

**Sub-Element 3.a— Implementation of Emergency Worker Exposure Control**

<p><b>What the Policy Says</b></p>	<p><b>Intent</b>                  NUREG-0654 provides that OROs should have the capability to provide for the following: distribution, use, collection, and processing of direct-reading dosimetry and permanent record dosimetry; the reading of direct-reading dosimetry by emergency workers at appropriate frequencies; maintaining a radiation dose record for each emergency worker; and establishing a decision chain or authorization procedure for emergency workers to incur radiation exposures in excess of protective action guides, always applying the ALARA (As Low As is Reasonably Achievable) principle as appropriate.</p> <p><b>Criterion 3.a.1:</b> The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plans and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.a, b).</p> <p><b>Minimum Frequency</b>                  Criterion 3.a.1 is to be evaluated every exercise.</p> <p><b>Extent of Play</b>                  OROs should demonstrate the capability to provide appropriate direct-reading and permanent record dosimetry, dosimeter chargers, and instructions on the use of dosimetry to emergency workers. For evaluation purposes, appropriate direct-reading dosimetry is defined as dosimetry that allows individual(s) to read the administrative reporting limits (that are pre-established at a level low enough to consider subsequent calculation of Total Effective Dose Equivalent) and maximum exposure limits (for those emergency workers involved in life saving activities) contained in the ORO's plans and procedures.</p> <p>Each emergency worker should have the basic knowledge of radiation exposure limits as specified in the ORO's plan and/or procedures. Procedures to monitor and record dosimeter readings and to manage radiological exposure control should be demonstrated.</p> <p>During a plume phase exercise, emergency workers should demonstrate the procedures to be followed when administrative exposure limits and turn-back values are reached. The emergency worker should report accumulated exposures during the exercise as indicated in the plans and procedures. OROs should demonstrate the actions described in the plan and/or procedures by determining whether to replace the worker, to authorize the worker to incur additional exposures or to take other actions. If scenario events do not require emergency workers to seek authorizations for additional exposure, evaluators should interview at least two emergency workers, to determine their knowledge of whom to contact in the event authorization is needed and at what exposure levels. Emergency workers may use any available resources (for example, written procedures and/or co-workers) in providing responses.</p>
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EA-3. Protective Action Implementation

	<p>Although it is desirable for all emergency workers to each have a direct-reading dosimeter (DRD), there may be situations where team members will be in close proximity to each other during the entire mission and adequate control of exposure can be effected for all members of the team by one dosimeter worn by the team leader. Emergency workers who are assigned to low exposure rate areas, for example, at reception centers, counting laboratories, emergency operations centers, and communications centers, may have individual direct-reading dosimeters or they may be monitored by dosimeters strategically placed in the work area. It should be noted that, even in these situations, each team member must still have their own permanent record dosimetry.</p> <p>Individuals without specific radiological response missions, such as farmers for animal care, essential utility service personnel, or other members of the public who must re-enter an evacuated area following or during the plume passage, should be limited to the lowest radiological exposure commensurate with completing their missions.</p> <p>All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p>
<p><b>Preparing to Evaluate This Criterion</b></p>	<p>Before the exercise, determine, according to the ORO's plan/procedures and the Extent of Play agreement:</p> <ul style="list-style-type: none"> <li>• Who (identify by title and organization) makes the decision to dispatch emergency workers?</li> <li>• When (under what circumstances) will emergency workers be dispatched?</li> <li>• Are they prepared to <u>brief</u> emergency workers on the use of dosimetry, including:             <ul style="list-style-type: none"> <li>➤ Zeroing direct-reading dosimeters,</li> <li>➤ Checking the direct-reading dosimeters periodically during an emergency response, (e.g., every 15 to 30 minutes),</li> <li>➤ Recording the readings of the direct-reading dosimeters on exposure record(s),</li> <li>➤ Radiation exposure limits and turn-back values,</li> <li>➤ Proper use of permanent record dosimeters, and</li> <li>➤ Where and to whom to return their dosimetry at the conclusion of the emergency or mission?</li> </ul> </li> <li>• What are the administrative reporting limits, and have they been pre-established at a level low enough to consider subsequent calculation of TEDE?</li> <li>• Who will determine whether to replace an emergency worker who has been exposed, and how is that determined?</li> <li>• What type of emergency worker exposure control is available for bus drivers, if required?</li> <li>• Who issues dosimetry to bus drivers, if bus drivers are required to have dosimetry?</li> <li>• Indicate which emergency workers will receive personal dosimetry, and which will have their exposure recorded by group dosimeters (such as those at reception centers, emergency operations centers, counting laboratories, etc.) worn either by a group leader or placed strategically in a facility?</li> </ul>

