FINDING OF NO SIGNIFICANT IMPACT:
CONVERSION OF 5-5 AIR DEFENSE ARTILLERY BATTALION AT JOINT BASE LEWIS-MCCHORD

Pursuant to the Council on Environmental Quality (CEQ) Regulations (40 CFR [Code of Federal Regulations] Parts 1500-1508) for implementing the procedural provisions of the National Environmental Policy Act (NEPA; 42 United States Code [U.S.C.] 4321 et seq.) and the U.S. Department of Army (Army) Regulation found in 32 CFR Part 651 (Environmental Analysis of Army Actions), the Army has prepared an Environmental Assessment (EA) to review the potential environmental effects associated with the 5th Battalion, 5th Air Defense Artillery (5-5 ADA) proposal to convert from an Avenger Battalion to an Indirect Fire Protection Capability (IFPC)/Avenger Composite Battalion at Joint Base Lewis-McChord (JBLM), Washington.

Purpose and Need

During the wars in Iraq and Afghanistan, enemy forces frequently attacked U.S. and friendly forces using rockets, artillery and mortars (RAM). U.S. Commanders on the ground identified an urgent need for a weapons system to provide for Counter-RAM (C-RAM) or Indirect Fire Protection Capabilities (IFPC), as RAM attacks comprised a significant portion of all Soldier casualties, second only to Improvised Explosive Devices. The purpose of the proposed action is to provide the 5-5 ADA with the systems capabilities to provide C-RAM and IFPC, which existing Avengers are unable to provide. The proposed action is needed to meet mission requirements and to protect lives.

Proposed Action

Under the proposed action, the 5-5 ADA would convert from an Avenger-only Battalion to an IFPC/Avenger Composite Battalion. Under the proposed action, the 5-5 ADA would acquire the Land-based Phalanx Weapons System (LPWS), which is the key component of the C-RAM/IFPC Intercept (destroy or deflect) System. The LPWS is a platoon-based structure that uses already developed, tested, and fielded capabilities and integrates them to perform the specific function/mission defined. The LPWS protects friendly forces by detecting incoming fire, providing timely and focused warning of attacks, and, in selected locations, intercepts incoming rockets, artillery and mortars.

EQUIPMENT

Under the proposed action, the 5-5 ADA would turn-in all of the existing 36 Avengers in receipt of 12 Slew-to-Cue (STC) Avengers, 24 LPWS and M916AC 6x6 tractors, and all associated equipment. The LPWS system is mounted on a lowbed trailer 35 feet long, and with its prime mover, is 65 feet long (12' wide, 14' high) and weighs approximately 55,000 pounds without any ammunition (~ 70,000 pounds when fully loaded).

Figure 1. Army's Land Based Phalanx Weapons System (LWPS) and Trailer

STATIONING

There will be both permanent and temporary increases to the workforce at JBLM as a result of the proposed action. The conversion of the 5-5 would require a *permanent increase of 93 military personnel*, in addition to the existing 377 to meet requirements. The increase is necessary primarily due to the complexity of the LPWS, which requires more personnel to maintain than the Avenger. The Army will also send a small number of Army civilian employees and contract personnel to JBLM to assist the 5-5 ADA with the conversion process. A *temporary* (10-12 months) *increase of 13-15 fielding personnel* will occur during the time period that 5-5 ADA is being trained on the new weapon system. Further, *6-9 contract logistics support personnel* will be onsite providing depot-level maintenance support for three to five (3-5) years while the Army builds this capability internally.

The increase in Soldiers at JBLM was addressed in the Grow the Army EIS (2010). That analysis found that stationing additional soldiers at JBLM would have a significant environmental impact. The proposed increase in stationing associated with the conversion of the 5-5 ADA, would increase the number of soldiers stationed at JBLM beyond the level determined to have a significant environmental impact unless offset by a decrease of soldiers from other units. Such a reduction is expected to occur, as outlined in the Final Finding of No Significant Impact for Army 2020 Force Structure Realignment, April 2013, (http://aec.army.mil/usaec/nepa/Army2020FNSI.pdf).

To mitigate the cumulative impact of the proposed action, the 5-5 ADA's stationing increase would not occur until the total number of troops at JBLM had been drawn down below the number analyzed in the Grow the Army EIS, (or alternatively, until the Army prepares supplemental NEPA documentation addressing the environmental impact of increasing the number of soldiers at JBLM.

