**Report Date:** 07 Aug 2014

# Summary Report for Individual Task
# 031-506-4029
# Conduct CBRN Vulnerability Assessment
# Status: Approved

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**Distribution Restriction:** Approved for public release; distribution is unlimited.

**Destruction Notice:** None

**Foreign Disclosure: FD5 -** This product/publication has been reviewed by the product developers in coordination with the MSCoE, Fort Leonard Wood, Missouri foreign disclosure authority.

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**Condition:** As a CBRN Staff Officer/NCO conducting intelligence preparation of the battlefield (IPB), given intelligence reports that enemy forces have the capability to employ tactical CBRN weapons in theAO. Some iterations of this task should be performed in MOPP 4.

**Standard:** Conduct CBRN vulnerability assessment by: 1. Conducting threat assessment by: determining if the threat possesses CBRN weapons and if the unit is within range of the adversarys CBRN capabilities; establishing named areas of interest (NAIs), determining the enemys most likely course of action (COA), establishing threat status, and synchronizing the CBRN reconnaissance and surveillance efforts within the overall ISR plan. 2. Conducting vulnerability analysis, by: assessing the units protective posture, detection posture, immunizations status, hygiene, and time/weather, and briefing the commander on the units subjective rating. 3. Conducting vulnerability reduction by: planning for CBRN reconnaissance and surveillance, decontamination operations, and medical and logistical support; employing operations security (OPSEC) measures, providing early warning of CBRN threat, advising the commander on the appropriate protective measures, mission-oriented protective posture (MOPP) level, and dispersal of units assets based on threat information IAW ATP 3-11.36 Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Aspects of Command and Control, and FM 3-11.3 Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance.

**Special Condition:** None

**Safety Risk:** Low

**MOPP 4:** Sometimes

**Task Statements**

**Cue:** None

## DANGER

None

## WARNING

None

## CAUTION

None

**Remarks:** None

**Notes:** None

**Performance Steps**

1. Conduct threat Assessment:

a. Chemical threat:

(1) Determine if the enemy has the following CW capabilities:

(a) Industrial chemical production facilities in the country or theater.

(b) Agent stockpiles present.

(c) Weapons capabilities.

(d) If no it is a low vulnerability.

(e) If yes go to next step.

(2) Is the fixed site or unit within range of CW delivery systems?

(a) Aerial spray.

(b) Aerial bombs.

(c) Artillery.

(d) Mines.

(e) Rockets.

(f) Other.

(g) If no, it is low vulnerability.

(h) If yes, go to next step.

(3) Is it possible for the enemy to target the unit doctrinally or as a COA?

(a) If no, it is a medium vulnerability

(b) If yes, go to next step.

(4) Are weather and terrain conditions favorable for employment?

(a) If no, it is a medium vulnerability

(b) If yes, go to next step.

(5) Is the enemy trained and equipped to conduct CW operations?

(a) Are the following items readily available to enemy forces?

_1_ Protective measures.

_2_ Chemical protective over garments.

_3_ Chemical defense equipment

(b) If no, it is a medium vulnerability

(c) If yes, go to next step.

(6) Have CW munitions been delivered to deployment-capable units?

(a) Has probable-use message traffic been intercepted?

(b) Has the enemy used CW weapons?

(c) If yes or no, it is a high vulnerability

(7) Synchronize CBRN reconnaissance and surveillance efforts within the overall ISR plan

b. Biological-agent Threat:

(1) Does the enemy have the following BW capabilities:

(a) Production facilities in the country or theater?

(b) Agent stockpiles present?

(c) BW munition plants capabilities?

(d) If no it is a low vulnerability.

(e) If yes go to next step.

(2) Is the fixed site or unit within range of CW delivery systems?

(a) Aerial spray

(b) Aerial bombs.

(c) Artillery.

(d) Mines.

(e) Missiles.

(f) Rockets.

(g) Other.

(h) If no it is a low vulnerability.

(i) If yes go to next step.

(3) Is it possible for the enemy to target the unit doctrinally or as a COA?

(a) If no it is a medium vulnerability.

(b) If yes go to next step.

(4) Are weather and terrain favorable for employment?

(a) If no it is a medium vulnerability.

(b) If yes go to next step.

(5) Is the enemy trained and equipped to conduct BW operations?

