POSITION TASK BOOK FOR THE POSITION OF

CHEMICAL OPERATIONS SUPPORT SPECIALIST (TYPE 1)

Version: March 2022

Check the appropriate position type:

☐ Single Type ☐ Type 1 ☐ Type 2 ☐ Type 3

POSITION TASK BOOK ASSIGNED TO:
TRAINEE'S NAME:
DUTY STATION:
PHONE NUMBER:
EMAIL:
POSITION TASK BOOK INITIATED BY:
OFFICIAL'S NAME:
TITLE:
DUTY STATION:
PHONE NUMBER:
EMAIL:
POSITION TASK BOOK WAS INITIATED:
LOCATION:
DATE:

Evaluator Verification

(Do not complete this form unless you are recommending the trainee for all-hazards certification.)

FINAL EVALUATOR VERIFICATION
I verify that _____ has successfully completed all tasks as a trainee and should therefore be considered for certification in this position. I also verify that all tasks are documented with appropriate initials.
FINAL EVALUATOR'S SIGNATURE:
DATE:
FINAL EVALUATOR'S PRINTED NAME:
TITLE:
DUTY STATION:
PHONE NUMBER:
EMAIL:

Documentation of Agency Certification

DOCUMENTATION OF AGENCY CERTIFICATION
I certify that_____ has successfully met all of the criteria set out in the National Incident Management System (NIMS) Job Title/Position Qualifications document for the position and will hereby receive certification of his/her qualification.
OFFICIAL'S SIGNATURE:
DATE:
OFFICIAL'S NAME:
TITLE:
DUTY STATION:
PHONE NUMBER:
EMAIL:

Position Task Book Overview

The Position Task Book (PTB) documents the performance criteria a trainee must meet to be certified for a position within the National Qualification System (NQS). The performance criteria are associated with core NQS competencies, behaviors and tasks.

A trainee may not work on multiple position type PTBs for a specific position at the same time; for example, a trainee may not simultaneously work on a Type 1 Incident Commander PTB and a Type 2 Incident Commander PTB. If a position has multiple types, the trainee must, in most cases, qualify at the lowest type before pursuing the next higher type. For example, before seeking qualification for a Type 1 position, an individual must first qualify at the Type 3 level and then at the Type 2 level.

Evaluation Process

- Evaluators observe and review a trainee's completion of PTB tasks, initialing and dating each successfully completed task in the PTB.
- Evaluators complete an Evaluation Record Form after each evaluation period by documenting the trainee's performance.
- The Authority Having Jurisdiction (AHJ) may not have enough resources to ensure that every evaluator is qualified in the position being assessed. Therefore, a trainee's supervisor may evaluate the completion of PTB tasks. For example, a Logistics Section Chief has the authority to sign off on completed PTB tasks for a Food Unit Leader trainee.
- The final evaluator is a leader who verifies that a trainee has completed the PTB and met all requirements for the position. A final evaluator is generally qualified in the same position for which the trainee is applying. When possible, the evaluator and the final evaluator should not be the same person, but in situations with limited resources, the evaluator can also serve as the final evaluator.
- Once the final evaluator has completed the Final Evaluator Verification, he/she forwards it to the Qualifications Review Board (QRB) along with supporting evidence that the trainee has completed all position requirements.
- After the QRB review, the AHJ completes the Documentation of Agency Certification form as appropriate.

Transferring Qualifications

- Personnel who have documentation of previous education, training or significant on-the-job incident experience may receive credit toward qualification for a given position. Each AHJ establishes the requirements for transferring qualifications from another AHJ.
- If an AHJ chooses not to accept a trainee's existing certification of qualification, the trainee may be reevaluated in the specific position and issued a new PTB.
- An individual may hold multiple certifications of qualification (that is, the Final Evaluator Verification form and the Documentation of Agency Certification form) along with the completed PTB.

Position Task Book Competencies, Behaviors and Tasks

The PTB sets minimum criteria for certification for a position. The AHJ has the authority to add content to the baseline PTB competencies, behaviors and tasks as necessary.