<p><b>During the Exercise</b></p>	<p>During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <ul style="list-style-type: none"> <li>• If instructed, verify that the dosimetry kits being distributed to emergency workers are those specified in the plan.</li> <li>• Observe the Radiological Officer (or designated staff member) brief the emergency workers on exposure control equipment and methodology.</li> <li>• Note whether emergency workers undertaking life-saving missions or protecting valuable property or large populations were briefed on the increased risk from radiation.</li> <li>• Note whether emergency workers read their dosimetry on a regular basis as specified in the plan, and note the result on their exposure record cards, including those being monitored by a group dosimeter or dosimeters.</li> <li>• Note whether all emergency workers have been issued TLDs.</li> <li>• Interview at least two emergency workers.</li> <li>• Determine whether emergency workers know what the administrative reporting exposure limits are and what to do when the limits are reached.</li> <li>• Determine whether emergency workers know what the maximum exposure limits are, what activities would warrant receiving that kind of dose, and who would authorize such activities.</li> </ul>
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**Sub-Element 3.b— Implementation of KI Decision**

<p><b>What the Policy Says</b></p>	<p><b>Intent</b>          NUREG-0654 provides that OROs should have the capability to provide radioprotective drugs for emergency workers, institutionalized individuals, and, if in the plan and/or procedures, to the general public for whom immediate evacuation may not be feasible, very difficult, or significantly delayed. While it is necessary for OROs to have the capability to provide KI to emergency workers and institutionalized individuals, the provision of KI to the general public is an ORO option and is reflected in ORO's plans and procedures. Provisions should include the availability of adequate quantities, storage, and means of the distribution of radioprotective drugs.</p> <p><b>Criterion 3.b.1:</b> KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals is maintained. (NUREG-0654, J.10.e)</p> <p><b>Minimum Frequency</b>          Criterion 3.b.1 is to be evaluated once in 6 years. It should be demonstrated in every biennial exercise by some organizations and should be demonstrated at least once every 6 years by every ORO with responsibility for implementation of KI decision.</p>
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	<p><b>Extent of Play</b></p> <p>Offsite Response Organizations (ORO) should demonstrate the capability to make KI available to emergency workers, institutionalized individuals, and, where provided for in the ORO plan and/or procedures, to members of the general public. OROs should demonstrate the capability to accomplish distribution of KI consistent with decisions made. Organizations should have the capability to develop and maintain lists of emergency workers and institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI. The ingestion of KI recommended by the designated ORO health official is voluntary. For evaluation purposes, the actual ingestion of KI is not necessary. OROs should demonstrate the capability to formulate and disseminate appropriate instructions on the use of KI for those advised to take it. If a recommendation is made for the general public to take KI, appropriate information should be provided to the public by the means of notification specified in the ORO's plan and/or procedures.</p> <p>Emergency workers should demonstrate the basic knowledge of procedures for the use of KI whether or not the scenario drives the use of KI. This can be accomplished by an interview with the evaluator.</p> <p>All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p> <p>Although it is desirable for all emergency workers to each have a direct-reading dosimeter, there may be situations where team members will be in close proximity to each other during the entire mission and adequate control of exposure can be effected for all members of the team by one dosimeter worn by the team leader. Emergency workers who are assigned to low exposure rate areas, for example, at reception centers, counting laboratories, emergency operations centers, and communications centers, may have individual direct-reading dosimeters or they may be monitored by dosimeters strategically placed in the work area. It should be noted that, even in these situations, each team member must still have their own permanent record dosimetry. Individuals without specific radiological response missions, such as farmers for animal care, essential utility service personnel, or other members of the public who must re-enter an evacuated area following or during the plume passage, should be limited to the lowest radiological exposure commensurate with completing their missions.</p> <p>All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p>
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EA-3. Protective Action Implementation

