BCT TACSOP
NBC

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5. CHEMICAL WEAPONS ARTILLERY EMPLOYMENT (THREAT DOCTRINE)

a. Defending Enemy:

(1) Phase I fires: Fire Interdiction of Advancing Enemy Troops (friendly units move from TAA to LD)

Targeted to AAs to line of departure - about 15 km
Normally begins when attacking in battalion size columns
DAG, fixed wing aircraft, all available long range assets
Purpose: to attrit combat power

Likely: PCHEM to canalize units into fire sacks
Possible: NPCHEM to disrupt C2 during movement

(2) Phase II fires: Fires to Repel Enemy Attack (friendly units move through security zone)

- Most important phase of fire support in the defense
- Designed to break up/split attacking formations from 15 km out up to the point of penetration
- RAG fires close in, DAG continues deep
- Not easy against a fast moving attacker
- Short, intense bursts

Possible: PCHEM as to protect enemy threatened flank
Likely: NPCHEM to disrupt attack momentum and conduct direct fire engagements degraded

(3) Phase III fires: Fire Support of Defending Troops (friendly units breach and assault)

- Begins when the attacker penetrates an MRC strong point
- Focus on penetrating forces to stop the development of successful attacks
- OPFOR expect enemy to penetrate but want to inflict the greatest damage possible

Possible: PCHEM as FPF during enemy withdrawal
Possible: NPCHEM to disrupt attack forces

(4) Phase IV fires: Fire Destruction of Enemy During Counterattack

- Essentially a transitional phase into the attack
- Supports forward movement and commitment of reserve force
- Mirrors purpose of offensive phases

Possible: PCHEM to protect enemy flank.
Possible: NPCHEM to cause casualties/disrupt follow-on units.

b. Attacking Enemy:

(1) Phase I fires: Fire Support for the Movement Forward (H-3 to H-4 hours)

- Targets Ops, COLTs, artillery, reserves, and others able to slow OPFOR movement
- PCHEM and FASCAM to shape the battlefield: eliminate reserves from the fight, contaminate support units and their supplies, maximum disruption of command and control
- DAG normally shoots: 3 battalions of 2S5, BM21, 2S3
- Regiment is on the move

Likely: PCHEM to fix units to be bypassed, reserves, block counterattack routes
Possible: NPCHEM to harass, degrade C2

7. CHEMICAL/BIOLOGICAL (CB) THREAT STATUS. The BCT establishes a minimum threat status. There are four different THREATCONs defined IAW FM 3-3. The BCT Chemical Officer briefs the THREATCON status and the reason why at both the OPORD and BCT rehearsal. The THREATCON is dynamic and can change during the course of operations. Units must pay particular attention to the THREATCON as MOPP level, auto-masking criteria, etc. may change as a result.

6. MOPP CONSIDERATIONS

a. MOPP suit may be worn open to compensate for heat. Clothing underneath MOPP suit may also be reduced.

b. Only the Brigade Commander may authorize units to assume mask only posture. Mask only is used when RCAs are being employed and in the downwind vapor hazard of a blood or choking agent. Units with vehicles that contain overpressure systems may NOT assume mask only simply because they have overpressure systems unless stated in the order. Mask only will be authorized based upon Chemical Officer recommendations.

c. MOPP ready is only authorized for dismounted infantry. When light TF is attached the rule applies - MOPP gear accessible within 2 hours and no further back than the BSA. When Bradley infantry dismounts are working away from their vehicle, the MOPP gear must be on-hand in the vehicle. Again, this posture is only authorized by the Brigade Commander and based upon Chemical Officer recommendations.

7. SOLDIER IDENTIFICATION IN MOPP:

a. Last name on 3" heavy (100mph) tape, in black, 1" block letters, above right front pocket. The same will be done for the left front pocket except with soldiers unit.

b. M9 Detection Paper worn on MOPP gear IAW STP-21-1-SMCT.

c. Pin-on rank worn on top left pocket flap of BDO.

