FINAL FINDING OF NO SIGNIFICANT IMPACT
FOR MODERNIZING AND OPERATING TRAINING RANGES
ON PREVIOUS OR EXISTING RANGE SITES
ON ARMY TRAINING AREAS

1.0 TITLE OF ACTION

Programmatic Environmental Assessment (PEA) for modernizing and operating training ranges on previous or existing range sites in Army training areas.

2.0 BACKGROUND

The primary mission of the Army is to fight and win our Nation's wars. Conducting offensive and defensive land operations has long been the Army's core capability. Effective live training, to include the firing of weapons and weapons systems, is the cornerstone of success on the battlefield. Through training, leaders, individual Soldiers, and units achieve the tactical and technical competence that builds confidence and agility. These characteristics allow Army forces to conduct successful operations across the spectrum of conflict. Army forces train using training doctrine that sustains their expeditionary and campaign capabilities. Focused training prepares leaders, Soldiers and units to deploy, fight, and win in full spectrum operations. Achieving this level of competence requires specific, dedicated training on offensive, defensive, stability and civil support tasks. The Army must train Soldiers and units daily in individual and collective tasks under challenging and realistic conditions.

The Army is continually modernizing its training ranges to meet wartime requirements and to provide facilities to reflect changes in training, doctrine, and weapon systems. These ranges are needed to train individual Soldiers and units to conduct operations in open terrain as well as in close quarters and urban conditions.

Technological advances have caused the Army to vastly expand the space units occupy on the battlefield. Since the Army's training doctrine is to "train as you will fight," this has expanded the requirement for training space on installations. The majority of Army installations have limited training land available to them on which to conduct maneuver training for tactical units. Therefore, considering the limited land resources available for maneuver training, the trend is to build new, modernized ranges on, or within, the footprint of an existing range that is outdated and can no longer support training on current techniques, doctrine, or weapon systems.

3.0 PURPOSE AND NEED

The purpose of the proposed action is to modernize and operate selected training ranges on Army installations in order to provide Soldiers and units the training capabilities they will need to be effective in the contemporary and future operating environments.

This PEA discusses a programmatic approach under the National Environmental Policy Act (NEPA) to conduct environmental analyses for modernizing and operating training ranges which will impact approximately 40 acres of land or less on previously disturbed sites. For the purpose of this PEA, previously disturbed ground is defined as ground which is currently, or has been used as a military training range.

4.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The proposed action is to modernize and operate selected Army training ranges on previously disturbed ground where the total disturbed ground would be approximately 40 acres or less.

The ranges selected for inclusion in this PEA are 18 small arms ranges which require approximately 40 acres or less of ground disturbance to build the range as well as 2 other selected non-live fire training ranges that require approximately 40 acres or less of ground disturbance. Table 1 provides a listing of the 20 ranges addressed in this PEA. Weapons fired on 16 of the 18 small arms ranges use ammunition equal to, or smaller than .50 caliber, to include 7.62mm and 5.56mm ammunition used in rifles, 9mm ammunition used in pistols, and 12-gauge ammunition used in shotguns. Also included within this PEA are the hand grenade familiarization range where high explosive hand grenades are employed, the hand grenade qualification course, the bayonet assault course, and the grenade launcher range (40mm). The hand grenade qualification course and the bayonet assault course do not use live ammunition. This PEA would be used as programmatic environmental analysis for the ranges identified in Table 1 on previously disturbed ground at Army, US Army Reserve, and Army National Guard installations and facilities, including joint (multi-service) installations on which there are current or formerly active Army ranges.

ALTERNATIVES CONSIDERED

This PEA considered six (6) alternatives. Two alternatives were carried forward for consideration in the PEA. One discarded option was to conduct the small arms training using simulators. Simulators are valuable training support systems, but do not have the required realism associated with Soldiers firing live ammunition, which they must do in combat. Simulators would reduce the realism of the training Soldiers and units require as prescribed in Army training guidance. Another discarded alternative was for units to use existing training ranges at another installation. The costs of transportation, loss of training time, and the additional logistics associated with movement of large numbers of individual Soldiers and their equipment make this alternative prohibitively costly and unsustainable. Another alternative discarded was to construct ranges impacting 40 or less acres on previously undisturbed ground. This alternative was discarded for being outside the scope and intended purpose of this PEA.

The two alternatives carried forward for consideration in this PEA were:

Alternative 1. Construct and operate modern ranges impacting approximately 40 acres or less on Army installations on previously disturbed ground. (Preferred Alternative)

The Army would construct any of the 20 types of ranges listed in Table 1 on a previously disturbed site that would require ground disturbance of approximately 40 acres or less. The proposed action also includes the demolition of structures on the previously disturbed sites (ranges). Site specific NEPA analysis for each range would be prepared utilizing the Record of Environmental Consideration (REC) checklist at Appendix A of the PEA or other additional NEPA analysis if the checklist is determined not to be applicable to the range proposal. Proposed construction of any range not listed in Table 1, or any range, including those listed in Table 1 proposed for construction on a site other than one previously disturbed would require its own environmental analysis under NEPA.

Alternative 2. The no action alternative

Under this alternative the Army would retain outdated ranges on Army installations, which would result in negative impacts on Soldier training and readiness. If the Army would decide to construct and operate a new range, the Army would conduct discrete environmental analyses under NEPA for each individual range construction project. This alternative would usually require the practice of preparing repetitive, time-consuming, and expensive, site-specific Environmental Assessments (EAs) for common range projects on previously disturbed sites that are, or were, being used for the same purpose. The potential environmental effects for modernizing and operating training ranges listed in Table 1 would be the same for conducting separate NEPA documents as under the Programmatic EA.

THE PREFERRED ALTERNATIVE

Alternative 1 is the preferred alternative. Under Alternative 1, the Army would continue to construct the following ranges, using the PEA and REC checklist to evaluate impacts of proposed range construction and operation where the use of these tools is appropriate.

Table 1. Army Training Ranges Less Than 40 Acres included in this Programmatic Environmental Assessment.

FCC	Range Type	FCC	Range Type
17803	Automated Field Fire Range (AFF)	17891	Infiltration Course
17805	Automated Record Fire Range (ARF)	17897	Infantry Platoon Battle Course (IPBC)
17812	Automated Sniper Field Fire Range	17895	Infantry Squad Battle Course (ISBC)
17816	Bayonet Assault Course (BAC)**	17810	Known Distance Course (KD)
17822	Combat Pistol Qualification Course (CPQC)	17880	Live Fire Exercise Breach Facility
17892	Fire and Movement Range	17879	Live Fire Exercise Shoot-house
17884	Grenade Launcher Range	17806	Modified Record Fire Range (MRF)
FCC	**Range Type**	**FCC**	**Range Type**
17883	Hand Grenade Familiarization Range	17801	Rifle/Machine gun Zero Range
17882	Hand Grenade Qualification Course**	17893	Squad Defense Range
17829	Heavy Sniper Range	17878	Urban Assault Course (UAC)

* FCC = Facility Category Code

** Does not use live ammunition

5.0 SUMMARY OF ENVIRONMENTAL IMPACTS

The analysis of the potential for environmental impacts is documented in the Programmatic Environmental Assessment for Modernizing and Operating Ranges on Previous or Existing Range Sites on Army Training Areas, which is hereby incorporated by reference. During the preparation of this PEA, 17 EAs that were prepared for the construction of training ranges on previously disturbed sites in training areas on Army installations across the U.S. were reviewed in detail. The EAs identified and analyzed the potential environmental effects of building 20 different types of Army training ranges. Collectively, these 17 EAs evaluated the potential effects of constructing and operating a military training range on 21 different environmental media areas.

Review and analysis of these 17 EAs determined there would be no potential significant effects on human health or the environment. The environmental media areas (Valued Environmental Components (VEC)) evaluated in the PEA are identified in Table 2.