<p><b>Preparing to Evaluate This Criterion</b></p>	<p>Before the exercise, determine, according to the ORO’s plan/procedures and the Extent of Play agreement:</p> <ul style="list-style-type: none"> <li>• Will they provide KI to the general public?</li> <li>• How will they distribute KI to those who require it?</li> <li>• How will those (other than the general public) who ingest KI record that information (including time and date). How will the ORO keep track of the information?</li> <li>• How will the decision to take KI be disseminated to emergency workers, institutionalized individuals, and, if applicable, the general public?</li> <li>• Are there instructions for the use of KI, including:             <ul style="list-style-type: none"> <li>➤ Reason for taking KI,</li> <li>➤ Dosages and time period within which KI should be taken, and</li> <li>➤ Possible side effects.</li> </ul> </li> </ul>
<p><b>During the Exercise</b></p>	<p>During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <ul style="list-style-type: none"> <li>• Note how KI is distributed to those who may need to take it. Note whether instructions on the use of KI were included with the KI.</li> <li>• Note how the decision to take KI was disseminated to emergency workers, institutionalized individuals, and, if applicable, to the general public.</li> <li>• Note whether the ORO has a method of tracking who, other than the general public, ingested KI and when.</li> <li>• Determine if emergency workers have a basic knowledge of procedures for ingestion and recording the use of KI, even if the scenario does not drive the use of KI. (This can be accomplished by interview.)</li> </ul>

**Sub-Element 3.c— Implementation of Protective Actions for Special Populations**

<p><b>What the Policy Says</b></p>	<p><b>Intent</b>          NUREG-0654 provides that OROs should have the capability to implement protective action decisions, including evacuation and/or sheltering, for all special populations. Focus is on those special populations that are (or potentially will be) affected by a radiological release from a nuclear power plant.</p> <p><b>Minimum Frequency</b>          Criteria 3.c.1 and 3.c.2 are to be evaluated once in 6 years. Plume phase and post-plume phase can be demonstrated separately.</p> <p><b>Criterion 3.c.1:</b> Protective action decisions are implemented for special populations other than schools within areas subject to protective actions. (NUREG-0654, J.10.c, d, g).</p>
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	<p><b>Extent of Play</b> Applicable OROs should demonstrate the capability to alert and notify (for example, provide protective action recommendations and emergency information and instructions) special populations (hospitals, nursing homes, correctional facilities, mobility impaired individuals, transportation dependent, etc.). OROs should demonstrate the capability to provide for the needs of special populations in accordance with the ORO's plans and procedures.</p> <p>Contact with special populations and reception facilities may be actual or simulated, as agreed to in the Extent of Play. Some contacts with transportation providers should be actual, as negotiated in the extent of play. All actual and simulated contacts should be logged.</p> <p>All implementing activities associated with protective actions for special populations must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p> <p><b>Criterion 3.c.2:</b> OROs/School officials implement protective actions for schools. (NUREG-0654, J.10.c, d, g).</p> <p><b>Extent of Play</b> Public school systems/districts shall demonstrate the ability to implement protective action decisions for students. The demonstration shall be made as follows:</p> <p>At least one school in each affected school system or district, as appropriate, needs to demonstrate the implementation of protective actions. The implementation of canceling the school day, dismissing early, or sheltering should be simulated by describing to evaluators the procedures that would be followed.</p> <p>If evacuation is the implemented protective action, all activities to coordinate and complete the evacuation of students to reception centers, congregate care centers, or host schools may actually be demonstrated or accomplished through an interview process.</p> <p>If accomplished through an interview process, appropriate school personnel, including decision making officials (for example, superintendent/principal, transportation director/bus dispatcher) and at least one bus driver (and the bus driver's escort, if applicable), should be available to demonstrate knowledge of their role(s) in the evacuation of school children.</p> <p>Communications capabilities between school officials and the buses, if required by the plan and/or procedures, should be verified.</p>
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	<p>Officials of the school system(s) should demonstrate the capability to develop and provide timely information to OROs for use in messages to parents, the general public, and the media on the status of protective actions for schools.</p> <p>The provisions of this criterion also apply to any private schools, private kindergartens and day care centers that participate in REP exercises pursuant to the ORO's plans and procedures as negotiated in the Extent of Play Agreement.</p> <p>All activities must be based on the ORO's plans and procedures and completed, as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p>
<p><b>Preparing to Evaluate These Criteria</b></p>	<p><b>Criterion 6.c.1</b>          Before the exercise, determine, according to the ORO's plan/procedures and the Extent of Play agreement:</p> <ul style="list-style-type: none"> <li>• Who will notify special populations?</li> <li>• What is the method used to notify special populations?             <ul style="list-style-type: none"> <li>➤ EAS or other notification method,</li> <li>➤ Telephone,</li> <li>➤ Tone-alert radio,</li> <li>➤ Telecommunications devices for the deaf (TDD/TTY),</li> <li>➤ Other.</li> </ul> </li> <li>• Who will identify and notify transportation resources/alternate locations for special populations, if necessary?</li> <li>• Where are these locations and resources?</li> <li>• If there is a gap in resources, how will back up transportation resources and/or alternate locations for special populations be identified?</li> <li>• What emergency response actions are the administrators of facilities that have special populations required to implement?</li> </ul> <p><b>Criterion 6.c.2</b>          Before the exercise, determine, according to the ORO's plan/procedures and the Extent of Play agreement:</p> <ul style="list-style-type: none"> <li>• Does the plan indicate the school district(s) located within the EPZ?</li> <li>• Does the plan address licensed day care centers and private schools?</li> <li>• Do the schools have separate plans?</li> <li>• Who (title and organization) notifies the school district(s) and by what means?</li> <li>• At what ECL would the school district(s) be notified?</li> <li>• What precautionary protective actions can the school district(s) take?</li> <li>• What is the school population, including all staff?</li> <li>• Where would students be transported?</li> <li>• Who would notify bus drivers and where do the bus drivers report?</li> <li>• What is the potential number of buses available?</li> <li>• How would parents of students be notified?</li> <li>• Does the plan indicate how soon information would be provided to parents regarding the status of their children?</li> <li>• Are there schools located outside the EPZ that have students who live within the EPZ? What are the arrangements for these students?</li> </ul>

EA-3. Protective Action Implementation

	<ul style="list-style-type: none"> <li>• Does the plan indicate the type of communications capabilities between the buses and the school officials?</li> <li>• How does the plan indicate school officials will provide information to OROs on the status of school children?</li> </ul> <p><u>Out-of-Sequence – Interview/Demonstration:</u></p> <ul style="list-style-type: none"> <li>• Will this be an out-of-sequence school demonstration?</li> <li>• If out-of-sequence, will interviews be conducted or will there be an actual demonstration?</li> <li>• If interviews only, where, when and with whom will they be conducted?</li> <li>• Does the extent of play indicate time and location of school to be evaluated by interview?</li> <li>• Does the extent of play indicate who will be available for the interview and are any specifics indicated, such as availability of dosimetry kits, appropriate maps, etc.?</li> <li>• If this is to be an actual demonstration: does the extent of play indicate time and location of school?</li> <li>• Does the extent of play indicate who must be available and what actions must occur?</li> <li>• Will actions include a demonstration by the bus driver to travel from the school to the relocation site?</li> </ul>
<p><b>During the Exercise</b></p>	<p><b>Evaluating Criterion 6.c.1</b></p> <p>During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <ul style="list-style-type: none"> <li>• Record the PAD and the time the PAD was reached or received for special populations.</li> <li>• Identify the groups that were notified. Check for up-to-date lists of special populations.</li> <li>• Check to see if the administrator of each special population’s facility has a current plan?</li> <li>• Note the method(s) used to make notifications and who made the notifications.</li> <li>• Document the names of the transportation provider companies including special resources for disabled persons (some calls to transportation providers should be actual calls, as indicated in the extent of play). All calls, real and simulated, should be logged (obtain a copy of the log maintained of both actual and simulated calls to special populations and transportation resources).</li> <li>• Note any gaps identified between the transportation resources needed and the resources available and whether alternate resource providers were identified and resources provided.</li> </ul>

	<p><b>Evaluating Criterion 6.c.2</b></p> <p>During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <ul style="list-style-type: none"> <li>• Record the ECL, time, and who notified school official(s). (All school district(s) must be contacted.)</li> <li>• Note what protective action was used:             <ul style="list-style-type: none"> <li>➤ Cancellation of School,</li> <li>➤ Early dismissal,</li> <li>➤ Shelter-in-Place, or</li> <li>➤ Evacuate.</li> </ul> </li> <li>• Note what method was used to notify parents.</li> <li>• Observe whether there was coordination with the ORO’s Public Information Officer to determine the correct information on the status of protective actions for schools.</li> </ul> <p><u>Out-of-sequence – Interview:</u></p> <ul style="list-style-type: none"> <li>• Note who would notify the school.</li> <li>• Note at what ECL would the school be notified.</li> <li>• Observe whether there is a current copy of the plan available at the school.</li> <li>• Determine what actions the school would take.</li> <li>• Determine whether the bus driver is aware of where to take the students or has a current map to the location.</li> <li>• If required by the plan, note if the bus driver is knowledgeable about emergency worker exposure control (dosimetry).</li> <li>• Determine what responsibilities the school has after the children arrive at the reception center.</li> <li>• Note who notifies the parents of actions taken to protect the students, and when.</li> <li>• Document the communication systems used to notify schools and parents.</li> </ul> <p><u>Out-of-sequence – Actual Demonstration:</u></p> <ul style="list-style-type: none"> <li>• Observe whether the school has a current copy of the plan available.</li> <li>• Determine who notified the school and how they received the notification.</li> <li>• Determine who notified the bus drivers to mobilize and how they received the notification.</li> <li>• Note whether the bus driver had an accurate map of the route, if needed.</li> <li>• Note how the school communicated with the bus drivers while they are en route, if required in the plan.</li> <li>• If required, determine whether the bus driver is knowledgeable about emergency worker exposure control (dosimetry).</li> <li>• Determine what responsibilities the school has after the children arrive at the reception center.</li> <li>• Note who notifies the parents of actions taken to protect the students, and when.</li> </ul>
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**Sub-Element 3.d— Implementation of Traffic and Access Control**