8. VEHICLE MARKING.

a. M8 paper will be attached next all M9 paper to aid in detection.

b. Wheeled vehicles will have M9 paper on the front and rear bumpers, left and right mirrors, hood, and on the sides of the vehicle near the tires so that the driver and VC can observe.

c. Tracked vehicles will have M9 paper attached so that the driver and VC can observe while buttoned up and on the sides of the vehicle near the tracks.

d. M9 paper strips will be at least 6 inches long.

e. Change M9 paper if it gets wet and when it becomes worn.

f. Static command posts emplace M9 paper on camouflage nets.

g. M9 paper will show positive for liquid agent if it comes in contact with POL products.

3. Evaluate the threat.

a. Identify threat chemical capabilities/vulnerabilities
- •Types of chemical agents
- •Delivery systems
- •Chemical posture / NBC defense units
- •Threat timeline

b. Refine higher SITEMP.

c. Identify NBC threat status.

d. Presence of contamination.

4. Determine threat COAs.

Template all possible chemical targets on the SITEMP for each COA.
- •Ensure they support the enemy likely objectives and desired endstate for the threat command one level above your own
- •Be aware of air avenues of approach
- •Be aware of enemy R&S plan - routes and locations of enemy reconnaissance by phase
- •Plot enemy range fans with S2
- •Plot both persistent and non-persistent agents
- •Identify specific locations

b. Evaluate and prioritize chemical targets for each COA
- •Most likely and most dangerous as a minimum
- •Strengths, weaknesses, decisive points

c. Develop each COA in detail.
- •Determine enemy's decision criteria, trigger points, and timeline
- •Consider enemy mission and the effect he wants - deny terrain, prevent counterattack, cause casualties, cause you to fight degraded, prevent reconsolidation

d. Identify collection requirements
- •Recommend PIRs to confirm estimate of enemy NBC activity at key locations and times
- •Establish NAIs for templated targets
- •Task a unit or NBC recon in R&S plan
- •Do not OPCON Fox Recon below TF level
- •Plot downwind hazards per NAI on NBC map
- •Collection plan must support the Commander's intent
- •Collection plan should concentrate on the differences between the NAIs and indicators of each COA

(c) Specified and implied tasks concerning NBC defense.

(1) Specified - NBC tasks stated by higher HQ which the unit must perform to successfully perform the commander's mission.

(2) Implied - Tasks the unit must perform to accomplish specified NBC tasks or the overall mission.

a. Determine locations of decon sites (link-up points) based on templated chemical

- Throughout the AO
- Edges of sector off either side of MSR

b. Coordinate AXP/CCCP with S1/S4

Stage decon elements forward, by event.

d. Priority of support and work.

e. Water resupply.

3. Recon.

4. Smoke.
   - Commander's intent - task and purpose
   - Visibility criteria
   - Clearly defined smoke target within the capabilities of the smoke asset
   - Clearly defined triggers/events for effective smoke on target (does not include 20-40 minute build up time)
   - Trigger/event to stop effective smoke

5. Flame fuel expedients.

6. CDE requirements to support each COA.

(c) Develop concept of NBC defense that supports the scheme of maneuver and fires - templated chemical targets affect scheme of maneuver and fires.

1. Identify critical friendly NBC events and the phase by which they occur - prioritize these events.

2. Determine NBC tasks that support the main effort's task and purpose.

3. Determine NBC tasks that support the supporting effort's task and purpose.

4. Determine where and when NBC risk occurs.

5. Determine NBC tasks that support the reserve's task and purpose.

6. Determine essential NBC defense tasks - identify automask criteria, changes in MOPP

7. Array NBC forces (combat multiplier vs combat provider) necessary to support the mission.
   - Array NBC forces at the expected decisive point
   - If amount of NBC forces less than required, plan for shortfall and the use of other combat multipliers.
   - If the amount of NBC forces greater than required, use excess to weight the main effort or reserve.

