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MARINE CORPS ORDER 3400.3G

From: Commandant of the Marine Corps
To: Distribution List

Subj: CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR DEFENSE TRAINING
REQUIREMENTS

Ref: (a) MCO 3500.26A
(b) MCWP 3-37
(c) MCWP 3-37.1
(d) MCWP 3-37.2
(e) MCWP 3-37.3
(f) MCWP 3-37.4
(g) MCWP 3-37.5
(h) MCRP 3-0A
(i) MCRP 3-0B
(j) MCRP 3-37B
(k) MCRP 4-11.1A
(l) MCRP 4-11.1B
(m) MCRP 4-11.1C
(n) MCRP 4-11.1F
(o) MCO P3500.72A
(p) NAVMC 3500.18
(q) NAVMC 3500.19
(r) NAVMC 3500.78
(s) NAVMC 3500.37
(t) MCO 3570.1B
(u) MCO 1553.3A
(v) BUMED Instruction 6470.10B
(w) SECNAV M-5210.1

Encl: (1) CBRND Proficiency for Units, Teams, and Individuals
(2) Procedures for Conducting a CBRN Individual Protective
Equipment (IPE) Confidence Exercise

1. Situation

a. Marine Corps Vision and Strategy 2025 states, "While the threat of state-on-state warfare featuring the destructive capabilities of major powers has declined, it remains a distinct possibility. It must still be regarded as the *most dangerous* threat to the Nation. The expected proliferation of chemical, biological, radiological, and nuclear weapons among states reinforces this assessment. The potential use of such weapons is ever present and compels us to devote substantial resources to countermeasures." It continues, "Non-state actors will also press to acquire weapons of mass destruction and other advanced military technologies."

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b. The Marine Corps supports the US Government's (USG) and Joint Force Commander's (JFC) efforts in combating weapons of mass destruction (CWMD), per the 2010 Marine Corps CWMD Operating Concept, by providing an agile and flexible response force capable of operating across the range of military operations (ROMO) with speed, accuracy and decisiveness. To meet these capability requirements, chemical, biological, radiological, and nuclear defense (CBRND) training will be conducted at all levels of command to maintain combat readiness.

c. This Order disseminates the CBRND training requirements and standards that enable units to continue their mission(s) while operating in a chemical, biological, radiological, and nuclear (CBRN) environment.

2. Cancellation. MCO 3400.3F.

3. Mission. This Order provides policy for the training requirements and standards for Marine Corps CBRND training per references (a) through (u). All CBRND training plans shall be written in compliance with this Order.

4. Execution

a. Commander's Intent. The Marine Corps shall provide its Marines with training in order to mitigate the effects of a CBRN incident and operate in a CBRN environment.

b. Concept of Operations

(1) All Commanders ensure individuals/units are capable of accomplishing all mission essential tasks (MET) in a CBRN environment per reference (a).

(2) All Commanders develop and annually update CBRND standard operating procedure (SOP) tailored to the unit's mission using references (a) through (n).

(3) Combat Development and Integration (CD&I), Force Protection Integration Division, CBRND Branch (C152)

(a) Advocate for all CBRND matters

(b) Publish this Order

(c) Manage Functional Area Checklist for CBRND

(d) Manage CBRND Training Input Plan

(e) Manage Marine Corps Combat Readiness Evaluation System CBRND content

(4) Plans, Policy and Operations (PP&O), Physical Security

(a) Manage Functional Area Checklist Guardian/installation protection program

(b) Manage training for the Guardian/installation protection program

DEC 07 2011(5) Training and Education Command (TECOM)

- (a) Manage the CBRND MOS producing school
- (b) Integrate and standardize CBRND training requirements across the Marine Corps
- (c) Manage CBRND MOS Roadmap
- (d) Update and publish the CBRND T&R Manual in accordance with reference (o)
- (e) Review and adjust as necessary CBRND content in all other T&R Manuals

(6) Marine Corps Systems Command (MCSC) (Combat Support Equipment)

- (a) Conduct new equipment training
- (b) Publish Manpower and Training plans
- (c) Conduct lifecycle sustainment/management of all Marine Corps CBRN equipment required for both training and operations

(7) Unit Commanders

- (a) Develop unit CBRND Training SOPs
- (b) Incorporate CBRND into all exercises and training
- (c) Evaluate the unit's ability to conduct METs in a CBRN environment
- (d) Report CBRND training readiness

(8) Training Requirements. CBRND training ensures all Marines can continue operations in a CBRN environment.