The PTB covers all type levels for a given position, but an AHJ may check only one "Type" box and work on only one type at a time. (The National Incident Management System (NIMS) Job Title/Position Qualifications document describes all types.)

Command and General Staff job titles/positions qualifications are typed based on incident complexity, while all other NIMS positions are typed based on the minimum qualifications.

Definitions

Competency: An observable, measurable pattern of knowledge, skills, abilities and other characteristics an individual needs to perform an activity and its associated tasks. A competency specifies the skillset a person needs to possess to complete the tasks successfully.

Behavior: An observable work activity or a group of similar tasks necessary to perform the activity.

Task: A specific, demonstrable action necessary for successful performance in a position. Trainees must demonstrate completion of required tasks.

- Occasionally, PTB tasks are unique to one of the types; for example, certain tasks apply only to a Type 3 Incident Commander, not to a Type 2 or Type 1 Incident Commander. In those cases, the PTB indicates the corresponding type at the beginning of the task.
- All tasks require evaluation. Bullet statements within a task are only examples and do not need to be performed to have a task signed off.

PTB Task Codes

For each of the tasks listed in the Position Task Book (PTB), there are one or more codes describing the circumstances in which the trainee can perform tasks related to the position. If a task has multiple codes listed, it means the evaluator can assess the trainee on any of those circumstances as opposed to evaluating the trainee on all of the listed codes.

Code C: Task performed in training or classroom setting, including seminars and workshops.

Code E: Task performed on a full-scale exercise with equipment deployment under the Incident Command System (ICS).

Code F: Task performed during a functional exercise managed under the ICS.

Code I: Task performed on an incident or event managed under ICS. Examples of incidents and events that may employ ICS include but are not limited to an oil spill, search and rescue, hazardous material response, fire and emergency or non-emergency (planned or unplanned) events.

Code J: Task performed as part of day-to-day job duties.

Code T: Task performed during a tabletop exercise.

Code R: Task performed very rarely and required only if applicable to the event. *Note:* Assignment of Code R is not recommended. However, AHJs may add at their discretion to tasks added to NQS PTBs.

How to Complete the Evaluation Record Form

Each Evaluation Record Form (see next page) covers one evaluation period. Evaluation periods may involve incidents, classroom simulations or daily duties, depending on what the PTB recommends. The AHJ determines the number of evaluations required for position qualification and certification. If evaluators need additional evaluation periods, they can copy pages from a blank PTB and attach them to the PTB in question.

Complete these items AT THE START of the evaluation period:

Evaluation Record Number: Label each evaluation record with a number to identify the incident(s), exercise(s) or event(s) during which the trainee completed the PTB tasks. The evaluator should also write this number in the PTB column labeled "Evaluation Record #" for each task performed satisfactorily. This number enables reviewers of the completed PTB to ascertain the evaluators' qualifications before signing off on the PTB.

Evaluator's name; Incident/office title and agency: List the name of the evaluator, his/her incident position or office title and the evaluator's home agency.

Evaluator's home jurisdiction address and phone: List evaluator's home jurisdiction address and phone number.

Name and location of incident or simulation/exercise: Identify the name (if applicable) and location where the trainee performed the tasks.

Incident kind: Enter the kind of incident (such as hazmat, law enforcement, wildland fire, structural fire, search and rescue, flood or tornado).

Complete these items AT THE END of the evaluation period:

Number and kind of resources: Enter the number of resources assigned to the incident and their kind (such as team, personnel and equipment) pertinent to the trainee's PTB.

Evaluation period: Enter inclusive dates of trainee evaluation. This time span may cover several small, similar incidents.

Position type: Enter position type (such as Type 3, Type 2, Type 1 or Single Type).

Recommendation: Check the appropriate line and make comments below regarding the trainee's future development needs.

Additional recommendations/comments: Provide additional recommendations and comments about trainee, as necessary.

Date: List the current date.

