FIRING/NONFIRING DATA

For use of this form see USAIC Regulation 350-19; the proponent agency is DPTMS

TO: Chief,
Range Division,
Directorate of Plans, Training, Mobilization and Security
Fort Benning, GA 31905

Date: 21-24 FEB 12
Range: DMPRC
Title: TANK AND BRADLEY LFX
Problem No:

Log #10-10-11

THRU: 316th CAV BDE
Fort Benning, GA 31905

FROM: S-3 316th CAV BDE
Fort Benning, GA 31905

SECTION I, TYPE OF TRAINING

☒ a. Live Fire ☐ b. Non-live Fire CP/Controller Coordinates: GA 0986 8870

SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges
See Weapon & Ammo List	See Weapon & Ammo List	See Weapon & Ammo List	See Weapon & Ammo List

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
See Weapon & Ammo List	M256A1 M2, M240	120mm M865/M831 .50 cal, 7.62mm (Ball & Tracer)	See Weapon & Ammo List	See Weapon & Ammo List
See Weapon & Ammo List			See Weapon & Ammo List	See Weapon & Ammo List
	[redacted]	[redacted]		

SECTION IV, LIVE FIRE EXERCISES Attach the following:

☒ **Scenario of training to be conducted:**
☒ **Sketch of area:**
☒ **Risk Assessment:**
☐ **Attach FB Form 350-19-2-E-R if Mortar or artillery is being fired:**

SECTION V, NON-LIVE FIRE TRAINING

Training area(s) to be occupied:

☐ **Scenario of training to be conducted:**
☐ **Sketch of area(s) to be occupied:**
☐ **Risk Assessment:**

Name/rank of requesting officer:
CECALUPO, JON C. BRIGADE S3

Name/rank of Major Unit S3/Commander:
DOUGHERTY, MARSHALL K. BDE COMMANDER

SECTION VI, FOR RANGE DIVISION USE

DATE: 10 FEB 12

TO: 316th CAV BDE
Fort Benning, GA 31905

FROM: **Range Division,**
Directorate of Plans, Training,
Mobilization and Security
Fort Benning, GA 31905

a. Roadblocks to be closed: See Roadblock Enclosure.
b. Road(s) to be closed/road barrier locations:
c. Remarks:
d. This approval expires: 9 FEB 14

Chief, Range Division
Directorate of Plans, Training, Mobilization and Security

FB FORM 350-19-1-E-R, AUG 09 **(REPLACES FB FORM 210-4-3, JAN 03)**

DMPRC 316 CAV Tank Gunnery Table II, V, VI (Log #10-10-11) Weapons/Ammo Enclosure, 20 Jan 2012				
Firing Positions	**Weapons**	**Ammunition**	**Left Limit, Mils Grid Azimuth**	**Right limit, Mils Grid Azimuth**
BP 3A: 1034 8928	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	0775 1030	1035 1655
BP 3B: 1203 9041	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	0645 1020 0680	0915 1190 1155
BP 3C: 1243 9084	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	0475 1135 0405	0820 1630 1330
BP 4A: 1047 8908	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	0895 0615	1400 1055
BP 4B: 1211 8986	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	0455 0950 0800	1095 1095 1010
BP 4C: 1266 9038	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	0295 0595 0630	1230 0960 0975
MB 3-1: Start 1035 8925 to Stop 1060 8933	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	0880 0725	1360 1040
MB 3-2: Start 1202 9047 to Stop 1231 9066	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	0565 0975 0255	1290 1335 1455
MB 3-3: Start 1246 9082 to Stop 1268 9103	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	0445 0660	0775 1500
MB 4-1: Start 1048 8905 to Stop 1067 8910	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	0880 1060	1030 1245
MB 4-2: Start 1209 8989 to Stop 1233 9012	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	0360 0245 0840	1210 0990 1295
MB 4-3: Start 1263 9043 to Stop 1275 9059	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	0275 0850	0540 1880

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY MANEUVER CENTER OF EXCELLENCE
1 KARKER STREET
FORT BENNING, GEORGIA 31905-5000

REPLY TO
ATTENTION OF
ATZB-SO

14 January 2012

MEMORANDUM FOR Commander, 1/16th CAV, Attn: SFC Hogan, Fort Benning, GA 31905

SUBJECT: 1/16th CAV DPMRC Tank and Bradley Gunnery Table II, V, and VI Concept and Safety Review

1. References.

a. 1/16th CAV DPMRC Tank and Bradley Gunnery Table II, V, and VI Concept, 12 January 2012.

b. Army Regulation 385-10, The Army Safety Program, 24 August 2007

c. Army Regulation 385-63, Range Safety, 19 May 2003

d. Department of the Army Pamphlet 40-501, Hearing Conservation Program, 10 December 1998

e. Department of the Army Pamphlet 385-10, Army Safety Program, RAR 19 January 2010

f. Department of the Army Pamphlet 385-30, Mishap Risk Management, RAR 01 February 2010

g. Department of the Army Pamphlet 385-63, Range Safety, RAR 12 May 2009

h. Field Manual 5-19, Composite Risk Management, August 2006

i. MCoE Regulation 350-19, Range and Terrain Regulation, 23 July 2010

2. Document received on 11 January 2012.

3. Concur w/comment.

a. Concept paper, paragraph 11. Add duties and responsibilities for the Laser Safety Officer.

b. CRMW, Block 11, pg 3. "Cold Weather Injury", recommend that you add "Buddy Team" and "Individual".

c. CRMW, Block 6. Recommend that you address "Eye Injuries" to the CRMW.

4. Point of contact is Mr. Michael W. Risher II, MCoE/Fort Benning Safety Office, Comm. (706) 545-8278, Govt. Cell. (706) 604-7249, michael.w.risher.civ@mail.mil

JILL E. CARLSON
Director, MCoE/USAG Safety

DEPARTMENT OF THE ARMY
HEADQUARTERS AND HEADQUARTERS COMPANY
316TH CAVALRY BRIGADE
BUILDING 5142 HARMONY CHURCH
FORT BENNING, GEORGIA 31905-4500

REPLY TO
ATTENTION OF

ATZK-SBH

20 January 2012

MEMORANDUM FOR CHIEF, RANGE OPERATIONS, Fort Benning, Georgia, 31905.

SUBJECT: Concept of Operations Digital Multi Purpose Range Complex (DMPRC) Tank Gunnery Table II, V and VI

1. PURPOSE: To establish a Concept of Operations to be used for Tank Live Fire on the DMPRC.

2. APPLICABILITY: This memorandum applies to all 316th Cavalry Units / activities using Tanks on the DMPRC. All Officers in Charge (OIC), Non-Commission Officers in Charge (NCOIC) and Range Safety Officers (RSO) will be familiar with the contents of this memorandum and all other applicable references.

3. REFERENCES:

a. Army Regulation 385-63, Range Safety

b. DA PAM 385-63, Range Safety

c. Army Regulation 350-1, Army Training and Leader Development

d. MCoE Regulation 350-19, Range and Terrain Regulation

e. FM 3-23.30, Grenades and Pyrotechnic Signals

f. TM 9-1300-206, Ammunition and Explosives Standards

g. FM 3-20.21 HBCT Gunnery Manual

4. SCHEDULING: Each unit / activity scheduling the DMPRC will prepare and submit the following documents to Range Operations, DPTMS:

a. DA Form 7566, Risk Management Worksheet and Daily Risk Assesment

b. FB Form 350-19-1-E-R, scenario, sketches, FB Form 144, and any specific enclosures as required.

c. Training guidelines: All training will be conducted IAW this memorandum, applicable references listed in paragraph 3, and FB 350-19-1-E-R. Units are responsible for developing and submitting a new range packet if requested training deviates from approved range packets.

d. Units will use the Range Facility Management and Scheduling System (RFMSS) when scheduling the DMPRC.

5. ADMINISTRATIVE: The training unit shall clear the range in accordance with local policies and procedures established with Range Control. Units will be required to clean all buildings occupied during the training event. This will require that the unit supply the following: brooms, mops, buckets, and appropriate cleaning supplies.

a. Using units are responsible for clearing all brass and ammunition from the range and all firing lanes. Brass and ammunition are to be policed during daylight hours only.

b. A red range flag will be provided to the using unit by Range Division personnel. The range flag will be displayed prior to live-fire training and must be returned to range support personnel prior to departing the range.

c. Using units are responsible for providing a fire detail. These personnel will be used in case of a fire downrange. All range fires will be suppressed and reported to Range Control IAW MCOE regulation 350-19.

d. Using unit will maintain continuous contact with Range Control at all times. If communications are lost the unit will go into a self induced check fire untill communications are restored.

e. Unit will use the standard 9 line MEDEVAC in case of illness or injury. Call 911 and determine what type of evacuation (air/ground) is the most appropriate for the injury. MEDEVAC will be IAW MCOE Regulation 350-19 and USAIC 40-2. Landing zone for MEDEVAC aircraft will be established prior to use and will be marked appropriatley. Using units higher Headquarters and Range Control will be notified in this event.

f. Weapons/Ammunition Malfunction Reports: When a malfunction is experienced, the OIC or RSO will suspend all firing and immediately notify Range Control. Retain the weapons and all components and ammunition involved in place. An investigation is required and will be conducted by DOL.

6. REQUIREMENTS: A specific operation 350-19-1-E-R / scenario package will be prepared by the units for the DMPRC and approved by Chief, Range Operations. All supporting documents, i.e. regulations, field manuals, TMs, etc. with an approved 350-19-1-E-R / scenario package will be onsite. All visiting personnel will also be directly controlled by the OIC / NCOIC. Prior to training, all personnel will be given range orientation / safety briefing, to include location of dud areas, medical procedures, loading and clearing weapons, misfire procedures, emergency cease fire signals, etc. Only weapons / ammo listed on the approved FB Form 350-19-1-E-R / scenario package will be allowed on the range. Prior to and after training, an ammo / weapons check will be made to ensure no individual or vehicle has any unauthorized ammo/ weapons. Prior to vacating the range, using unit will ensure the range is cleared of all refuse generated. (i.e. pallets, ammo boxes and food packaging) All units are responsible for damages to any structure, fixture or equipment that is part of the range and will repair the damages at their own expense. Any damage or malfunction must be reported, in writing to the Chief Range Operations. Approved hearing protection will be worn. Meals will only be eaten at the approved area and this area will be cleaned after use. A detailed briefing will be given by the OIC/RSO to all personnel prior to training at the DMPRC. This briefing will include the FB Form 350-19-1-E-R/ scenerio package, daily risk management worksheet and a detailed safety briefing.