(a) Unit Training. Units train to accomplish METs in a CBRN environment. Integration of CBRND training into all unit exercises during offensive and defensive operations and live-fire evolutions tests the ability of Marines at all levels of command to survive a CBRN incident, perform subsequent mission(s) and utilize proper CBRN reporting procedures. Enclosure (1) lists standards of CBRND proficiency for unit training, as reflected in references (p) and (q).

(b) Team Training. CBRN teams provide the commander situational awareness of CBRN threats and hazards, an assessment of the potential CBRN impacts on the unit and mission, and the ability to mitigate the effects of a CBRN attack. Team training aids in the accomplishment of the METs through contamination avoidance, CBRN protection and decontamination capabilities at the unit level. Enclosure (1) lists standards of CBRND proficiency for CBRN teams.

(c) Individual Training. All Marines must be trained to recognize and respond to CBRN incidents. Additionally, Marines must understand how to accomplish mission-specific tasks while operating in the

CBRN environment. All Marines must be trained in CBRND individual training standards. CBRND mission performance standard training is a key enabler for units to continue operations in a CBRN environment. Enclosure (1) lists standards of CBRND proficiency for individuals, as reflected in references (p) through (r).

(d) Training Waivers. Waivers from the requirements of this order may be requested every fiscal year when it is determined that time or resources are unavailable. The waiver request will include a brief plan on how the unit will achieve required CBRND training during the next fiscal year. Training waivers are not automatically applied to the following year and must be resubmitted if necessary.

1. Commanders, Marine Forces Command, Marine Forces Pacific, Marine Forces Reserves, and Marine Forces Special Operations Command approve waivers for subordinate units and individuals.

2. Deputy Commandant, Combat Development and Integration (C152) approves waivers for supporting establishment commands.

(e) Exemptions. There are circumstances that warrant a Marine to be exempt from completing annual individual training. Exemptions are only for the circumstances listed in this Order. Per the commander's discretion, any Marine exempt per this Order can and should be afforded the opportunity to complete individual training. Commanders may grant exemptions for the following circumstances (these exemptions do not apply to the Predeployment Training Program):

1. Marines assigned to units with no protective mask on their T/E.

2. Marines who are serving in the last 6-months of their active service, unless they have indicated their intention to reenlist or extend.

3. Marines holding the grades of O-5, CWO-4, E-7 or higher.

(f) CS Training for Non-Military Personnel. Only Commanding Officers may authorize CS training of personnel other than Marine Corps Total Force personnel (e.g. Jane Wayne participants, Junior Marines etc.). The appropriate command endorsements, liability waivers, and safety documentation must be finalized prior to the event.

5. Administration and Logistics.

a. The training standards described in this Order will be evaluated via the Commanding General's Readiness Inspection program and the Functional Area checklist. Inspector General, Headquarters Marine Corps (HQMC) readiness inspection teams will conduct CBRND evaluations using the Functional Area detailed inspection checklist(s) as applicable.

b. Enclosures

(1) Enclosure (1) lists standards of CBRND Proficiency for Individuals and Units, as reflected in references (p) through (r).

(2) Enclosure (2) provides guidance for the conduct of a CBRN IPE confidence exercise, as reflected in reference (t).

(3) References (s) and (u) provide specific guidance on fully integrating individual and unit CBRND training into command training plans.

c. Recommendations concerning the content of this Order may be forwarded to HQMC, DC CD&I, C152 (CBRN Defense Branch) via the appropriate chain-of-command.

d. Records created as a result of this Order shall be managed according to National Archives and Records Administration approved dispositions, per reference (w), to ensure proper maintenance, use, accessibility, and preservation, regardless of format or medium.

6. Command and Signal

a. Command. This Order is applicable to the Marine Corps Total Force.

b. Signal. This Order is effective the date signed.



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CBRND PROFICIENCY FOR UNITS, TEAMS, AND INDIVIDUALS

1. General. CBRND mission performance standards are the standards a unit must perform to continue operations in a CBRN environment. Units must also be trained in CBRND aspects of unit CBRN staff and medical functions. CBRND team training ensures that the Commander will have Marines trained to conduct CBRN reconnaissance and surveillance (R&S), decontamination, and CBRN center operations. Individual training standards ensures every Marine is able to recognize a CBRN incident, don protective clothing, and perform assigned missions in a CBRN environment. Individual Marines will be designated and trained to perform a specific unit CBRND fuction (i.e. squad CBRN detector operator).

