

Radiological Emergency Preparedness (REP) Program Manual Change Summary

January 2016

This revision of the REP Program Manual (RPM) encompassed the input of a broad range of stakeholders and saw the follow-on implementation of the new RPM update and maintenance process. In general, the update focused on continued refinement of guidance, driven largely by questions and issues raised by Regional REP Program staff and offsite response organizations (OROs). In addition, this revision cycle included tech edits and formatting changes to provide stakeholders with a more intuitive and easier to read document.

PROCESS

At the beginning of 2015, the REP Program entered the RPM into a newly initiated maintenance process, which will complete two revision cycles each year, with new versions released in January and July. The new process will ensure that the Manual remains up to date and that issues are quickly resolved.

Additionally, the process formalizes the involvement of Regional REP Program staff and the Consistency, Frequently Asked Question (FAQ), and Steering Committees, along with Headquarters (HQ) REP Program staff in the RPM Integrated Project Team (IPT).

UPDATES

This cycle's updates were driven by questions asked and issues found through the FAQ Committee, Regional REP staff, and HQ REP staff. The changes were discussed at length and agreed upon by the RPM IPT. The following table outlines each change in more detail.

#	Issue	Change	Rationale	Location
1	Planning Standards/Core Capabilities Crosswalk	<p>The following changes were made to the Planning Standards/Core Capabilities Crosswalk:</p> <p>Added new core capability:</p> <ul style="list-style-type: none"> • “Fire Management and Suppression” in the “Response” mission area with the following Planning Standards selected: <ul style="list-style-type: none"> ◦ Planning Standard A - Assignment of Responsibility (Organization Control) ◦ Planning Standard B - Onsite Emergency Organization ◦ Planning Standard C - Emergency Response Support and Resources <p>Replaced core capability:</p> <ul style="list-style-type: none"> • “Public and Private Services and Resources” with “Logistics and Supply Chain Management”. <p>Updated core capabilities’ names:</p> <ul style="list-style-type: none"> • Supply Chain Integrity and Security • On-Scene Security, and Protection, and Law Enforcement • Public Health, and Medical Services Healthcare, and Emergency Medical Services 	Language in the Planning Standards/ Core Capabilities Crosswalk was revised to align with the updated National Preparedness Goal, which was published in October 2015.	Pgs. 18-19
2	Backup Alert and Notification Messages	<p>Added guidance to Evaluation Criterion E.6 under the “Explanation” section in a. “Design Objectives for Alert and Notification to the Public”:</p> <p>Backup Systems: Supplement 4 to NUREG-0654/ FEMA-REP-1 includes a new requirement for backup ANSs. Backup means of alert and notification will differ from facility to facility. <u>However, all backup messages, at a minimum, should include: (1) a statement that an emergency exists at the plant(s) and (2) instructions regarding where to obtain additional information.</u></p> <p>The backup means may be designed so that it can be implemented using a phased approach in which the populations most at risk (e.g., within 2 miles), are alerted and notified first, followed by alerting and notification of people in less immediately affected areas (e.g., 2 to 5 miles, followed by downwind 5 to 10 miles, and finally the remaining population as directed by authorities). The backup method may have the additional capability of being employed only in the specific areas impacted when a portion of the primary ANS, such as a single siren or group of sirens within a community, fails and the extent of the affected area and population can be determined.</p>	Text was added to align guidance in Evaluation Criterion E.6 with language found in Demonstration Criterion 5.a.3 and the REP Exercise Preparation Guide (EPG).	Pg. 44 (E.6.a)

