**Section 337.2050 Monitoring, Detection and Assessment**

a) Monitoring and Detection

1) Licensees shall establish and maintain the capability to continuously monitor and detect, without delay, all unauthorized entries into its security zones. Licensees shall provide the means to maintain continuous monitoring and detection capability in the event of a loss of the primary power source or provide for an alarm and response in the event of a loss of this capability to continuously monitor and detect unauthorized entries.

2) Monitoring and detection shall be performed by:

A) A monitored intrusion detection system that is linked to an onsite or offsite central monitoring facility;

B) Electronic devices for intrusion detection alarms that will alert nearby facility personnel;

C) A monitored video surveillance system;

D) Direct visual surveillance by approved individuals located within the security zone; or

E) Direct visual surveillance by a licensee-designated individual located outside the security zone.

3) A licensee subject to this Subpart shall also have a means to detect unauthorized removal of the radioactive material from the security zone. This detection capability shall provide:

A) For category 1 quantities of radioactive material, immediate detection of any attempted unauthorized removal of the radioactive material from the security zone. Immediate detection capability shall be provided by:

i) Electronic sensors linked to an alarm;

ii) Continuous monitored video surveillance; or

iii) Direct visual surveillance.

B) For category 2 quantities of radioactive material, weekly verification through physical checks, tamper indicating devices, use or other means to ensure that the radioactive material is present.

b) Assessment

Licensees shall immediately assess each actual or attempted unauthorized entry into the security zone to determine whether the unauthorized access was an actual or attempted theft, sabotage or diversion.

c) Personnel Communications and Data Transmission

For personnel and automated or electronic systems supporting the licensee's monitoring, detection and assessment systems, licensees shall:

1) Maintain continuous capability for personnel communication and electronic data transmission and processing among site security systems; and

2) Provide an alternative communication capability for personnel and an alternative data transmission and processing capability in the event of a loss of the primary means of communication or data transmission and processing. Alternative communications and data transmission systems may not be subject to the same failure modes as the primary systems.

d) Response

Licensees shall immediately respond to any actual or attempted unauthorized access to the security zones or actual or attempted theft, sabotage or diversion of category 1 or category 2 quantities of radioactive material at licensee facilities or temporary job sites. For any unauthorized access involving an actual or attempted theft, sabotage or diversion of category 1 or category 2 quantities of radioactive material, the licensee's response shall include requesting, without delay, an armed response from the LLEA.

(Source: Amended at 42 Ill. Reg. 42 Ill. Reg. 7485, effective April 4, 2018)