

RADIOACTIVE MATERIAL PROJECT INSPECTION CHECKLIST

Project Number _____ Responsible Investigator _____

Review Date and Time _____ Reviewed with _____

Reviewer _____ Entered Into Database By _____ Date _____

REVIEW OF THE PROJECT FILES BEFORE VISIT

Review key authorization documents, applications, and last two inspections.

List items of non-compliance cited during last 2 inspections:

Review Special Conditions of authorization.

List project personnel:

Name	ID	Status	IRS Date	ARS Date	Notes

Review return record of Luxel monitors and TLD rings _____ Late _____ Unreturned

Current RAM on-hand inventory:

Shipment Number	Isotope	Date Received	Original Activity, mCi	Date of Last Inventory	On-Hand activity, mCi	Usage, mCi	Empty?

RAM PROJECT INSPECTION VISIT

OK = Checked and found to be OK **CA** = Corrective action required **NA** = Not Applicable

ADMINISTRATIVE AND GENERAL RADIATION SAFETY

OK	CA	NA	
P01			Key project authorization documents, applications, inspection reports, data sheets, survey reports, inventories and other records are organized in binder(s)
P02			No changes in protocol that would impact on safety (e.g., iodinations, animal use, airborne hazards, etc.)
P03			Project binder(s) and a copy of the Radiation Safety Manual are accessible
P04			Unauthorized radionuclides are not being used, including during collaborations with other projects
P05			All personnel working with RAM without direct supervision had Initial Radiation Safety training and current Annual Refresher Training
P06			All personnel working with RAM are listed on the Project
P07			Labels and signs are properly posted on doors, storage cabinets, containers, refrigerators, freezers, hoods, centrifuges, etc.
P08			DHEC <i>Notice To Employees and Rules for Radioisotope Labs</i> are posted and followed during visit (lab coats, gloves, absorbent paper, etc.)
P09			RAM is only used in authorized rooms, including counting and storage.
P10			Radioactive material is properly shielded during use and storage.
P11			RAM is secured against unauthorized removal when lab is not occupied.
P12			Work area signs are posted as needed.
P13			Radiation levels in the lab and surrounding areas are ALARA and meet regulations (2mrem in any hour, 100 mrem in year to individuals)
P14			Vacuum systems/pumps used to transfer radioactive liquids are properly trapped and filtered.
P15			Check refrigerators, freezers, desks, and garbage cans for food a beverages (get permission first).
P16			Tour lab(s) and note any other problems in comments section.

Comments

INVENTORIES

OK	CA	NA
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- I01 Form R-011 *RAM Use/Inventory* or equivalent for all materials are in use and meet standards (create and provide missing logs if needed)
- I02 Physical inventories of unsealed sources are conducted at least semiannually
- I03 Check material possessed against the latest inventory report and enter usage since last inventory date
- I04 Old stock solution bottles are discarded when deleted from inventory
- I05 Perform physical inventory of sealed sources.
- I06 Sealed source leak test performed at least every 6 months

Comments

SURVEYS

OK	CA	NA
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- S01 All survey meters are listed in correct location, calibrated, operational, and available for use
- S02 Surveys are performed of work surfaces and floor at meaningful times by project personnel (GM and/or wipes)
- S03 Project personnel monitor hands, shoes, clothing before breaks and when finished working with radioactive material
- S04 Recordable lab surveys performed at least once every month RAM was used
- S05 If using low-energy beta emitters (tritium, F-55, etc.), wipe tests are taken
- S06 Appropriate instrumentation (LSC) is available to analyze wipes and location is authorized for this project

Comments

WASTE

OK CA NA

W01	Entries on dry waste log(s) are appropriate for container contents
W02	Dry solid waste containers do not contain sharps, liquids, hazardous chemicals, bio-hazardous materials, scintillation fluids, animals, tissue samples, labels, lead
W03	Waste minimization is practiced – educate and encourage when possible
W04	Sink signs and sewage disposal logs are posted as necessary
W05	Sink traps and waste lines do not appear to be leaking
W06	Sewage disposal log agrees with inventory report
W07	Check contents of ordinary waste containers with a GM counter
W08	Check contents of ordinary waste containers for radiation warning labels and food wrappers
W09	Are any contaminated solvents generated (other than scintillation fluid)
W10	If yes, are appropriate conditions of authorization exist? If not, discuss with RI and request amendment to authorization.
W11	Contaminated animal waste (carcasses, bedding, blood contaminated items, excrement, etc.) are bagged, tagged, and frozen
W12	Animal and human blood and tissue samples are disposed of properly

Comments

FUME HOODS AND GLOVE BOXES

OK CA NA

G01	All hoods and glove boxes in authorized areas are functional
G02	All hoods were inspected during the last 12 months
G03	Hoods and glove boxes that did not pass the inspection are clearly labeled with our "Do Not Use.." sign and are not being used

Comments

USE OF RADIOACTIVE MATERIAL IN ANIMALS

OK CA NA

- | | |
|-----|--|
| A01 | Procedures for animal care, animal housing, and waste disposal are adequate |
| A02 | Conditions of authorization and application describing animal use and care are current and appropriate |
| A03 | Animal use locations are in accordance with authorization documents |
| A04 | Animal housing at Godley-Snell includes use of cage cards |
| A05 | Project personnel perform surveys at meaningful times in Godley-Snell housing areas |
| A06 | Waste disposal for animal use in accordance with authorization documents and current policies |

Comments

USE OF RADIOACTIVE IODINE

OK CA NA

- Are iodinations performed, if yes complete the following
- | | |
|-----|---|
| B01 | Project personnel check the hood for proper operation before use |
| B02 | If used, NaI stock vial is purged through fresh activated carbon before opening |
| B03 | A closed process vessel is used |
| B04 | The process vessel is purged through fresh activated carbon before opening |
| B05 | Where appropriate, project personnel have had thyroid baseline and bioassay 12-48 hours after use |

Comments

Name and Signature of the person performing inspection:

Name and Signature of the project representative present during inspection (if not RI):

Project's Responsible Investigator:

Project personnel comments:

RSO Reviewed _____ (*Konstantin Povod*)

Follow-up comments: