

10 CFR Part 37 Changes from IC & FP Orders
(Compiled by CDPH/RHB)

[37.11(c)] LLRW is exempt from Subparts B, C, and D of Part 37 (but not Part A) if the LLRW is not: 1) discrete sources; 2) ion exchange resin; or 3) less than 2000 kg (4409 lbs) activated materials. If not exempt, the LLRW must meet the full Part 37 requirements. However, even if the LLRW is exempt from Subparts B, C, and D, it is still subject to the security requirements in 37.11(c)(1-4) noted below. Refer to NUREG 2155, Rev 1 pages 35-36 for further information.

1. Use continuous physical barriers allowing access only through access control points. [37.11(c)(1)]
2. Use a locked door or gate with monitored alarm at the access control point. [37.11(c)(2)]
3. Assess and respond to each actual or attempted unauthorized access to determine whether an actual or attempted theft, sabotage, or diversion occurred. [37.11(c)(3)]
4. Immediately notify LLEA and request armed LLEA response if determined actual or attempted theft, sabotage, or diversion occurred. [37.11(c)(4)]

Guidance: The terms “continuous physical barrier” and “access controls” are used for exempt LLRW and also with respect to non-exempt “security zones”, and presumably should be interpreted similarly. However, no unescorted access approval process is defined for exempt LLRW, nor is any monitoring and detection requirements defined for exempt LLRW.

Change: The specified LLRW is exempt from Subparts B, C, and D of Part 37, but not from Subpart A.

[37.23(a)(2)] Individuals who have been determined to be trustworthy and reliable must have completed the security training outlined in 37.43(c) before being allowed unescorted access.

Change: New training requirements for security plan and implementing procedures.

[37.23(b)(2)] Licensees must name one or more individuals to be a reviewing official, and must provide a certification that the reviewing official is deemed trustworthy and reliable under oath or affirmation to CDPH-RHB Licensing. The reviewing official must have undergone a fingerprint check, including an FBI criminal history records check.

Guidance: The oath or affirmation is to be provided to CDPH-RHB Licensing (not to NRC). CDPH-RHB licensing intends to amend individual licenses to list the reviewing official(s).

Change: Reviewing official must be fingerprinted by a prescribed entity, have criminal history check, and be certified to CDPH-RHB under oath or affirmation to be trustworthy and reliable anytime a reviewing official is T&R'd under Part 37 (i.e., initial and 10-year reinvestigations).

[37.23(c)(1)] Licensees must not initiate a background investigation, including re-investigations, without the informed and signed consent of the subject individual.

Guidance: The signed consent documentation should show that the subject individual has been provided the appropriate explanation, indicating his or her understanding that a background investigation will be conducted. Annex B, “Sample Consent Form for Background Investigations,” contained in NUREG-2155, Rev 1 provides template language for a consent form that licensees can adapt for their use.

Change: New requirement for signed consent before initiating a background investigation.

[37.23(c)(2)] Licensee access authorization programs must ensure that individuals are informed that he or she may withdraw consent for a background investigation at any time. (The withdrawal of consent is

sufficient cause for denial or termination of unescorted access authorization.)

Change: *New requirement to inform individuals that their consent for a B.I. may be withdrawn .*

[37.23(d)] Individuals applying for unescorted access authorization must disclose personal history information required by the licensee's access authorization program.

Guidance: *Any refusal to provide, or the falsification of, the required information (i.e. identity verification, employment history, education, references) may result in denial or termination of unescorted access. If such falsifications do not result in denial or termination of unescorted access, licensee should appropriately document their reasoning in the approval to grant unescorted access.*

Change: *New requirement for individuals to provide specified information for background investigation.*

[37.23(e) and (h)(3)] The list of individuals approved for unescorted access must be retained for three years after being superseded or replaced.