8. Task organize NBC assets.

(f) Products - Updated NBC defense plan/graphics:
- Task and purpose for each NBC unit
- Task organization and command/support relationships
- Critical NBC events/actions
- MOPP levels and where MOPP gear will be stored or carried
- Vulnerability assessment - including probable targets and agents
- Levels of risk taken

(4) Orders preparation and reproduction.

(5) Orders issue.

(6) Supervise, inspect, refine

BCT TACSOP
CARD 950 - CHEMICAL RECONNAISSANCE AND SURVEILLANCE

1. GENERAL. The basics of chemical reconnaissance and surveillance.

2. DEFINITIONS.

a. Chemical detection - to establish the presence of liquid or vapor contamination, but not identify type of agent.

b. Chemical identification - to classify type of agent but may not distinguish between nonpersistent and persistent.

3. BACKGROUND. Chemical agents are classified into two categories either PCHEM or NPCHEM based on the desired effects. Chemical agent duration depends on environmental factors such as temperature gradients, wind speed, humidity, soil type, etc.

4. ORGANIC DETECTION/IDENTIFICATION.

a. Vapor hazards (persistent or nonpersistent chemical agents).

(1) M256-Series detector kit detects nerve agent vapors (i.e. G Series or VX) but does not identify type nor distinguish persistent/nonpersistent . Detects and identifies blister agent. Detects blood agent. Does not detect choking agents. Detection takes 20 minutes to complete.

(2) M8A1 Chemical agent monitor.

- Detects nerve agent vapors only (i.e. G-Series or VX) but does not identify type nor distinguish persistent/nonpersistent
- Must be static to use immediate detection

(3) Chemical agent monitor (CAM).

- Detects nerve agent vapors (i.e. G-Series or VX) but does not identify type or distinguish persistent/nonpersistent
- Detects blister agent but does not identify. Must be 1 centimeter away from contamination to get reliable read used to verify equipment and patient decon (PDS)

b. Liquid hazards (persistent or nonpersistent chemical agents).

(1) M9 Detector paper.

- Turns reddish brown in the presence of liquid contamination
- Detects all liquid agents to include lewisite and phosgene oxime (M8 Paper does not detect)
- Cannot use red lens flashlight to read at night)

(2) M8 Detector paper.

- Paper color changes to identify:
  Yellow=G-Series nerve
  Dark green=VX nerve
  Red=H-Series blister

  Cannot use red lens flashlight to read at night

Visual.

(5) Crew does not have to exit the vehicle to identify

(6) Provides GPS location data.

(7) Can emplace NATO marking system.

(8) Can keep up with maneuver forces.

Limitations

(1) Resembles enemy BTR-60 (fratricide risk)

(2) Specialized maintenance requirements.

(3) Light armor (may need assistance to break contact with the enemy).

(4) Only has stand-off detection capability when vehicle is equipped with M21 detector. Otherwise, no stand-off capability.

(5) Chemical markers are difficult to see.

6. R&S Planning - Identify collection requirements to confirm estimate of enemy NBC activity at key locations and times.

a. Recommend PIRs to confirm estimate of enemy NBC activity at key locations and times.

(1) Establish NAIs for templated targets on each SITEMP.

(2) Task a unit or NBC Recon in R&S plan - include primary and alternate observers

(3) Do not OPCON Fox recon below TF level.

(4) Plot downwind hazards per NAI on NBC map.

(5) Direct observation of chemical attack is the most rapid means of predicting whether it is a NPCHEM or PCHEM without using detection or identification equipment/teams.

- NPCHEM - ground burst artillery
- PCHEM - air burst artillery

b. The collection plan must support the commander's intent. If the commander wants to practice contamination avoidance and not fight dirty:

- Each maneuver platoon, engineer platoon, and battery will have standard marking sets.
- Attach white CHEM LITES to markers at night or during periods of limited visibility.

