

4.16.5 Alternative IV: Southwest/East Gate/UTM 90

The impacts to and mitigation for airspace under Alternative IV are the same as in Alternative I.

4.16.6 Alternative V: East Gate/UTM 90

4.16.6.1 Potential Impacts to Participating Military Operations

The impacts to and mitigation for airspace under Alternative V are the same as in Alternative I.

4.16.7 Alternative VI: No Action

4.16.7.1 Potential Impacts

Under the No Action Alternative, there are no new adverse impacts to airspace.

4.16.8 Cumulative Impacts

Cumulatively there are no impacts anticipated due to proposed airspace modifications.

4.17 Hazardous Materials and Solid Waste

Impacts from solid waste and hazardous substances could be considered significant if any of the following occurred:

- ❖ Solid waste placement that will create a nuisance, increase erosion and/or sedimentation potential, increase potential for land settlement and/or landslide, create an eyesore and/or noxious odors, or attract vermin or undesirable wildlife;
- ❖ An increase in the generation of hazardous substances that will require disposal to regional landfill and/or treatment facilities;
- ❖ Activity that will spread or exacerbate an existing hazardous substances site by directly spreading the substances or causing the substances to be spread by the alteration of land forms, drainage, or other means;
- ❖ The generation of hazardous substances and/or materials that will expose the general public to health risks through direct exposure, groundwater contamination, and/or airborne contaminants; and/or
- ❖ The generation of hazardous substances and/or materials that will expose wildlife or vegetation outside of the project area in a manner that is detrimental to longevity or propagation.

4.17.1 Alternative I: East/West

4.17.1.1 Impacts

Hazardous and toxic materials potentially used in the proposed expansion area under this alternative would include:

- ❖ Fuels (JP-8 and gasoline)
- ❖ Antifreeze
- ❖ Motor oil and lubricants
- ❖ Cleaners, which may include solvents and corrosives in addition to soaps and detergents
- ❖ Vehicle batteries
- ❖ Explosives waste, including blank rounds and pyrotechnics

The maintenance facilities of the OPFOR vehicles and rotary aircraft will remain in their current location at Fort Irwin, with the ability to set up to store, handle, and dispose of these types of hazardous materials.

The hazardous substances/waste impacts associated with conducting military exercises within the land expansion area under this alternative will include contaminated soils, unexploded ordnance (UXO), rags, and residual liquids containing:

- ❖ Oil
- ❖ Grease
- ❖ Lubricants
- ❖ Hydraulic fluids
- ❖ Battery electrolytes
- ❖ Fuels from vehicle refueling
- ❖ Explosives

Hazardous waste generation, storage, disposal, and transportation will be managed under the HSMS system and the Hazardous Materials/Waste Management Plan. There is a potential for spills as a result of equipment breakage and field repairs. Fort Irwin has in place a Spill Prevention Control and Countermeasures Plan that provides guidance for spill prevention and control. Methods employed to clean-up possible spills include sending contaminated soils to a POL bioremediation land farm, treating soil and using it as a cover material for the landfill, and mixing the soils in a cold-mix asphalt which is then used in the construction of roads. If groundwater is threatened due to a hazardous substance spill the Regional Water Quality Control Board is contacted immediately.

The number of personnel will not increase with the proposed expansion therefore; there will be no increase in the amount of solid non-hazardous waste and/or sewage sludge generated. Operations involving the generation of solid waste would be removed from the field and disposed at the Fort Irwin Class III landfill. Staging areas currently use portable latrines that are pumped out into Fort Irwin's sewage treatment facility. This will also be a practice in the proposed expansion area.

The environmental impacts from the management of hazardous materials, hazardous waste, and solid waste by the Army under this alternative are considered to be less than significant.

4.17.1.2 Mitigation

Utilizing the current hazardous materials and solid waste management practices/procedures and implementing them in the expansion area, mitigation measures will not be necessary. UXO will be surfaced cleared within the alternative on a regular basis.

4.17.2 Alternative II: East Gate/South

4.17.2.1 Impacts

The environmental impacts under this alternative would be the same as Alternative I.

4.17.2.2 Mitigation

Utilizing the current hazardous materials and solid waste management practices/procedures and implementing them in the expansion area, mitigation measures will not be necessary. UXO will be surfaced cleared within the alternative on a regular basis.

4.17.3 Alternative III: East Gate

4.17.3.1 Impacts

The environmental impacts under this alternative would be the same as Alternative I.

4.17.3.2 Mitigation

Utilizing the current hazardous materials and solid waste management practices/procedures and implementing them in the expansion area, mitigation measures will not be necessary. UXO will be surfaced cleared within the alternative on a regular basis.

4.17.4 Alternative IV: Southwest/East Gate/UTM 90

4.17.4.1 Impacts

The environmental impacts under this alternative would be the same as Alternative I.

4.17.4.2 Mitigation

Utilizing the current hazardous materials and solid waste management practices/procedures and implementing them in the expansion area, mitigation measures will not be necessary. UXO will be surfaced cleared within the alternative on a regular basis.

4.17.5 Alternative V: East Gate/UTM 90

4.17.5.1 Impacts

The environmental impacts under this alternative would be the same as Alternative I.

4.17.5.2 Mitigation

Utilizing the current hazardous materials and solid waste management practices/procedures and implementing them in the expansion area, mitigation measures will not be necessary. UXO will be surfaced cleared within the alternative on a regular basis.

4.17.6 Alternative VI: No Action

Under this alternative, the Army would not maneuver in the study area, and therefore, would not introduce hazardous and/or toxic materials into those areas. Military exercises and equipment support under this alternative would be limited to the existing levels at Fort Irwin and within its boundaries. Therefore, the amount of hazardous materials and solid waste used and generated would be expected to remain constant.

The inspection and monitoring of hazardous materials storage and handling facilities will continue to be performed under the auspices of Fort Irwin and NTC regulations promulgated according to the Department of Public Works (DPW). Under these regulations, Fort Irwin will continue to comply with the Resource Conservation and Recovery Act for the inventory, storage, handling, recycling, and disposal of hazardous materials. Therefore, no significant adverse impacts are anticipated.

Contaminated soils generated from spills of oil, grease, lubrication fluid, hydraulic fluid, and fuels from fueling and maintenance of vehicles and equipment will continue to be removed from the field. Stockpiling of these hazardous substances at the Fort Irwin Class III landfill is no longer permitted, and the material is now decomposed through a permitted bioremediation program. Therefore, no significant adverse impacts will result in the continued military field operations that generate this type of waste.

Operations involving the generation of solid waste would continue to be removed from the field and disposed of at the Fort Irwin Class III landfill.

4.17.7 Cumulative Impacts

Cumulatively there are no anticipated impacts to hazardous and solid waste.

4.18 Health and Safety

The evaluation of health and safety impacts related to the alternatives is based on the potential for accidents and any health risks from normal project operations. The significance of an adverse safety impact increases as either (or both) of these two parameters increase. By definition, adverse safety impacts result from unsafe acts and conditions undertaken during the operations phase of a project. Beneficial impacts may result from any direct or indirect safety improvements resulting from project implementation.

Impacts to Health and Safety are considered significant if any of the following would occur: