

Overflights above 15,000 ft AMSL are not allowed whenever Goldstone is operating a high power transmitter in excess of 105 kilowatts or during critical spacecraft events. The proposed NTC Fort Irwin maneuverable training expansion area places Goldstone between Fort Irwin and the proposed southwestern maneuver expansion area. A straight-line transit route from the north part of Fort Irwin to the proposed southwestern maneuverable training expansion area would over-fly Goldstone. Goldstone must be assured that the proposed NTC maneuverable training expansion plan will not cause unauthorized overflights.

Electromagnetic Emissions

The receivers at each of Goldstone's antennas receive extremely weak radio and radar energy from deep space—any outside RF energy could significantly impact the Goldstone mission. The closer NTC ground and air exercise activity approaches the Goldstone boundaries, the more likely there would be for electromagnetic interference to the Goldstone radio and radar receivers.

To establish fundamental policies and responsibilities concerning electromagnetic interference and safety, NASA and DoD entered into a Memorandum of Understanding for Compatible Operations in the Mojave Desert Area. This memorandum became effective on February 5, 2002 and will end on December 31, 2006 unless renewed by the signatories.

3.17 Hazardous Materials and Solid Waste

Hazardous materials and substances are identified and regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), the Solid Waste Disposal Act (SWDA), and the Emergency Planning and Community Right-to-Know Act (EPCRA). In California, hazardous materials and substances are generally recognized under Title 22 of the California Code of Regulations. They are defined as any substance that, due to quantity, concentration, physical, chemical, or infectious characteristic, may present substantial danger to public health, welfare, or the environment when released. Examples of hazardous materials include petroleum, natural gas, synthetic gas, toxic chemicals, and low-level radioactive sources, such as compasses and gauges. Hazardous wastes that are regulated under RCRA are defined as any solid, liquid, contained gaseous or semisolid waste, or any combination of wastes that either exhibit one or more hazardous characteristic of ignitability, corrosivity, toxicity or reactivity, or are listed as a hazardous waste under 40 CFR Part 261 (RCRA, Determining Solid and Hazardous Wastes). The term solid waste is used to define non-hazardous waste and materials resulting from domestic refuse, mining operations, vegetative debris from clearing of land, sewage sludge, and building debris.

3.17.1 Hazardous Waste and Materials

Hazardous waste and materials used by the Army are managed under Army Regulation (AR) 200-1, Environmental Regulation and Enhancement, 1997, which covers environmental protection and enhancement for Active Army, Army National Guard, U.S. Army Reserve, and civil works activities that are under the jurisdiction of the U.S. Army Corps of Engineers. Fort Irwin presently has policies and procedures to minimize potential for such releases or other damage to the environment from hazardous materials. This system is based on a hazardous materials pharmacy (HAZMART), or issue point, as the Hazardous Material Management Control Center (HMMCC), except for ammunition and pyrotechnics munitions. Army Regulations strictly control accountability, use, and disposal of these items. The primary objective of the HAZMART is to provide life cycle management of hazardous materials and the

resultant reduction of hazardous waste generated by all Fort Irwin activities, including contractors, tenants, and members of other services. The HMMCC has implemented an automated hazardous substance management system (HSMS), not only to provide cradle to grave tracking of hazardous materials stored and used, but also to supply the chemical constituents of those materials. This system provides full functionality and legal reporting requirements to satisfy Executive Order 12856, Federal Compliance with Emergency Planning and Community Right-to-Know Laws and Pollution Prevention Requirements. The HSMS is essential to the Army's continual efforts to automate and streamline its hazardous substance management processes and reporting requirements to ensure that, during this era of dwindling resources and increased requirements, it can continue to support the soldier in the field while protecting the environment. Fort Irwin has in place a Spill Prevention Control and Countermeasures Plan that provides guidance for spill prevention and control.

The NTC does not operate in the study area therefore there is no known military source of hazardous waste or hazardous materials in this area. Studies discussed in Section 3.17.2 address potential sources of hazardous material/substance usage and hazardous waste contamination from non-military use in the study area.

3.17.2 Environmental Investigations of Study Area

Surveys have been conducted to determine the extent or potential for hazardous materials, substances, and waste in the study area. An Environmental Baseline Study (EBS), performed in 1991, examined the area from Superior Valley east to the Avawatz Mountains. A Preliminary Assessment Screening (PAS) conducted in 1992 evaluated the area east of the existing Fort Irwin boundary in the Silurian Valley. In 1997 a second PAS was conducted in the Land Expansion study area. In 2002 an EBS was conducted, examining potential contamination in the Western Expansion Area and the East Gate Expansion Area. These studies found elevated levels of metals from natural mineral sources present in the soil of various mining locations. The Unnamed Mine and Victor Gold Mine exceed California Title 22 Action Levels of metal concentrations.

3.17.3 Hazardous Materials Education

Hazardous materials and waste handlers training is required for all Environmental Officers, Hazardous Materials/Waste Managers, Hazardous Materials/Waste Handlers and their alternates in the incoming units. The training program is presented to all incoming rotations and the environmental cleanup teams. The teams receive hazardous materials/waste spill response training required by the State of California.

3.17.4 Solid Waste Management

No known authorized or permitted landfills or dumps exist in the study area. Local residents within the study area may bury, burn, recycle, or transport their waste. The Fort Irwin Sanitary Landfill and the NTC-Fort Irwin Waste Tire Facility are located on Fort Irwin. The Army operates the landfill and waste tire facility. The landfill accepts waste types such as asbestos, contaminated soils, mixed municipal wastes, and sludge. The Fort Irwin Sanitary Landfill has a permitted capacity of 80 tons of waste per day and an average intake of 30 tons per day. The waste tire location accepts oversize, passenger vehicle, tractor, and truck tires.