2. Unit CBRND Mission Performance Standards, Unit CBRN Staff, and Medical Functions

a. The unit must be able to perform the following mission performance standards, Unit CBRN Staff, and Medical Functions:

Unit: Mission Performance Standards
a. Take immediate action upon warning of an imminent CBRN attack or arrival of a CB agent or radiological fallout while continuing to conduct the primary mission of the unit.
b. Determine the presence and nature of CBRN hazards in the unit's area of operations and take effective measures to mitigate the possible effects of a CBRN attack while continuing to conduct the primary mission of the unit.
c. Properly use unit CBRN protective equipment. Maintain the equipment in a high state of serviceability and readiness while continuing to conduct the primary mission of the unit.
d. Integrate medical prevention and prophylaxis in accordance with CBRND plans.
e. Maintain a degree of protection appropriate to the risk while continuing to conduct the primary mission of the unit.
f. Delineate the areas of contamination / CBRN hazard on the common operating picture.
g. Mark contaminated areas / CBRN hazard using standard signs/NATO markers.
h. Conduct operational decontamination when necessary while continuing to conduct the primary mission of the unit.
i. Conduct MOPP analysis.
j. Conduct continuous CBRN warning and reporting.
Unit CBRN Staff training standards
a. Implement the principles of CBRND in accordance with references a through t.
b. Assess the CBRND readiness of the unit.
c. Assess the effects of CBRN threats and hazards, especially on operations to be conducted.
d. Issue orders and take protective measures depending on the CBRN situation and mission.
e. Plan operations taking into account the CBRN threat and the readiness of units for operations in a CBRN environment.
f. Assess the effects of wearing CBRN IPE for an extended period of time.
g. Assess the availability of medical prophylactic pretreatment and countermeasures.

h. Integrate CBRN training in all exercises.
CBRN Medical Functional training standards
a. Manage and treat CBRN casualties.
b. Identify preventive medicine plan.
c. Recommend exposure guidance.
d. Maintain records of the unit's CBRN hazard exposure.

Figure 1-1. Mission Performance Standards, Unit CBRN Staff, and Medical Functions Training Standards

b. Unit Training Frequency. Accomplish mission performance standards annually. This training is applicable to all Marines assigned to the unit and shall be reported via appropriate automated training tracking system.

3. CBRN Team Training

a. In accordance with references (b) thru (f) additional training is required for the following teams:

(1) Unit CBRN R&S Team. CBRN R&S teams must be trained and equipped to conduct the common reconnaissance (survey) and surveillance (monitor) tasks and unique surveillance tasks outlined in reference (f). The common R&S tasks include; Detect, identify, quantify, sample, and report.

CBRN Reconnaissance and Surveillance (R&S) Team training standards
a. Operate CBRN equipment applicable to the task.
b. Recognize CBRN incident and report CBRN incident per SOP.
c. Detect and presumptively identify chemical warfare agents and radiological hazards.
d. Monitor personnel, and equipment for CBRN contamination and effectiveness of decontamination.
e. Mark CBRN contaminated areas.
f. Provide data for compilation of CBRN reports.
g. Organize and conduct CBRN R&S.

Figure 1-2. CBRN Reconnaissance and Surveillance Team Training Standards

(2) CBRN Assessment and Consequence Management Team. Marine Air Ground Task Force CBRN Assessment and Consequence Management (MAGTF CBRN ACM) teams confirm or deny the presence of CBRN hazards, through the conduct of CBRN R&S after a CBRN incident across the ROMO and in support of CWMD objectives. These teams may also be called upon to assess CBRN and hazardous material sites. These teams are located at the Major Subordinate Commands (MSC) (Div, Wing, and MLG) and MEUs. MAGTF CBRN ACM teams are trained and equipped to detect, sample and identify CBRN hazards as well as operate in known and unknown toxic environments. They are also capable of limited mitigation efforts and serving as an initial command and control (C2) capability for a CBRN consequence management event.

MAGTF CBRN ACM Team training standards
a. Maintain appropriate level of Hazardous Material Certification (Operator, Technician, Train the Trainer, Incident Commander).
b. Operate Specialized CBRN Detection and Identification Equipment.
c. Maintain (as appropriate) CBRN Detection and Identification Equipment.
d. Confirm or deny the presence of CBRN Hazards.
e. Characterize a CBRN attack, incident/accident or site and advise the

commander on its impact to operations.
f. Collect and transfer CBRN samples as required.
g. Conduct operations while wearing specialized Personal Protective Equipment (PPE) (e.g., SCBA, PAPR, Level Asuits).
h. Maintain (as appropriate) specialized Personal Protective Equipment (PPE) Operate Specialized CBRN Detection and Identification Equipment.
i. Monitor for low oxygen environment.
j. Monitor for explosive atmosphere environment.
k. Safely operate and conduct SCBA refilling operations.
l. Conduct personnel decontamination of team members.
m. Conduct equipment decontamination (as appropriate).
n. Conduct extraction operations for "injured," "downed" or "low on air" team members.
o. Establish and conduct Cold Zone operations.
p. Establish and conduct Warm Zone operations.
q. Establish and conduct Hot Zone operations.
r. Maintain (as appropriate) General Support equipment.
s. Conduct intra team and external communications/report findings.
t. Mark the area as appropriate (both internal and external).
u. Provide CBRN reports.
v. Monitor personnel, and equipment for CBRN contamination and effectiveness of decontamination.