(a) Are the following items readily available to enemy forces:

_1_ Protective measures?

_2_ Protective over garments?

_3_ BW defense equipment?

(b) If no it is a medium vulnerability.

(c) If yes go to next step.

(6) Have BW munitions been delivered to deployment-capable units?

(a) Has probable use message traffic been intercepted?

(b) Has the enemy used BW weapons?

(c) If yes/no, it is a high vulnerability

(7) Synchronize CBRN reconnaissance and surveillance efforts within the overall ISR plan

c. Nuclear-weapon Threat:

(1) Does the enemy have the following nuclear capabilities?

(a) Production facilities nearby.

(b) Stockpiles present.

(c) If no it is a low vulnerability.

(d) If yes go to next step.

(2) Is there a national policy that governs nuclear-weapon use?

(a) Does the enemy reserve the right of first use?

(b) Does the enemy reserve the right to retaliate in kind?

(c) If no it is a low vulnerability.

(d) If yes go to next step.

(3) Is the fixed site or unit within range of nuclear delivery systems?

(a) Aerial bombs.

(b) Artillery.

(c) Missiles.

(d) Rockets.

(e) Other.

(f) If no it is a low vulnerability.

(g) If yes go to next step.

(4) Is it possible for the enemy to target the unit doctrinally or as a COA?

(a) If no it is a medium vulnerability.

(b) If yes go to next step.

(5) Is the enemy trained and equipped to conduct nuclear operations

(a) If no it is a medium vulnerability.

(b) If yes go to next step.

(6) Have nuclear munitions been delivered to nuclear-capable units?

(a) Has probable-use message traffic been intercepted?

(b) Has the enemy used nuclear weapons

(c) If yes/no, it is a high vulnerability

(7) Synchronize CBRN reconnaissance and surveillance efforts within the overall ISR plan

d. Radiological-weapon Threat:

(1) Are RAD material sources (agricultural, industrial, production and research, and radiological) present in the AO?

(a) If no it is a low vulnerability.

(b) If yes go to next step.

(2) Does the enemy have RAD material capabilities?

(a) Does the enemy have industrial material production facilities?

(b) If no it is a low vulnerability.

(c) If yes go to next step.

(3) Is the fixed site or unit within range of a likely RAD material release?

(a) If no it is a low vulnerability.

(b) If yes go to next step.

(4) Is the fixed site or unit downwind from a potential source of RAD material (agricultural, enemy, industrial, production and research, and radiological)?

(a) If no it is a medium vulnerability.

(b) If yes go to next step.

(5) Is the terrain favorable for the employment of RAD material?

(a) If no it is a medium vulnerability.

(b) If yes go to next step.

(6) Is the enemy trained and equipped to release RAD material?

(a) Are protective masks and over garments available to the enemy?

(b) If no it is a medium vulnerability.

(c) If yes go to next step.

(7) Is it possible for the enemy to target the unit with RAD material doctrinally or as a COA?

(a) If no it is a medium vulnerability.

(b) If yes go to next step.

(8) Has the enemy used RAD material releases during this conflict?

(a) Has probable-use message traffic been intercepted?

(b) If yes or no, it is a high vulnerability

(9) Synchronize CBRN reconnaissance and surveillance efforts within the overall ISR plan

2. Conduct CBRN Vulnerability Analysis

a. Assess unit's protective posture by assigning a value to the type of structure being used and the level of MOPP that can be attained.

(1) Assign a value of 2 if hardened infrastructure or Collective Protective Shelter (COLPRO) and MOPP3/4 are available.

(2) Assign a value of 4 if semi-hardened infrastructure or Joint Expeditionary Collective Protection (JECP) and MOPP1/2 are available.

(3) Assign a value of 6 if shelter in place is the only option and the unit is in a MOPP ready status.

b. Assess unit's detection posture by assigning a value to the type and quantity of detection equipment available.

(1) Assign a value of 2 if the unit has 2 or more of the following systems available: Joint Warning and Reporting Network (JWARN), Biological Integrated Detection System (BIDS), Portal Shield, Instantaneous Bio-Aerosol Detector System (IBADS), and Joint Biological Point Detection System (JBPDS), Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV).

(2) Assign a value of 4 if the unit has only 1 of the systems listed in 2.a. above.