#	Issue	Change	Rationale	Location
3	Emergency Alert System (EAS) Equipment	<p>Removed language from Evaluation Criterion E.7, under the “Explanation” section in “Initial messages”:</p> <p>Plans/procedures discuss the process for modifying or selecting pre-scripted, including computer-generated, EAS messages for broadcast. They also address process of issuing messages to the EAS station and the process by which messages are reviewed by a responsible official prior to being released to the EAS station. In addition, ORO plans/procedures discuss the methodology for EAS message rebroadcast, along with the frequency (how many times and at what interval, such as every 15 minutes). The memory capacity of the EAS equipment is identified for each station if different from the 2-minute minimum standard.</p>	Language was removed since the Federal Communications Commission (FCC) provides guidance for the EAS equipment.	Pg. 48 (E.7)
4	Dosimeter Correction Factors	<p>Updated language in Evaluation Criterion K.3.a, under the “Explanation” section in b. “Dosimeters:”</p> <p>The EPA-400-R-92-001 guidance is to use a factor of 5 for this conversion (see dose control discussion in the next section); however States may be more conservative. If the State adopts administrative dose limits or turn-back values that are more restrictive than EPA dose limits, the DRDs provided to emergency workers must be able to read R in the range that will correspond to the administrative limit when the selected factor is applied. EPA-400-R-92-001 background documentation suggests an administrative correction factor of 5 as a starting point when KI is administered. Dose assessors must characterize the composition of the plume to develop the correction factor appropriate for each incident. DRDs provided to emergency workers must be capable of reading R in the range corresponding to administrative limits and incident specific calculated limits.</p> <p><u>EPA-400-R-92-001 background documentation suggests an administrative correction factor of 5 as a starting point when KI is administered. Dose assessors must characterize the composition of the plume to develop the correction factor appropriate for each incident. DRDs provided to emergency workers must be capable of reading R in the range corresponding to administrative limits and incident specific calculated limits.</u></p>	Language was replaced to ensure the understanding that the default factor for dosimeter correction, taken from EPA-400-R-92-001, is not a required correction factor, but rather a suggested starting point.	Pg. 109 (K.3.a)

#	Issue	Change	Rationale	Location
5	Demonstrated Strengths	<p>Added language to Section 6. “Documenting REP Exercises,” under a. “Identifying Exercise Outcomes and Issues.” New language will be placed under (5) “Assigning Exercise Issues and Numbers.”</p> <p><u>(6) Additional Observations</u></p> <p><u>The following terms are used to capture the knowledge and experience gained from both positive and negative actions during demonstrations:</u></p> <ul style="list-style-type: none"> • <u>Demonstrated Strength: an observed action, behavior, procedure, and/or practice that is worthy of special notice and recognition.</u> • <u>Best Practice: an exemplary, peer-validated technique, procedure, good idea, or solution that works and is solidly grounded in actual operations, training, and exercise experience.</u> • <u>Lesson Learned: knowledge and experience, positive or negative, derived from actual incidents, as well as those derived from observations and historical study of operations, training, and exercises.</u> <p><u>Best Practices and Lessons Learned should be shared within the REPP community. FEMA’s Lessons Learned Information Sharing (LLIS) program is a tool for distributing Best Practices and Lessons Learned through an online submittal process. More information on the LLIS program can be found at https://www.fema.gov/lessons-learned-information-sharing-program.</u></p>	Language was added to comply with the “New Terms to Classify REPP Exercise-Related Observations and Issues Memorandum.”	Pg. 172
6	Information Technology Tools	<p>Removed language from Section 6. “Documenting REP Exercises,” in d. “Developing the After-Action Report.”</p> <p>An electronic copy of the cover letter of the report will be sent to the REPP HQ Branch Chief and their Regional Liaison Officer (RLO) within 90 calendar days of the exercise. This will be indication for the RLO to go into the EET; to retrieve the finalized AAR and save it to Headquarters shared drive.</p>	Language was removed because the Exercise Evaluation Tool (EET) is no longer in use.	Pg. 174
7	Improvement Plans	<p>Added language to Section 6. “Documenting REP Exercises,” in Part e. “Developing the Improvement Plan.”</p> <p>The IP is an outcome of the AAR. The IP contains information on how OROs will correct or improve Level 1 Findings, Level 2 Findings, Plan Issues, and Areas for Improvement, who is responsible, and an anticipated timeline for correction/improvement. As FEMA documents each Level 1 Finding, Level 2 Finding, and Plan Issue, and/or Area for Improvement within the AAR, OROs make a corresponding entry in the IP. The content of the IP will be negotiated during the AAM, so it is not necessary for all information to be filled in when the Draft AAR/IP goes out for comment. <u>FEMA Regions will follow up with OROs to ensure that IP corrective actions are met.</u></p>	Language was added to comply with the “New Terms to Classify REPP Exercise-Related Observations and Issues Memorandum.”	Pg. 174