Figure 1-3. MAGTF CBRN ACM Team Training Standards

(3) Unit CBRN Decontamination (CBRN decon) Team. The unit CBRN decon team provides the unit commander with the ability to conduct the decontamination necessary to enable the quick restoration of combat power, and to facilitate the return to pre-incident operational capability as soon as possible. CBRN decon teams must be capable of rapid employment and are augmented to support sustained operations. Decon teams support operational decontamination; including MOPP gear exchange and vehicle wash down. CBRN decon teams at battalions and squadrons will be trained to perform as an integral unit during combat operations to support casualty decontamination, MOPP Drop, MOPP Gear Exchange, and Vehicle/Aircraft Washdown. The CBRN decon teams located at the MSCs will be able to support and conduct operational and thorough decontamination operations.

CBRN Decontamination Team training standards
a. Maintain and operate assigned decontamination equipment.
b. Conduct operational decontamination.
c. Support thorough decontamination.
d. Conduct / Support casualty decontamination.
e. Coordinate with other staff sections to provide for logistics and re-supply.

Figure 1-4. CBRN Decontamination Team training standards

(4) Unit CBRN Center Team. The unit CBRN Center Team is the focal point in the unit's combat operations center for all CBRN operations within the unit's area of operations (AO). The unit CBRN CC team is capable of continuous operations and maintains close coordination with the staff sections. The team is capable of coordinating CBRND operations, developing and forwarding CBRN reports, conducting vulnerability assessments,

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determining the effect of CBRN hazards on the unit, and developing and implementing CBRND plans.

CBRN Center Team training standards
a. Synchronize efforts to determine the resources required to respond to a CBRN incident.
b. Coordinate CBRN protection, contamination avoidance and decontamination measures.
c. Plot CBRN downwind hazard prediction.
d. Plot actual CBRN contamination.
e. Provide CBRN hazard situational awareness.
f. Conduct CBRN warning and reporting.
g. Direct and supervise CBRN detector and sensor employment.
h. Direct R&S and decontamination team operations.
i. Advise commander on CBRN protection changes.
j. Conduct CBRN vulnerability assessments.
k. Provide input during the staff planning process.
l. Determine work/rest ratios through MOPP analysis.
m. In conjunction with medical planners determine CBRN agent effects.
n. Conduct pre-attack/incident modeling.
o. Develop, implement, support, and supervise CBRN R&S activities.
p. Support the active tracking of CBRN hazards
q. Support targeting of a CBRN hazard.
r. Support the interdiction of a CBRN hazard.
s. Support exploitation of a CBRN related site/evidence/material.
t. Collect subordinate commands CBRN exposure status and compile the units overall exposure status.
u. Develop, implement, support, and supervise of decontamination activities.

Figure 1-5. CBRN Center Team Training Standards

b. Team Training Frequency. References (b) thru (f) define the organization and manning of CBRN teams. Minimum training for each CBRN team shall be four hours per quarter. During the accomplishment of unit MET training, the CBRN teams shall be employed as part of the overall exercise. Team training shall be reported via appropriate automated training tracking system. NAVMC 11780 is the format to report and follow-up on CBRND training conducted and reported to the unit S-3.

4. Individual Training

a. Individual training standards (Figure 1-3) are the service requirements that the individual must master to survive a CBRN incident. Designated individual training standards are those that designated individuals in a unit perform to continue operations in a CBRN environment.

Individual Training Standards
a. Recognize a CBRN hazard and/or CBRN attack indicators and take immediate protective action.
b. Properly don, clear, and check the protective mask.
c. Recognize CBRN alarms, signals and markers.
d. Pass on the appropriate CBRN alarm or signal.
e. Recognize chemical agent symptoms and perform self or first aid.
f. Maintain CBRN IPE when issued.

g. Conduct immediate decontamination.
h. Properly don and doff protective clothing.
i. Perform MOPP gear exchange.
j. Cross or bypass marked CBRN contaminated areas.
k. Perform basic functions while in MOPP.
l. Perform primary military duty—to include the use of crew/personal weapon(s) while wearing varied levels of IPE for extended periods.
m. Comply with depleted uranium safety. IAW reference (v).

Figure 1-6. Individual Training Standards

b. Individual Training Frequency

(1) Individual training standards training is an annual requirement for all Marines. They may be accomplished as a separate training event or as part of a MET-related operational exercise. Individual training shall be reported via appropriate automated training tracking system. NAVMC 11780 is the format to report and follow-up on CBRND training reported to the unit S-3.

(2) The Individual Protective Equipment (IPE) Confidence Exercise is accomplished annually by fiscal year. The requirements and details for the IPE confidence exercise are outlined in enclosure (2). The IPE confidence exercise will satisfy individual training standards b and h on Figure 1-3.

(3) Designated training standards will be performed on an annual basis for those Marines assigned specific roles, e.g. assigned a chemical detector for his infantry squad, or radio operator that submits CBRN-1 reports.

Designated Individual Training Standards
a. Ensure serviceability of CBRND individual protection, detection and decontamination equipment.
b. Perform CBRN detection.
c. Submit a CBRN-1 observers report.
d. Perform unmasking procedures.

Figure 1-7. Designated Individual Training Standards

5. Collateral Duty CBRN Defense Billet personnel. Some units in the operating forces do not possess MOS 57XX CBRND officer or CBRND specialists and necessitates the assignment of non-CBRND MOS Marines as additional duty CBRN personnel. Marines identified as collateral duty CBRN personnel will be trained by CBRND MOS staff in the organizationally-designated higher headquarters within 3-months of assignment. Generally, but not restricted, additional duty CBRN personnel are needed within the Marine Air Wings and Marine Reserves. All CBRND additional duty training will adhere to the Marine Corps CBRND School's published program of instruction.

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Procedures For Conducting a CBRN Individual Protective Equipment Confidence Exercise

1. Introduction. This enclosure provides instructions for the IPE confidence exercise. Ensure unit SOPs, base/installation orders/regulations, state/host country laws and environmental regulations are followed. Use every precaution necessary ensure proper Chlorobenzalmalononitrile (CS) agent concentrations.

2. Purpose. The IPE confidence exercise will train personnel to properly wear and clear a mask in a contaminated environment every fiscal year; personnel will gain practical knowledge and confidence that when an agent is present and the seal of their mask is broken, proper respiratory and ocular protection can be reestablished. The instructor's primary purpose is to safely execute training.

3. IPE Confidence Exercise Training Objective. Familiarize Marines in proper fit and wear, and builds confidence in the protective capabilities of the mission oriented protective posture (MOPP) equipment.

a. All participants must wear a properly fitted MOPP level 4 ensemble while in the chamber facility. A properly fitted protective mask during training gives participants necessary confidence in their ability to employ the protective mask.

4. Ammo. Accountability of all ammo will be IAW local SOP.

5. Facility Requirements. Conduct IPE confidence exercise training in an approved CS chamber or open training area which has been approved for use by base range control and in accordance with reference (t).

a. CS chamber

(1) A CS chamber should be reasonably airtight in order to maintain the desired CS concentration levels. The enclosed space must be of sufficient size to safely conduct the CS chamber exercise. Consideration will be given to the number of participants inside the chamber facility to ensure safe conduct of the exercise. The facility Manager will be the primary point of contact (POC) to determine the number of participants to be allowed in the chamber at any given time. Control measures that ensure overcrowding does not occur inside the chamber will be the responsibility of the unit CBRND Specialists and Range Safety Officer (RSO). The CBRND Specialist (Officer or Enlisted) will have received the Military Occupation Specialty (MOS) 5702/5711 from the MOS producing school. The required materials to conduct the exercise include CS capsules, a fire extinguisher(s), and a base and safety regulations compliant heat source to aerosolize CS.

(2) CS chambers will be run by Marines with the MOS 5702 or 5711 without exception. Units that do not rate 5702/5711 on their Table of Organization (T/O) will coordinate with their higher headquarters for chamber support.

(3) At no time will CS grenades or materials from dissected CS grenades be used inside any chamber facility.

(4) CS chambers will be at least 100m away from heavily traveled roads, 500m from aircraft operations and inhabited areas, and 1,000m from the nearest installation boundary unless the CS chambers are designed to contain

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and filter all CS. Base safety (or their appointed equivalent) must approve the chamber facility.

b. Open area CS training. Open area CS training will be 500m or more away from public traffic routes and the nearest inhabited buildings, and 1,000m from installation boundaries. Host country/state regulations and/or laws will regulate this type of CS training. Range Control (or other appropriate/responsible authority) must approve the training area and ammunition for such use. The CS training exercise area should be relatively flat, free from ditches, holes, and other possible individual safety hazards. CS grenades may be used for this training. Ensure the downwind drift of CS will not affect nonparticipating personnel.