Guidance: *NRC has not developed a single, specific set of criteria for determining trustworthiness and reliability by the licensee. The licensee must consider the elements contained in 37.25 to meet the background investigation requirements in accordance with their procedures. Annex A of NUREG-2155, Rev 1 lists some indicators that could be considered as potential concerns.*

Change: *Record retention for basis of T&R approval changed to 3 years "from the date the individual no longer requires unescorted access" (instead of 3 years after the IC controls are no longer effective.).*

[37.23(f)] The licensee must develop, implement, and maintain written procedures for implementing the access authorization program.

Guidance: *The procedures need to include, but not be limited to, how to:*

- *conduct a background investigation;*
- *develop and document a determination basis for trustworthiness and reliability;*
- *reinstate individuals previously approved for unescorted access;*
- *maintain the list of approved individuals;*
- *withdraw an individual's approval for unescorted access; and*
- *notify individuals who are denied unescorted access, including the reason for the denial, and allow the individual to provide additional information.*

Change: *New requirement for written implementing procedures for access authorization program.*

[37.23(g)] Prior to any adverse determination, the licensee must notify each individual subject to the access authorization program with the right to complete, correct, and explain information obtained as a result of the licensee's background investigation. Records of confirmation of such notifications must be maintained for 1 year.

Change: *Individuals are allowed to provide corrected information on any aspect of the background investigation, not just the criminal history records.*

[37.25(a)] Licensees must complete a background investigation for individuals before allowing unescorted access. The scope must include at least the 7 years preceding the date of the background investigation or since the individual's eighteenth birthday, whichever is shorter, and must include:

- fingerprinting and FBI identification and criminal history records check;
- verification of true identity;
- verification of employment history;
- verification of education;
- determination of character and reputation; and
- to the extent possible, other independent information to corroborate that provided by the individual (e.g. references not supplied by the individual).

Change: New requirements: background investigation requirements are same whether long-term employee or new hire; background investigation needs to go back at least 7 years for all (or to 18th birthday); new “true identity requirement; independent information now required; and new requirement for situations where an inquiry to verify information supplied by individual fails to illicit a response.

[37.25(b)] Individuals may be grandfathered as trustworthy and reliable as long as they had been determined to be trustworthy and reliable under the Fingerprint Orders or a Part 73 NRC program.

Change: Grandfathering as trustworthy and reliable is allowed under specified circumstances.

[37.25(c)] Reinvestigations must be conducted every 10 years.

Guidance: The re-investigation only needs to include fingerprinting and FBI criminal history check.

Change: New requirement to complete re-investigation within 10-years of previous investigation.

[37.29(a) and (b)] Individuals relieved from elements of the background investigation must satisfy the requirements of 37.29.

Guidance: There are two categories of exemptions. The exemption in 37.29(a) exempts the entire background investigation requirement [i.e., 37.25(a)(1-6)], while the exemption in 37.29(b) only exempts the fingerprinting and criminal history investigation requirement [i.e., 37.25(a)(1)] and requires that the alternate fingerprinting/criminal history investigation was performed within the previous 5 years.

Change: Relief allowed for additional categories of individuals per 37.29(a) [e.g., any emergency response personnel responding to an emergency, commercial drivers, transportation facility package handlers].

[37.31(e)] The licensee must maintain fingerprint and criminal history records for 3 years from the date the individual no longer requires unescorted access.

Change: Record retention changed to 3 years “from the date the individual no longer requires unescorted access” instead of 3 years after termination of employment.

[37.33(a), (b) and (c)] The licensee’s access authorization program must be reviewed annually. The results of the reviews must be documented, along with any recommendations, and the records maintained for 3 years.

Change: New requirement for annual review of access authorization program (first review due by 3/18/17).

[37.41(a)(3)] A licensee who had not previously implemented the Security Orders or been subject to the

provisions of Subpart C must provide written notification to CDPH-RHB Licensing at least 90 days before aggregating radioactive material to a quantity that equals or exceeds the category 2 threshold.

Change: *The 90-day notification is a new requirement.*

[37.43(a)] Licensees must develop and approve a written security plan specific to its facilities and operations.