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8	Backup Communications Systems	<p>Removed language from Demonstration Criterion 1.d.1 (second paragraph under ASSESSMENT/ EXTENT OF PLAY):</p> <p>OROs must demonstrate that a primary system, and at least one backup system for fixed facilities, is fully functional at all times. Communications systems are maintained and tested on a recurring basis throughout the assessment period and system status is available to all operators. Periodic test results and corrective actions are maintained on a real time basis. If a communications system or systems are not functional, but exercise performance is not affected, no exercise issue will be assessed.</p>	Language was removed to clarify that both field operations and fixed facilities must have at least one backup communications system.	Pg. 180 (1.d.1)
9	Annual Letter of Certification Review Guide (ALC)	<p>Revised language in the Annual Letter of Certification (ALC) Review Guide under the “Requirement” section:</p> <p>Requirement:</p> <ul style="list-style-type: none"> ✓ 44 CFR part 350.5 (Planning Standards) ✓ NUREG-0654/FEMA-REP-1 Planning Standard <ul style="list-style-type: none"> A. 24-Hour Staffing Capability G. Public Education and Information H. Emergency Facilities and Equipment N. Exercises and Drills O. Radiological Emergency Response Training P. Responsibility for the Planning Effort ✓ FEMA-REP10 ✓ FEMA REP Program Manual 	The references for the Planning Standards and NUREG-0654/FEMA-REP-1 were updated for clarity. The reference to “FEMA-REP-10” was removed as it is now part of the RPM.	Pg. 248 (ALC) Review Guide
10	Reformatting of Checkmarks	<p>Replaced Checkmarks with Roman numerals (i.e., changed from ✓ to i).</p> <p>Replaced sub-bulleted checkmarks with lowercase letters.</p>	Checkmarks were reformatted to simplify referencing.	Pgs. 16-151 (RPM Part II)

#	Issue	Change	Rationale	Location
11	“Emergency Worker Exposure Control Plan” and “ALARA” Definitions	<p>Added the following definitions to the RPM Glossary:</p> <ul style="list-style-type: none"> • <u>Emergency worker exposure control plan:</u> <u>demonstrates that OROs have the capability to assess and control the radiation exposure received by emergency workers. OROs should include in their Plans the methods or options for the following: direct-reading dosimetry and permanent record dosimetry; reading of direct-reading dosimetry by emergency workers; maintaining a radiation dose record; establishing a decision chain or authorization procedure for EWs to incur radiation exposures in excess of the PAGs; and the capability to provide KI for EWs, always applying ALARA.</u> • <u>As low as reasonably achievable (ALARA):</u> <u>a philosophy followed to achieve making every reasonable effort to maintain exposures to ionizing radiation as far below the dose limits as practical. A practice to ensure consistency with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to the state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations. These means are in relation to utilization of nuclear energy and licensed materials in the public interest.</u> 	<p>The term “emergency worker exposure control plan” was added for clarification.</p> <p>The definition of “ALARA” was revised because the Glossary only spelled out the acronym without providing a definition.</p>	Pgs. 277-302 (RPM Glossary)
12	“Reentry” Definition	<p>Updated definition:</p> <p><u>Reentry:</u> <u>Workers or members of the public going into a restricted zone on a temporary basis under controlled conditions.</u></p>	The definition of “reentry” was updated to match the EPA 2013 Draft PAG Manual for Interim Use and Public Comment.	Pgs. 277-302 (RPM Glossary)
13	“Combined License” and “Early Site Permit” Definitions	<p>Added the following definitions to the RPM glossary:</p> <ul style="list-style-type: none"> • <u>Combined license (COL):</u> <u>a joint construction permit and operating license with conditions for a nuclear power facility issued under Subpart C of 10 CFR Part 52.</u> • <u>Early Site Permit (ESP):</u> <u>a permit through which the NRC resolves site safety, environmental protection, and emergency preparedness issues, in order to approve one or more proposed sites for a nuclear power facility, independent of a specific nuclear plant design or an application for a construction permit or COL. An ESP is valid for 10 to 20 years, but can be renewed for an additional 10 to 20 years.</u> 	Terms were not previously included in the Glossary.	Pgs. 277-302 (RPM Glossary)