6. Safety. The following safety standards must be practiced and enforced during all CS training exercises. Maintaining these standards will reduce injuries and enhance effectiveness of the training.

a. Units will provide government transportation to and from the chamber; individuals participating in the training will not drive government or privately owned vehicles to/from the chamber.

b. The 5702/5711 instructor shall provide a brief on the following safety rules and considerations:

(1) Proper don, fit, and doff of the protective mask and IPE.

(2) Protective mask and IPE serviceability checks in accordance with the appropriate technical manual.

(3) Participants will aid each other when properly donning and doffing IPE. This practice is called the "buddy system". Buddy teams will inspect each other's mask fit, seal and the correct wear of MOPP gear/IPE.

(4) Actions and Events Performed During the IPE Exercise

(a) Entrance into the CS chamber or area

(b) Required performance steps in the CS chamber or area

(c) Exiting the CS chamber or area

(5) In the event of an emergency (injury, adverse reaction) participants will follow the commands given by the instructor in order to facilitate timely safe response and treatment.

(6) Screen to ensure all participants are medically qualified to undergo CS training. Refer all individuals with the one or more of the following conditions to medical support, reference (t):

(a) Respiratory ailments

(b) Recent eye surgery or eye infections

(c) Open wounds

(d) Severe facial acne or any active dermatitis

(e) Pregnant

(f) Current medical waiver (for the IPE confidence exercise)

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(g) Medical braces and/or casts

(7) Encourage participants to drink plenty of water. Ensure participants are aware of the training area's water supply.

(8) Wearing contact lenses while training with CS agents is prohibited. Individuals who normally wear contact lenses will use optical inserts.

(9) CS effects. The effects of CS may persist for several minutes due to CS particles entering the pores of the skin, lungs, respiratory tract and inside the mask. Participants must understand that if a seal is broken, clearing the mask will not result in immediate relief from the exposure to CS. Participants will be informed that it is their responsibility to take immediate action to correct a leaking mask. After making several attempts to gain a seal the individual will be safely guided to the exit in a timely manner.

(10) Running within a CS cloud is strictly prohibited.

c. A safety vehicle specifically identified to support the training evolution will be present prior to executing the IPE exercise. The safety vehicle driver will not participate in any portion of training. The driver must exercise caution to avoid becoming exposed to CS during the entire training event.

d. Ensure Communications requirements and checks are followed according to the range regulations and unit SOP prior to executing any portion of training.

e. Those facilities that have a "CBRN trail" obstacle course, or endurance course, will ensure proper supervision and training support exists prior to running the course, in accordance with base range regulations.

f. Medical. A corpsman or emergency medical technician (EMT) with current certification, who is familiar with the effects of CS and heat stress and heat stress indicators, will be present during the IPE exercise. To prevent personal CS exposure, medical support must have their mask available, sleeves down, and buttons buttoned in preparation to treat potential casualties. Medical support will have necessary equipment, e.g. unit 5 bag, EMT bag or equivalent.

NOTE: Medical Support personnel will be familiar with the unit CBRND SOP and reference (s), and will be provided this enclosure 24-hours prior to the IPE exercise.

7. Responsibilities

a. CBRND Officer/CBRND Chief

(1) MOS 5702/5711

(2) Will be familiar with the CBRN training area requirements within the base range regulations.

(3) Shall be knowledgeable in all safety regulations pertaining to the effects of CS agent, IPE exercise, chamber operations, training

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requirements, and effects on participants when wearing MOPP for extended periods of time in varying weather conditions.

(4) Ensures the exercise is appropriately scheduled with the unit, Range Control, and if required, chamber facility staff.

(5) Supervise the preparation and safe conduct of the IPE exercise.

(6) Monitor CS concentration inside the chamber.

(7) As capable, ensures mask repair parts and extra IPE are available.

(8) Briefs all training support staff on safety requirements, training process, emergency procedures, and reiterates areas of responsibility for each supporting member.

(9) Supervises the IPE training exercise, ensuring training objectives are met and that no "unnecessary" training processes occur. Unnecessary training processes are employing procedures that do not benefit the training objective or are unsafe practices that could result in injury.

(10) May perform the RSO role if not also the primary or assistant instructor.

b. Primary Instructor

(1) MOS 5702/5711

(2) Inspects the fit of IPE worn by all assistant instructors.

(3) Inspects the fit of participants' IPE.

(4) Assigns participants to pair-off (buddy system) to check each other's protective mask and IPE fit prior to the instructor's inspection.

(5) Briefs participants on characteristics and effects of CS agent, on proper fit of masks and IPE, on exercise procedures, and the details concerning commands given, how to notify the instructor if the protective mask is leaking, what to do in an emergency and what breaking the seal actually consists of.