Table 2. Valued Environmental Components Analyzed in the PEA

Environmental Component	Environmental Component
Air Quality	**Operating Noise**
Airspace	**Soils and Topography**
Cultural Resources	**Solid Waste**
Facilities and Infrastructure	**Threatened and Endangered Species**
Hazardous Materials/Waste	**Traffic and Transportation**
Land Use	**Water Resources**
Natural Resources	**Wetlands**

Based on the 17 NEPA documents reviewed in preparing this PEA, the VECs for energy and socioeconomics were eliminated from detailed analysis in this PEA, for the reasons detailed below.

Energy. There would be a minor short-term increase in energy consumption to construct the range. Most of this energy consumption would be petroleum used by the heavy construction equipment required to construct the range. There would be a minor increase in the use of energy to operate the targets on the range and to heat and cool the buildings occupied while the range is in operation. Overall this energy increase would be nominal compared with the total energy use on an Army installation.

Socioeconomics. Economic development and sociological environment are often affected by Army actions insofar as proposed actions may alter economic development (employment and income), population, housing, public health and safety, school enrollment, social services, recreational and community facilities, and visual and aesthetic resources within a region of influence. Construction, or major renovation, of a training range within a land area dedicated to live-fire of weapons and to Soldier training would have little or no effect on elements of socioeconomics listed above.

The following is a summary of the impacts for the 14 VECs analyzed in the PEA:

Air Quality: The proposed action would have less than significant, temporary effect on air quality. Construction of an Army training range may generate some dust resulting from earth-moving operations during construction. This effect would be localized to the construction site and immediate surroundings, would occur during daylight hours on weekdays during the construction period, and last for the duration of construction. Effects on air quality from operating an Army training range would largely result from vehicles travelling to and from the range, and would be *de minimus* (negligible).

Airspace: The proposed action would have a negligible effect on airspace. Installations normally have permanent Special Use Airspace (SUA) over the installation. Installations without SUA above their training ranges would need to coordinate with the Federal Aviation Administration to obtain SUA status during live fire training periods. These temporary periods of SUA could affect private or commercial flight paths in the area around the installation boundary.

Cultural Resources: The proposed action would have a non-significant impact on historic or cultural resources. This conclusion is supported by the analyses of EAs that were prepared for the construction and operation of training ranges at U.S. Army installations. The proposed action would construct new and modernized ranges on previously disturbed ground that was the site of a previously-used Army range. If there is potential for cultural resources to be on the range site footprint, a survey for cultural resources would be conducted.

Facilities and Infrastructure: The proposed action would have a negligible impact on facilities and infrastructure. The proposed action requires little in the form of facilities or infrastructure support from the installation. Almost all ranges used dry vault latrines, septic tank system, or contract for portable latrines. Drinking water is commonly provided by the the unit using the range. Ranges would have needed infrastructure to provide nominal electric power to operate targetry and provide lighting, and heating/air conditioning for up to three small buildings, and basic lighting requirements for two more. For safety purposes, hard wired or cellular telephone service is provided to each range.

Hazardous Materials/Waste: The proposed action would have a negligible impact on hazardous materials/waste. The presence of heavy construction equipment may increase the risk of a release of hazardous material, such as oil, hydraulic fluid, or diesel fuel. Contractors would be responsible for proper management, control, and disposal of any hazardous materials used and hazardous waste generated in accordance with state and Federal laws and regulations. This risk is small and the potential threat to human health and the environment is not significant. Metals in the ammunition used on these ranges, such as lead, antimony, copper, and zinc generally tend to adhere to soil grains and organic material and remain fixed in shallow soils. These metals, through soil erosion, can migrate off the range and into surface water (e.g., steams, creeks, rivers, ponds, lakes) and/or wetlands. The potential effects of metals from spent ammunition can be mitigated by implementing and sustaining best management practices (BMPs) to control the accumulation of spent ammunition, storm water runoff, and soil erosion. Mitigation of metals on ranges is discussed in detail in the subsequent mitigation portion of this document.

