

## Pantex Clean-up Progress

Active clean-up continues from legacy operations that released contaminants to the perched groundwater and for solvents that were released to soils in the Burning Ground. The perched groundwater clean-up action includes three in-situ bioremediation systems (ISB) and two pump and treat systems. A soil vapor extraction system operates to remove solvents from the Burning Ground soils. One of the primary goals for treatment is to prevent movement of contaminated perched groundwater and solvents in soils to the deeper drinking water aquifer (Ogallala Aquifer). Pantex monitors over 100 perched groundwater wells to evaluate the effectiveness of the clean-up and 28 Ogallala Aquifer wells to evaluate the continued protectiveness of the action for the drinking water aquifer. Monitoring results from Ogallala wells continue to indicate that all constituents of concern are below safe drinking water levels. You can find results on the Mission page at [pantex.energy.gov](http://pantex.energy.gov).

## Zone 11 ISB Expansion Project

Located on the south central portion of Pantex Plant, the Zone 11 *In Situ* Bioremediation (ISB) system (originally installed in 2009) will soon expand the system with 22 new wells. As Pantex continues to dewater the perched aquifer, changes in groundwater flow have the Pantex team addressing new areas of the plume. The new wells will further help treat plumes of high explosives, perchlorate, and TCE.

Across the Zone 11 ISB system, 11 injection events have occurred since 2009 using either molasses or emulsified vegetable oil (EVO). The new expansion will use molasses as its primary amendment. Several storage tanks are used to store the amendment and treated water from the Southeast Pump and Treat System, until it can be mixed. Then using one of the Pantex injection control trailers, the mixture is delivered and injected into the ISB wells.

## Annual Public Meeting Delayed Until 2021

Pantex provides updates of clean-up progress at an annual Public Meeting usually held during the month of November. However, due to the COVID-19 pandemic, Pantex has made the decision to delay the public meeting until 2021. A specific date will be announced later in 2021. As a result, Pantex will provide an up-to-date presentation of current clean-up progress in lieu of a in-person public meeting event. Comments or questions can be submitted through a link on the web page.

Please go to [pantex.energy.gov](http://pantex.energy.gov) to access the 2020 Annual Public Meeting Presentation. It will be located with the Press Release links on the main page.

*The presentation will be available beginning November 10 and a comment form will be available for a limited time.*

### Highlights of Clean-up Actions

- This past year, Pantex removed 850 lbs of contaminants through remedial actions.

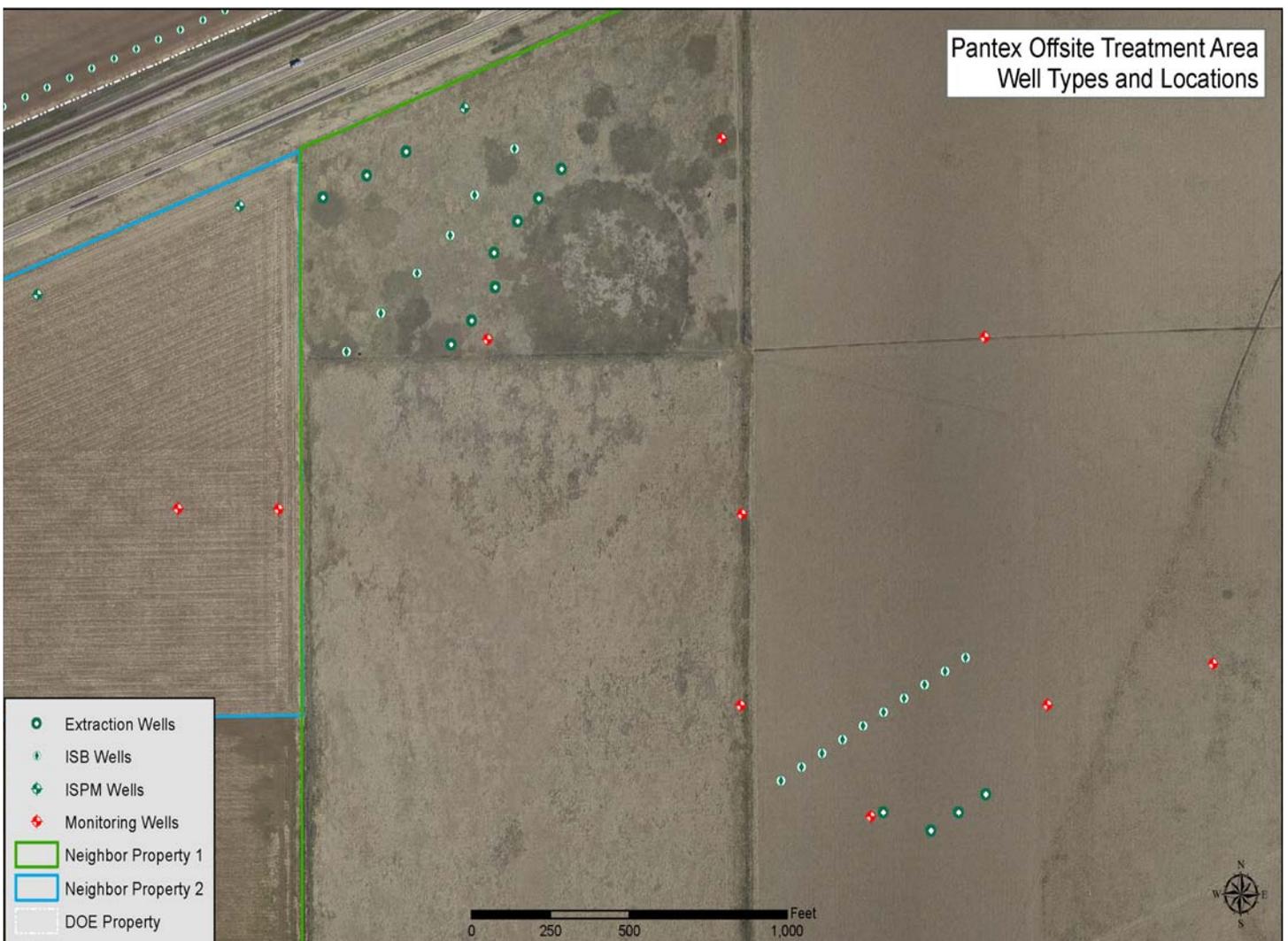
#### *Totals since start of remedial action :*

