- (3) Has access to the area restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.
- ii. An event in which equipment is disabled or fails to function as designed when:
 - (1) The equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;
 - (2) The equipment is required to be available and operable when it is disabled or fails to function; and
 - (3) No redundant equipment is available and operable to perform the required safety function.
- iii. 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.
- iv. An unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material when:
 - (1) The quantity of material involved is greater than five times the lowest annual limit on intake specified in Appendix B of Part D; and
 - (2) The damage affects the integrity of the licensed material or its container.
- c. Preparation and submission of reports. Reports made by licensees in response to the requirements of this section must be made as follows:
 - i. Licensees shall make reports required by paragraphs a. and b. of this section by telephone to the Agency. To the extent that the information is available at the time of notification, the information provided in these reports must include:
 - (1) The caller's name and call back number;
 - (2) A description of the event, including date and time;
 - (3) The exact location of the event;
 - (4) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
 - (5) Any personnel radiation exposure data available.
 - ii. Written report. Each licensee who makes a report required by paragraph a. or b. of this section shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These reports must be sent to the Agency. The reports must include the following:
 - (1) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
 - (2) The exact location of the event;
 - (3) The isotopes, quantities, and chemical and physical form of the licensed material involved;

With regard to areas containing information classified by an agency of the U.S. Government in the interest of national security, an individual who accompanies an inspector may have access to such information only if authorized to do so. With regard to any area containing proprietary information, the workers' representative for that area shall be an individual previously authorized by the licensee or registrant to enter that area.

Sec. J.15 Consultation with Workers During Inspections.

- (a) Agency inspectors or agents etc. or a State-licensed inspector performing an inspection under the authority of COMAR 26.12.01.02 may consult privately with workers concerning matters of occupational radiation protection and other matters related to applicable provisions of these regulations and licenses to the extent the inspectors deem necessary for the conduct of an effective and thorough inspection.
- (b) During the course of an inspection, any worker may bring privately to the attention of the Agency inspector or agents etc., either orally or in writing, any past or present condition which the worker has reason to believe may have contributed to or caused any violation of the Act, these regulations, or license condition, or any unnecessary exposure of an individual to sources of radiation under the licensee's or registrant's control. Any such notice in writing shall comply with the requirements of J.16(a).
- (c) The provisions of J.15(b) shall not be interpreted as authorization to disregard instructions pursuant to J.12.

Sec. J.16 Requests by Workers for Inspections.

- (a) Any worker or representative of workers believing that a violation of the Act, these regulations, or license conditions exists or has occurred in work under a license or registration with regard to radiological working conditions in which the worker is engaged may request an inspection by giving notice of the alleged violation to the Agency. Any such notice shall be in writing, shall set forth the specific grounds for the notice, and shall be signed by the worker or representative of the workers. A copy shall be provided to the licensee or registrant by the Agency no later than at the time of inspection except that, upon the request of the worker giving such notice, such worker's name and the name of individuals referred to therein shall not appear in such copy or on any record published, released, or made available by the Agency, except for good cause shown.
- (b) If, upon receipt of such notice, the Agency determines that the complaint meets the requirements set forth in J.16(a), and that there are reasonable grounds to believe that the alleged violation exists or has occurred, an inspection shall be made as soon as practicable to determine if such alleged violation exists or has occurred. Inspections pursuant to J.16 need not be limited to matters referred to in the complaint.
- (c) No licensee, registrant, or contractor or subcontractor of a licensee or registrant shall discharge or in any manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under these regulations or has testified or is about to testify in any such proceeding or because of the exercise by such worker on behalf of such worker or others of any option afforded by this part.

Sec. J.17 Inspections Not Warranted; Informal Review.

(a) (1) If the Agency determines, with respect to a complaint under J.16, that an inspection is not warranted because there are no reasonable grounds to believe that a violation exists or has occurred, the Agency shall notify the complainant in writing of such determination. The

complainant may obtain review of such determination by submitting a written statement of position with the Secretary of the Department of the Environment. The Agency will provide the licensee or registrant with a copy of such statement by certified mail, excluding, at the request of the complainant, the name of the complainant. The licensee or registrant may submit an opposing written statement of position with the Secretary of the Department of the Environment. The Agency will provide the complainant with a copy of such statement by certified mail.

- (2) Upon the request of the complainant, the Secretary of the Department of the Environment may hold an informal conference in which the complainant and the licensee or registrant may orally present their views. An informal conference may also be held at the request of the licensee or registrant, but disclosure of the identity of the complainant will be made only following receipt of written authorization from the complainant. After considering all written and oral views presented, the Secretary of the Department of the Environment shall affirm, modify, or reverse the determination of the Agency and furnish the complainant and the licensee or registrant a written notification of the decision and the reason therefor.
- (b) If the Agency determines that an inspection is not warranted because the requirements of J.16(a) have not been met, the complainant shall be notified in writing of such determination. Such determination shall be without prejudice to the filing of a new complaint meeting the requirements of J.16(a).

Interpretations

<u>Sec. A.11 Interpretations</u>. Except as specifically authorized by the Agency in writing, no interpretation of these regulations by an officer or employee of the Agency will be recognized to be binding upon the Agency.

Communications

<u>Sec. A.12 Communications</u>. All communications and reports concerning these regulations, and applications filed thereunder, should be addressed to the Maryland Department of the Environment, Radiological Health Program, 1800 Washington Boulevard, Baltimore, Maryland 21230.

Sec. A.13 Units of Exposure and Dose.

- (a) As used in these regulations, the unit of Exposure is the coulomb per kilogram (C/kg). One roentgen is equal to 2.58×10^{-4} coulomb per Kilogram of air.
- (b) As used in these regulations, the units of dose are:

Gray (Gy) is the SI unit of absorbed dose. One gray is equal to an absorbed dose of 1 joule per kilogram (100 rad).

Rad is the special unit of absorbed dose. One rad is equal to an absorbed dose of 100 erg per gram or 0.01 joule per kilogram (0.01 Gy).

Rem is the special unit of any of the quantities expressed as dose equivalent. The dose equivalent in rem is equal to the absorbed dose in rad multiplied by the quality factor (1 rem = 0.01 Sy).

Sievert is the SI unit of any of the quantities expressed as dose equivalent. The dose equivalent in sievert is equal to the absorbed dose in gray multiplied by the quality factor (1 Sv = 100 rem).

(c) As used in these regulations, the quality factors for converting absorbed dose to dose equivalent are shown in Table 1.