Evaluator's initials: Initial here to authenticate your recommendations and to allow for comparison with initials in the PTB.

Evaluator's relevant qualification: List your certification relevant to the trainee position you supervised.

Evaluation Record Form

TRAINEE NAME:
TRAINEE POSITION:
Evaluation Record Number:
Evaluator's name:
Incident/office title and agency:
Evaluator's home jurisdiction address and phone:
Name and location of incident or simulation/exercise:
Incident kind:
Number and kind of resources:
Evaluation period:
Position type:
Recommendation: The above named trainee performed the initialed and dated tasks under my supervision. I recommend the following for this trainee's further development: _____The trainee has successfully performed all required tasks for the position. The AHJ should consider the individual for certification. _____The trainee could not complete certain tasks or needs additional guidance. See comments below. _____Not all tasks were evaluated on this assignment. An additional assignment is needed to complete the evaluation. _____ The trainee is severely deficient in the performance of tasks and needs further training prior to additional assignment(s) as a trainee for this position.
Additional recommendations/comments:
Date:
Evaluator's initials:
Evaluator's relevant qualification:

1. Competency: Assume position responsibilities

Description: Successfully assume the role of Chemical Operations Support Specialist (COSS) and initiate position activities at the appropriate time, according to the following behaviors.

1a. Behavior: Ensure readiness for assignment

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
1. Demonstrate a basic ability to interpret release and exposure data products: ● Interpret and brief at least two data products to an audience	C, E, F, I, J, T		
2. Demonstrate ability to share information with responders and decision makers using the Homeland Security Information Network (HSIN), WebEOC, spreadsheets and other common software: ● Demonstrate a working knowledge of HSIN, WebEOC, spreadsheets, and other common software	C, E, F, I, J, T		
3. Demonstrate application that maps, plume modeling (atmospheric, stream, subsurface), briefing products, and technical reports can come from several sources: ● Explain functions of software or data product providers, types of information, and product provided	C, E, F, I, J, T		
4. Explain the value to responders and decision makers of the standard Interagency Modeling and Atmospheric Assessment Center (IMAAC) products: ● Describe standard products delivered from IMAAC for various incidents ● Identify standard assumptions, layout, features, information, and legends for the data products ● Recognize common questions that the IMAAC products are intended to answer	C, E, F, I, J, T		
5. Explain the differences between providing technical guidance versus making recommendations: ● Describe how recommendations consist of specific options derived from technical guidance	C, E, F, I, J, T		
6. Identify the AHJ that is responsible for chemical emergency response in the area to which you are deployed: ● Coordinate with the AHJ responsible for public and worker protection during chemical incidents	C, E, F, I, J, T		
7. Demonstrate the ability to interpret the full set of exposure pathway data products for one of the three scenarios (transportation-related, fixed facility, and terrorist/Weapons of Mass Destruction [WMD] chemical incident): ● Provide an after-action report or other relevant comprehensive documentation from a previous exercise detailing demonstration of tasks	C, E, F, I, J, T		
8. Demonstrate working knowledge of the basic functionality and differences between advanced modeling tools: ● Demonstrate working knowledge of Visual Sampling Plan (VSP) and Environmental Protection Agency (EPA) environmental monitoring and sampling tools (i.e., Airborne Spectral Photometric Environmental Collection Technology [ASPECT])	C, E, F, I, J, T		

1b. Behavior: **Successfully assume the role of COSS and initiate position activities**

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
9. Report to your assigned site and supervisor and obtain briefing on role to begin position activities as COSS: ● Provide sign-in sheets documenting your attendance at previous incidents or exercises	C, E, F, I, J, T		

1c. Behavior: **Ensure availability, qualifications, and capabilities of resources to complete assignment**

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
10. Demonstrate ability to assess qualifications of COSS strike team members and deploy according to their varying capabilities: ● Provide an after-action report or other relevant comprehensive documentation from a previous exercise detailing demonstration of tasks	C, E, F, I, J, T		

2. Competency: Communicate effectively

Description: Use suitable communication techniques to share relevant information with appropriate personnel on a timely basis to accomplish objectives in a potentially rapidly changing environment.