(3) Assign a value of 6 if the unit has no detection capabilities.

c. Assess unit's immunization by assigning a value to the percentage of the unit that is immunized.

(1) Assign a value of 2 if 90 percent or more of the unit has been immunized.

(2) Assign a value of 4 if less than 90 percent but more than 0 percent have been immunized.

(3) Assign a value of 6 if none of the unit has been immunized.

d. Assess unit's hygiene by assigning a value to the level of hygiene practiced by the unit.

(1) Assign a value of 2 if the unit has good hygiene.

(2) Assign a value of 4 if the unit has average hygiene.

(3) Assign a value of 6 if the unit has poor hygiene.

e. Assess time and weather by assigning a value to the time and weather data.

(1) Assign a value of 2 if the time and weather are unfavorable for CBRN use.

(2) Assign a value of 4 if the time and weather are marginal for CBRN use.

(3) Assign a value of 6 if the time and weather are favorable for CBRN use.

f. Determine subjective rating for the unit.

(1) Add the values obtained in steps 1-5.

(2) Use the total to determine the units subjective rating (8-15 = Low, 16-23 = Medium, 24-30 = High for BW threats or 2-9=Low, 10-17=Medium, 18-24=High for chemical, radiological, or nuclear).

g. Brief the commander on the unit's subjective rating. The briefing must contain the following as a minimum:

(1) An introduction that contains a greeting, type and classification (security classifications), purpose and scope, and outline or procedure of the briefing.

(2) A main body that is logically sequenced uses visual aids to emphasize main point(s), and transitions from one main point to the next.

(3) A closing statement that asks for questions, briefly recaps main ideas, and makes a concluding statement.

3. Conduct vulnerability reduction:

a. Active CBRN weapons vulnerability reduction measures.

Note: Strategic levels of command will have the responsibility and the assets to find and destroy these targets. Operational and tactical level commanders do not have the capability to locate and destroy stockpiles or production facilities, but they do have the capability to find and destroy delivery systems.

(1) Find and destroy delivery capabilities

(2) Find and destroy stockpiles

(3) Find and destroy production facilities

b. Passive CBRN weapons vulnerability reduction measures

(1) Planning Ahead

(a) Develop courses of action (COAs)

(b) Allocate resources

_1_ Reconnaissance and surveillance assets

_2_ Decontamination

_3_ Casualty Processing

(c) Coordinate medical support

(d) Coordinate logistical support

(2) Avoid Detection

(a) Employ operations security (OPSEC) measures

(b) Signal security

(c) Light discipline

(d) Camouflage

(3) Provide warning

(a) Establish CBRN warning and reporting procedures

(b) Employ CBRN detection capabilities

(c) Implement the warning and reporting network

(d) Monitor for changes to the threat and rapidly disseminate major changes

(e) Ensure host nation (HN) emergency response and reporting agencies are included in the dissemination of CBRN data

(4) Increase protection

(a) Increase MOPP

(b) Employ collective protection (COLPRO) shelters or systems

(c) Cover equipment and supplies

(d) Complete Immunizations (biological warfare [BW] threat only)

(e) Establish good hygiene and sanitation measures for the unit

(5) Disperse assets

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier scores NO-GO, show the Soldier what was done wrong and how to do it correctly.

**Evaluation Preparation:** Setup: Evaluate this task during a Command Post Exercise (CPX) or during a normal training session. Gather all equipment and materials listed in the condition statement. Develop several sets of scenarios for testing purposes. Use approved simulants, devices, or sources to simulate contamination.