Guidance: *The licensee's security plan needs to be site-specific and clearly explain how security measures will be implemented, including the identification of resources and technologies available to satisfy security program requirements. The licensee needs to have a plan for reviewing, and revising if necessary, the written security plan if there are changes or modifications to the facilities or operations that affect the security program. The security plan needs to be reviewed and approved by the individual with the overall responsibility for the licensee's security program. Site-specific plans are not required for temporary jobsites.*

Change: *New requirement for written security plan document, and for approval by the individual responsible for security program.*

[37.43(b)] Licensees must develop and maintain written procedures that document how the requirements of Subpart C and the security plan will be met. A copy of the current procedure must be retained for 3 years after the procedure is no longer needed. Superseded portions of the procedure must be retained for 3 years after the record is superseded.

Guidance: *The licensee needs to have developed written procedures that document how requirements of the security program and security plan will be met, with approval by the individual with the overall responsibility for the licensee's security program.*

Change: *New requirement for written implementing procedures, and for approval by the individual responsible for security program.*

[37.43(c)] Licensees must conduct training to ensure that individuals implementing the security program possess and maintain the knowledge, skills, and abilities to carry out their assigned duties. The licensee shall maintain records of initial and refresher training for 3 years from the date of the training and records must include dates, topics covered, attendees, and related information.

Guidance: *The licensee training needs to include: instruction in the purpose and function of security measures employed; the responsibility to report any condition that causes or may cause a security violation; the responsibility to report promptly to LLEA actual or attempted theft, sabotage or diversion; and, the appropriate response to security alarms. The licensee needs to ensure that the training is commensurate with assigned duties and is effective (e.g., exams, audits, performance based reviews, refresher training, drills/exercises). The providers of training should have adequate knowledge of the security plan and implementing procedures.*

Refresher training needs to be conducted at a frequency not to exceed 12 months and when significant changes have been made to the security program. Refresher training should include a review of initial training requirements and changes made; reports of relevant security issues, problems and lessons learned; relevant results of NRC/CDPH-RHB inspections; and, relevant results of the licensee's security program review and maintenance and tests.

Change: *New requirement for initial, 12-month refresher, and as-needed-for-changes training.*

[37.45(a)] Licensees subject to this subpart must coordinate, to the extent practicable, with an LLEA to

respond to threats to the licensee's facility, including any necessary armed response. Information provided to the LLEA must include a description of the facility, security measures, and a notification that the licensee will request a timely armed response by the LLEA to any actual or attempted theft, sabotage, or diversion.

Guidance: *The LLEA must be authorized by a Government entity to make arrests and have the capability to provide an armed response in the licensee's jurisdiction. In cases of cross-jurisdiction, licensees may need to coordinate with multiple LLEAs. Coordination activities may include, among other things, meetings, telephone conferences, site tours, and other forms of communication. A pre-arranged plan is not required. The licensee is not required to coordinate with the LLEA for work performed at temporary job sites. It is a good practice for the licensee to provide photographs of devices containing radioactive material or transport containers (i.e., radiography camera, source changer, transport or shipping container).*

Change: *Requirement to have a "pre-arranged plan" relaxed to require "coordination" with LLEA.*

[37.45(d)] Licensees must coordinate with the LLEA at least every 12 months, or when changes to the facility design or operation adversely affect the potential vulnerability of the licensee's material to theft, sabotage, or diversion.

Change: *Annual (at least every 12 months) coordination with LLEA required.*

[37.47(a) and (b)] Licensee must use or store all aggregated category 1 and 2 quantities of radioactive material within licensee-established security zones.

Guidance: *The security zone must be established to provide for isolation of material and access control to the area.*

Change: *"Security zone" terminology is new; however, it has no real impact other than terminology.*

[37.47(d)] Licensees must provide approval for unescorted access to enough individuals to be able to maintain continuous surveillance of category 1 quantities of radioactive materials in temporary security zones and in any security zone in which physical barriers or intrusion detection systems have been disabled during periods of maintenance, source receipt, preparation for shipment, installation, or source removal or exchange.