#	Issue	Change	Rationale	Location
14	Level 1 Findings, Level 2 Findings, and Plan Issues	<p>Removed definitions and language on “Deficiencies” and “ACRAs” throughout the RPM and replaced with “Level 1 Findings” and “Level 2 Findings.” Definition of “Plan Issue” was revised.</p> <ul style="list-style-type: none"> • Level 1 Finding: An observed or identified inadequacy of organizational performance in an exercise that could cause a determination that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of the Nuclear Power Plant (NPP). • Level 2 Finding: An observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety. • Plan Issue: An observed or identified inadequacy in the offsite response organizations’ (OROs’) emergency plan/implementing procedures, rather than that of the ORO’s performance. 	The terms “Deficiencies” and “ACRAs” were replaced with “Level 1 Findings” and “Level 2 Findings,” and the definition of “Plan Issues” was updated to comply with the “New Terms to Classify REPP Exercise-Related Observations and Issues Memorandum.”	Throughout
15	Planning Standards and NUREG-0654/FEMA-REP-1 Language	<p>Revised 44 CFR 350 Planning Standards and NUREG-0654/FEMA-REP-1 Evaluation Criteria references throughout RPM.</p> <p>For example:</p> <ul style="list-style-type: none"> • Pg. 8 – E. Evaluation of Radiological Emergency Preparedness <ul style="list-style-type: none"> ◦ “The planning guidance contained in Part II of this manual further explains the NUREG-0654/FEMA-REP-1 Planning Standards and associated Evaluation Criteria 16 Planning Standards and associated NUREG-0654/FEMA-REP-1 Evaluation Criteria that apply to OROs. • Pg. 138 – Evaluation Criterion N.4, Explanation <ul style="list-style-type: none"> ◦ Part III of the REP Program Manual includes six Assessment Areas that are derived from the 16 Planning Standards of 44 CFR Part 350 and NUREG-0654/FEMA-REP-1 and their associated Evaluation Criteria 16 Planning Standards of 44 CFR Part 350 and the associated NUREG-0654/FEMA-REP-1 Evaluation Criteria. 	Language was revised to ensure the 44 CFR 350 Planning Standards and the NUREG-0654/FEMA-REP-1 Evaluation Criteria are appropriately referenced.	Throughout
16	Formatting Revisions/ Technical Edits	<ul style="list-style-type: none"> • Inserted blank pages. • Reordered footnotes. • Implemented technical edits. • Added “Tribal government” language. 	Formatting changes and technical edits were implemented to provide clarification and to make RPM more intuitive to read.	Throughout

FORMAT

The January 2016 revision includes formatting changes to ensure that the Manual is easy to navigate. In Part II of the Manual, the checkmarks that appeared under the Evaluation Criteria were changed to Roman numerals for simpler referencing. Blank pages were inserted to organize the sections so that they appear on the right-hand side of the document. Throughout the Manual, non-sequential page numbers and footnotes were reordered.

TECHNICAL EDITS

The RPM received a technical edit to address formatting and grammatical inconsistencies. As part of the technical edit, Tribal government considerations were added.

PUBLICATION

The January 2016 edition of the RPM, along with a Change Summary, will be available for order through the FEMA Printing Office, as well as for download on the FEMA THD website.