



## New Jersey Picatinny Arsenal

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

Picatinny Arsenal is located 45 miles west of New York City and is the home of the Army Armament Research, Development and Engineering Center. Its primary mission is the research, development, and pilot plant production of explosives and propellants for the Army. The arsenal has been in operation for over 100 years and has served as a major source of ammunition during wartime. Perchlorate sampling has been conducted at three sites.

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

**Drinking Water** — In 2010, two of two samples detected perchlorate at 0.2 ppb. In 2009, three of three samples detected perchlorate from 0.1 to 0.57 ppb. Prior to 2007, over 100 statewide samples were collected as part of study to characterize perchlorate in drinking water with the high detection of 0.87 ppb at Picatinny.

**Groundwater** — In 2011, 32 of 41 samples detected perchlorate from 0.04 to 29.4 ppb. In 2010, 46 of 46 samples detected perchlorate from 0.1 to 3.03 ppb. In 2009, three of three samples detected perchlorate from 0.2 to 1.6 ppb. In 2008, 17 samples reported no detection. Prior to 2007, 7 of 32 samples (from a perchlorate manufacturing, disposal, and research activities area called PICA 111 under the Installation Restoration Program) detected perchlorate from 2.6 to 616 ppb. In addition, 13 of 42 samples collected at an open burn/open detonation (OB/OD) site where demilitarization and disposal activities are conducted detected perchlorate with a high of 20 ppb.

**Sediment** — In 2011, two of eight samples detected perchlorate at 7.8 and 10.5 ppb. In 2010, eight of eight samples detected perchlorate from 0.2 to 3.94 ppb.

**Soil** — In 2011, four of five samples detected perchlorate from 0.001 to 0.50 ppb. In 2010, 32 of 32 samples detected perchlorate from 0.72 to 38.6 ppb. Prior to 2007, 21 soil samples detected perchlorate with a high of 500 ppb.

**Surface Water** — In 2011, four of six samples detected perchlorate from 0.07 to 0.39 ppb. In 2010, six of six samples detected perchlorate from 0.07 to 0.2 ppb.

**Wastewater** — In 2010, two of three samples detected perchlorate at 10,000 and 10,300 ppb.

### ***Appropriate Actions***

Groundwater samples were above the EPA and DoD Preliminary Remediation Goal of 15 ppb. To address perchlorate levels, Picatinny has sampled the southern boundary wells for perchlorate under a Record of Decision approved remedial design and results are expected in 2012. Open Detonation wells are sampled quarterly per an approved sampling and analysis plan under the Resource Conservation and Recovery Act (RCRA) Subpart X OB/OD permit. NJDEP issued a letter stating no further action is needed in regard to drinking water.

Wastewater generated is shipped to a private management facility. The EPA is conducting a Risk Investigation at a neighboring site called Radiation Technology. This investigation required that wells be placed on Picatinny Arsenal. Picatinny will monitor that progress.