Change: *LLEA not required to be notified for source exchanges.*

[37.49(a)(3)] Licensees must have a means to detect unauthorized removal of the radioactive material from the security zone.

Guidance:

- *For category 1 quantities, the licensee must have the capability to immediately detect unauthorized removal through the use of electronic sensors linked to an alarm; or continuous monitored video surveillance; or direct visual surveillance.*
- *For category 2 quantities, unauthorized removal can be detected through weekly physical checks, tamper indicating devices, actual use; or other means.*

The documentation of physical checks needs to be addressed in the licensee's security plan.

Change: *New requirement for both category 1 and category 2 materials.*

[37.49(b)] Licensee must 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.
Change: Adds “attempted”.

[37.51(a) and (b)] Licensees must implement a maintenance and testing program for intrusion alarms, associated communication systems and other physical components used to secure or detect unauthorized access to radioactive material. If there is no manufacturer suggested frequency, the testing must be performed at least annually, not to exceed 12 months. Verify that the licensee maintains records on the maintenance and testing for 3 years.

Guidance: *Systems and components need to be maintained in operable condition and tested by the licensee to ensure they are capable of performing their intended function when necessary. If the system employs multiple components, the inspector should verify that the testing checks the function of each component (e.g., a system has motion detectors in a vault and magnetic switches on vault door, verify that the motion detector and the switch are each tested at the appropriate frequency). Testing is not expected if the test itself could compromise either radiation safety (e.g. locked entrance to a panoramic irradiator) or the future performance of a component or system, such as a tamper-indicating device.*

Procedures should be prescribed for routine maintenance of alarms, communications systems, security systems, and detection systems, and records maintained of performance and maintenance tests.

Change: *New requirement for security system maintenance, testing, and calibration programs.*

[37.53(a) and (b)] Licensees possessing mobile devices must have two independent physical controls that form tangible barriers to secure the material from unauthorized removal when the device is not under direct control and constant surveillance by the licensee. For devices in or on a vehicle or trailer, licensees must disable the vehicle or trailer when it is not under direct surveillance by the licensee (unless site requirements prohibit the disabling of the vehicle). Licensees shall not rely on removal of an ignition key to meet this requirement.

Guidance: *If locks are used with chains or cables, the licensees need to limit access to the keys to authorized individuals. Vehicle-disabling measures, such as ignition cutoff, trailer hitch locks, wheel locks (“boots”), or other methods can be used. [If a vehicle is left unattended, licensees must have a way to monitor and immediately detect, assess, and respond to an actual or attempted theft, sabotage, or diversion.] Site-specific policies addressing emergency situations (e.g., explosions, fires, toxic releases) may require that vehicles remain accessible at all times.*

Change: *Allows for relief from disabling mechanism in cases of health and safety. Removes distinction between mobile and portable devices.*

[37.55(a)] Verify that the licensee performs an annual review of the radioactive material security program content and implementation.

Guidance: *The licensee should develop an audit plan or specific criteria against which each requirement or element of the program can be measured. The review should, if possible, be performed by individuals who do not have direct responsibility for program implementation, but have been deemed trustworthy and reliable as a result of access to the security plan.*

Change: *New requirement for annual security program review (first review due by 3/19/17).*

[37.55(b) and (c)] Results of annual reviews, along with any recommendations for corrective actions taken and completed, must be documented and maintained for 3 years.

Change: *New requirement for annual review documentation.*

[37.57(b)] Licensees must assess any suspicious activity related to a possible theft, sabotage, or diversion and notify the LLEA, as appropriate, and the local CDPH-RHB Inspection Office (or the State Warning Center) as soon as possible, but not later 4 hours after notifying LLEA.

Change: New requirement to report suspicious activity.

[37.71(a)] For category 1 quantities of radioactive material, licensees must verify that the transferee's license authorizes the location requested for delivery, in addition to receipt of the type, form, and quantity of material to be transferred.