(6) Conducts exercise and/or delegates appropriate duties to assistant instructors. The Primary instructor will know the experience level of each instructor involved, especially those who will be inside the chamber facility supporting the primary instructor while going through the IPE confidence exercise.

(7) Assembles participants upwind from the facility and conducts final safety brief and mask/IPE inspections.

(8) Maintain proper CS agent concentration.

(9) Closely observe participants in the chamber.

(10) Ensures the chamber is ventilated and cleaned after the exercise.

(11) May not perform the RSO role.

c. Assistant Instructors (as required)

(1) Assist CBRND Officer/CBRND Chief and primary instructor during preparation and while conducting the IPE training exercise.

(2) Assist in regulating the safe flow of participants in and out of the chamber.

(3) Guide exiting participants away from the chamber and face them into the wind. Use other participants in the exercise as additional guides, if required.

(4) May not perform the RSO role.

d. Medical Personnel

(1) A Corpsman/EMT will ascertain if participants have medical conditions that would prevent an individual from conducting the IPE exercise. When the IPE exercise pre-brief is given, participants who believe they may have a medical condition/concern will be interviewed by medical support staff. Medical personnel provide the final decision if an individual will go in the chamber facility.

(2) A Corpsman/EMT not participating in the IPE exercise will be present at all times during the IPE confidence exercise.

e. Range Safety Officer

(1) The IPE exercise RSO will be qualified per base range safety regulations and have a clear understanding of the unit's CBRND SOP.

(2) May not perform a primary instructor or assistant instructor role.

(3) Ensures the safe execution of all CS training and has the authority and responsibility to stop or modify any unsafe activities.

(4) Ensures participants and support personnel receive the safety brief and perform all required tasks.

(5) Ensures a dedicated safety vehicle and nonparticipating Corpsman and driver are on-site.

8. IPE Confidence Exercise Training Procedures

a. Pre-Brief and Safety Brief. Prior to entry into the CS training area, the CBRND Officer/CBRND Chief will give a detailed brief on the training objectives, purpose and procedures of the IPE confidence exercise (enclosure 2 para 5.b). After allowing for questions, the instructor may begin the IPE inspections and drills.

b. IPE Inspections and Drills. Before entering the CS open training area or CS chamber, instructors will conduct IPE inspections and mask donning drills. During these drills CBRND specialists will inspect that each participant is capable of sealing their mask. Marines should be able to don their protective mask within nine seconds. Participants shall be provided time to practice donning their protective mask and ensuring its proper fit. Participants will be paired up into buddy teams and use the buddy system. Buddy teams will inspect each other's mask fit and proper wear of IPE. CBRND

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specialists will repair malfunctioning masks using mask repair parts. Defective masks can be replaced with extra protective masks if available.

c. CS Chamber and CS Open Area Training Events. Either the CS Chamber or Open Area CS Training will meet the IPE confidence exercise requirement.

(1) CS Chamber Event

(a) Preparation

1. The number of CS capsules used to initially charge the chamber will be calculated using the following formula: **length x width x height ÷ 30** (interior of chamber in meters)

Example: 5m X 6m X 6m = 180 cubic meters; $180 \div 30 = 6$ capsules

2. A heat source will be used to aerosolize the CS. Each capsule will be individually opened and emptied onto the heat source. The CS particles will aerosolize. At the conclusion of each group/stick completing their IPE confidence exercise and after the participants have exited the chamber add the contents of one CS capsule per 10 new participants entering the chamber. The instructors, under the supervision of the CBRND Officer/CBRND Chief, will ensure that an appropriate concentration level is maintained. Concentration levels should be low enough to maintain a safe level of visibility.

3. CS use. Only the appropriate number of CS capsules (DODIC: K765, NOMENCLATURE: Riot Control Agent, CS) will be used within all chamber facilities.

4. The number of persons allowed in the chamber shall be determined before hand and not exceeded.

(b) Participants will don IPE. An instructor will inspect the IPE for proper wear and fit prior to entry into the chamber. The protective mask will be donned outside of the chamber facility, this allows participants to go through the entire range of motion involved when donning the mask; e.g. removing the mask from the mask carrier.

(c) An instructor will lead the participants into the CS chamber. The instructors will constantly monitor each person for uncorrected mask leaks. If at any time, an individual's mask leaks, the individual will perform immediate action to reseal and clear their own mask. If the immediate action is unsuccessful, the participant will raise their hand for assistance. Instructors will attempt to quickly correct the problem while inside the chamber. Instructions will be given to adjust and clear the protective mask. If the leak cannot be immediately corrected within the 15-seconds per reference (t), the instructors will escort the participant to the exit. Once outside, the participant will have the mask refitted, repaired, or replaced, if extra masks are available, and reenter with another group. If, at any time, a participant displays extreme stress or panic, an instructor will immediately escort the participant to the exit. Those who fail to complete the entire IPE confidence exercise for any reason shall not be on the training roster.