2a. Behavior: Ensure the exchange of relevant information during briefings and debriefings

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
11. Demonstrate the ability to identify opportunities for COSS engagement and how to relay the information to important responders, incident managers, agencies, and stakeholders: ● Demonstrate ability to communicate effectively with workers in the field as well as with senior leadership ● Identify the right meetings/mechanisms to relay important information to responders, incident managers, agencies, and stakeholders	C, E, F, I, J, T		

2b. Behavior: Communicate incident priorities and operations

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
12. Evaluate the chemical characteristics of the scenario and relate the risks to the responders, environment, and the public: ● Provide content for Public Information Officer (PIO) messaging ● Provide chemical perspectives for development of the Incident Action Plan (IAP) ● Provide chemical perspectives for incident briefing	C, E, F, I, J, T		
13. Demonstrate capacity as described in Incident Command System (ICS) forms (i.e., Health and Safety Plan or other components of an IAP).	C, E, F, I, J, T		
14. Demonstrate capacity to appropriately engage with decision makers in the highest levels of government.	C, E, F, I, J, T		

2c. Behavior: Effectively gather, produce, apply, distribute, and communicate information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
15. Provide just-in-time training for responders operating in a chemical environment: ● Deliver training to a group of responders preparing to deploy for a chemical incident ● Prepare training for responders to include risk communication and perspectives to put the chemical risk in perspective with overall hazards	C, E, F, I, J, T		
16. Demonstrate ability to convey technical information to a non-technical audience: ● Given a topic related to the consequences of a chemical incident, describe it in terms understandable by a sixth-grader	C, E, F, I, J, T		

17. Demonstrate effective public interaction skills: ● Effective and concise language ● Good eye contact ● Proper body language ● Self-awareness to recognize effectiveness of message delivery ● Situational awareness and ability to adapt message to audience	C, E, F, I, J, T		

2d. Behavior: Oversee production and distribution of information per established guidelines and ensure recipient understands information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
18. Identify how to request map and data products and how to receive and distribute them: ● Describe working knowledge of how to record and relay a request for and receipt of a standard or custom IMAAC product	C, E, F, I, J, T		
19. Record and relay a request for and receipt of a standard or custom IMAAC product.	C, E, F, I, J, T		
20. Demonstrate application of the DOT ERG, NIOSH Pocket Guide, WISER, EPA AEGLs, CAMEO, ChemResponder and other chemical emergency response and recovery guidance in context of varying levels of risk to workers and the public based on incident type: ● Recognize important considerations for recommendations, including inputs, assumptions, and limitations ● Recognize where protective actions may not correspond to the recommended guidance	C, E, F, I, J, T		
21. Demonstrate ability to effectively relate risk to public: ● Demonstrate ability to convey technical information in a non-technical and concise manner appropriate for the public ● Demonstrate ability to coordinate with appropriate representatives (e.g., PIO, chemical management, Incident Commander) in a jurisdiction to draft and distribute messages ● Identify resources available to assist in developing chemical risk or incident messaging	C, E, F, I, J, T		
22. Given a unique response or recovery concept, define a custom data product supporting the delivery of information about that concept: ● Demonstrate ability to advise on how to order a more specific or detailed data product to address incident questions or priorities ● Demonstrate ability to recognize when a specialty is required to brief on a custom data product ● Describe the information that this specialized product is communicating in a meaningful way that is useful to the responders/decision makers ● Identify types of information that can be added to a data product or map (agricultural, special populations, local datasets, etc.) ● Respond to difficult questions or requests that would result in non-standard interpretation and use of products	C, E, F, I, J, T		

23. Interpret an EPA/ASPECT data product: ● Describe how the EPA National Response Center may be contacted to request EPA/ASPECT data ● Describe how the EPA/ASPECT can provide measurements of actual contamination over a wide area early in a response effort	C, E, F, I, J, T		

3. Competency: Competency: Ensure completion of assigned actions

Description: Identify, analyze, and apply relevant situational information and evaluate actions to complete assignments safely and meet identified objectives. Complete actions within established time frame.

