

PBEDS Milestone Podcast Transcript

The U.S. Army Non-Stockpile Chemical Materiel Project, or NSCMP, began operations at the Pine Bluff Explosive Destruction System, known as PBEDS, located at Pine Bluff Arsenal, Arkansas in June 2006 to destroy more than 1,200 munitions, such as 4.2-inch mortars and German Traktor rockets captured during World War II.

PBEDS workers completed operations in April 2010, marking the destruction of the largest recovered chemical warfare inventory in the nation.

The PBEDS milestone also marks the completion of all non-stockpile materiel declared upon the United States' Entry-Into-Force of the Chemical Weapons Convention, an international treaty mandating the destruction of chemical warfare.

In 1941, the War Department (now the Department of Defense) established Pine Bluff Arsenal to manufacture mustard and lewisite chemical agents and to assemble and load incendiary, pyrotechnic and chemical munitions.

The production of chemical agents and munitions ended in 1969.

In the 1980s, Pine Bluff Arsenal workers recovered hundreds of buried chemical warfare munitions on post during arsenal environmental restoration activities.

NSCMP was tasked with the destruction of the recovered items as well as items shipped to Pine Bluff Arsenal for safe storage and monitoring.

In June 2005, prior to treatment at PBEDS, operators at the Pine Bluff Munitions Assessment System assessed the munitions.

After the initial assessment, three separate, environmental enclosures were built to house the transportable Explosive Destruction System units, known collectively as PBEDS.

The Explosive Destruction System, or the EDS, provides safe, environmentally responsible on-site treatment of recovered chemical warfare materiel.

Developed as an alternative to open detonation, the mobile EDS provides on-site treatment and neutralization of recovered chemical warfare materiel and prevents the release of vapor, blast or munition fragments from the process.

Operators confirm complete neutralization by sampling residual liquid and air prior to reopening the EDS.

The NSCMP research and development team, faced with the unique and diverse inventory of recovered munitions at PBEDS, invented patent-protected processes and cutting-edge vessel enhancements.

NSCMP engineers and chemists received a U.S. National Patent for developing a technology that improves the detoxification of lewisite, a World War II-era German arsenic-based compound.

Before their work, the Army was challenged by disposal of lewisite and other arsenical compounds.

System enhancements included the Advanced Fragment Suppression System, which reduces up to 500 pounds of solid waste per treatment, significantly cutting costs and keeps with NSCMP's commitment to environmental stewardship.

The PBEDS mission and its team of workers, engineers and scientists, used technical expertise to overcome challenges to successfully complete the mission—keeping safety as the number one priority.

Steven Bird - PM NSCM PBEDS Site Manager:

I've been fortunate that I've worked with these munitions almost my entire career at the Non-Stockpile program, beginning in 1996 when we first conducted assessment on some of the munitions that we are currently destroying. My involvement in the Pine Bluff Explosive Destruction System began in May of 2004 with the 60 percent design so I've been very fortunate, and lucky and honored to have worked through the design, the construction and now seeing through the completion of the destruction phase of this operation. I feel very fortunate to have worked with a great team at PBEDS. These guys were brought together from all across the country specifically to come to Arkansas and destroy these munitions which they have done in a safe and environmentally sound manner.

Laura Graham - ECBC PBEDS Project Manager:

This isn't something many people get to do you know, on a daily basis. Come to work and get rid of something that's not good for people so it's very rewarding. Usually I just say I blow things up for a living, but it's more specific than that as to grandfathers that were in World War II so they understand some of the things that went on there and to explain to them I'm able to get rid of some of that is exciting.

Brian Harris - ECBC PBEDS Chemical Engineering Technician:

What I do here, I enjoy doing this because what I do is help protect them inside there while they're working and the same thing I would want if I have to go in there, I would want something somebody loves doing to monitor me. So I think this has been a great mission overall. I've enjoyed doing it. I think I'd continue to do it until I can retire.

Crystal Ford - SAIC PBEDS Integration Analyst:

I know that every day that I come to work I make a difference. What we do here, is you know destroying the non-stockpile portion of the chemical munitions and I know that we're making the world a safer place.

Torrey Davis-Collins - ECBC PBEDS Operator:

It means a lot to me, you know, saving the environment, you know. You find rounds that date back to what, 1944 and it means a lot to know that I'm doing my part of cleaning up the environment and getting rid of, you know, the bad chemicals in the ground and stuff like that. It means a lot to me knowing that I got a nice safe workplace to come work with another few other comrades and to be able to go home safe every day. I feel like my job's real secure here.

Elvin Spears - SAIC Integration Analyst:

Just the feeling of accomplishment knowing that what I'm doing is actually benefiting more or less in the long term. Not just here, but what we do is going to benefit other sites as well too. We've got other jobs scheduled to come up and this is the framework, the ground work being laid right here for work in the future too so that's part of it as well. So that's a good feeling as well.

For more information on the PBEDS mission completion, please visit

www.cma.army.mil