Land Use: The proposed action would not have a significant impact on land use. The ranges addressed in this PEA would be built on previously disturbed land that was a previous site of an Army training range that was either obsolete or no longer met the installation's training requirements. In effect, there is no change in the use of the land.

Natural Resources: The proposed action would have a less than significant impact on natural resources. Constructing an Army range on an existing range frequently requires earth moving and causes some removal of vegetation, and in some instances trees. Installations could anticipate minor direct and indirect short-term and long-term effects on wildlife from constructing and operating a training range on previously disturbed ground in the training area. Construction activity could damage vegetation that could result in some habitat loss, which could displace wildlife.

Operating Noise: The noise generated from the proposed action would not have a significant effect on the installation or local community. Noise from heavy equipment and construction vehicles would be localized, limited to daylight hours on weekdays, would be short-term, and its anticipated effects minimal. Noise generated from weapons firing would be limited to small arms firing in areas previously used for similar purposes. Ranges that generate noise from weapons firing have historically been located a significant distance from sensitive land uses such as family housing, health care facilities, or schools. Operating and conducting training on an Army range would likely have a minor effect on noise with a low risk of creating excessive noise in sensitive land use areas.

Soils and Topography: The proposed action would have a less than significant impact on soils or topography. Constructing an Army range involves earth moving to establish lines of sight and firing lanes. Earth moving operations like these frequently require a sediment and erosion control plan and implementing BMPs to prevent or control erosion, and maintaining those BMPs until a suitable vegetative cover has been established. Areas disturbed by construction could experience soil loss by water and wind erosion, unless such disturbance is mitigated by using soil erosion BMPs. Much of this disturbance would be on soils already disturbed from former range activities. Proposed construction would have only minimal effects on soils beyond construction sites.

Solid Waste: The proposed action would not have a significant impact on solid waste. Constructing an Army training range would generate some solid waste as would the demolition of existing structures on the old range site. The solid waste would be disposed of IAW the

installation solid waste management plan. Solid waste would consist of waste concrete, drywall, metals (conduit, wiring, and piping), lumber, packaging and cardboard. Operating ranges would generate solid waste from ammunition packaging, and metal cartridges and links. Using units are required to collect and recycle all ammunition cartridges and links generated during weapons firing. Using units are also required to collect, and properly dispose of all other solid waste they generate on a range. This waste is a minor contribution to the total volume of solid waste an installation generates and would not affect the installation's solid waste management program or put the installation at risk of violating solid waste regulations.

Threatened and Endangered Species: The proposed action would not have a significant impact on threatened or endangered (T&E) species. The Army is required by the Endangered Species Act (ESA) to conserve the federally-listed T&E species that occur on its lands, and to ensure that any action authorized, funded, or carried out by the Army does not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Since the ranges in this PEA would be constructed on previous range sites, the likelihood of finding T&E species or its habitat on the range is low. In cases where a T&E species or its habitat is found on a range, the Army would consult with the US Fish and Wildlife Service (USFWS). In this event the Army would either mitigate for the species or its habitat or opt to not construct the range on the site.

Traffic and Transportation: The proposed action would not have a significant impact on traffic or transportation. During the construction of a range, increases in local traffic would occur resulting from moving heavy equipment in during the initial phases of construction, their removal after completion, and daily commuting by the work force during the construction period. These effects would be temporary and vary from insignificant to minor.

Water Resources: The proposed action would not have a significant impact on water resources. The proposed action could affect the quality of water resources resulting from potential for erosion from the range site. The scope of the potential effect is largely dependent on the quality of the design and implementation of BMPs used to control erosion and the migration of metals from spent ammunition on the range. Where soil erosion is a potential risk to water quality, soil erosion control BMPs are required as mitigating actions to reduce or eliminate this risk. Long-term minor impacts could occur through increased stormwater runoff as a result of an increase of impermeable surfaces, such as buildings and paved areas. Daily range operations would not affect groundwater.