3a. Behavior: Execute assigned tasks, assess progress, and make necessary adjustments

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
24. Explain the purpose and functions of the Assessment of Chemical Exposures Program (ACE): ● Describe incidents and scenarios where ACE models are most useful ● Explain basic functions of ACE and output information provided from system	C, E, F, I, J, T		
25. Explain the purpose and functions of EPA CAMEO Suite: ● Describe the features of EPA CAMEO Suite that would benefit response to a wide-area contaminating incident ● Explain how the EPA CAMEO Suite information would be shared	C, E, F, I, J, T		
26. Provide interpretation and guidance for confounding instrument readings/results: ● Demonstrate ability to apply data quality objectives to ensure reliable data ● Demonstrate ability to identify possible reasons for conflicting data in an incident ● Demonstrate ability to recognize when data requires additional validation	C, E, F, I, J, T		
27. Use ChemResponder mobile app and/or website to support response: ● Obtain ChemResponder Train the Trainer Certification in all four user roles: Generalist, Data Collection, Event Manager and Organization Administrator ● Provide an after-action report or other relevant comprehensive documentation from exercise detailing demonstration of task	C, E, F, I, J, T		
28. Demonstrate use of ACE to support response: ● Demonstrate the ability to complete an ACE analysis for an exercise or incident from start of the scenario through at least the first 24 hours of exposure ● Provide an after-action report or other relevant comprehensive documentation from a previous exercise detailing demonstration of task	C, E, F, I, J, T		
29. Demonstrate use of EPA CAMEO Suite to support response: ● Demonstrate the creation of an Areal Locations of Hazardous Atmospheres (ALOHA) plume, plotted for a specific location, using Mapping Application for Response, Planning, and Local Operational Tasks (MARPLOT) for one or more chemicals from EPA CAMEO Suite to support at least one exercise or incident ● Provide an after-action report or other relevant comprehensive documentation from a previous exercise detailing demonstration of task	C, E, F, I, J, T		

30. Manage others in the use of EPA CAMEO Suite chemical emergency consequence management: ● For the purposes of a wide range of decision making, demonstrate ability to lead a team using EPA CAMEO Suite to identify relevant information ● For the purposes of a wide range of decision making, demonstrate ability to appropriately apply information provided from EPA CAMEO Suite to analyze an incident	C, E, F, I, J, T		
31. Manage others in the use of ACE for chemical emergency consequence management: ● For the purposes of a wide range of decision making, demonstrate the ability to guide a team using ACE to generate appropriate models for the incident/exercise ● For the purposes of a wide range of decision making, demonstrate ability to appropriately apply information provided from ACE to analyze an incident	C, E, F, I, J, T		
32. Manage others in the use of ChemResponder for aspects of chemical response for situational awareness: ● Demonstrate ability to direct others in implementation or use of procedures to ensure appropriate data for a common chemical operating picture and situational awareness using ChemResponder ● Demonstrate proficiency in using the full functionality of the ChemResponder website, including mapping features, to direct others to generate and display a variety of data and overlays to support situational awareness	C, E, F, I, J, T		
33. Manage assessment scientists engaging in multiple exposure pathway analysis: ● Demonstrate ability to appropriately apply information provided from multiple exposure pathway analyses to incident	C, E, F, I, J, T		

3b. Behavior: Make appropriate decisions based on analysis of gathered information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
34. Integrate state, local, tribal, and territorial (SLTT) capabilities with federal assets to meet objectives: ● Provide evidence that you have coordinated with federal and SLTT response partners in at least one exercise/incident to maintain a common chemical operating picture and situational awareness	E, F, I, T		
35. Match multiple capabilities of federal and SLTT assets to objectives: ● Explain to an audience the main non-chemical assets available from the Federal government to support incident response	C, E, F, I, J, T		