- 2.8 billion gallons of perched groundwater treated with 1.7 billion gallons beneficially used
- 15,314 pounds of contaminants removed from perched groundwater
- Perched water levels are continuing to steadily decline
- Bioremediation systems are reducing high explosives, perchlorate, and TCE (trichloroethene) to safe drinking water levels
- 21,035 pounds of solvents removed from soils by the Soil Vapor Extraction System

# Pantex Continues Efforts to Clean Offsite Property During Pandemic

Through the continued evaluation of cleanup operations, Pantex determined there were areas of impacted perched groundwater that have migrated offsite and beneath neighboring properties that appears to be following a old subsurface stream channel. While the Southeast ISB Extension is now helping prevent additional migration of contaminants offsite, cleanup is needed for the contaminants already under the neighbor's properties south and east of the plant. In early 2020, Pantex started drilling wells for a new offsite system. The new system will treat the perched groundwater using a combination of pump and treat and ISB technologies. The system installation will be phased through 2023 and is expected to operate for 10 years, with monitoring continuing afterward to verify complete cleanup.

However, as we all know, the world came to a halt in early 2020 with the introduction of COVID-19, which started an unprecedented worldwide pandemic. Pantex was not unaffected and on April 8th, the Environmental Projects group came to the hard decision to shut down all non-essential activities including drilling and construction of the new offsite system. This shutdown allowed for Pantex's EP group to develop protocols meant to protect Pantexans and the contractors we work closely with from the spread of COVID-19. Pantex worked closely with our contractors to ensure all parties felt safe to return to work and on April 23rd, drillers returned to Pantex to begin work on the Offsite ISB system. During the months when the country was shutdown, Pantex's EP group and contractors worked hard to maintain their commitment to protecting the public. The Offsite System is now ahead of schedule and Phase 1 and 2 drilling is almost complete. Phase 2 drilling was originally planned for early 2021. Work to install the infrastructure (roads, pads, electrical, and fencing) will continue into 2021.



Consolidated Nuclear Security, LLC operates the Pantex Plant, located in Amarillo, Texas, and the Y-12 National Security Complex, located in Oak Ridge, Tennessee, under a single contract for the U.S. National Nuclear Security Administration. Pantex and Y-12 are key facilities in the U.S. Nuclear Security Enterprise, and CNS performs its work with a focus on performance excellence and the imperatives of safety, security, zero defects and delivery as promised. For more information, visit [pantex.energy.gov](http://pantex.energy.gov) or [www.y12.doe.gov](http://www.y12.doe.gov). Follow Pantex on Facebook, Twitter or LinkedIn.