7. MEDICAL: Medical personnel and equipment on site will be IAW unit SOP and risk management worksheet risk level for the training conducted. MEDEVAC will be IAW MCOE Regulation 350-19. (FLA) will be located IAW Commander/OIC guidance and not adjacent to the mess area. All incidents will be immediately reported to Brigade Headquarters and Range Control.

8. VEHICLE CONTROL: POV and wheeled military vehicle parking is located in the vicinity of DMPRC Operations building. (Located Vic GA 098 887)

9. AMMO POINTS: There will be an ammo point. No open flames will be allowed within 50 feet and two 10lb bicarbonate fire extinguishers will be available at all times at the ammunition point. Ammunition Non-Commissioned Officer will control issue of live ammunition and monitor at all times. All ammunition will be issued and turned in to the Ammunition NCO and logged. Ammo NCO will be Ammo Handler certified. Ammunition will be seperated at all times by DODIC.

10. OPENING OF RANGE: Tasks for opening the range and occupying the site.

a. The unit will have in it's posession the approved 350-19-1-E-R, overlays, approved RFMSS Request summary, this concept document, and Unit risk assesment worksheet before occupation of the DMPRC. The OIC will call range control and request permission to occupy the range complex for which the unit is scheduled. Appropriate overlays will be posted upon arrival, the OIC and RSO will receive a briefing from the range site supervisor and WTA support contractor.

b. The unit will draw appropriate communication security (COMSEC), and ensure that all Force XXI Battle Command Brigade and Below (FBCB2) equipped platforms are configured properly, the correct COMSEC has been loaded and the vehicle has achieved connectivity to the DMPRC Control Center.

c. The Unit Master Gunner or representative will verify that the scenario data at the range complex is correct. They will also provide a final battle roster and firing order.

d. Vehicles will move to the designated vehicle instrumentation area adjacent with range operations center on Hour Glass Road. The Instrumentation Specialists will install and test all instrumentation and other equipment that needs to be attached to the participating platforms/ personnel. To prevent injury or damage to equipment, at no time, are unit personnel to install, remove, adjust or otherwise tamper with the instrumentation or video devices on the vehicle. If a piece should fail to function, the instrumentation on the vehicle must be checked out by qualified range personnel. Once a piece of equipment is installed on a unit, it becomes virtually 'tied' to that unit for the duration of the run or until it is removed by range personnel.

e. The Crew Evaluators will receive orientation training on the Crew Evaluator Workstation (CEWS) and instrumented after action review (IAAR) systems. They will also have the opportunity to assign user-defined events to certain keys on the execution control (EXCON) or system control (SYSCON) workstation keypad. Any scenario action can be a user-defined event. This is also where the Unit IAAR templates can be refined for the training table.

f. Unit will proof the range before firing.

g. The Unit Master Gunner or ammunition NCOIC will coordinate with the DMPRC target personnel for the sub-hand receipting of all pyrotechnic battlefield effects simulators M30, M31 devices. The DMPRC target personnel will draw the pyrotechnics, go down range, load the battlefield effects simulator (BES) devices and upon returning from down range turn-in any residue or spare devices to the ammo NCOIC. This will occur twice daily at a minimum, prior to, and after both mandatory shutdown periods.

h. The unit leadership must assign personnel to perform special duties such as road guards and fire fighting details IAW this memo, approved 350-19-1-E-R guard listing and applicable Fort Benning regulations. OIC/RSO will maintain communitions with Roadguards.

11. CONDUCT OF EXERCISE: Tasks for conducting exercise follow:

a. The OIC:

(1) Controls exercise and ensures Vehicles will only fire at approved 350-19-1-E-R target listing.
(2) Maintains efficient throughput.
(3) Maintains required communications.
(4) Calls Cease Fire, notifies higher HQ and Range Operations of any incident.

b. The NCOIC:

(1) Supervises all details.
(2). Controls the movement of vehicles and personnel.

c. The weapons system-certified Safety Officer or Safety NCO:

(1). Ensures that the crew handles misfires IAW safety regulations.
(2) Observes for any safety violations.
(3) Ensures Weapons Systems Remain oriented down range at all times while negotiating the range.
(4) Clears each firing vehicle at end of each exercise in designated area ensuring that weapon. systems are oriented in a safe direction down range during clearing process.
(5) Ensures Vehicles will only fire at approved 350-19-1-E-R target listing.

d. The Master Gunner:

(1) Ensures the range adheres to the appropriate gunnery table.
(2) Ensures that crews boresight and zero correctly.
(3) Conducts onsite remedial training as needed.
(4) Supervises Vehicle Crew Evaluator.
(5) Helps safety personnel clear weapons when required.
(6) Helps maintenance personnel identify and correct malfunctions.
(7) Helps Commander determine and verify alibi conditions.
(8) Ensures Vehicles will only fire at approved 350-19-1-E-R target listing.

12. CLOSURE OF THE RANGE:

a. The OIC:

(1) Notifies range control that firing has terminated.
(2) Debriefs unit personnel.
(3) Ensures vehicle crews adhere to approved task matrix/ scenerio during firing event.
(4) Ensures clearing of the range and training areas follows local regulations and SOP.

b. The NCOIC:

(1) Supervises ammunition and target details.
(2) Ensures range facilities have been policed.

c. The Master Gunner:

(1) Updates DA Form 2408-4 for each vehicle.

d. The ammuntion NCOIC:

(1) Ensures that only authorized personnel remove munitions from range.
(2) Prepares residue certificates required by ammunition supply point.

13. BFV/ TANK VEHICLE FLAGS:
Vehicles will display appropriate flags to show the vehicle weapons and ammunition status. The following procedures apply:

a. Displays no flag: Vehicle has no ammunition on board.

b. Displays Green flag: Vehicle has ammunitition on board.

c. Displays Red flags: Ammunition on vehicle, preparing to negotiate course electrical and manual safeties engaged.

d. Displays Yellow and Green flags: Vehicle has experienced a malfunction conducting maintenance.

14. EXECUTION OF THE EXERCISE:

The tanks will be staged along Hourglass Road prior to executing the gunnery table. Tanks will remain green and clear with gun tubes elevated and oriented downrange. The firing vehicle will occupy BP 3A/3B of its assigned lane when instructed to do so by the DMPRC Control Center. Tanks will continue this process of moving in pairs and using adjacent BPs or Firing positions (only one firing at a time) throughout the engagement process in accordance with the attached shot sheet. The vehicles will only move when instructed to do so by the DMPRC Control Center. Tanks will remain in constant contact with the adjacent tank and the DMPRC Control Center throughout the range process and if communication is lost at anytime tanks will halt their move and go into a self induced check fire until communications can be reestablished. The crew will be instructed to verify that all personnel are in the proper uniform, that all guards are in place, and that crew evacuation and rollover drills have been conducted. They will then be given permission to depress weapons systems, identify left and right range limits, and to conduct a short test fire of small arms weapons systems. They will test fire 7.62mm and .50 caliber ammunition on approved targets from their lane. The crew will then execute the gunnery scenario. Crews will be instructed to identify left and right range limits prior to firing each engagement. Crews will execute offensive engagements from 10mph to 20mph. At the completion of every step, the crew will place all weapons systems on electrical and mechanical safe and maintain their orientation downrange. The crew will clear all weapons systems at the completion of the table, then return along the designated route and rendezvous with the RSO at the ammo pad. The RSO will clear the vehicle and report this to the DMPRC Control Center. The crew will then elevate all weapons systems and exit the range.

15. SAFETY:

a. During Gunnery operations all vehicles will maintain communications with the DMPRC Control Center at all times. If communications goes down all movements and engagements will cease fire freeze until communications is restored.

b. All commands come from the DMPRC Control Center.

c. All engagements will be cleared and authorized by the DMPRC Control Center personnel.

d. Vehicles will only fire at approved 350-19-1-E-R target listing.

e. If a malfunction occurs, all operations will cease fire freeze and the malfunction will be attempted to be fixed, if assistance is needed the Master Gunner will be notified via radio communications. The Master Gunner will notify OIC if required to go to vehicle location to assist.

f. Vehicles that are running the course will be given weapon control status from the DMPRC Control Center and maintain weapons systems oriented downrange until cleared by the RSO.

g. The emergency cease fire signal and E-911 medical evacuation procedures will be briefed during the range safety brief.

h. A Field Litter Ambulance with qualified medics will be present through the duration of the gunnery.

i. All vehicles be cleared onto and off execution line by RSO or Master Gunner.

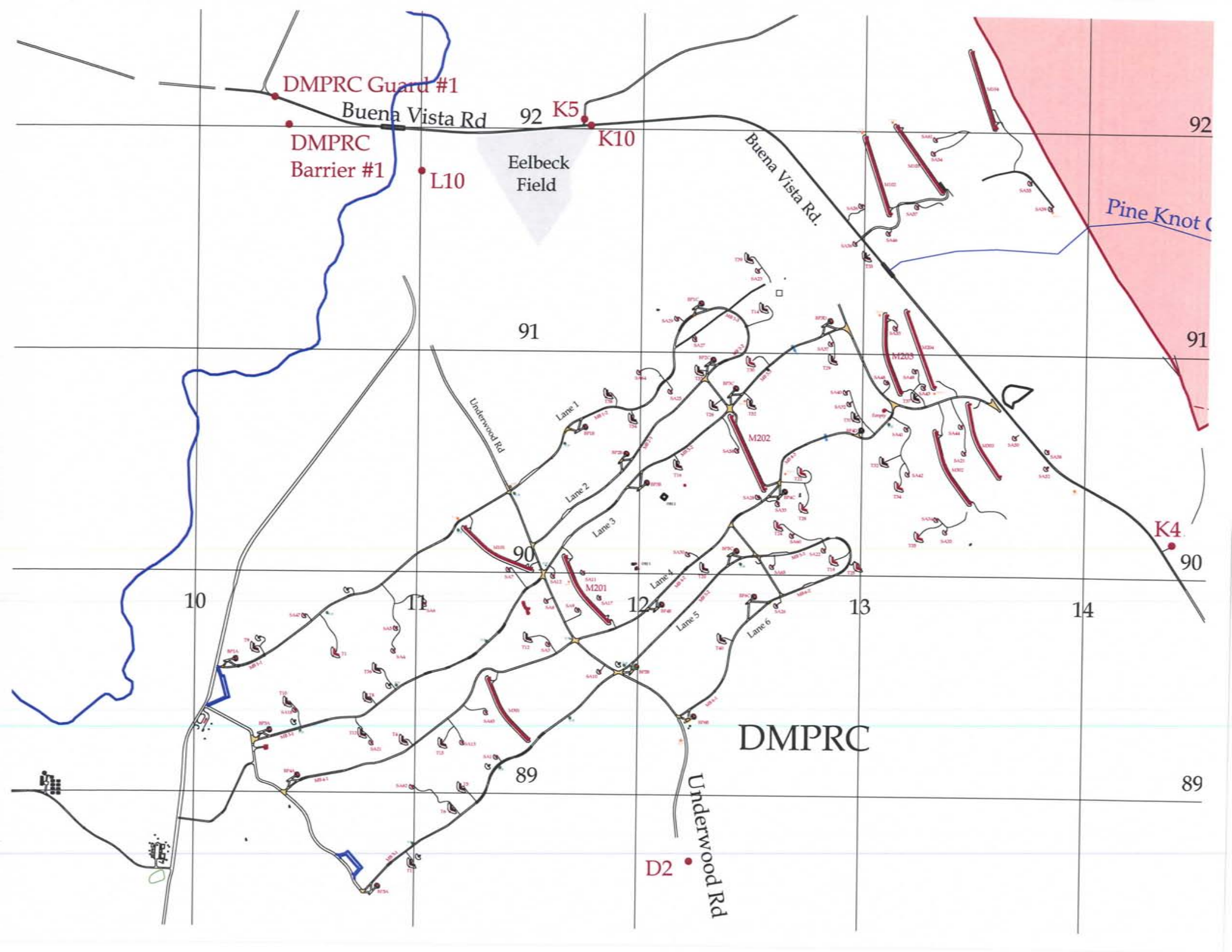
j. In the event of an accident, injury or incident the RSO will immediately notify Range Control and his/her higher headquarters and call a cease fire until the problem is resolved. The RSO will render reports to Range Control and take all action as directed by Range Control. The following information will be furnished by the OIC/RSO to Range Control:

1) Designation of unit
2) Range and Location
3) Type of weapon involved
4) Type of ammunition involved
5) Brief Summary of what happened

6) Personnel injuries and extent
7) Full Name, SS#, Rank and unit of injured personnel
8) Extent of property damage
9) Intentions regarding an AR 15-6 investigation

16. The point of contact for this action is SFC Hogan,Travis Master Gunner, 1st Squadron, 16th Cavalry. COMM (706)544-3865 or travis.r.hogan@us.army.mil

JON C. CECALUPO
MAJ, AR
BDE S3


DMPRC Guard #1
Buena Vista Rd
92
K5
K10
DMPRC
Barrier #1
L10
Eelbeck
Field
Buena Vista Rd.
Pine Knot
91
Underwood Rd
Lane 1
Lane 2
Lane 3
Lane 4
Lane 5
Lane 6
M202
M203
M201
90
K4
10
11
12
13
14
DMPRC
89
D2
Underwood Rd

DMPRC 316 CAV Tank Gunnery Table II, V, VI (Log #10-10-11) Target List Enclosure, 20 Jan 2012

Firing Positions	Weapons	Ammunition	Targets
BP 3A: 1034 8928	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	M101, SA4, SA5, SA7. T8, T13, T36.
BP 3B: 1203 9041	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	M104, SA36, SA46, SA55, SA61. SA49, SA53. T16, T26, T52.
BP 3C: 1243 9084 See Note Below	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	M102, M103, M104, SA36, SA46, SA54, SA56. M203, M204, SA37, SA 40, SA48, SA49. T29, T30, SA36, SA37.
BP 4A: 1047 8908	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	M201, SA12, SA13, SA63. T8, T13, T36.
BP 4B: 1211 8986	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	M103, M104, SA42, SA49, SA54, SA57. SA41, SA42. T20, T24.
BP 4C: 1266 9038	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	M103, M104, M204, SA43, SA44, SA55, SA57, SA61. M204, SA32, SA48, SA49. T37, SA32.
MB 3-1: Start 1035 8925 to Stop 1060 8933 See Note Below	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	M301, SA7. T36.
MB 3-2: Start 1202 9047 to Stop 1231 9066 See Note Below	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	M103, M104, M204, SA46, SA53, SA54, SA55, SA56, SA57, SA61. SA37, SA40. T26, T29, T30, T37, T52, T53, SA37.
MB 3-3: Start 1246 9082 to Stop 1268 9103 See Note Below	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	M103, M104, SA57. T29, T33, SA37, SA46, SA53.
MB 4-1: Start 1048 8905 to Stop 1067 8910	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	SA8, SA9. T4.
MB 4-2: Start 1209 8989 to Stop 1233 9012 See Note Below	M1 Tank M2 M240	120mm M831, M865 .50 cal Ball/Tracer 7.62mm Ball/Tracer	M202, M302, SA28, SA33, SA40, SA41, SA44. SA28, SA33, SA58. T22, T24, T28.
MB 4-3: Start 1263 9043 to Stop 1275 9059	M1 Tank M240	120mm M831, M865 7.62mm Ball/Tracer	M103, M104, SA57. T31, T32, T37, SA38, SA42, SA50.

NOTE: **1) BP 3C:** Only Left 312m of M203 can be Engaged. Only Left 327m of M204 Can be Engaged. **2) MB 3-1:** Only Left End of M301 Can be Engaged. **3) MB 3-2:** T26 Cannot be Engaged From The Last 20m of MB3-2; T53 Can Only be Engaged From The First 160m of MB3-2; Only Left 240m of M204 Can be Engaged. **4) MB 3-3:** T29 Can Only be Engaged From The First 1/2 of MB 3-3. **5) MB 4-2:** Only The Right 160m of M202 Can be Engaged. Only The Left 173m of M302 Can be Engaged.

DMPRC 316 CAV BDE Tank Gunnery (Log #10-10-11) Roadblock List, 01 Feb 2012

BLOCK	GRID	LOCATION	TYPE
K-2	163 883	Across Box Springs Rd 125m N. of its intersection with Buena Vista Rd.	Gate
K-5	117 920	Across Shamanski Rd 25m N. of its intersection with Buena Vista Rd.	Gate
K10	118 920	Across buena Vista Rd at K-5 road block.	Gate
K-16	190 003	Across Rinehart Rd 100m W. of its intersection with Box Springs Rd.	Gate
K-28	191 885	Across Whitson Rd 15m W. of its intersection with Cactus Rd.	Cable
K-30	193 916	Across cactus Rd 150m North on Pine Knot Creek. Permanently closed.	Gate
K-32	192 915	Across Shamanski Rd 35m W. of its intersection with Cactus Rd.	Gate
K-36	162 882	Across Buena Vista Rd 50m W. of its intersection with Box Springs Rd.	Gate
K-38	201 941	Across unnamed trail 35m W. of its intersection with the east boundary road. Permanently closed.	Cable
K-39	202 949	Across unnamed trail 15m W. of its intersection with the east boundary road. Permanently closed.	Cable
K-41	192 944	Across Kennesaw Trail 30m W. of its intersection with Box Springs Rd.	Cable
K-42	194 956	Across Box Springs Rd 1200m N. of its intersection with Cactus Rd.	Gate
L-10	110 918	North on Hourglass road from Buena Vista road 175 meters past tank trail.	Gate
D-1	098 878	On Hourglass road, 700 meters north of 1st Division Road.	Gate
D-2	122 887	On Underwood road approximately 900 meters north of Underwood and Plymouth road intersection.	Gate

DMPRC 316 CAV BDE Tank Gunnery (Log #10-10-11) Roadguard List, 01 Feb 2012

Guard #1	On Buena Vista Road at Moore Road 1029 9215 blocking traffic going East on Buena Vista Road and the East entrance to Cemetery Drop Zone (Tank Trail).	Guard #3	On Buena Vista Road at 1628 8822 (K36 Roadblock) blocking traffic going North-West on Buena Vista Road.
Guard #2	On Underwood Road at Plymouth Road, 1283 8785, blocking traffic going North-West on Underwood Road.	Guard #4	At the entrance to Cactus Range, 1896 8891, blocking two un-named trails going downrange located approximately 100m North and 100m South of this position.

DMPRC 316 CAV BDE Tank Gunnery (Log #10-10-11) Barrier List, 01 Feb 2012

Barrier #1	On Tank Trail (leading to Upatoi Creek ford site) aproxamately 45 meters East of Cemetary DZ at 1041 9201 blocking traffic going East.	Barrier #4	On Tank Trail at 1627 8817 blocking traffic going North -West on Tank Trail.
Barrier #2	On un-named trail at 1553 8738 blocking traffic going West.	Barrier #5	On unnamed trails at the entrence to Cactus Range 1890 8883.
Barrier #3	On un-named trail at 1608 8766 blocking traffic going West.	Barrier #6	On unnamed trails at the entrence to Cactus Range 1900 8903.

Note: Unit has the option of placing Guard #4 in position or placing Barriers #5 and #6.

COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM5-19; the proponent agency is TRADOC

1. MSN/TASK	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYMMDD)
TANK AND BRADLEY GUNNERY LFX	21 0800 JANUARY 2012	24 2359 JANUARY 2012	20120111

4. PREPARED BY:

a. LAST NAME	b. RANK	c. POSITION
Hogan, Travis R.	SFC	SQUADRON MASTER GUNNER

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Conduct of Live Fire Exercise	Direct Fire Fratricide During Execution of Mission	H	1. Soldiers/Crews observe appropriate weapons safety posture and weapons control status as dictated by the tower. 2. Leaders request change to weapons safety posture and weapons control status through Range NCOIC/ MG. 3. Crews complete GST/GTI prior to execution of live fire training. 4. Crews complete GTII prior to execution of live fire. 5. Crews able to identify range markers prior to day and night firing. 6. Safety briefing twice a day. 7. Range OIC/RSO enforces unit chain of command compliance with all range safety measures. 8. Medics on site.	M	Leader supervision of weapon clearing procedures, and safety briefings. FM 3-20.21(HBCT), TC 3-20.21-1, DA PAM 385-63, Concept of Operations, Applicable weapon TM	All Leaders, OIC, RSO	

Additional space for entries in Items 5 through 11 is provided on page 2.

13. OVERALLL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check One)

☐ LOW ■ MODERATE ☐ HIGH ☐ EXTREMELY HIGH

14. RISK DECISION AUTHORITY

a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE
DOUGHERTY, MARSHALL K.	COL	BRIGADE COMMANDER	

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Conduct of Live Fire Exercise	Fratricide due to accidental discharge while loading/ unloading weapons systems.	H	1. Crews complete GST/GTI prior to live fire. 2. Crewmembers observe appropriate weapons safety posture and weapons control status. 3. Executing unit changes weapons safety posture only when directed to do so by Range NCOIC/MG 4. Upon completion, Tank Commanders inspect and report that all weapons systems are green and clear. 5. RSO inspection of weapons systems prior to vehicles returning to cantonment area. 6. Safety briefing twice a day. 7. Medics on site.	M	Leader supervision of weapon clearing procedures, safety briefings, DA PAM 385-63, TC 3-20.21-1, FM 3-20.21 (HBCT), Applicable TM,	All Leaders, OIC, RSO	
	Inter-unit participation on the range	H	1. Units will conduct range safety brief prior to and on location of DMPRC. 2. Leadership will ensure that range safeties are in place and range personnel are accounted for	M	Leader supervision of crews	All Leaders, RSO, OIC	
	Fire inside crew compartment of tank	H	1. Crews complete prep to fire checks prior to firing. 2. Leaders complete PCIs prior tofiring. 3. Crews conduct PMCS daily. 4. Crews complete rehearsals of crew evac drills daily prior to firing. 5. Loaders follow proper loading procedures. 6. Crews wear Nomex suit with balaclava, gloves, and spall vest while firing.	M	Leader supervision of crew evacuation drills and briefings. Adherence to all proper loading procedures. TC 3-20.21, FM 3-20.21(HBCT), Unit TACSOP	All Leaders, RSO, OIC	

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Soldier struck by a vehicle.	H	1. Ground Guides utilized IAW Range SOP and utilize proper hand and arm signals. 2. No vehicle authorized to move in reverse without rear ground guide present 3. Ground guides posted five meters to the right front and right rear of tracked vehicles when moving in contonement areas. 4. All night ground guiding will be conducted with flashlights. 5. Chain of command enforces established speed limits. 6. Leaders maintain situational awareness of dismounted Soldiers operating around their vehicles and unit assembly areas. 7. Dismounted Soldiers carry flashlights or chemlites and maintain situational awareness of nearby and approaching vehicles, especially at night. 8. Bivouac areas are designated and marked w/ engineer tape and chemlights. 9. Medics on site.	M	Leader supervision and briefings. TC 21-305, FM 21-60, Unit TACSOP	Unit leaders, OIC, RSO	
	Cold Weather Injury	H	1. Prior cold weather injuries will be identified prior to the training event. 2. Temperature will be monitored and work/rest cycle will be enforced. 3. Soldiers will hydrate continuously. 4. Leaders will monitor range control net for weather advisories. 5. Soldiers exhibiting signs of Cold Weather injury will be treated IAW FM 4-25.11 and BDE Cold Weather Injury SOP. 6. Medics available on site.	M	Leaders monitor Soldiers' water and food consumption. Designated rest area located in the heated building provided to facilitate work/rest cycle. Cold weather casualties treated IAW MCOE and Brigade Cold Weather Injury Prevention SOP.	First Line Supervisors, Vehicle Commanders, Platoon Sergeants	

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Execution of live fire exercise	Injury or damage due to a weapons misfire or malfunction	H	1. Proper execution of crew drills. 2. Proper misfire procedures will be followed IAW -10 manuals for all weapons systems. 3. Operators and supervisors will inspect all ammunition for serviceability. 4. PMCS and pre-fire checks will be verified by TCs before firing. 5. Proper weapon control status observed at all times. 6. Leaders request change of weapon safety status from NCOIC/MG. 7. Medics on site.	M	Leader supervision of clearing procedures and briefings, FM 3-20.21(HBCT), TC 3-20.21-1, Range Concept of Operations, TACSOP	Unit Leaders, RSO, OIC	
	Detonation of stored ammunition	H	1. No smoking within 50 meters of stored ammunition or military vehicle. 2. RSO ensures proper ammunition storage procedures are observed.	M	Leader supervision and briefings. Leader inspections to ensure proper storage of ammunition. AR 71-9, AR 385-63	All Leaders, OIC, RSO, Ammunition NCO	
	Personnel forward of the firing line.	M	1. Leaders maintain accountability of all assigned personnel. 2. Leaders ensure Soldiers use the buddy system to watch out for each other.	L	Leader supervision and briefings. Assign and enforce buddy teams prior to live fire.	RSO, OIC, Vehicle Commanders, Platoon Sergeants	

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Execution of live fire exercise	Laser rangefinder operation	L	1.The M1A2 SEP is equipped with an eye safe laser. There is no nominal ocular hazard distance (NOHD) associated with this laser. Therefore it is not to be treated as a direct fire weapon. 2. OIC will verify that no reflective materials are in the area surrounding targetry.	L	Leader inspection and verification of range scenario. AR 385-63, TM 9-2350-288-10	OIC, RSO, Unit Master Gunner	
	Animal bites and stings	M	1. Soldiers will receive a thorough safety brief concerning contact with local wildlife. 2. Personnel allergic to stings identified prior to the operation; leaders will ensure that these individuals carry sting kits to prevent anaphylactic shock and mark their uniform with white engineer tape to ensure other Soldiers and leaders are aware of their condition.	L	Leader supervision and briefings. Medics and CLS on site. FM 4-25.11	OIC, RSO, Unit Leaders	
	Hearing Loss	M	1. Soldiers will wear the appropriate hearing protection while operating vehicles and while operating on the range.	L	Leader enforcement. Hearing protection available for visitors. Unit TACSOP	Vehicle Commanders, RSO, OIC	

Risk Assessment Matrix

SEVERITY			HAZARD PROBABILITY				
			FREQUENT	LIKELY	OCCASIONAL	SELDOM	UNLIKELY
			A	B	C	D	E
	CATASTROPHIC	I	EH	EH	H	H	M
	CRITICAL	II	EH	H	H	M	L
	MODERATE	III	H	M	M	L	L
	NEGLIGIBLE	IV	M	L	L	L	

RISK LEVELS

Extremely High - Loss of ability to accomplish the mission.

High - Significantly degrades mission capability.

Medium - Degrades mission capability.

Low - Little or no impact to mission capability.

Examples

I/A = Extremely High

II/B = High

III/C = Medium

IV/D = Low

EFFECT

1. CATASTROPHIC - Death or permanent total disability, system loss, major property damage.
2. CRITICAL - Permanent partial disability, temporary total disability, major system damage, major property damage.
3. MODERATE - Minor injury, lost workdays, compensable injury/illness, minor system damage, minor property damage.
4. NEGLIGIBLE - First aid or minor supportive medical treatment, minor system impairment.

PROBABILITY

A. FREQUENT - Occurs often - resources are continuously exposed.

B. LIKELY - Occurs frequently - resources are exposed frequently and/or several times.

C. OCCASIONAL - Occurs sometimes - resources are exposed sporadically.

D. SELDOM - Remote occurrence - resources are possibly exposed.

E. UNLIKELY - Rare occurrence of exposure.

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RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

EMD Number: 1123001 **Project#:** WAR4A8 **Project Title:** Hammer Focus

Description of proposed action:

Unit will conduct a Combined Arms Live Fire Exercise (CALFEX)with Bradleys, Tanks, HMMWVs, and dismounted troops maneuvering downrange, along established lanes, utilizing the weapons systems listed below. See attached document for concept of operations. (Renewal ~KP)

Project Location:

Digital Multipurpose Range Complex

Amount, Description, Location of Disturbance/Digging:

Tent Pegs

Number/Types of Vehicles:	Number of Personnel:	Type of Ammunition:	Number/Types of Trees:
29 Tank, 29 BFV, 8 M113, 6 LMTV, 20 HMMWV	150	5.56,7.62,.50 cal,120mm,120mm mortar, pyro, grenade Live and Blank	None

Size of Project Area: 11,000Square Meters **Duration of Action:**Start: 10/1/2011 Stop: 9/30/2012

Proponent: craig.black 544-3865 **Organization/Unit:** 3RD BDE, 3RD ID

****

DECISION: Concur with conditions

This Action is adequately covered in the Existing EA titled: 'Ongoing Mission and siting Activities, USAIC, FT.Benning, GA.'

(NA): Training involving LIVE FIRE and tracked vehicles has NO CATEX -- "Ongoing Mission and Siting Activities, USAIC, Ft. Benning, GA."

****

REC APPROVED THROUGH 30 SEPTEMBER, 2012

Hazardous Materials/Waste Conditions: **Dudley Carson (706 545 7570), 8/26/2011**

Considerations for Field Training Exercises and Range Operations
1. Appropriate precautions must be taken to prevent hazardous material spills. Have adequate quantities of spill response supplies on hand. If a spill occurs use notification procedures as outlined in the Fort Benning Hazardous Waste Management Plan. Contain and clean up spill according to guidance provided by the Environmental Protection Management Branch. Any waste generated must undergo a waste stream analysis to determine appropriate management requirements. If any hazardous waste is generated it must be managed in accordance with Federal, State, Army and Fort Benning regulations.
2. Ensure personnel know the correct procedure for handling misfires at the range:
-Closed containers (ammunition can marked 'MISFIRES") will be used for the collection of misfires at each firing range.
-The MISFIRE container will stay closed except to add or remove misfires.
-Misfires SHALL NOT BE COLLECTED in any open container or cardboard box.
All excess, unused munitions (including smoke canisters) must be returned to the Ammunition Supply Point (ASP) after the range operation is complete. Defective, misfired, or otherwise unserviceable munitions may be destroyed on the range, as part of the training exercise, in coordination with EOD.
A dud shall not be removed from the range; it will be marked, called into range control and will be properly disposed of by EOD personnel IAW/MCOE Reg 350-19, dated 23 July 2010.
3. Rubbish, empty containers and other waste shall be removed from the training area after the exercise. Contact EPMB for detailed information on the proper disposal of waste products resulting from the exercise.
4. Contact POC for questions or additional guidance.