<p><b>What the Policy Says</b></p>	<p><b>Intent</b>                  NUREG-0654 provides that OROs should have the capability to implement protective action plans, including relocation and restriction of access to evacuated/sheltered areas. This sub-element focuses on selecting, establishing, and staffing of traffic and access control (T&amp;AC) points and removal of impediments to the flow of evacuation traffic.</p> <p><b>Minimum Frequency</b>                  Criteria 3.d.1 and 3.d.2 are to be evaluated every exercise. Physical deployment of resources is not necessary.</p> <p><b>Criterion 3.d.1:</b> Appropriate traffic and access control is established. Accurate instructions are provided to T&amp;AC personnel. (NUREG-0654, J.10.g, j).</p> <p><b>Extent of Play</b>                  OROs should demonstrate the capability to select, establish, and staff appropriate T&amp;AC points, consistent with protective action decisions (for example, evacuating, sheltering, and relocation), in a timely manner. OROs should demonstrate the capability to provide instructions to T&amp;AC staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.</p> <p>T&amp;AC staff should demonstrate accurate knowledge of their roles and responsibilities. This capability may be demonstrated by actual deployment or by interview, in accordance with the extent of play agreement.</p> <p>In instances where OROs lack authority necessary to control access by certain types of traffic (rail, water, and air traffic), they should demonstrate the capability to contact the State or Federal agencies with authority to control access.</p> <p>All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p> <p><b>Criterion 3.d.2:</b> Impediments to evacuation are identified and resolved. (NUREG-0654, J.10.k)</p> <p><b>Extent of Play</b>                  OROs should demonstrate the capability, as required by the scenario, to identify and take appropriate actions concerning impediments to evacuation. Actual dispatch of resources to deal with impediments, such as wreckers, need not be demonstrated; however, all contacts, actual or simulated, should be logged.</p> <p>All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p>
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<p><b>Preparing to Evaluate These Criteria</b></p>	<p><b>Criterion 3.d.1</b>                  Before the exercise, determine, according to the ORO’s plan/procedures and the Extent of Play agreement:</p> <ul style="list-style-type: none"> <li>• Who has the responsibility for establishing traffic and/or access control points (TCP/ACPs)?</li> <li>• Are there pre-identified traffic and/or access control points established in the plan?</li> <li>• Is there coordination among various OROs, such as:                         <ul style="list-style-type: none"> <li>➤ Local Law Enforcement,</li> <li>➤ State Law Enforcement,</li> <li>➤ National Guard,</li> <li>➤ State and/or local transportation departments.</li> </ul> </li> <li>• When (at what ECL) would TCP/ACPs be established?</li> <li>• Who deploys TCP/ACP personnel to the assigned location?</li> <li>• According to the plan, when and who has responsibility for notifying, and what agency is contacted for control of:                         <ul style="list-style-type: none"> <li>➤ Water Traffic,</li> <li>➤ Rail Traffic, and</li> <li>➤ Air Traffic.</li> </ul> </li> <li>• In addition to required activities in the EOC, will there be an actual deployment of traffic/access control personnel or an interview?</li> </ul> <p><b>Criterion 3.d.2</b>                  Before the exercise, determine, according to the ORO’s plan/procedures and the Extent of Play agreement:</p> <ul style="list-style-type: none"> <li>• How would the resources to remove impediments to evacuation be identified and coordinated?</li> <li>• What organizations are identified to assist in impediment removal?</li> </ul>
<p><b>During the Exercise</b></p>	<p><b>Evaluating Criterion 3.d.1</b>                  During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <p><u>At the EOC:</u></p> <ul style="list-style-type: none"> <li>• Check that TCP/ACPs were established (identified, staffed, and established) in timely manner for the affected areas.</li> <li>• Note whether instructions were provided to traffic and access control staff on changes/modifications of protective action decisions.</li> <li>• Note whether access control personnel were moved when protective action decisions expanded the affected area.</li> <li>• Document time and ECL when rail, water, and air traffic access control were notified by the ORO.</li> </ul>

	<p><u>Traffic and Access Control Personnel (Interview or Actual Demonstration):</u></p> <ul style="list-style-type: none"> <li>• Determine if they have accurate knowledge of their roles and responsibilities, including:             <ul style="list-style-type: none"> <li>➤ Location of traffic and/or access control point(s),</li> <li>➤ The Exposure Control Items Are Evaluated Under Criterion 3.a.1 or 3.b.1</li> <li>➤ Radiological Exposure Control, including:                 <ul style="list-style-type: none"> <li>– Dosimetry,</li> <li>– Knowledge of administrative and turn back limits,</li> <li>– KI – knowledge of purpose, who authorizes, etc.</li> </ul> </li> </ul> </li> <li>• Location of reception/registration centers,</li> <li>• Location of emergency worker monitoring and decontamination center, and</li> <li>• Equipment available to establish traffic and access control points.</li> </ul> <p><b>Evaluating Criterion 3.d.2</b></p> <p>During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <ul style="list-style-type: none"> <li>• Identify impediments to evacuation.</li> <li>• Note whether organizations were identified to assist in removal of impediments.</li> <li>• Note if actions (actual or simulated) to remove impediments are taken in a timely manner.</li> <li>• Obtain log of all contacts (actual or simulated) with resources.</li> <li>• Note if resources were available when needed.</li> </ul>
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**Sub-Element 3.e— Implementation of Ingestion Pathway Decisions**

