



## Utah

# Naval Industrial Reserve Ordnance Plant

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### ***Facility and Location***

The Bacchus facility consists of approximately 10,000 acres owned, leased and/or operated by Alliant Technical Systems (ATK) in the greater metropolitan Salt Lake City area. The Naval Industrial Reserve Ordnance Plant (NIROP) is 537 acres used by ATK for production and thermal treatment of energetic waste. It has 130 buildings with over ten miles of paved roads. Manufacturing operations occurring on NIROP include processing of nitroglycerine in preparation for propellant mixing, storage of ammonium perchlorate and cyclotetramethylene-tetranitramine, mold assembly/disassembly operations, rocket motor machining, and nondestructive testing.

### ***Media Sampled and Findings***

**Groundwater** — In 2011, six of eight samples detected perchlorate from 10 to 43 ppb. In 2010, 15 of 15 samples detected perchlorate from 3.9 to 249 ppb. In 2009, 11 of 13 samples detected perchlorate from 11 to 228 ppb. In 2008, 22 of 24 samples detected perchlorate from 6.94 to 342 ppb. In 2007, 19 of 23 samples detected perchlorate from 4.93 to 318 ppb. Prior to 2007, 85 of 93 samples detected perchlorate from 2.1 to 469 ppb.

### ***Appropriate Actions***

Groundwater samples were above the EPA and DoD Preliminary Remediation Goal of 15 ppb. ATK at NIROP is working with the Utah Division of Solid and Hazardous Waste to determine what actions in the future may need to be taken with respect to the perchlorate contamination. In 2011, a Human Health Risk Assessment was completed for groundwater contamination. Additionally, a Screening Level Ecological Risk Assessment submitted for review and approval. Once approval is received ATK will prepare a corrective measures study/site management plan for the facility to insure perchlorate contaminated groundwater is properly managed on, and downgradient to, the facility.

Groundwater samples are collected on the NIROP Facility by ATK under a Resource Conservation and Recovery Act Subpart X permit issued by Utah Solid and Hazardous Waste Control Board. In 2011, seven wells were analyzed using the preferred EPA 6850 method and the EPA 314 method. The results compared favorably and the 314 method was deemed accurate and appropriate for future sampling and will be utilized in the future as required by the Utah RCRA permit to maintain consistency with prior sampling rounds.