3c. Behavior: Gather, analyze, and validate information and make recommendations for setting priorities

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE

36. For a large or unique threat or incident, scale and adjust guidelines for personal protective equipment (PPE), exposure, population monitoring, and zone definitions and controls to balance resources with responder risk and response benefit: ● Demonstrate ability to identify unique considerations important for large-scale/severe chemical incidents ● Demonstrate ability to provide information and references to guide establishment or adjustment of exposure recommendations or PPE requirements ● Demonstrate ability to use COSS Toolkit to provide recommendations for adjustments to guidance/thresholds when resources are scarce	C, E, F, I, J, T		
37. Demonstrate ability to help the incident commander adjust responder exposure guidelines for rescue operations involving large exposures and vulnerable populations: ● Clearly and concisely communicate implications of setting worker exposure for lifesaving missions too low ● Identify appropriate alarm set points/exposure alerts	C, E, F, I, J, T		
38. Describe the reasons why higher exposure thresholds are considered appropriate by recommending bodies (such as the Center for Disease Control and Prevention [CDC], the Occupational Safety and Health Administration [OSHA], and the EPA) and when these could be applied.	C, E, F, I, J, T		
39. Demonstrate application of decision-making process for incident response: ● Describe positions and agencies typically involved in decision-making for chemical incidents ● Explain how non-technical factors (geographical, social, etc.) can inform protective action decisions	C, E, F, I, J, T		
40. Explain to an audience how non-technical factors (geographical, social, etc.) can inform protective action decisions.	C, E, F, I, J, T		
41. Provide science-based guidance with specificity required in complex and potentially dangerous situations to agencies typically involved in decision-making for chemical incidents.	C, E, F, I, J, T		
42. Explain capabilities of the chemical portfolio of the Department of Defense (DOD) Chemical, Biological, Radiological, and Nuclear (CBRN) Response Enterprise: ● Explain to an audience the DOD assets important to chemical incident response, their mission, capabilities, footprint and expected response times ● For decision makers, describe the best application of the Chemical Response Enterprise (CRE) assets and when they should be requested or activated	C, E, F, I, J, T		
43. Explain capabilities of the primary federal and SLTT chemical response and recovery assets: ● Explain to an audience the federal and SLTT assets important to chemical incident response, their mission, capabilities, footprint and expected response times ● For decision makers, describe the best application of the federal and SLTT assets and when they should be requested or activated	C, E, F, I, J, T		

44. Integrate SLTT capabilities with federal assets to meet objectives: ● Coordinate with SLTT jurisdictions to assist in requests for federal assets in a minimum of three full-scale exercises or level three or greater real-life incidents ● Communicate directly with multiple federal assets in three full-scale exercises or level three or greater real-life incidents to request and receive information and products important for incident response	E, I		

3d. Behavior: Gather, update, and apply situational information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
45. Support the collection and upload/entry of actionable, verified data on ChemResponder or other data collection systems: ● Assess data entered into ChemResponder for validity per jurisdictional procedures and designate the assessment of the data point appropriately ● Demonstrate knowledge of equipment details required to allow data to be used for further analysis and product development ● Enter data using both the ChemResponder mobile app and the desktop version of the website	C, E, F, I, J, T		
46. Demonstrate the ability to distinguish relevant information from other non-mission essential information: ● Describe the reasons and methods for sorting through large amounts of chemical data and information to identify those that are relevant to specific questions or priorities	C, E, F, I, J, T		
47. Demonstrate ability to recognize release and modeling resources most appropriate for the scenario: ● Describe the differences between several modeling products, including ALOHA, WISER/ERG and IMAAC, and explain why one might be better applied in certain situations	C, E, F, I, J, T		
48. Demonstrate ability to coordinate with appropriate release and modeling resources to meet objectives: ● Demonstrate direct coordination with IMAAC or other release/modeling resources during three full-scale exercises or level three or greater real-life incidents ● Demonstrate proficiency in describing the typical methods for and assumption applied in atmospheric/environmental release and transport modeling for three full-scale exercises or level three or greater real-life incidents	E, I, T		

4. Competency: Conduct operations and ensure completion of assigned tasks

Description: Identify, analyze, and apply relevant situational information and evaluate actions to complete assignments safely and meet identified objectives. Complete actions within established timeframe.