Guidance: Verification can be performed through NRC's License Verification System (LVS) or by contacting the NRC or Agreement State license-issuing authority. If the licensee uses the LVS, the system will save the record and the licensee will not need to keep further documentation. If the licensee contacts the license-issuing authority (by telephone, e-mail or facsimile), the communication is required to be documented. Licensees may choose to contact the license-issuing authority through the LVS Help Desk, by use of the manual license verification procedure posted on the NRC website. If the manual license verification process is utilized, a report will be generated and saved in the NRC Agencywide Documents Access and Management System (ADAMS).

Change: Requires use of LVS (or contacting license issuing authority) for each shipment, and must include verification of delivery location for category 1 shipments.

[37.71(b)] For category 2 quantities of radioactive material, licensees must verify that the transferee's license authorizes receipt of the type, form, and quantity of material to be transferred.

Guidance: See guidance for 37.71(a) immediately above.

Change: Requires use of LVS (or contacting license issuing authority) for each shipment (but not verification of delivery location for category 2 quantities).

[37.71(c)] Written certifications used for verification in an emergency where the licensee cannot reach the license-issuing authority and LVS is non-functional, must include the license number, current revision number, issuing agency, expiration date, and for a category 1 shipment, the authorized address. The transferring licensee must confirm the certification by use of the LVS or by contacting the license-issuing authority by the end of the next business day.

Change: Requires next day use of LVS (or contacting license issuing authority) for each shipment (but not verification of delivery location for category 2 quantities).

[37.75(a)(1), (a)(2) and (a)(3)] For category 1 shipments, the shipping licensee must: (1) preplan and coordinate shipment arrival and departure times with the receiving licensee, (2) preplan and coordinate shipment information with the governor or the governor's designee of any State through which the shipment will pass, and (3) document the preplanning and coordination activities.

Guidance: Shipment preplanning and coordination activities conducted with the governor (or governor's designee) of a State needs to include the State's intention to provide law enforcement escorts and identification of safe havens with required capabilities. A safe haven for shipments should include the following criteria:

- *it is located near the transportation route and readily available to the transport vehicle;*

- law enforcement is present or is accessible for a timely response;
- on a 24-hour basis, the site can be readily identified, has adequate parking, is well lit, can be used for emergency repair, and will allow waiting for the LLEA response; and,
- additional communication systems are available if the transport vehicle system fails to function properly.

Change: NRC no longer issues Orders to licensees concerning category 1 shipments. In Agreement States, licensees notify Agreement State rather than NRC. Licensees are not required to share position information on a shipment.

[37.75(b) and (c)] In addition to expected arrival times, no-later-than arrival times must be provided to receiving licensees. Licensees who receive a category 2 quantity of radioactive material must confirm receipt of the material with the originator. If the shipment has not arrived by the no-later-than arrival time, the receiving licensee shall notify the originator.

Change: Use of no-later-than arrival times, which must be no later than 6 hours after the estimated arrival time.

[37.75(d)] Licensees who transport, or plan to transport a category 2 quantity of radioactive material, and determines that the shipment will arrive after the no-later-than arrival time, must promptly notify the receiving licensee of the new no-later-than arrival time.

Change: New requirement for notification of late shipments.

[37.77(a)] Verify that the advance written notification is made to CDPH-RHB Licensing and to the office of each appropriate governor of the state, or governor's designee, through which the shipment travels.

Change: Advance notifications of category 1 shipments by Agreement State licensees are to be made to Agreement States rather than to NRC, and Agreement states are not required to notify NRC.

[37.77(d)] Licensee must issue notices of any cancellation of an advance notification.

Change: New requirement for notification of cancelled shipments.

[37.77(f)] Individuals who receive schedule information of the kind specified in 37.77(b) must protect that information against unauthorized disclosure as specified in 37.43(d).

Change: Information is considered OOU–Security Sensitive Information until shipment is completed.

