**How the selection was made for a treatment, storage and disposal facility to host the Zimpro® wet air oxidation system**

**Evaluating the impact on the environment**

All federal agencies, including the Army, must assess the impact of major actions such as the installation of a wet air oxidation unit on the environment by conducting an environmental study under the National Environmental Policy Act. This project proposal indicates that potential impacts to the environment are evaluated as part of the decision-making process.

**The Non-Stockpile Project** suggested that an environmental assessment was the appropriate NEPA process for the installation and use of a wet air oxidation treatment system. In this specific case, the NEPA process proposed was:

- Wet air oxidation has been demonstrated to treat binary neutrals safely and successfully.
- The commercial facility selected to treat, store and dispose of the waste also has demonstrated experience and ability to treat neutralent waste in a safe manner.

**What does an environmental assessment do?**

An environmental assessment:
- describes the proposed installation process;
- evaluates potential impacts to environmental resources such as air, water, land, and wildlife;
- evaluates potential impacts to cultural, social and economic resources;
- describes waste management issues.

**Because the assessment was performed at three separate facilities in two states, the assessment did not evaluate transportation issues or the pre-treatment of the binary neutrals that will occur before they are transported to the commercial treatment system.**

**What effect did the environmental assessment have on the project?**

A “Finding of No Significant Impact” (FONS) was determined after the environmental assessment process. FONS assessments in NEPA do not mean that no impacts will be found. They indicate that there will be no significant impacts to the natural and human environments resulting from the use of the wet air oxidation treatment system at any of the facility sites investigated. Any minor impacts would have to be addressed before the FONS was finalized.

If the environmental assessment had determined there were significant impacts with use of the system, the Non-Stockpile Project would have prepared an environmental impact statement to examine the system and alternatives to the system in greater detail.

**What happens after a “Finding of No Significant Impact”?**

The chemical compound hydrogen fluoride. HF is a strong acid that is formed by the reaction of fluorine with water. HF is a byproduct produced by neutralizing DF with water.

The chemical compound hydrazine. Hydrazine is a strong base that is formed by the reaction of hydrazine with water. Hydrazine is a byproduct produced by neutralizing DF with water.

The chemical compound hydroxylamine. Hydroxylamine is a strong base that is formed by the reaction of hydroxylamine with water. Hydroxylamine is a byproduct produced by neutralizing DF with water.

The chemical compound methylphosphonic acid. Methylphosphonic acid is a strong acid that is formed by the reaction of methylphosphonic acid with water. Methylphosphonic acid is a byproduct produced by neutralizing DF with water.

**How far is the facility located?**

The chemical compound hydrogen peroxide. Hydrogen peroxide is a strong oxidizing agent that is formed by the reaction of hydrogen peroxide with water. Hydrogen peroxide is a byproduct produced by neutralizing DF with water.

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**How far is the facility located?**
Disposing of DF and QL neutralent

Using Zimpro® wet air oxidation technology to break down the neutralents.

Testing Zimpro® wet air oxidation technology for neutralents.

The Non-Stockpile Project is committed to identifying and evaluating alternative technologies for treatment and disposal of secondary waste. The Non-Stockpile Project has already conducted a demonstration program using wet air oxidation technology utilizing various organic and inorganic neutralents. The testing demonstrated that wet air oxidation can achieve greater than 99% destruction of the organic or inorganic content of the neutralents tested.

The wet air oxidation technology is designed to achieve greater than 99% destruction of the carbon and phosphorus compounds contained in the neutralents. The wet air oxidation technology is designed to achieve greater than 99% destruction of the carbon and phosphorus compounds contained in the neutralents.

Disposing of the wastewater from the Zimprop® RRS unit.

The wastewater from the wet air oxidation process will be disposed at Texas Molecular by using a combination of treatment and disposal methods. The wastewater will be treated using a combination of treatment and disposal methods.

Integrated Binary Production Facility Demolition (IBPF)

Disposal of DF and QL neutralent wastes.

DF and QL neutralents are disposed of at a designated disposal site.

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