4a. Behavior: Demonstrate core position skills

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
49. Demonstrate ability to research and explain capabilities of the major federal and SLTT assets as they relate to transportation-related, fixed facility, and terrorist/WMD chemical incidents: ● Describe the main resources for chemical incidents available in federal and SLTT jurisdictions ● Describe the main chemical subject-matter expert (SME) assets available from the federal and SLTT government for chemical incidents ● Identify references where the various assets and resources are described	C, E, F, I, J, T		
50. Demonstrate application of guidance and reference documents important for transportation related, fixed facility, and terrorist/WMD chemical incident: ● Describe the guidance documents related to response to a transportation accident ● Describe the guidance documents related to response to a fixed facility contamination incident ● Describe the guidance documents related to response to a terrorist/WMD incident	C, E, F, I, J, T		
51. Differentiate the chemical risks of transportation related, fixed facility, and terrorist/WMD chemical incident: ● Identify objectives of response related to the specific release and pathways to human exposure for transportation related, fixed facility, and terrorist/WMD chemical incident ● Describe the variations in incident scale between transportation related, fixed facility, and terrorist/WMD chemical incident ● Identify the most critical chemical effects likely from transportation related, fixed facility, and terrorist/WMD chemical incident	C, E, F, I, J, T		
52. Recognize the appropriate IMAAC data products for transportation related, fixed facility, and terrorist/WMD chemical incident: ● Describe the unique characteristics of each of the data products available for transportation related, fixed facility, and terrorist/WMD chemical incident ● Obtain the different data products from for transportation related, fixed facility, and terrorist/WMD chemical incident	C, E, F, I, J, T		

53. Recognize the varying levels of chemical control in the COSS toolkit useful in response to transportation related, fixed facility, and terrorist/WMD chemical incident: ● Describe other chemical and nuclear emergency response resources in the COSS toolkit useful in response to transportation related, fixed facility, and terrorist/WMD chemical incident ● Describe the considerations and criteria related Shelter and Evacuation in the COSS toolkit useful in response to transportation related, fixed facility, and terrorist/WMD chemical incident ● Describe the considerations and criteria related to Population Monitoring in the COSS toolkit useful in response to transportation related, fixed facility, and terrorist/WMD chemical incident ● Describe the controls related to Perimeters and Zones in the COSS toolkit useful in response to transportation related, fixed facility, and terrorist/WMD chemical incident ● Describe the controls related to Worker Safety in the COSS toolkit useful in response to transportation related, fixed facility, and terrorist/WMD chemical incident	C, E, F, I, J, T		
54. Describe the appropriate chemical instrumentation and environmental measurement data collection technique for transportation related chemical incident: ● Identify modifications of routine environmental sampling and analysis procedures that may be necessary following transportation related chemical incident ● Identify quality assurance controls for sampling and laboratory analysis for samples obtained after transportation related chemical incident ● Identify the analytical instrumentation for environmental samples obtained following transportation related chemical incident ● Identify the media samples appropriate to assessing exposure pathways for transportation related chemical incident	C, E, F, I, J, T		
55. Identify the exposure calculations appropriate to transportation related, fixed facility, and terrorist/WMD chemical incident: ● Describe quality assurance methods to best correlate exposure measurements to the success of incident objectives ● Describe response objectives-oriented recommendations relative to the exposure calculations needed for transportation related, fixed facility, and terrorist/WMD chemical incident ● Describe the exposure calculations from all pathways and their consequences for transportation related, fixed facility, and terrorist/WMD chemical incident	C, E, F, I, J, T		
56. Describe how the environmental monitoring requirements for a transportation related, fixed facility, and terrorist/WMD chemical incident for chronic exposures in the environment are similar in their characteristics and methodologies: ● Identify the environmental consequences of transportation related chemical incident ● Identify the environmental consequences of fixed facility contamination incident ● Identify the environmental consequences of terrorist/WMD related chemical incident	C, E, F, I, J, T		
57. Describe environmental assessments for human health protection common to transportation related, fixed facility, and terrorist/WMD chemical incident incidents.	C, E, F, I, J, T		

