

#### **Overview**

TVA has successfully demonstrated a hot-gas decontamination technology that can remove explosives residues in a safe and cost-



effective manner without adversely impacting the environment. The technology works so well that the U.S. Department of Defense (DoD) is partnering with TVA to decontaminate munitions, storage tanks, piping, and other equipment at Army ammunition plants, depots, and arsenals across the country. The hot-gas unit is transportable and can be

used to decontaminate small loads of munitions and other equipment at one site and then quickly be moved to another location—saving time and money.



TVA has more than 70 years of experience in developing chemicals and munitions and has been a leader in chemical demilitarization since the early 1980s. We understand the importance of providing affordable solutions that not only meet environmental regulations but also effectively contribute to the protection of the nation's land, water, and air resources.

TVA is:

- The first to decontaminate and dismantle a large chemical weapons production facility (Rocky Mountain Arsenal)
- A winner of the Federal Environmental Quality Award
- A source of expertise and facilities for in-house scale-up of technologies from conceptual design to demonstration
- A team with mobility to relocate at any national or international work site
- A source for unbiased technical evaluations





#### **Professional Services**

TVA offers services and innovative technologies, such as hot-gas decontamination, to solve complex environmental problems. We have the staff and skills needed to decontaminate explosives

residues from production equipment and munitions. This decontamination process allows the equipment to be repaired and used, or certified as explosive-free and sold to vendors. More than 99.999 percent of explosives residue is successfully vaporized and removed in the heating process.

Although the hot-gas system is designed for short-term operations, the technology also can be adapted to large-scale fixed units for decontamination and demilitarization capabilities. The system works by removing explosives residues or volatile organic



Disassembled Piping Awaiting Decontamination in Hot-Gas System

compounds, including pesticides, solvents, and similar materials, found inside pores of metal parts, munitions, or equipment.





TVA is committed to protecting the environment in ways that are practical and affordable for your business. Hot-gas decontamination is an excellent example of the innovative solutions TVA is developing to help meet the environmental challenges facing the nation.

How TVA's decontamination system can benefit you:

- Saves time and money
- Allows for quick on-site setup
- Removes explosives residue from contaminated sources
- Meets state and federal environmental regulations
- Reclaims contaminated metal for reuse or scrap
- Eliminates a wide range of volatile organic compounds
- Provides versatility—portable or permanent units

### For more information, contact:

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