

ENFORCEMENT PROCEDURES

GENERAL

The RSS will inspect facilities, perform surveys, and verify inventories, etc, for compliance. The inspection is essentially an ALARA audit of each AU's radiation safety program. These inspections of the authorization radiation safety program are crucial to maintaining radiation exposures ALARA.

The inspections also document that the individual radiation safety programs are being conducted in compliance with MU's License conditions and commitments granted by the NRC. An escalated enforcement format is based on the fact that there are items which are of more importance than others, based upon the repercussions which could result from noncompliance. A four tiered enforcement strategy is proposed.

While all deficiencies can lead to violations imposed by the NRC, the tiered enforcement reflects the level of hazard and the level of corrective action necessary.

DEFICIENCY LEVELS

"D" Level Deficiencies are those of an administrative, documentation or record keeping type.

"C" Level Deficiencies are associated with the AU's radiation safety program confirming the safe use of radioactive materials.

"B" Level Deficiencies are those which, if continued, could result in the NRC issuing a violation, and perhaps assessing the University and/or responsible individuals a monetary fine. This level of deficiency would require timely remediation of the situation by the AU and the RSS.

"A" Level Deficiencies are the most serious from the potential damage/injury to the environment, RW's, general public and may require immediate reporting to the NRC, which could result in issuance of violations and monetary fines. This level of deficiency would require immediate cessation of the project by the RSS in order to control the situation.

AU RESPONSE TO DEFICIENCIES

Response to the violations is based upon the type of deficiency and the progress that the AU has demonstrated in correcting previous problems. In all instances the AU will be informed of the deficiency. The AU will be held responsible for correcting deficiencies and ensuring compliance of his/her authorization. Consideration for immediate corrective action will be a factor in the prescribed response required:

- **"D" Level Deficiencies** - - The AU will be informed of the deficiency in the inspection report. As this level of deficiency is minor, they can usually be corrected immediately on the spot. The assigned HP may discuss corrective mechanisms with the AU and staff. The AU will insure that the deficiency has been corrected in a timely fashion and typically review of the correction will occur at the next inspection.
- **"C" Level Deficiencies** - - The AU will be informed of the deficiency in the inspection report. Typically, the deficiency will be discussed by the assigned HP with the AU. The AU will be required to take corrective action within a given time period to

correct the deficiency. The RSS will follow up at the end of the time to assure the deficiency has been corrected.

- **"B" Level Deficiencies** - - The AU will be told of the deficiency immediately by the inspector or the assigned HP. The deficiency will be discussed by the assigned HP with the AU. The AU will be required to take corrective actions in a time period established to correct the deficiency. The corrective action will require a written response from the AU to the RSO as to what the deficiency was, why the deficiency occurred, and the remedial action that the AU has taken to assure that it will not recur in the future. The inspection report will be forwarded to the assigned RSCR for their consideration and discussion with the AU and the RSC. Informational copy will be provided to the AU's Administrator.
- **"A" Level Deficiencies** - - The AU will be told immediately of the deficiency by the Inspector. The operation will be immediately curtailed, the deficiency will then be discussed and the AU will be required to take corrective action within an immediate time period established to stabilize and control the operation. The incident will be immediately reported to the RSO and the assigned HP. The potential health and safety, and regulatory implications will govern the remedial actions required. Potentially the AU's authorization may be immediately suspended. Reactivation of the authorization will not occur until a RSC review has been conducted. The AU will be required at a minimum to report to the Committee what occurred, why it occurred and how the AU intends to prevent a recurrence and ensure safe continuation of the authorization. Any

documentation developed by the AU and personnel involved, or by the RSS and RSO will be completed on a time frame compatible with NRC reporting requirements. Informational copies will be provided to the AU's Administrator.

NOTE: Deficiencies will be assigned at time of inspections. Notification of a problem to the RSS will not result in issuance of a deficiency. However, an inspection may be conducted at any time and deficiencies issued if corrective actions have not been implemented in a timely manner. Recurrent deficiencies may escalate the enforcement action to the next level.

At the time of inspection, the RSS may interact with a knowledgeable RW's whom the AU's have designated to act in their absence.

DEFICIENCY LEVELS
EXAMPLES OF AUTHORIZATION DEFICIENCIES

Class of Deficiency	Type/Examples	AU Corrective Action	RSS/RSO/RSC Follow-Up
D - Level	Administrative; e.g., <ul style="list-style-type: none"> • Poor or incomplete record keeping such as; <ul style="list-style-type: none"> ○ No meter or LSC listed on survey maps ○ Initials missing on Package receipt ○ No CPM to DPM conversion ○ Calibration dates on survey maps out of date. • Minor deficiencies immediately corrected. • Out of date HML • Security violation but no significant exposure risk to public, e.g. ppg, or low activities of low energy isotopes. 	Complete or correct deficiency	RSS verifies corrective action and documents in AU file
C - Level	Minor program violations; e.g., <ul style="list-style-type: none"> • Improper waste storage, i.e. no secondary containment • Missed Radiation Survey for month • No HML on waste • Minor contamination found during inspection unidentified by AU's surveys • Improper ordering, • ALARA response deficiency, • RSS identified Corrective Actions to Prevent Re-Occurrence from previous inspection results not followed. • Evidence of Personal Safety violation- (broken glass in improper waste container) • Security violation where access to significant items presents exposure risk to public, e.g. Stock Vials but < 2mr/hr • Escalation of D – Level 	Immediate response to correct if possible; or correct deficiency within specified time frame	<ul style="list-style-type: none"> • RSS verifies corrective action and documents, • Technical follow up and documentation of corrective action/notify HP, • HP may visit/call
B - Level	Major program violations: e.g., <ul style="list-style-type: none"> • Evidence of food and/or drink, • Major contamination, • Spread of contamination, • Program violation due to inadequate personnel training, • No Surveys performed for more than one month. • Security violation where access to radiological items or sources presents exposure risk to public > 2 mR/hr. • Escalation of C – Level 	Respond to RSO with corrective actions in writing including: <ul style="list-style-type: none"> • Reasons for problem, • Immediate remediation of problem, • How it will be prevented in the future. 	<ul style="list-style-type: none"> • RSCR notified/ may visit with HP, • RSO notified, • HP will visit and present summaries to RSCR and RSO, • May suspend authorization temporarily
A - Level	Major loss of program control; e.g., <ul style="list-style-type: none"> • Lack of control of material, • Spread of contamination to unrestricted areas, • Any NRC reportable event, • Personnel exposure in excess of limit, • Escalation of B – Level 	Immediate cessation of operations <ul style="list-style-type: none"> • Immediate notification of RSO; • Suspend operations pending review; • Respond to RSO with corrective actions in writing including reasons for problem, immediate remediation of problem, and how it will be prevented in the future 	<ul style="list-style-type: none"> • RSO verifies cession of operations; • Notify RSCR and RSC Chair; • Notify NRC if required; • May suspend authorization; • If authorization has been suspended, AU must report to RSC and describe corrective actions and formally request re-instatement of authorization