58. Describe the appropriate chemical instrumentation and environmental measurement data collection technique for fixed facility contamination incident: ● Identify modifications of routine environmental sampling and analysis procedures that may be necessary following a fixed facility contamination incident ● Identify quality assurance controls for sampling and laboratory analysis for samples obtained after a fixed facility contamination incident ● Identify the analytical instrumentation for environmental samples obtained following a fixed facility contamination incident ● Identify the media samples appropriate to assessing exposure pathways for a fixed facility contamination incident	C, E, F, I, J, T		
59. Describe the appropriate chemical instrumentation and environmental measurement data collection technique for a terrorist/WMD incident: ● Identify modifications of routine environmental sampling and analysis procedures that may be necessary following a terrorist/WMD incident ● Identify quality assurance controls for sampling and laboratory analysis for samples obtained after terrorist/WMD incident ● Identify the analytical instrumentation for environmental samples obtained following a terrorist/WMD incident ● Identify the media samples appropriate to assessing exposure pathways for a terrorist/WMD incident	C, E, F, I, J, T		
60. Demonstrate the ability to lead a strike team of COSS engaged in transportation related, fixed facility OR terrorist/WMD chemical incident or exercise: ● Provide an after-action report or other relevant comprehensive documentation from a previous exercise detailing demonstration of task	C, E, F, I, J, T		
61. Recognize the critical role of exposure related recordkeeping in response to transportation related, fixed facility, and terrorist/WMD chemical incidents: ● Describe methods to ensure and preserve the quality and integrity of exposure related records ● Describe the types of exposure related records to be obtained and maintained in response to transportation related, fixed facility, and terrorist/WMD chemical incident ● Identify uses of exposure related records to individual, group, and incident management purposes	C, E, F, I, J, T		
62. Recognize the potential health impacts related to a transportation related chemical incident: ● Describe the physical, environmental, societal, and human effects of a transportation related chemical incident ● Describe the roles COSS can play in minimizing or mitigating the physical, environmental, societal, and human effects of a transportation related chemical incident ● Explain to an audience the complexities of minimizing or mitigating the physical, environmental, societal, and human effects of a transportation related chemical incident where resources are scarce and conditions are austere ● Explain to an audience the specific sources of chemical exposure in the early and later phases of a transportation related chemical incident	C, E, F, I, J, T		

63. Recognize the potential health impacts related to a fixed facility contamination incident: ● Describe the physical, environmental, societal, and human effects of a fixed facility contamination incident ● Describe the roles COSS can play in minimizing or mitigating the physical, environmental, societal, and human effects of a fixed facility contamination incident ● Explain to an audience the specific sources of chemical exposure in the early and later phases of a fixed facility contamination incident	C, E, F, I, J, T		
64. Recognize the potential health impacts related to a terrorist/WMD incident: ● Describe the physical, environmental, societal, and human effects of a terrorist/WMD incident ● Describe the roles COSS can play in minimizing or mitigating the physical, environmental, societal, and human effects of a terrorist/WMD incident ● Explain to an audience the specific sources of chemical exposure in the early and later phases of aa terrorist/WMD incident	C, E, F, I, J, T		
65. Recognize the variety of environmental monitoring methods appropriate for assessing the exposure pathways following a transportation related, fixed facility, and terrorist/WMD chemical incident: ● Describe the sampling priorities and analysis methods for samples obtained following transportation related, fixed facility, and terrorist/WMD chemical incident incidents ● Explain to an audience the primary exposure pathway resulting in exposure to humans from transportation related, fixed facility, and terrorist/WMD chemical incident incidents	C, E, F, I, J, T		