<p><b>What the Policy Says</b></p>	<p><b>Intent</b>                  NUREG-0654 provides that OROs should have the capability to implement protective actions, based on criteria recommended by current Food and Drug Administration guidance, for the ingestion pathway zone (IPZ), the area within an approximate 50-mile radius of the nuclear power plant. This sub-element focuses on those actions required for implementation of protective actions.</p> <p><b>Minimum Frequency</b>                  Criteria 3.e.1 and 3.e.2 are to be evaluated once in 6 years.</p> <p><b>Criterion 3.e.1:</b> The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions. NUREG-0654, J.9, 11).</p>
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	<p><b>Extent of Play</b> Applicable OROs should demonstrate the capability to secure and use current information on the locations of dairy farms, meat and poultry producers, fisheries, fruit growers, vegetable growers, grain producers, food processing plants, and water supply intake points to implement protective actions within the ingestion pathway EPZ. OROs should use Federal resources as identified in the FRERP, and other resources (for example, compacts, nuclear insurers, etc.), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.</p> <p>All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p> <p><b>Criterion 3.e.2:</b> Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654, J.9, 11).</p> <p><b>Extent of Play</b> Development of measures and strategies for implementation of Ingestion Pathway Zone (IPZ) protective actions should be demonstrated by formulation of protective action information for the general public and food producers and processors. This includes either pre-distributed public information material in the IPZ or the capability for the rapid distribution of appropriate pre-printed and/or camera-ready information and instructions to pre-determined individuals and businesses.</p> <p>ORO's should demonstrate the capability to control, restrict or prevent distribution of contaminated food by commercial sectors. Exercise play should include demonstration of communications and coordination between organizations to implement protective actions. Actual field play of implementation activities may be simulated. For example, communications and coordination with agencies responsible for enforcing food controls within the IPZ should be demonstrated, but actual communications with food producers and processors may be simulated.</p> <p>All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.</p>
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<p><b>Preparing to Evaluate This Criterion</b></p>	<p><b>Criterion 3.e.1</b>                  Before the exercise, determine, according to the ORO’s plan/procedures and the Extent of Play agreement:</p> <ul style="list-style-type: none"> <li>• What information is available on the location of water supply intakes, the location of dairy operations, the location of various crops, the location of food processing plants, and the harvest period for crops?</li> <li>• If the information is not in the plan/procedures, from what source is this information to be obtained?</li> <li>• In addition to the location of agribusiness sites, what other information is in the database (e.g., name and address of owner)?</li> </ul> <p><b>Criterion 3.e.2</b>                  Before the exercise, determine, according to the ORO’s plan/procedures and the Extent of Play agreement:                  (This is under 3.e.1)</p> <ul style="list-style-type: none"> <li>• Are Federal and other resources identified (i.e., the Federal Radiological Emergency Response Plan (FRERP), compacts, etc.) that will assist with determination and implementation of ingestion pathway protective actions?</li> <li>• What are the State/local requirements to implement embargos or condemnations? Who delivers condemnation or embargo notices to agribusiness?</li> <li>• Where or how are condemned food products taken for disposal?</li> <li>• What assistance do Federal resources provide in the implementation of protective measures in the ingestion pathway?</li> <li>• What agencies are to participate in this demonstration and what level of play has been established in the extent of play?</li> </ul>
<p><b>During the Exercise</b></p>	<p><b>Criterion 3.e.1</b>                  During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <ul style="list-style-type: none"> <li>• Document any coordination of implementation of protective actions.</li> <li>• Document any precautionary actions taken to prevent contamination.</li> </ul> <p><b>Criterion 3.e.2</b>                  During the exercise, in addition to evaluating activities related to the items listed above, be sure to:</p> <ul style="list-style-type: none"> <li>• Document measures taken and strategies developed by the ORO to implement protective actions for general public and for food producers in the IPZ, including preventing distribution of potentially contaminated food.</li> <li>• Document arrangements for delivery of all necessary legal notices.</li> <li>• Note coordination and communications among organizations responsible for implementing protective actions (field play may be simulated – see extent of play agreement).</li> <li>• Observe whether reproduction-ready information and instructions to pre-determined individuals and businesses were available for production and distribution (obtain copies of available information). Check to see if the information on the handouts is current.</li> </ul>