EMD Number: 1123001 IJO# WAR4A8 Project Title: Hammer Focus

****

CWA - Training Conditions: **Jesse Taylor (706 545 0276), 9/2/2011**

Environmental Review: Caution within training areas and motor pools should be taken to protect all nearby waterways (including perennial, intermittent streams and wetlands); as well as ground surfaces and any other sensitive areas in the vicinity of the training areas. Potential spills/releases from this activity that may occur before and/or during the FTX include: 1. Discharge and/or improperly disposal of oil or hazardous substances into or upon land, water, or into ground water areas from storage, handling and/or transportation of hazardous materials/waste; 2. Vehicle/equipment/generators leaks; 3. Fuel loading/unloading/refueling operations; 4. Field mess facilities/equipment/operations, and/or 5. Ammunitions /explosives (as applicable, before and/or during the FTX).

General SPCC Requirements: Ensure all hazardous materials are properly storage to prevent spill/discharges, to meet safety requirements for storage, and that containers are not exposed to the weather. Have adequate spill response supplies available during exercise for any spills that may likely occur. Use drip pans under vehicles and provide secondary containment for any fueling activities and hazardous material/waste storage. Locate all refueling operations and storage of hazardous materials/waste away from waterways and sensitive areas. See attached section on prevention procedures and CHECKlist (Figure 6.9.1) to be used during training exercise to comply with SPCC plan requirements. Ensure all wastewater from field mess equipment/operations particularly those involving oil/grease are collected and dispose properly. Do not discharge any wastewater into storm drains or dispose of oil/grease waste directly into land.

General ISCP Requirements: In the event of a spill/discharge -- notify Range Control by radio or call 544-6291, and they will notify E-911 for Fire Department/HAZMAT Team assistance and/or notification of the EMD office (Spill Beeper 706-317-6584). As appropriate, and if personnel are trained – REACT to minimize spill damages. Submit a spill report to the EPMB Spill Program Manager (use Spill Response Report attached). All spills reaching navigable water must be reported immediately. The unit is responsible for the final cleanup of any spill during this exercise. Coordination with this office is required for clearance of the site.

SPECIAL NOTE: See 2010 ASP SOP Training and Deployment.doc for further training requirements.

Natural Resources - RCW Conditions: **Michael Barron (706 544 7080), 8/29/2011**

Note: although this 144R does not mention the use of live fire from helicopters, this has been done recently. No existing EIS or BO authorizes the use of live fire from helicopters and thus is not allowed at this time. Helicopters may be used, but may not be fired from.

Cultural Resources - Archeological Conditions: **Edward Howard (706-545-1898), 8/18/2011**

See attached JPEG maps for reference. The project area contains federally protected sensitive sites. These sites may be marked with Siebert stakes placed 20 - 30 meters apart which contain labels warning against ground disturbance. Training may be conducted in these sites so long as it does not disturb the ground (digging, off-road vehicle traffic, etc.) The project OIC is responsible to insure the sites are not disturbed, regardless of whether or not they are marked. They are identified in RED in the attached maps. Additionally, if endangered plants, historic artifacts or Native American artifacts (arrowheads, etc) are encountered here (as in anywhere on the Installation) their removal constitutes theft as well as possible violation of other federal laws. This could result in criminal prosecution. Contact CRM with any questions or concerns. Resubmittal is required if submitted project is modified in any way.

Noise Conditions: **Ellis Leeder (706 545 7576), 8/22/2011**

This is normal training operations that must be conducted. If there are any noise complaints received, the Environmental Management Division IONMP and or POA programs will investigate by determining if the noise was detected by noise detection monitors, and then recommending operational noise mitigation actions to the appropriate personnel for the training actions. In accordance with the Army's policy on environmental noise management, all efforts shall be made to minimize noise annoyances to the highest extent practicable with training operations without interfering with the proposed missions. Please follow the fly friendly program avoiding no fly zones. Please follow good smoke management practices not allowing smoke to travel off Installation boundary. If any assistance or a copy of MCoE Regulation 350-19 is needed please feel free to contact Ellis Leeder at 706.545.2400 or email ellis.leeder@us.army.mil

Signature _____

for John E Brown
NEPA Program Manager

Date 6 September 2011

Signature _____

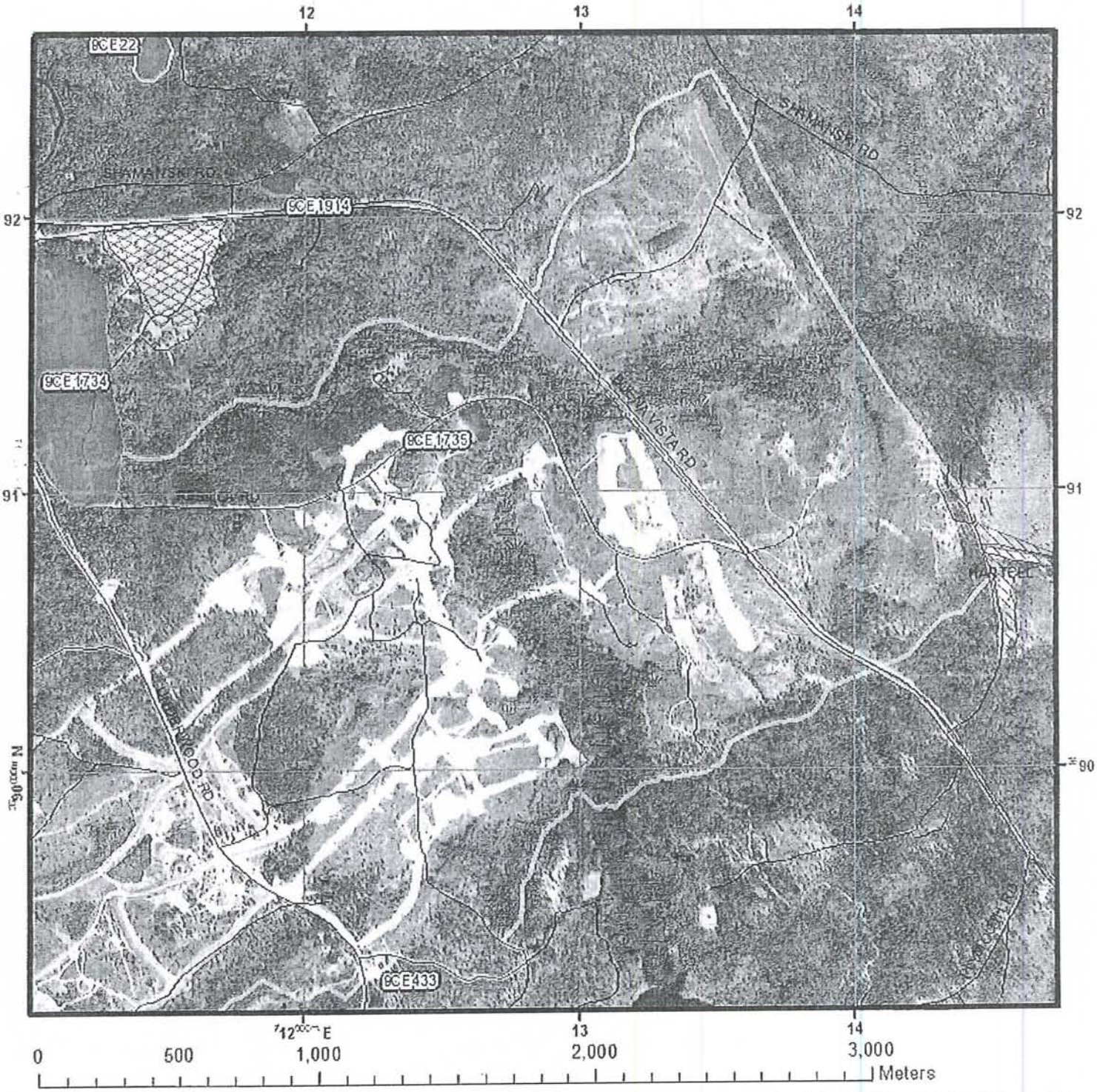
Christopher E. Hamilton, PhD
EPMB Chief

Date 7 Sep 11

DMPRC east

For Official Use Only, Not for Public Release
Ground Disturbing Activity In Protected Sites
Subject to Criminal and/or Civil Penalties

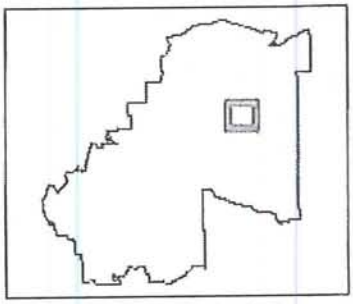
NAD 83
Grid in Meters



Historic_buildings
STATUS
- Historic
- Historic/FRL
- Not Evaluated
- Not Eligible
- Not Historic
- Demolished
- Moved to New NIM
- Prgm Cmt
- Prgm Cmt/FRL

Historic Districts
Name
- Lawson Army Airfield
- Main Post
- Parachute Jump Tower
- No Vehicles or ground disturbance

N

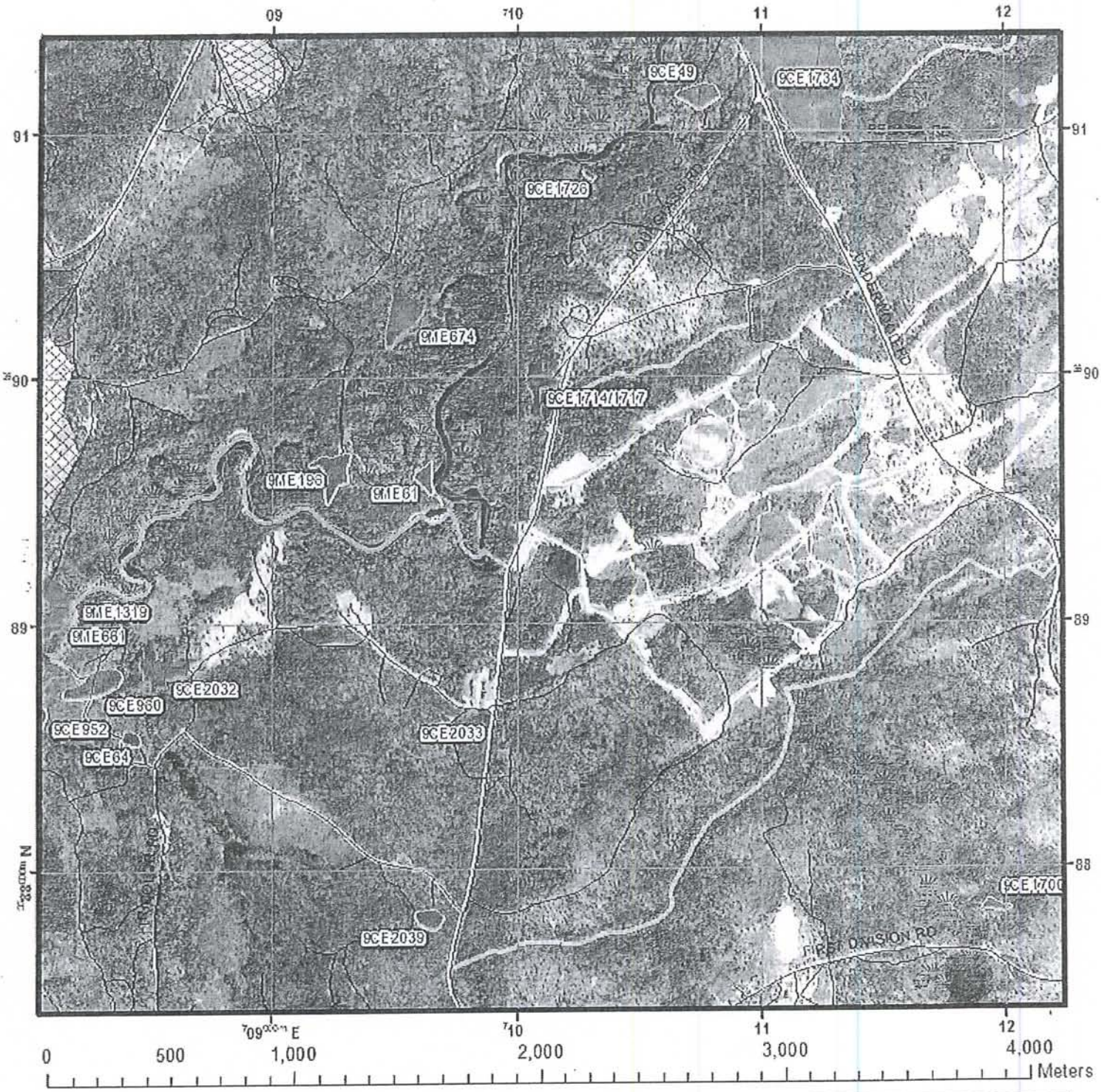


DPW-EPMB
Cultural Resources

DMPRC west

For Official Use Only, Not for Public Release
Ground Disturbing Activity In Protected Sites
Subject to Criminal and/or Civil Penalties

NAD 83
Grid in Meters



Historic_buildings
STATUS
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- Historic/FRL
- Not Evaluated
- Not Eligible
- Not Historic
- Demolished
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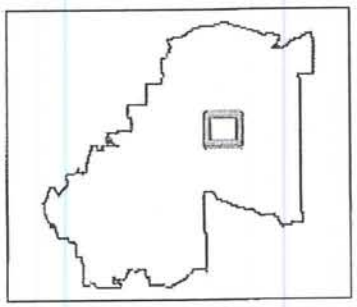
- Prgm Cmt/FRL

Historic Districts
Name
- Lawson Army Airfield
- Main Post
- Parachute Jump Tower

No Vehicles or ground disturbance

N



DPW-EPMB
Cultural Resources

Example Unit/Activity SOP for Training and Deployment

Introduction

This SOP is divided into two main sections: PREVENTION & RESPONSE. The following sections will assist you in planning your environmental activities while bedding down, initiating, sustaining and conducting field exercises, and/or during deployment. Before you deploy, ensure you are familiar with the following:

What Are Hazardous Materials and Hazardous Wastes

Hazardous Materials are defined as any material that may be a health or physical hazard, or any material that, based on either chemical or physical characteristics, is capable of posing a risk to human health or the environment if improperly disposed of, handled, stored, or transported. Chemical and physical characteristics that may pose a risk to human health or the environment include, but not limited to, one of the following characteristics: Ignitable; Corrosive; Reactive and/or Toxic.

Hazardous Waste: is defined as any discarded material (solid, liquid or gas) that:

1. Has no further value and cannot be reused or recycled;
2. Is harmful to human health or the environment due to its quantity, concentration, biological, chemical or physical characteristics; and/or
3. Exhibits one or more of the characteristics as described for Hazardous Material.

Contaminated or unusable fuel is a typical hazardous material/hazardous waste common to training and deployment operations and should be handled, stored, and disposed of properly.

Ten of the most common hazardous materials/hazardous wastes that you will encounter during training and or deployment operations include:

- Fuel
- Engine Oil
- Bleach or DS-2
- Solvent
- Anti-Freeze
- Transmission Fluid
- Used Oil Filters or Batteries
- Empty POL Containers
- Brake Fluid
- Grease.

These materials should be handled, stored and disposed of properly.
SPILL KITS: Spill kits should be maintained in and around all locations where hazardous materials/hazardous wastes are stored, handled, or disposed. Various types of kits may be ordered through the U.S. Army Supply System and include: rubber gloves, safety goggles, putty, rubber mallet, wooden plugs, absorbent booms, absorbent pads, plastic bags, and in some cases, a disposal barrel.

SPILL PREPARATION: Despite the best prevention, you may run into difficulties and an accident may occur when you least expect it. To minimize contamination, hazards to people, and environmental damage, you must REACT immediately. To help you prepare, this SOP will tell you:

- HOW to **PLAN** and be ready to respond to a problem;
- HOW to **REACT** to a minor, intermediate or major spill; and
- **WHAT** to do after a spill occurs.

Planning

MINOR SPILLS

- When on the move, keep some plastic bags in your vehicle, and have your assigned On-Vehicle Equipment (OVE) ready for use.
- Maintain supplies, rags, absorbent pads, or other kinds of materials that will soak up spills on hard surfaces (like Dry Sweep), or know where you can easily obtain them.
- Keep Personal Protective Equipment (PPE) accessible (gloves, goggles, etc.).

INTERMEDIATE & MAJOR SPILLS

In addition to the procedures above:

- Know where to go for help.
- Know where spill kits are kept and learn how to use them.

Prevention

Vehicle Maintenance and Fueling Points, Hazardous Waste Collection Points and hazardous material Storage & Supply Areas may not be set up at your deployment destination. So PLAN to build your areas to prevent hazardous material accidents before they occur. Remember the following:

HAZARDOUS MATERIAL/HAZARDOUS WASTE AREA LOCATION - Locate hazardous material/hazardous waste areas away from living areas, bunkers, ammunition storage, fence lines and/or dining facilities. Place them near the areas where hazardous material are used.

MATERIAL SAFETY DATA SHEET (MSDS) - Keep MSDSs for each hazardous material stored or collected at hazardous material/hazardous waste areas.

UNIT/ACTIVITY ENVIRONMENTAL SOP & SPILL RESPONSE PLAN - Place SOP and Spill Response Plan at each hazardous material/hazardous waste area.

COMPATIBILITY OF MATERIALS - Store and/or dispose of each class of hazardous material/hazardous waste separately. MSDSs describe the classification of HMs. Four common classification include the following: Flammable (fuels), Corrosives (acids), Reactive (explosives), and Toxic (insecticides).

BEFORE you deploy, plan to pack drip pans, rags, plastic, Dry Sweep, absorbent, and spill pallets to prevent drips, spills, and leaks from seeping into the ground and contaminating soil and water resources.

SECONDARY CONTAINMENT - All liquid hazardous material/hazardous waste must have secondary containment. In order for it to be effective it must:

1. Hold 10% of the total hazardous material/hazardous waste stored or 100% of the largest container.
2. Have sand and/or pallets placed in certain areas to protect the liner.
3. Have overhead cover.

You should continually keep your hazardous material/hazardous waste areas clean and orderly by applying the principals of Monitoring and Housekeeping. An easy way to remember what to check, is

to remember your CHECK list:

Containment:

___Ensure that secondary containment is used and in good condition.

___Empty water within secondary containment on a regular basis and dispose of it as hazardous waste at the Hazardous Waste Collection Point.

Hazardous Material/Hazardous Waste locations:

___Make sure the locations of your hazardous material/hazardous waste are well chosen.

___Put up warning signs and keep them clean and orderly.

Environmental Documentation:

___Maintain MSDSs for each hazardous material and update Unit/Activity SOPs and Spill Response Plans regularly.

Containers:

_____Check condition of containers and keep containers of incompatible materials in proper order.

Kits:

_____Place Spill Kits, First Aid Kits, and Emergency Response Kits in the vicinity of the hazardous material/hazardous waste areas.

See Appendix D of the ASP for specific CHECKlists for areas such as: Vehicle Fueling & Maintenance Areas; Hazardous Waste Collection Points; and Hazardous Material Supply & Storage Areas.

Response

Be prepared to respond immediately to any spill situation. Keep your Environmental SOP and Spill Response Plan (SRP) readily available at the main hazardous material/hazardous waste areas. The SRP should ensure that the following measures are implemented:

- PERSONAL PROTECTIVE EQUIPMENT (PPE) - At the entrance of every hazardous material/hazardous waste area, keep a supply of PPE to protect hands, eyes, skin, ears, head, feet, and lungs. If you are unsure about which items you need, consult the MSDS for the HMs that you are using.
- MSDS - Make sure that MSDSs are available in order to REACT to spills safely and effectively.
- SPILL STATIONS - Maintain spill response equipment at a station near (not inside of) hazardous material/hazardous waste areas. They should contain: First Aid Kits, Fire Extinguishers, Spill Response Kits, and Emergency PPE.
- TRAINING - Improve your readiness by practicing the SPILL DRILL on a regular basis, and be sure to know the spill reporting process.

Respond to spills, major or minor, immediately in order to eliminate hazards that could cause personal injury and/or environmental damage. If assistance is required, or spill/release is major, immediately call 911 or the Fort Benning Military Police (MP) Desk.

In any spill situation:

1. Safety First! -- Protect yourself by using PPE, including goggles, gloves, and suits. THEN...
2. Do the SPILL DRILL -- **REACT**:

REMOVE THE SOURCE: Plug the drip or leak and stop the spill.

ENVELOP THE SPILL: Place absorbent booms around the spill area, or build an earthen dam, when appropriate, around the spill.

ABSORB/ACCUMULATE: Place appropriate absorbent material (Dry Sweep, pads, etc.) on the spill in the middle of the boomed-off area.

CONTAINERIZE THE HAZARDOUS WASTE: Use a shovel to place contaminated materials (including soil, booms, pads or other materials) in a plastic bag or a waste drum.

TRANSMIT A REPORT: If a spill is too large to handle alone, - REACT as best you can and get help!

See Appendix D of the ASP for specific REACT actions for spills involving:

- **Minor Spills** (20 gallons or less);
- **Intermediate Spills** (from 21-55 gallons); and
- **Major Spills** (more than 55 gallons), or any spill into water, where injuries occurred or where spills occurred off Fort Benning associated property.

In addition:

- Prevent hazardous material from entering storm sewers and waterways;
- Minimize impacts to vegetation and wildlife; and
- Notify proper personnel and maintain record of spill event.

Acronyms are defined in the ASP Table of Content

APPENDIX H

Spill Kits and Response Material Checklists

Summary Spill Kit and Response Material Checklist

Recommended Spill Kits for Unit/Activity Motor Pools, Aircraft Hanger Areas, and all POL Field Sites

Recommended Spill Kits for Fuel Carrying Vehicles

Recommended Spill Kits for Other Military Vehicles

Vehicles Transporting Hazardous Materials other than POL

Summary Spill Kit and Response Material Checklist

Spill Kits and Response Material	Primary Contents
Spill kits should be maintained in and around all locations where hazardous material and hazardous waste are stored, handled, or disposed. The contents of a spill kit will vary depending on the hazardous materials and their characteristics. Hazardous materials other that POL will require spill kits to meet their specific requirements, (i.e., acid spill kit for Battery Shop that handles lead acid batteries).	Spill kits should include as a minimum: ✓ Rubber gloves, ✓ Safety goggles, ✓ Putty, rubber mallet, ✓ Wooden plugs, ✓ Absorbent booms, ✓ Absorbent pads, ✓ Plastic bags, and ✓ In some cases, a disposal barrel.
The Unit/Activity must check the material's MSDS for specific information on PPE and spill supplies.	Units/activities **transporting hazardous materials** should also plan for having a minimum amount of response materials on hand. ✓ Various types of kits can be ordered through the U.S Army Supply System (through the Units supply or S-4 shop); ✓ The Unit/Activity must assess their hazardous material inventory and plan to have enough spill response material to respond to the larger container within their facility and the minimum for any specific hazardous material that require specific spill materials or PPE; and ✓ Whenever the Unit gets to this minimum level, the user should initiate a reorder to the supply NCO or S-4 to maintain the minimum amount on-hand.

Acronyms are defined in the ASP Table of Contents

Recommended Spill Kits for Unit/Activity Motor Pools, Aircraft Hanger Areas, and all POL Field Sites

30-Gallon POL Boom Kit: Absorbs Approx. 40 Gallons
Polyurethane 2 Rolls
55-Gallon POL Kit: Absorbs Approx. 40 Gallons
1 55 Gallon Drum
2 Bags Absorbent
6 Booms 2x10
50 Absorbent Pads
10 Heavy Duty Trash Bags

Recommended Spill Kits for Fuel Carrying Vehicles

It's recommended that all fuel carrying vehicles should have a transportation pack spill kit or equivalent spill equipment on board at all times. The following vehicles are considered to be fuel transporting vehicles: HEMITT M971 2500 gallons, Tanker 5000 gallon, M49C 1200 gallon, Tank and Pump unit 600 gallon.

The following is a list of the minimum level of spill equipment recommended to be on hand in all fuel carrying vehicles, especially if they are traveling within the Installation or in a filed exercise.

Drip Pan
30-Gallon POL Kit: Absorbs Approx. 20 Gallons
1 30 Gallon Drum
1 16 pound bag Absorbent
3 Booms 2x10
25 Absorbent Pads ~17x19
5 Heavy Duty Trash Bags
1 Dust Pan

Recommended Spill Kits for Other Military Vehicles

Recommended on Vehicle Equipment (OVE) for small spills (usually from vehicle leaks):

1 drip pan
4-5 absorbent pads
1-2 plastic bags.

Additional Materials or Equipment

For each one of these recommended spill kits, the following should be available:
PPE such as: Goggles and Gloves. (2-3 pairs)
1 Shovel
2 Labels for wastes
1 Spill report
1 Inventory

Vehicles Transporting Hazardous Materials other than POL

- ✓ Transportation of hazardous materials is regulated under the Department of Transportation. Personnel transporting hazardous materials must follow all DOT requirements.
- ✓ As a preventive measurement, vehicles transporting small amounts of hazardous materials or waste should have a transportation pack spill kit or equivalent spill equipment on board to REACT in the event of an incident.

✓ Hazardous Materials other that POL will require spill kits to meet their specific requirements. The Unit/Activity should check the MSDS for the materials that they transport and have appropriate amount for those particular materials.

Spill Response Record

PHASE I-IMMEDIATE ACTIONS FOR EVALUATING AND REPORTING SPILLS:

IMMEDIATELY REPORT ALL SPILLS TO YOUR SUPERVISOR AND/OR CALL 911 or the Fort Benning Military Police (MP) Desk

***BE PREPARED TO PROVIDE THE FOLLOWING INFORMATION TO THE 911 OPERATOR:*

During Duty Hours also Call Mr. Felix Seda, EMD Spill Manager at (706) 545-9879

1. DATE/TIME OF SPILL: _____ / _____
2. LOCATION: _____
3. MATERIAL SPILLED (include NSN and ingredients, if able): _____
4. HAZARD: FLAMMABLE _____ TOXIC _____ CORROSIVE _____
   OXIDIZER _____ REACTIVE _____ UNKNOWN _____
   OTHER (Specify) _____
5. CAUSE OF SPILL: _____
6. DESCRIPTION OF SPILL QUANTITY, SIZE AND TYPE OF AREA AFFECTED:
   a. Quantity Released and Size of Spill Area: _____
   b. Soil: _____
   c. Pavement: _____
   d. Vegetation: _____
   e. Storm of Sewer Drain: _____
   f. Name of body of Water (River, Creek, Pond, Lake, Drainage Ditch): _____
7. HAS RELEASE BEEN STOPPED? _____
8. HAS RELEASE BEEN CONTAINED? _____
9. DID RELEASE CROSS INSTALLATION BOUNDARIES: (IF YES, DESCRIBE LOCATION): _____
10. TYPE AND EXTENT OF INJURIES, IF ANY: _____

***Provide a copy of this form to DPW EMD Spill Program Manager or FAX to (706) 545-4209*

PHASE II — POST-SPILL RESPONSE AND CLEAN UP ACTIONS:

11. DESCRIBE CLEAN-UP METHOD AND CONTAINMENT PROCEDURES: _____
12. NAME OF CONTRACTOR INVOLVED IN CLEAN-UP: _____
13. ESTIMATED AMOUNT OF SPILL RESIDUE AND CONTAMINATED MATERIAL REMOVED: _____
14. ESTIMATED COST OF CLEAN-UP: _____
15. CORRECTIVE ACTION TAKEN OR TO BE TAKEN TO PREVENT FUTURE SIMILAR INCIDENTS: _____
16. NAME AND PHONE NUMBER OF PERSONNEL REPORTING SPILL: _____

***KEEP THIS FORM FOR A MINIMUM OF 5 YEARS*

FORT BENNING ENVIRONMENTAL REGULATIONS SUMMARY

RED-COCKADED WOODPECKER (RCW): Cavity trees are identified by two white bands. Cluster boundaries extend 200 feet around each cavity tree, and are delineated by diamond-shaped signs. **WITHIN a cluster:**

- Personnel MAY NOT stay for more than 2 hours; NO BIVOUACS.
- The only digging allowed is BY HAND for hasty defense light infantry fighting positions. ALL other digging is prohibited.
- Within one half mile of a cluster, NO MECHANICAL DIGGING may be done within 20 feet of any mature pine tree (8 inch diameter or greater).
- Off-road vehicles MAY NOT come within 50' of any cavity tree.
- Use only .50cal and 7.62mm (or smaller) blank ammo; NO LIVE FIRE.
- CS gas, HC smoke, and noise generators MAY NOT be used.
- Incendiary devices (including trip flares) MAY NOT be used.
- Only hardwood may be cut for camouflage; CUT NO PINE.

GOPHER TORTOISE: Inhabits burrows in high sandy areas. Some burrows are marked by white 1" PVC pipe topped with reflective tape. Digging and vehicular traffic must be kept more than 50 feet away from burrows.

---------- CUT HERE ----------

ENVIRONMENTAL INCIDENT REPORT FORM

For your protection, company commanders are asked to document any environmental incidents by completing this card and forwarding it to the Chief, Environmental Management Division, Building 6, Room 307, or call 545-2180, within 24 hours of incident. Check off incident and take corrective actions.

