

FINDING OF NO SIGNIFICANT IMPACT FOR FIELDING AND USING THE MINE RESISTANT AMBUSH PROTECTED VEHICLES AT ARMY INSTALLATIONS IN THE UNITED STATES

1.0 TITLE OF ACTION

Programmatic Environmental Assessment for using the Mine Resistant Ambush Protected vehicles at Army Installations in the United States.

2.0 BACKGROUND INFORMATION

Mine Resistant Ambush Protected (MRAP) vehicles were developed to counter the threats of the 21st century fluid battlefield. When the U.S. military entered Afghanistan (2001) and Iraq (2003) most of the U.S. Army and Marine Corps tactical vehicles were unarmored. Trucks and High Mobility Multipurpose Wheeled Vehicles (HMMWV) were soft-skinned because there had been no requirement for this type of protection in previous operations. Prior to 2001, there had been no significant threat to US Soldiers that required the production and use of MRAP vehicles and the resulting increase in logistic requirements that accompany their additional armor protection.

The Army identified a need to provide a vehicle with a significant increase in force protection that is more resistant to asymmetric threats and tactics of irregular warfare. The up-armored HMMWV (UAH) is not designed to provide the type of protection that US Soldiers need in today's current theater of operations specifically related to improvised explosive devices (IEDs) and other threats. In response, the Army developed the MRAP vehicle.

Category (CAT) I MRAP vehicles are fire team-size vehicles designed to hold six occupants, including the driver, vehicle commander, and gunner. CAT I MRAP vehicles provide units with a protected maneuver capability in urban areas and other restricted terrain. They primarily serve as armored personnel carriers for fire teams and weapons carriers for medium and heavy machine guns. Reconnaissance units use CAT I MRAP vehicles to conduct mounted reconnaissance while employing the Long Range Scout Surveillance System from the vehicle.

CAT II MRAP vehicles are a squad-size vehicle designed to hold ten occupants, including the driver, vehicle commander, and gunner. The CAT II MRAP vehicle is considered a multi-mission vehicle and provides units with protected transport between secure areas. Sapper and rifle squads use the CAT II MRAP vehicle for protected maneuver and movement when it is necessary to mass Soldiers rapidly for a mission such as a quick reaction force. The purpose-built armored ambulance used by medical evacuation squads (MEDEVAC) conducting ground MEDEVAC is a CAT II vehicle. (US Army 2008)

3.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

The proposed action is to train Soldiers with MRAP vehicles, and to use the vehicles on all roads (paved and unpaved), and on established training ranges

and maneuver areas on Army installations for Home Station Training (HST) purposes.

3.1 Alternative 1. Preferred Alternative. The MRAPs operate on all roads, all ranges and maneuver areas approved for vehicle use at the installation.

These vehicles would be used on all roads (paved and unpaved), all weapons ranges for appropriate MRAP weapons systems, and all established tactical maneuver and training areas including off road.

3.2 Alternative 2. The MRAPs operate only on the installations paved roadways.

The MRAP vehicles would operate only on paved roadways. Operations on both unpaved roads and off-road would be prohibited.

3.3 Alternative 3. The MRAPs operate only on the installations roadways.

The MRAP vehicles would operate only on the installation's established paved and unpaved roadways. Off-road operations would be prohibited.

3.4 No Action Alternative. Continued use of the up-armored HMMWVs.

Under the No Action Alternative MRAP vehicles would not be used at Installations in the United States. This would lead to degradation of the training and readiness of units in the U.S. Army. The vehicle has been developed in order to fulfill an identified gap in the force protection of War-fighters engaging the enemy. Without MRAP vehicles, there would be a gap in Soldier training requirements. This alternative provides a baseline for comparison of the environmental impacts of the alternatives listed.

4.0 SUMMARY OF ENVIRONMENTAL EFFECTS

Analysis of potential environmental effects typically addresses numerous resource and legal requirements that may be affected by implementation of proposed actions. In the case of using the MRAP vehicles certain environmental resource areas that typically receive attention have been initially examined and determined not to warrant further analysis. These areas are infrastructure, hazardous waste site contamination and cleanup, groundwater, socioeconomics, to include environmental justice and protection of children, traffic and transportation, and airspace management.

Given the wide spatial distribution of mobile emission sources, using the MRAP vehicles should have a minor to moderate effect on air quality. The level of effect largely depends on the current status of regional air quality near an installation receiving MRAP vehicles. There is no indication there would be any significant change in the numbers of "process" emissions from maintenance shops and other sources resulting from the proposed change. Best Management Practices

(BMPs) for dust suppression should mitigate any potential problems caused by fugitive dust.

Operation of MRAP vehicles on paved or unpaved roadways is not likely to have an effect on historical or cultural resources. The MRAP is expected to operate within established boundaries of existing training and maneuver areas. These areas have been used by other and heavier tactical vehicles. Normal operations of the MRAP within the boundaries of established training and maneuver areas should have no effect on historic and cultural resources.