| PERFORMANCE MEASURES | GO | NO-GO | N/A |
|---|---|---|---|
| 1. Conducted Threat Assessment | | | |
| a. Determined if the enemy has CW capabilities: | | | |
| (1) If no determined it is a low vulnerability. | | | |
| (2) If yes went to next step. | | | |
| b. Determined if enemy was at a fixed site or if unit is within range of CW delivery systems? | | | |
| (1) If no, determined it is low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| c. Determined if it is possible for the enemy to target the unit doctrinally or as a COA | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| d. Determined if weather and terrain conditions are favorable for employment? | | | |
| (1) If no, determined it is a medium vulnerability | | | |
| (2) If yes, went to next step. | | | |
| e. Determined if the enemy is trained and equipped to conduct CW operations? | | | |
| (1) If no, determined it is a medium vulnerability | | | |
| (2) If yes, went to next step. | | | |
| f. Determined if CW munitions have been delivered to deployment-capable units? | | | |
| (1) If no, determined it is a high vulnerability | | | |
| (2) If yes, determined it is a high vulnerability | | | |
| g. Synchronized CBRN reconnaissance and surveillance efforts within the overall ISR plan | | | |
| h. Determined if the enemy has BW capabilities: | | | |
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| i. Determined is unit is within range of BW delivery systems. | | | |
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| j. Determined if is it possible for the enemy to target the unit doctrinally or as a COA. | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| k. Determined if weather and terrain favor for employment of BW. | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes went to next step. | | | |
| l. Determined if the enemy is trained and equipped to conduct BW operations | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| m. Determined if BW munitions have been delivered to deployment capable units. | | | |
| (1) If no, determined it is a high vulnerability | | | |
| (2) If yes, determined it is a high vulnerability | | | |
| n. Synchronized CBRN reconnaissance and surveillance efforts within the overall ISR plan. | | | |
| o. Determined if the enemy has nuclear capabilities | | | |
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| p. Determined if there is a national policy that governs nuclear-weapon use. | | | |
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| q. Determined unit is within range of nuclear delivery systems. | | | |

| | | | |
|---|---|---|---|
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| r. Is it possible for the enemy to target the unit doctrinally or as a COA? | | | |
| (1) If no it is a medium vulnerability | | | |
| (2) If yes go to next step. | | | |
| s. Is the enemy trained and equipped to conduct nuclear operations. | | | |
| (1) If no it is a medium vulnerability. | | | |
| (2) If yes go to next step. | | | |
| t. Have nuclear munitions been delivered to nuclear-capable units? | | | |
| (1) Has probable-use message traffic been intercepted? | | | |
| (2) Has the enemy used nuclear weapons | | | |
| (3) If yes/no, it is a high vulnerability | | | |
| u. Synchronize CBRN reconnaissance and surveillance efforts within the overall ISR plan. | | | |
| v. Determined if there are RAD material sources (agricultural, industrial, production and research, and radiological) present in the AO | | | |
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| w. Determined if the enemy has RAD material capabilities | | | |
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| x. Determined if unit is within range of a likely RAD material release. | | | |
| (1) If no, determined it is a low vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| y. Determined if unit is downwind from a potential source of RAD material (agricultural, enemy, industrial, production and research, and radiological) | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| z. Determined if the terrain is favorable for the employment of RAD material. | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| aa. Determined if the enemy is trained and equipped to release RAD material. | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| ab. Determined if it is possible for the enemy to target the unit with RAD material doctrinally or as a COA. | | | |
| (1) If no, determined it is a medium vulnerability. | | | |
| (2) If yes, went to next step. | | | |
| ac. Determined if the enemy has used RAD material releases during this conflict. | | | |
| (1) If no, determined it is a high vulnerability | | | |
| (2) If yes, determined it is a high vulnerability | | | |
| ad. Synchronized CBRN reconnaissance and surveillance efforts within the overall ISR plan. | | | |
| 2. Conducted CBRN Vulnerability Analysis | | | |
| a. Assessed unit's protective posture and assigned the appropriate value. | | | |
| (1) Assigned a value of 2 if hardened infrastructure or Collective Protective Shelter (COLPRO) and MOPP3/4 were available. | | | |
| (2) Assigned a value of 4 if semi-hardened infrastructure or Joint Expeditionary Collective Protection (JECP) and MOPP1/2 were available. | | | |
| (3) Assigned a value of 6 if shelter in place was the only option and the unit was in a MOPP ready status. | | | |
| b. Assessed unit's detection posture and assigned the appropriate value. | | | |