____ bivouacking in RCW cluster (Relocate bivouac site.)
____ off-road driving / parking within 50' of RCW cavity tree (Relocate.)
____ digging in RCW cluster [except individual hasty fighting positions] (Refill holes.)
____ scarring or felling of trees in RCW cluster (Contact EMD Conservation Branch through Range Control.)
____ digging or driving in Sensitive Area (Relocate, DO NOT refill holes.)
____ wildfire started (Begin suppression and contact Range Control.)
____ POL spill greater than 20 gallons on land or any quantity on water (Immediately contact Range Control and begin spill control – REACT.)
____ POL spill less than 20 gallons on land (Begin spill control - REACT; contact Range Control and submit a Spill Report Form to EMD within 24 hours.)

FORT BENNING ENVIRONMENTAL REGULATIONS SUMMARY

SENSITIVE AREAS: Endangered species habitat or cultural resources. They are marked with steel pickets and white signs. Digging and vehicular traffic is prohibited.

POL/HAZMAT SPILLS: Report all spills through Range Control at 545-3474. If assistance is required from the Fire Department/HAZMAT Team, Range Control will make notifications through E-911. For POL spills greater than 20 gallons on land or any quantity on surface water, the Environmental Management Division (EMD) must be immediately notified through E-911 or 545-9879/4203. For POL spills less than 20 gallons on land, a Spill Report Form must be submitted within 24 hours to the EMD (Call 545-9879 and/or FAX 545-4209). After hours call the spill pager at 317-6584.

Unit should begin spill control measurements (REACT) within their capabilities. If a spill occurs within a sensitive area; stop the source, contain, and absorb the spill material - do not dig until EMD personnel arrive at the site.

Be prepared to report:
- Time, grid location, and cause of spill.
- Type of product and amount spilled.
- Distance from flowing water.
- Action taken to combat spill.

See USAIC 210-4, Range and Terrain Regulations, for more detail.

ENVIRONMENTAL INCIDENT REPORT FORM

Unit: _____

OIC/NCOIC: _____

Training Area: _____

Grid Coordinates: _____

Date and Name: _____

Signature: _____

FB (DPW) Form 31, 1 May 2004 PREVIOUS EDITION OBSOLETE

FIELD TRAINING EXERCISES AND DEPLOYMENT
GENERAL SPCC CHECKLIST
Figure 6.9.1

Units should continually keep HM/HW areas clean and orderly by applying the principals of Monitoring and Housekeeping. Vehicle Maintenance and Fueling Points, HW Collection Points and HM Storage & Supply Areas may not be set up at your filed training area and/or deployment destination.

BEFORE you deploy, plan to pack drip pans, rags, plastic, dry sweep, absorbent, and pallets to prevent drips, spills, and leaks from seeping into the ground and contaminating soil and water resources.

Plan to build your areas to prevent HM accidents before they occur. An easy way to remember what to check, is to remember your **CHECK** list:

Containment:

___ Ensure that secondary containment is used and in good condition.

___ Empty water within secondary containment on a regular basis. If water is contaminated, dispose of it IAW the Unit Hazardous Waste Management Plan.

HM/HW locations:

___ Make sure the locations of your HM/HW are well chosen. Stay away from waterways, drainage, sensitive areas, living areas, bunkers, ammunition storage, fence lines and/or dining facilities. Place them near the areas where hazardous materials are used.

___ Put up warning signs and keep them clean and orderly.

Environmental Documentation:

___ Maintain MSDSs for each hazardous material and update Unit/Activity SOPs and Spill Response Plans regularly.

Containers:

___ Check condition of containers and keep containers of incompatible materials in proper order.

Kits:

___ Place Spill Kits, First Aid Kits, and Emergency Response Kits in the vicinity of the HM/HW areas.

___ Spill Kits should also be available on vehicles transporting hazardous material/waste.

SPILL RESPONSE RECORD

PHASE I - IMMEDIATE ACTIONS FOR EVALUTING AND REPORTING SPILLS:

IMMEDIATELY REPORT ALL SPILLS TO YOUR SUPERVISOR AND CALL 911

***BE PREPARED TO PROVIDE THE FOLLOWING INFORMATION TO 911 OPERATOR:*

During Duty Hours also Call Mr. Felix Seda, EPMB Spill Manager at 545-9879

1. DATE/TIME OF SPILL: _____ /

2. LOCATION: _____

3. MATERIAL SPILLED (include NSN and ingredients, if able): _____

4. HAZARD: FLAMMABLE _____ TOXIC _____ CORROSIVE _____
OXIDIZER _____ REACTIVE _____ UNKNOWN _____
OTHER (specify) _____

5. CAUSE OF SPILL: _____

6. DESCRIPTION OF SPILL QUANTITY, SIZE AND TYPE OF AREA AFFECTED:
   a. Quantity Released and Size of Spill Area: _____
   b. Soil: _____
   c. Pavement: _____
   d. Vegetation: _____
   e. Storm or Sewer Drain: _____
   f. Name of Body of Water (River, Creek, Pond, Lake, Drainage Ditch): _____

7. HAS RELEASE BEEN STOPPED? _____

8. HAS RELEASE BEEN CONTAINED? _____

9. DID RELEASE CROSS INSTALLATION BOUNDARIES? (IF YES, DESCRIBE LOCATION) _____

10. TYPE AND EXTENT OF INJURIES, IF ANY: _____

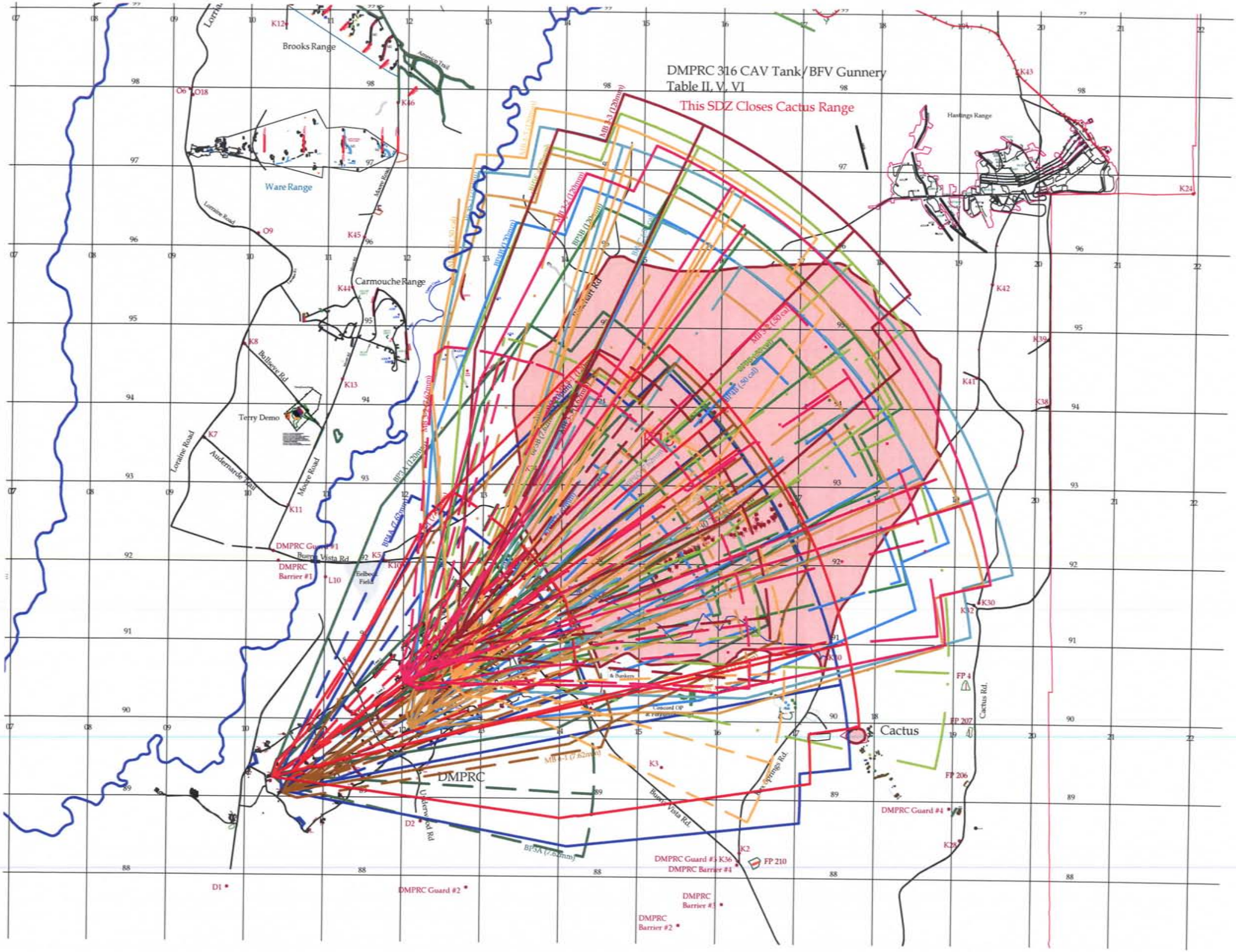
****Provide a copy of this form to DPW EPMB Spill Program Manager or FAX to 545-4209**

PHASE II - POST-SPILL RESPONSE AND CLEAN UP ACTIONS:

11. DESCRIBE CLEAN-UP METHOD AND CONTAINMENT PROCEDURES: _____

12. NAME OF CONTRACTOR INVOLVED IN CLEAN-UP: _____

13. ESTIMATED AMOUNT OF SPILL RESIDUE AND CONTAMINATED MATERIAL REMOVED: _____


DMPRC 316 CAV Tank / BFV Gunnery
Table II, V, VI
This SDZ Closes Cactus Range
Brooks Range
Ware Range
Carmouche Range
Hastings Range
Terry Demo
Lorraine Road
Audemarde Road
Moore Road
Bellicourt Rd
Buena Vista Rd
Underwood Rd
Cactus Rd.
Cactus
DMPRC
DMPRC Guard #1
DMPRC Barrier #1
DMPRC Guard #2
DMPRC Guard #3
DMPRC Barrier #4
DMPRC Guard #4
DMPRC Barrier #3
DMPRC Barrier #2
FP 4
FP 207
FP 206
FP 210
K12
K43
K46
K45
K44
K8
K13
K7
K11
K5
K10
L10
K3
K2
K36
D1
D2
K42
K39
K41
K38
K24
K30
K32
K29
O6
O18
O9