Normal operations of the MRAP will have minor effect on noise. Using the MRAP is not expected to significantly increase ambient noise levels. Operation near or adjoining zone I areas (such as housing, schools, and medical facilities) should be avoided. The MRAP employs the same weapons as similar tactical vehicles. It is expected to fire from the same ranges. The noise will be no greater than currently experienced with vehicles such as the HMMWV. Noise emissions from driving are smaller than those of equipment transports and are similar to other vehicles such as dump trucks that have similar engines and gross vehicle weights.

Using the MRAP vehicles may have a minor localized negative effect on soil and vegetation resulting from off-road operations. Increased soil compaction, and associated damage to vegetation could contribute to increased levels of soil erosion. The level of impact will depend on the MRAP being used however it can be assumed that CAT II MRAP vehicles will have a greater impact as they are generally larger and heavier than CAT I MRAP vehicles. Potential MRAP impacts on soil resources are attributable to the maneuver of MRAP vehicles on and off road during testing, training, and fielding activities. Minor impacts to biological resources (disturbances to vegetation/habitat and wildlife) could also occur. These effects can be mitigated through strict adherence to local installation regulations and BMPs. Soil erosion and compaction due to MRAP vehicle operation over unimproved surfaces will be addressed by site-specific NEPA documentation. Installation personnel have the responsibility of conducting an evaluation and preparing that NEPA documentation.

Implementation of the installation INRMP, SRP and ITAM program, and consultation, when necessary, with the USFWS or NMFS will ensure that the proposed action avoids or has minimal impact on listed species and their habitat within the action area. Using existing roads and operating within established limits on existing training ranges and maneuver areas will minimize any potential adverse effects of the action on the listed species and their habitat.

Using the MRAP would have minor to moderate effect on surface water quality. Using the MRAP would not have any effect on groundwater quality. Because of their additional size and weight, the MRAP Vehicles have a greater potential for degrading stream channels and banks during fording operations, than lighter

tactical vehicles such as the HMMWV. The MRAP vehicles will likely have minimal impact on surface water quality since the majority of its operations will be on established roadways. The SRP program, mandated by Army regulations (U.S. Army, 2005) is designed to identify and restore natural resources and lands damaged by training operations. The MRAP vehicles will likely have little, if any, effect on surface water quality if it uses hardened stream crossings.

There are no anticipated effects on facilities relating to weapons firing ranges or on maneuver training areas from using MRAP vehicles at Army installations in the United States. There may be some limited effects on facilities within the cantonment area regarding the size of existing motor pools and size of existing maintenance facilities. The footprint of MRAP vehicles may be larger than existing vehicles. This, along with a greater turning radius may require a unit to make a minor expansion of the motor pool.

An MRAP equipped unit might generate more waste oil per year than a unit equipped only with current vehicles such as the HMMWV. The presence of MRAP vehicles will require the unit to store and manage additional hazardous material, such as POL products and waste oil. POL required for the MRAP are either the same type required by the HMMWV (e.g., engine oil, transmission fluid), or are standard materials used in other military vehicles (e.g., hydraulic fluid). However, the MRAP may require increased volume of many of the same products due to its increased size. The potential effect on human health or the environment of additional volumes of POL products and waste oil is minor.

Using MRAP vehicles will have minimal effect on facility energy requirements if it is determined additional maintenance facility is required, and only if existing maintenance facilities (which accommodate other tactical vehicles) are too small for MRAP vehicles. If an additional structure or modification of existing structures is needed, there will be some minor to moderate increase in energy to provide heat lighting to the facility. There will be no effect on facility energy if additional maintenance facilities are not required. The additional fuel required for MRAP vehicles may require either construction of additional fuel storage assets in the cantonment area or more frequent deliveries of fuel. Despite the additional fuel consumption, with its relatively long range (300 mile minimum) the MRAP vehicles will require less frequent re-fueling than other similar vehicles.

5.0 PUBLIC INVOLVEMENT

The public's participation is essential to a successful NEPA analysis. The Council on Environmental Quality (CEQ) and 32 CFR 651 regulations provide opportunities for the public to participate in the EA process. In accordance with these public notification requirements, the Army announced the availability of the draft EA in public web and print media on August 5, 2009 and has made the draft EA and draft Finding of No Significant Impact (FNSI) available for review at <http://aec.army.mil/usaec/nepa/topics00.html> for a 30 day review period prior to signing of this FNSI.

6.0 CONCLUSION

Based on a review of guidelines set forth in this Programmatic Environmental Assessment (PEA) it has been determined that no significant environmental impacts are likely to result at installations being fielded with MRAP vehicles in accordance with the uses proposed as part of the Army's preferred alternative, Alternative 1. No significant impacts are anticipated providing the site-specific conditions and criteria are met and that specified mitigation measures are implemented as determined to be required at the fielding installations. If these specified mitigations cannot be implemented to reduce potentially significant impacts, or, if site-specific conditions are not consistent with this PEA, additional supplemental NEPA analysis and documentation will be conducted.

Based on my review of the PEA and public comments received as part of this process, I have selected Alternative 1 as the Army's preferred alternative for implementation and use of MRAP vehicles. Installations receiving MRAP vehicles will conduct follow-on site specific NEPA analysis at the appropriate level.



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