BCT TACSOP
CARD 954 - REACT TO CHEMICAL ATTACK (NEAR AND FAR)

1. Reaction drill to a chemical attack (near and far) for CO/TM and TF in contact.

a. Mask immediately.

b. Submit chemical contact report to higher commander on command net ASAP.

WHO: IRON KNIGHT 6, THIS IS MADDOG 6
WHAT: CHEMICAL ATTACK
WHERE: PK143562
WHEN: TIME NOW
ACTIONS: GOING MOPP 4, CONTINUING MISSION
NOTE: ALL OTHER UNITS ACKNOWLEDGE

c. Individual decon as required (M258/M291 Kit)

d. Go to MOPP 4

e. Higher commander's guidance to remainder of the force - place other units in MOPP 4 as necessary.

f. Determine ASAP if persistent/nonpersistent from detection paper.

(1) If either M8 or M9 paper colors, report persistent.

(2) If M8 paper colors, report agent type.

(3) If both M8 and M9 papers do not color, report nonpersistent.

g. Report:

WHO: IRON KNIGHT 6, THIS IS MADDOG 6
WHAT: PERSISTENT CHEMICAL ATTACK, BLISTER, MUSTARD
WHERE: PK143562
WHEN: 0706L
ACTIONS: BYPASSING TO THE EAST

h. Commanders instruct appropriate force reaction

(1) If persistent:

(a) All elements outside contaminated area immediately bypass/avoid.

(b) Give bypass instructions based on wind direction.

(c) Dirty elements caught inside contaminated area continue the mission in MOPP 4 and O/O request/conduct Operational Decon.

(d) Report:

BCT TACSOP
CARD 956 - UNMASKING PROCEDURES

1. GENERAL. Several options available to commanders for unmasking procedures in an NBC environment.

2. FOX recon vehicle - immediate results:

a. Desired when rapid unmasking is needed.

b. FOX renders all clear to indicate no contamination.

c. ALL CLEAR relayed to higher and other units on CMD net.

d. Confirm that unit is not downwind or forthcoming vapor hazard.

e. Order all or part of unit to unmask (METT-T dependant).

f. Watch for symptoms and have first aid immediately.

3. M256A1 Kit - delayed results (usually 20-25 minutes for M256 kit and another 20 minutes for actual soldier tests. Execute IAW STP 21-21 SMCT (Skill Level 3).

4. Scout/intelligence assets - immediate results:

a. Higher risk scenario!

b. Use when rapid unmasking is needed based on mission requirements and the following considerations:

1) No FOX available.

(2) No time for unmasking with/without M256 kit.

(3) Higher temperature threatens mission.

(4) No liquid agent results on M8/M9 paper.

(5) No likelihood of being in a downwind hazard.

(6) IPB (SITEMP, likely enemy COA, etc) does not template any CB hazard in the area.

c. Scouts/recon report enemy attacking or defending in MOPP 0, 1, or no mask (establish unmasking trigger).

d. LTC or above orders all or part of unit to unmask (METT-T dependent) report ALL CLEAR to higher and other units on CMD nets.

e. Watch for symptoms and have first aid immediately available.

(10) Establish decon FM net (will normally be the decon platoons FM net when they are in support).

(11) Staging area (pre-decon actions).

(12) Ensure units tasked to provide M17s include M17 SANATOR, all M17 components, one 54B, and one M17 operator.

b. Contaminated Unit:

(1) Report number of contaminated soldiers including cross attachments.

(2) Report number of contaminated vehicles by type.

(3) Report confirmed agent type.

(4) Site security.

(5) ADA coverage.

(6) Engineer support to dig decon sumps.

(7) Set up and execute detailed troop decon.

(8) Provide decon/detection equipment for troop decon line.

(9) Provide detection equipment for equipment decon line.

(10) Conduct resupply of MOPP gear, Filters, decon kits, Class I, NAAK, DS2/STB, etc.

