

d. Each Directorate: Each Directorate possessing radioactive materials including radiation producing equipment (such as x-rays, XRD, XRF, SEM, etc.) and/or lasers will be represented on the committee.

e. Additional Members: Directorates, Divisions, and Programs who feel they have vested interest in the decisions made by the committee may request that they be represented (to be approved by the Director).

f. Establishing a Quorum: A quorum will be met providing the Chairperson, each RSO and a representative for each directorate from which specific issues will be discussed are present (members who call into the meeting will count as present). If a quorum cannot be met at the time of the meeting, the meeting will continue with the present members and the Chairperson will contact each absent member for their required approval that will be in writing and will be attached to the minutes.

6. **Functions:** As a function of providing RSP oversight, the committee will perform the following functions:

a. Act as an advisory group on radiation safety, waste, and transport matters to the SHO Radiation Team relating to operations conducted within the Center and at off-site locations.

b. Act as the approving authority for all ECBC Radiation Permits, requesting authorization of radiation sources or radiation producing devices. A part of the ECBC Radiation Permit process is the approval of authorized users for each permit application submitted.

c. Review results of annual audit conducted by the SHO Radiation Team, internal personnel or outside auditing agencies.

d. Direct corrective actions required as a result of the above audits.

e. Establish criteria for specific level of training for radiation/laser use areas to ensure training is commensurate to hazard present.

f. Evaluate results of occupational exposures to ensure that doses are maintained at or below ALARA.

g. Evaluate results of investigations of radiation exposures and facilitate corrective actions when required.

h. Act as approving authority for all ECBC Laser Permits, requesting authorization of class 3B and 4 lasers. A part of the ECBC Laser Permit process is the approval of authorized users for each permit application submitted.

7. **Emergency Powers:** The ECBC Supervisors/Managers have "Stop Work Authority" for operations reported through the committee that present an unacceptable radiation or laser hazard or would place the center into a non-compliance status for any Federal, Army, or local regulation.

8. **Meeting Frequency:** The committee will meet at a minimum of once every six months or at the call of the chair. The chair may also use email to receive member approval for issues that arise between meetings.

9. **Reports:** Minutes of each meeting will be generated by the SHO Radiation Team, reviewed by the chair and approved by the Director or a designated representative at the executive level in the organization who is not a radiation user. The minutes will contain at a minimum the following information:

a. Date of the meeting.

b. List of attendees.

c. Summary of discussions based on agenda, and recommendations.

d. Summary of permit applications/changes reviewed and results of review (i.e. approved/disapproved).

e. Summary of program and audits presented.

f. All enclosures

Eric L. Moore

Approved By:

ERIC L. MOORE
Director

CF:
RCC Committee Members
Dir, DPI
Dir, Eng
Dir, R&T
Dir, Safety and Human Capital
Occupational Health Physician, Kirk US Army Health Clinic

**ROUTING AND TRANSMITTAL SLIP**

Date
05/31/2018

| TO: *(Name, office symbol, room number, building, Agency/Post)* | Initials | Date |
|---|---|---|
| 1. Jennifer Sollenberger, RDCB-DSR-H | | 5/31/18 |
| 2. Carol Eason, RDCB-DSR | | 31 MAY 2018 |
| 3. George Collins, RDCB-DS | | |
| 4. Eric L. Moore - RDCB-D | | 6/6/18 |
| 5. | | |

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|---|---|---|---|---|---|
| | Action | | File | | Note and Return |
| | Approval | | For Clearance | | Per Conversation |
| | As Requested | | For Correction | | Prepare Reply |
| | Circulate | | For Your Information | | See Me |
| | Comment | | Investigate | X | Signature |
| | Coordination | | Justify | | |

REMARKS

Dr. Moore - Per the ECBC Nuclear Regulatory Commission (NRC) license, a Radiation Control Committee (RCC) is required to perform oversight of the radiation safety program. I have updated the RCC Charter to reflect that the ECBC Radiation Safety Officer (RSO) may also be the Chairperson, to add the ECBC RSO at Dugway Proving Ground and to establish procedures if a quorum is not met. Please sign the attached updated charter if you approve the changes.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: *(Name, organization symbol, Agency/Post)*

RAMSEY.AMY.JOY.1266912605

Digitally signed by RAMSEY.AMY.JOY.1266912605
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=RAMSEY.AMY.JOY.1266912605
Date: 2018.05.31 12:47:50 -04'00'

Amy Ramsey, RDCB-DSR-H

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410-436-1877