(d) The instructor will have the participants bend over at the waist and shake their head vigorously from side to side, stand erect, and turn their heads right and left then up and down as far as possible in order to account for full range of motion. The head shaking and movements are done to demonstrate to the individual that a proper seal can be maintained

throughout a full range of motion. Between each of these events, the instructor will allow sufficient time to observe the individuals for a broken seal.

(e) The instructor will inform the participants that they are about to break the seal of their mask. The participants will be reminded that clearing and resealing their mask will not immediately eliminate the CS effects. On command, the instructor will have all participants break the seal of the mask by placing two fingers inside the right cheek of the mask face form. Once all participants have done this, they will clear and reseal the mask. This step will train participants how to clear their mask effectively in a contaminated environment and is a source of confidence; knowing an agent is present and if the seal is compromised it is possible to regain respiratory and ocular protection.

(f) The total length of time in the chamber will not exceed fifteen (15) minutes per group. Upon completion of the IPE exercise, an assistant instructor will guide the masked participants out of the chamber in an orderly manner to prevent accidents and collisions. The instructors will lead the group upwind of the chamber, face the individuals into the wind, and instruct them to remove their protective mask without touching their face.

(g) The CS agent concentration is then replenished (one additional capsule per ten (10) participants entering the facility). This procedure is repeated until all participants complete the exercise.

(2) CS Open Area Training Event

(a) IPE exercises conducted in open training the use of DODIC: G963 M7A3 CS grenade or DODIC: K765 Riot Control Agent, CS.

(b) A smoke grenade, such as DODIC: G940 Grenade, Hand Green Smoke M18, may be used to check wind direction as well as to observe how the CS cloud formation will travel. This practice will assist in positioning participants, or identify where the instructor should employ the CS grenades in order to obtain the desired result.

(c) The CBRND instructor will signal or command the participants and all other potentially affected personnel to don MOPP level four (4). The CBRND instructor(s) will ensure that all participating individuals have properly donned the CBRND equipment, and that the participants are able to effectively seal the protective mask.

(d) Participants are formed into one or more columns facing into the prevailing wind.

(e) An instructor will ignite a CS grenade. Multiple CS grenades may be used as appropriate. At no time shall a CS cloud be formed which unsafely inhibits vision. If such a CS cloud is formed, all participants and instructors will walk upwind and wait for the cloud to dissipate before training can resume.

(f) The instructors will constantly monitor each person for uncorrected mask leaks. If at any time, an individual's mask leaks, he/she will perform immediate action to reseal and clear their own mask. If the immediate action is unsuccessful, the participant will raise their hand for assistance. Instructors will attempt to quickly correct the problem while inside the CS cloud. Instructions will be given to adjust and clear the protective mask. If the leak cannot be immediately corrected within the 15-seconds per reference (s) / DA PAM 385-63, the instructors will direct the

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participant to walk to a predetermined upwind location. Once at the determined location, the participant will have the mask refitted, repaired, or replaced, if extra mask is available, and reenter with another group. If, at any time, a participant displays extreme stress or panic, an instructor will immediately direct the participant to walk to the predetermined upwind location. Those who fail to complete the entire IPE confidence exercise for any reason shall not be on the training roster.

(g) Once the CS cloud is over the participants, the procedures within this Order, as stated in 8c(1)d and 8c(1)e will be followed. 8c(1)d, 8c(1)e, and 8c(2)d may be replaced by safe and equivalent individual actions to increase training benefits in a training scenario. The individuals undergoing training while in a CS cloud are required to at a minimum:

1. Exercise a full range of motion while maintaining a seal on their mask.

2. Properly clear their mask of CS.

d. Close of CS Training. Instructors will distribute instructor training evaluation forms for participants to complete. Unused CS and other ordnance will be returned per base regulations. An exit brief after the IPE confidence exercise will be conducted by the CBRND Officer/CBRND Chief or CBRND instructor/assistant instructor to cover prevention of CS spread and residual CS effects after the exercise to include the following:

(1) Instruct participants to air out IPE for a couple of hours upon return to the garrison environment.

(2) When conducting personal hygiene individuals will start with a cool shower first, since an initial warm shower will activate the CS agent residue. Participants may feel agent effects when showering but these effects will last only a short time.

(3) Participants will not operate government or personal vehicles for at least one (1) hour following the completion of the IPE exercise.