STORAGE & TRAINING AT JBLM

Local JBLM training will include moving out and emplacing the LPWS so it is fully operational, but will not include live fire training. Training will include: conducting site reconnaissance, setting up local security and site prep, convoying of LPWS, emplace guns, set up of the lightweight counter-mortar radar and Sentinel radars, set up the radio frequency network and tie in all the assets, establish network connectivity, conduct planning and continuous operations, simulate engagements, tear down and pack-up of vehicles, and return LPWS to the 5-5 ADA motor pool. Training will occur at JBLM North at the Delta Block Training Area and at the 5-5 Battalion Headquarters.

INTER-BASE TRANSPORTATION

The 5-5 ADA conversion will station Soldiers at JBLM, but will require Soldiers to travel to Yakima Training Center (YTC) to complete live fire qualifications. Soldiers will be required to convoy to YTC twice annually to complete live fire qualifications. The Battalion's personnel, the LPWS and Avenger weapons systems, and all equipment will travel between JBLM and YTC over interstate and state highways in military convoys. Convoys are kept as small as possible without hampering the unit's command and control, but will never exceed four LPWS in one group. Convoys will not travel on interstate highways during periods of daily peak travel, to include the "rush hours" of 6:00 – 9:00am and 3:00 – 6:00pm, Monday – Friday to minimize impacts to traffic.

LIVE FIRE AT YAKIMA TRAINING CENTER

The live-fire activities would occur at the Multipurpose Training Range (MPTR) at Yakima Training Center (YTC). Live-fire qualifications would require 4 LPWS to be emplaced, each separated by 300-400 meters. Qualification training/evaluation of each platoon would occur for a total of five days: 3 days (32 hr) Emplacement training and 2 day Battle Drill/Maintenance Rehearsals.

Construction of four permanent fighting positions (one each for four LPWS) would consist of ECO or HESCO barriers to protect the system from incoming rounds. ECO/HESCO barrier would be set up on a level site, approximately 8 feet tall, 85 feet long, and 70 feet wide. Gravel (85 ft x 64 ft x 4 ft deep) would be required for filling the barriers. The range areas would need to be maneuverable for tractors and LPWS (combined length of 65 feet) and free of any major dips or pot holes (trailer has 17 inches ground clearance). Excavation and roadway improvements would be required to level and harden areas to emplace the LPWS. One concrete bunker will also be set up on-site for storage of ammunition.

Each of the six IFPC platoons would occupy the range for approximately one week, two times a year (12 weeks total time for the entire 5-5 ADA). The overall footprint of this impact would include the LPWS, the Platoon CP, antennas, radars, and vehicles. Although four guns would be emplaced, only two guns would be queued to fire at any target. C-RAM sensors and weaponry will be set up in previously disturbed areas, or firing points, and directed into the Central Impact Area. All training with, or testing of the systems will be conducted on existing gun positions, roads, trails and/or disturbed areas.

Alternatives Considered

As prescribed by CEQ regulations, the Army evaluated the No Action Alternative in addition to the Proposed Action. Under the No Action Alternative, the 5-5 ADA would not convert into an Indirect Fire Protection Capability (IFPC)/Avenger Composite Battalion, and would maintain its Avenger Capabilities. The 5-5 ADA would still be issued the 36 Slew-to-Cue (STC) Avengers, in receipt of their existing Avengers. The STC feature is purely a technological improvement which allows the weapons system to more quickly detect, acquire, and engage its target. There will be no structural changes to the system or to the type of ammunition it fires. Therefore, we do not anticipate any change to the affected environment from the STC Avenger when compared to the Avenger model currently in possession of 5-5 ADA. For this reason, there is no additional discussion of the STC Avenger transition's impact on the environment in this EA.

Factors Considered in Determining No Significant Environmental Impacts

The EA, which is attached and incorporated by reference into this Finding of No Significant Impact (FNSI), examined the potential direct, indirect, and cumulative effects of the proposed action on areas of environmental concern, including: air quality, noise impacts, traffic and transportation, infrastructure and utilities, biological resources, and hazardous materials.

The EA found no significant impacts to air quality. Testing on toxic fumes levels measured for the LPWS found that no gas measured exceeded the OSHA, NIOSH or ACGIH standards. In addition, the risk of wildfire (and resulting air quality inputs) associated with live-fire training is not expected to increase under this alternative.

No significant impacts to noise are expected from live-fire activities. The two proposed sites (OP9 and MPTR) are located near the impact area in the existing Noise Zone III (>70 CDNL). Additional activity might cause a negligible change to the Noise Zones in close proximity to the firing points, but there would not be a significant impact to the noise environment either on or off post. Additionally, the sites

are located a minimum of 12,000 meters from the closest boundary (majority of the boundaries are at least 14,500 meters away), so Peak levels from training would not result in a complaint risk off post.

No significant impacts to traffic and transportation are expected from convoys of the LPWS between JBLM and YTC. Under the proposed action, no more than four (4) LPWS would be convoyed at a time to YTC for live-fire training. No ammunition will be transported and the LPWS will meet dimensional and weight limits for U.S. highway transport. Convoys would also avoid peak traffic periods, and would not travel on I-5 or I-405 during the periods of 6-9:00 AM and 3-6:00 PM, Monday thru Friday. Because of these mitigation measures and the minimal amount of travel (12 trips per year), impacts associated with traffic and transportation are considered to be less than significant.

No significant impacts to infrastructure and utilities are expected from the introduction of the LPWS to JBLM and YTC. Under the proposed action, the LPWS will be stored and maintained within the 5-5 ADA's existing motor pool. Minimal power, bay doors, and exhaust upgrades will be required to meet the needs of the LPWS. Minimal improvements to the YTC Rangeland roadways and firing points will also be required. The minimal motor pool and roadway improvements that are required for the LPWS will result in less than significant impacts to infrastructure and utilities.

Potential significant impacts to biological resources were avoided by selecting firing spot for the LPWS that was outside of sage grouse habitat. The Multi Purpose Training Range at Yakima Training Center was selected for live fire training. These are active firing ranges which have been previously disturbed and are reserved for the purpose of live fire training. Travel and training with the LPWS will remain on the roadways within the training area, so no ground disturbance will occur. Furthermore, the potential impacts to biological resources resulting from wildfire impacts from live-fire activities was discountable due to the self-destruct and safety features that are built into the ammunition.

No significant impacts are expected due to hazardous waste associated with the M940 Multipurpose Tracer Self Destruct ammunition and/or the diesel generators that provide power for the LPWS. The M940, 20mm is classified as a DoD Hazard Class 1.2E Explosives, UN 0321. Based on the munitions composition report for the M940 and the DoD Toxic Release Inventory Data Delivery System (TRI-DDS), there is no hazardous waste concerns or issues with fielding the LPWS at JBLM or YTC. Fuel support for generators and tanks will occur through a Petroleum Supply Specialist, who has specialized training in fueling operations to minimize risk of accidents. Containment supplies are nevertheless stored within the HEMMITT tanker in case an accident does occur. A 55 gallon drum is also stored on the LPWS trailer for proper disposal of ethylene glycol mixture that is a byproduct of the diesel generator. All hazardous waste materials will be disposed in accordance with applicable environmental regulations. Because of the safety measurements that have been put in place and the minimal risk for accidents, the M940 ammunition and fuel support for the LPWS will not result in significant impacts to hazardous wastes and hazardous materials.

Mitigation

As stated previously, JBLM is currently over the stationing cap that was established in the Grow the Army EIS and ROD (2010). The Army 2020 Force Structure Realignment EA and FNSI (2013) has set forth a plan to reduce its current population at JBLM by 8,000 Soldiers over the next several years.

The 5-5 ADA's proposed stationing increase will not occur until JBLM is below the stationing limit outlined in the Grow the Army EIS and ROD, or alternatively, until the Army has prepared additional NEPA documentation analyzing an increase in troops stationed at JBLM beyond their current levels. Potential significant impact from the additional troops and support personnel stationed at JBLM as part of the conversion will thus be mitigated below the level of significance.

Public Comment

The Environmental Assessment and draft Finding of No Significant Impact (FNSI) was released for 30-day public review and comment, beginning August 14, 2013. Advertisements for Notice of Availability ran for three-consecutive days in the Tacoma News Tribune and the Yakima Herald (August 14th, 15th and 16th). NOA postcards were also mailed out to the EA Distribution List at this time. Copies of all documents were also made available on the JBLM Public Works website at http://www.lewis-mcchord.army.mil/publicworks/sites/envir/eia.aspx. The public comment period ended on September 20, 2013. No comments were received for this action.

Conclusion

I have considered the results of the analysis referenced above and the Army mission requirements. In review of the resource areas potentially impacted by the proposed action of implementing the 5-5 ADA Conversion, it was found that the new mission and the arrival of the LPWS to JBLM would have no significant environmental impacts on the natural or human environment. Based on this documentation, which has incorporated or referenced the best information available, I have taken a hard look at known impacts and determined that the implementation of the proposed action will not significantly affect the environment and therefore, an Environmental Impact Statement is not warranted.

H. Charles Hodges, Jr.
Colonel, IN
Commanding

30 Sept 13
Date