Wetlands: The proposed action could affect the quality of wetlands resulting from the potential for erosion from the range site or the destruction of wetlands during construction, but the effects would not be significant. The scope of the potential effect is largely dependent on the quality of the design and implementation of BMPs used to control erosion and the migration of metals from spent ammunition on the range. The Army's policies and programs on planning and designing ranges recognizes the Army's legal obligation to protect wetlands, and the need to plan and design ranges to avoid impacts on wetlands. Evidence from other range construction NEPA documents reaffirms that the steps the Army has taken to avoid, reduce, and mitigate as necessary the potential impact to wetlands have worked in the past. Construction of a range may require the Army to mitigate damage to wetlands from construction activities. Consequently, constructing an Army range would have minimal impact on wetlands. Operating an Army range would have little or no impact on wetlands.

6.0 MITIGATION

There is potential for negative effects caused by the migration of metals from the range and by soil erosion that could affect surface water and wetlands ecosystems. To minimize the potential effects of soil erosion from ranges, and the potential migration of metals from spent ammunition migrating off the range and into surface waters or wetlands, installations would incorporate elements of design and BMPs to reduce the potential effects of metals from spent ammunition migrating off the training range and into surface water or wetlands ecosystems. Elements of design include avoiding firing over or into surface water (e.g., creeks, streams, ponds, lakes) or wetlands. Installations would also implement and maintain BMPs that would eliminate or minimize soil erosion and migration of metals from spent ammunition from training ranges. Those elements of range design and BMPs are identified and discussed in detail in Army Small Arms Training Range Environmental Best Management Practices (BMPs) Manual (Fabian and Watts, 2005), and Prevention of Lead Migration and Erosion from Small Arms Ranges (U.S. Army Environmental Center, 1998). Incorporation of these design principles early in the planning and design of Army training ranges, and implementing and sustaining BMPs can effectively mitigate the potential effects of soil erosion from ranges and the potential of metals from spent ammunition migrating off the range area.

Construction of a range may require the Army to mitigate damage to wetlands from construction activities. The Army would coordinate with the Corps of Engineers District office for any mitigation requirements due to damage to wetlands during construction.

There is also potential for the construction of ranges to impact T&E species or their habitat. In this event, installations would consult with the USFWS for any conservation requirements due to range construction activities.

7.0 PUBLIC INVOLVEMENT

The public's participation is essential to a successful National Environmental Policy Act (NEPA) analysis. The Council on Environmental Quality (CEQ) and Army (32 CFR 651) regulations provide opportunities for the public to participate in the Environmental Assessment (EA) process. The Army is required to notify the public when the EA is available and ensure that the public has access to the findings of the environmental analysis. The EA and Draft Finding of No Significant Impact (FNSI) were made available for public review on 11 December, 2012. Notices announcing the availability of the documents were published in the USA Today and other online media sources. The public was given a 30-day public comment period to provide comments and input on the PEA analysis. The 30-day public comment period concluded on 11 January, 2012. The Army has considered comments received from the public as part of the PEA decision-making process.

8.0 CONCLUSION

After a careful review of the PEA, I have concluded that the implementation of the preferred alternative (Alternative 1) does not constitute a major federal action significantly affecting the quality of the natural or human environment. Furthermore, there are no indications that implementation of the preferred alternative would violate any federal, state or local environmental laws or regulations. This PEA can be used to conduct the environmental analysis under NEPA for the ranges listed in Table 1 when the proposed construction involves disturbance of approximately 40 acres or less on previously disturbed ground. Site specific NEPA analysis for each range would be prepared utilizing the Record of Environmental Consideration checklist at Appendix A of the PEA. This PEA may not be used to meet the requirements of NEPA for ranges other than those listed in Table 1 or for any range proposed

for a site that is not previously disturbed. I have selected for implementation Alternative 1, to construct and operate modern ranges impacting approximately 40 acres or less on Army installations on previously disturbed ground which was the Army's Preferred Alternative evaluated in the PEA.

1 Feb 2013
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