(11) Conduct police call to centralize contaminated items for disposal (engineer support required).

(12) Mark contaminated area.

(13) 20 man detail to augment decon line operations.

(14) Report decon status every 30 minutes.

(5) Provide decon/detection equipment for DED.

(6) Site clearance.

(7) Mark contaminated areas.

(8) Report decon status to brigade TOC every 30 minutes.

(9) Report final results to BDE Chemical Officer/NCO.

c. Contaminated unit:

(1) Report number of contaminated soldiers including cross attachments.

(2) Report confirmed agent type.

(3) Provide M17 SANATOR with operator and 54B NCO.

(4) Site security.

(5) ADA coverage.

(6) Engineer support to dig decon sumps.

(7) Must set up and execute detailed troop line (DTD) and provide required equipment.

(8) Conduct resupply of MOPP gear, filters, decon kits, Class I, NAAK, DS2/STB, etc.

(9) Conduct police call to centralize contaminated items for disposal (engineer support required).

(10) Provide 20 man detail to augment DED

b. Where and for how long am I willing to sustain this smoke over my position, between my unit and the enemy, and on the enemy?

c. How much restriction in my own mobility and target acquisition can I accept?

d. When might on-call hasty or deliberate smoke benefit me?

e. How will counter smoke help me?

5. Smoke mission request. Must address these as a minimum to effectively support the scheme of maneuver.

a. Commander's intent.

b. Target - location and size of smoke target.

c. Start time - time effective smoke on target

d. Stop time - duration of effective smoke, based on time phase requirements.

6. Smoke support plan development:

a. Obtain restated mission.

(1) Task organization, smoke delivery systems, munitions availability, objectives, axis of advance or sector, commander's intent.

(2) Recommend smoke support coordinating measures.

(3) Key time, place, and event.

(4) No smoke areas.

(5) Target allocations.

(a) Smoke unit, artillery and mortar targets.

(b) Based on current RFL, CFL, NFL munition availability, and priority of fire.

b. Update status displays.

1) Maneuver elements and objectives.

(2) Locations of agreed targets.

Develop smoke support plan.

1) Get target lists from FSO.

(2) Modify target lists as necessary.

(3) Develop list of smoke delivery targets.

(4) Decide time smoke is required.

BCT TACSOP
CARD 980 - MANAGEMENT OF RADIATION HAZARDS AND EXPOSURE

1. GENERAL. Procedures for management of radiation hazards at BDE/TF levels.

2. Operational Exposure Guidance (OEG).

   a. Issued by higher HQ in OPORD and FRAGOs.

   b. Issued down to CO/SEP PLT level.

   c. Represents maximum total dose radiation levels allowed in a unit.

   d. Use IM-93 Dosimeter to measure total dose.

3. Automatic reports.

   a. Arrival of initial fallout (dose rate > 2 cGy/HR) using AN/VDR-2.

   b. Peak radiation dose rate using AN/VDR-2.

   c. First encounter with radioactive contamination.

   d. Damage to equipment containing radioactive sources (M8, CAM, etc.

4. Radiation Exposure Status (RES).

   a. BCT Chemical Officer/NCO maintains cumulative radiation exposure of BCT elements.

   b. BCT units report to BDE TOC any change in RES level.

   c. RES IAW FM 3-3.

5. Radioactive contamination areas.

   a. Brigade Commander decision to enter or cross area.

   b. NBC Teams.

   c. Mark using standard NATO marking kits.

6. Designated observer program.

   a. Designate observers at CO/SEP PLT levels to report flash-to-bang time for nuclear strikes.

   b. Rehearse report (NBC-1 Nuclear Report items).

7. Troop Safety Criteria will be issued by higher HQ.

b. Mark all samples with DTG and location sample was taken.

c. Do not unwrap any samples once packaged for transfer.

d. Keep samples cool if possible, but do not freeze.