| | | | |
|---|---|---|---|
| (1) Assigned a value of 2 if the unit had 2 or more of the following systems available: Joint Warning and Reporting Network (JWARN), Biological Integrated Detection System (BIDS), Portal Shield, Instantaneous Bio-Aerosol Detector System (IBADS), and Joint Biological Point Detection System (JBPDS). | | | |
| (2) Assigned a value of 4 if the unit had only 1 of the systems listed in the paragraph above. | | | |
| (3) Assigned a value of 6 if the unit had no detection capabilities. | | | |
| c. Assessed unit's immunization and assigned the appropriate value. | | | |
| (1) Assigned a value of 2 if 90 percent or more of the unit had been immunized. | | | |
| (2) Assigned a value of 4 if less than 90 percent but more than 0 percent had been immunized. | | | |
| (3) Assigned a value of 6 if none of the unit had been immunized. | | | |
| d. Assessed unit's hygiene and assigned the appropriate value. | | | |
| (1) Assigned a value of 2 if the unit had good hygiene. | | | |
| (2) Assigned a value of 4 if the unit had average hygiene. | | | |
| (3) Assigned a value of 6 if the unit had poor hygiene. | | | |
| e. Assessed time and weather and assigned the appropriate value. | | | |
| (1) Assigned a value of 2 if the time and weather was unfavorable for CBRN use. | | | |
| (2) Assigned a value of 4 if the time and weather was marginal for CBRN use. | | | |
| (3) Assigned a value of 6 if the time and weather was favorable for CBRN use. | | | |
| f. Determined the unit's subjective rating. | | | |
| (1) Added the values in steps 1-5. | | | |
| (2) Used the total to determine the units subjective rating (8-15 = Low, 16-23 = Medium, 24-30 = High for BW threats or 2-9=Low, 10-17=Medium, 18-24=High for chemical, radiological, or nuclear). | | | |
| g. Briefed the commander on the unit’s subjective rating. At a minimum the briefing contained: | | | |
| (1) Introduction contained a greeting, type and classification (security classification), purpose and scope, and outline or procedure for the briefing. | | | |
| (2) Main body was logically sequenced, used visual aids to emphasize the main points, and contained effective transitions from one point to the next. | | | |
| (3) Closing statement asked for questions, briefly recapped main ideas, and made a concluding statement. | | | |
| 3. Conducted vulnerability reduction: | | | |
| a. Determined if active vulnerability reduction measures applied. | | | |
| b. Established passive CBRN weapons vulnerability reduction measures. | | | |
| (1) Planned for CBRN reconnaissance and surveillance, decontamination, medical and logistical support. | | | |
| (2) Avoided Detection | | | |
| (a) Employed operations security (OPSEC) measures | | | |
| (b) Signal security | | | |
| (c) Light discipline | | | |
| (d) Camouflage | | | |
| (3) Provided warning | | | |
| (a) Established CBRN warning and reporting procedures | | | |
| (b) Employed CBRN detection capabilities | | | |
| (c) Implemented the warning and reporting network | | | |
| (d) Monitored for changes to the threat and rapidly disseminated major changes | | | |
| (e) Ensured host nation (HN) emergency response and reporting agencies were included in the dissemination of CBRN data. | | | |
| (4) Increased protection as necessary | | | |
| (a) Increased MOPP | | | |

| | | | |
|---|---|---|---|
| (b) Employed collective protection (COLPRO) shelters or systems | | | |
| (c) Covered equipment and supplies | | | |
| (d) Completed Immunizations | | | |
| (e) Established good hygiene and sanitation measures for the unit | | | |
| (5) Dispersed assets | | | |

**Supporting Reference(s):**

| Step Number | Reference ID | Reference Name | Required | Primary |
|---|---|---|---|---|
| | ATP 3-11.36 | MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR ASPECTS OF COMMAND AND CONTROL | No | No |
| | FM 3-11.3 | Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance | No | No |
| | FM 3-11.4 | Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection | No | No |
| | FM 6-0 | COMMANDER AND STAFF ORGANIZATION AND OPERATIONS | No | No |
| | TC 7-100.2 | Opposing Force Tactics | No | No |

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :** None

**Supported Individual Tasks :**

| Task Number | Title | Proponent | Status |
|---|---|---|---|
| 031-506-3023 | Apply the Military Decision Making Process (MDMP) as a CBRN Staff Officer | 031 - CBRN (Individual) | TMD Review |

**Supported Collective Tasks :** None

**ICTL Data :**

| ICTL Title | Personnel Type | MOS Data |
|---|---|---|
| 74D40, CBRN Specialist - Version 14.0 | Enlisted | MOS: 74D, Skill Level: SL4 |

| | | |
|---|---|---|
| 74A, CBRN Officer BOLC - Version 13 | Officer | AOC: 74A, Rank: 1LT |