[37.79(a)(1)] For category 1 shipments by road, verify that where appropriate each licensee:

- establishes a movement control center;
- establishes redundant communications;
- continuously and actively monitors shipments through the use of a telemetric position monitoring system, or alternative tracking system;
- provides an individual to accompany the driver when necessary;
- develops written normal and contingency procedures; and
- provides access to normal and contingency procedures for drivers and others.

Guidance: Movement control centers must maintain position information from a location remote from

the transporting vehicle; provide continuous monitoring 24 hours a day, seven days a week; and have the capability to communicate immediately in an emergency with the appropriate law enforcement agencies. Licensees must have redundant communication systems (e.g., cellular phones, satellite phones, 2-way radios) that operate independently from the primary communication device. Redundant communications must operate independently and cannot be subject to the same interference factors or failure mode.

Shipments must be continuously and actively monitored by a telemetric position monitoring system or an alternative tracking system (e.g., radiofrequency identification or satellite-based GPS system) reporting to a movement control center and that the center continuously provides positive confirmation of the location, status, and control of the shipment and can communicate with LLEA.

Normal procedures must be developed to describe activities to meet regulatory requirements, and contingency procedures developed to identify issues that could interfere with compliance.

Change: Training of drivers, accompanying personnel, and movement control center personnel are no longer required. Instead these individuals need to have access to the procedures.

[37.79(a)(3)] For licensees delivering category 2 quantities of material to a carrier for shipment by road, each licensee must use a carrier that; (1) has a package tracking system; (2) maintains constant control and/or surveillance during transit, and; (3) requires an authorized signature prior to releasing the package for delivery or return.

Change: Licensee no longer has to assure the trustworthiness and reliability of drivers or document that the carrier employs the previously listed security “measures”.

[37.79(b)(1)] For category 1 shipments by rail, each licensee must; (1) monitor shipments by a telemetric position monitoring system or an alternative tracking system reporting to the licensee, third party or communication center and; (2) ensure that periodic reports to the communications center are made at preset intervals.

Change: Licensee no longer required to ensure training of rail personnel as the railroad will have their own training and procedures that must be followed.

[37.79(c) and 37.5] Each licensee who makes arrangements for the shipment of category 1 quantities of radioactive material must conduct an investigation immediately upon discovery that the shipment is lost or missing. For category 2 shipments, licensees must conduct an immediate investigation, in coordination with the receiving licensee, of any shipment that has not arrived by the designated no-later-than arrival time (no more than 6 hours after the estimated arrival time).

Change: Investigation needs to commence based on “no-later-than” arrival time, or for category 1 shipments, when it is determined that the material is lost or missing if earlier than “no-later-than” time.

[37.81(c)] Shipping licensees must notify the designated LLEA along the shipment route as soon as possible upon discovery of any actual or attempted theft or diversion or suspicious activities related to theft or diversion of a category 1 shipment.

Change: New requirement for reporting suspicious activities.

[37.81(d)] Shipping licensees must notify the local CDPH-RHB Inspection Office (or the State Warning

Center) as soon as possible upon discovery of any actual or attempted theft or diversion or suspicious activities related to theft or diversion of a category 2 shipment.

Change: *New requirement for notification of suspicious activity.*

[37.81(e) and (f)] Shipping licensees must notify the local CDPH-RHB Inspection Office (or the State Warning Center) and the LLEA as soon as possible upon recovery of any lost or missing category 1 or category 2 quantities of radioactive material.

Change: *New requirement for notification of recovery of lost or missing materials.*

[37.81(g)] Initial telephonic notifications required by 37.81(a) through (d) must be followed within a period of 30 days by a written report submitted to CDPH-RHB Licensing by an appropriate method listed in 37.7, and that the report contains the required information.

Change: *New requirement for written reports for transportation related telephonic reports.*

[37.81(h)] Subsequent to filing the written report, the licensee also needs to report any additional substantive information on the loss or theft within 30 days after the licensee learns of such information.

Change: *New requirement for subsequent written reports beyond 30-day written report.*