

**United States Environmental Protection Agency
Region III
POLLUTION REPORT**

Date: Friday, April 20, 2007

From: Mike Towle

Subject: POLREP 01 and Special Bulletin A

Stoney Creek Technologies
3300 4th Street, Trainer, PA
Latitude: 39.8300000
Longitude: -75.3975000

POLREP No.:	1	Site #:	
Reporting Period:		D.O. #:	
Start Date:	4/19/2007	Response Authority:	CERCLA
Mob Date:	4/19/2007	Response Type:	Emergency
Demob Date:		NPL Status:	
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Current Activities

Introduction

The On-Scene Coordinator (OSC) is conducting a removal site evaluation pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) at the Stoney Creek Technologies Site (Site) which is located in Trainer, Delaware County, Pennsylvania. The Site is the location of Stoney Creek Technologies' chemical manufacturing facility. The evaluation has identified the existence of a threatened release of hazardous substances posing a significant threat to public health or welfare or the environment. The OSC evaluated Site conditions against the factors contained in Section 300.415 of the NCP and determines that immediate response activities pursuant to Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, are necessary to mitigate the immediate threats identified in this Pollution Report. Pursuant to Delegation of Authority 14-2, the OSC is authorizing the expenditure of CERCLA funding in an amount not to exceed \$250,000 to initiate an emergency Removal Action to prevent a release of hazardous substances stemming from tanks and containers of flammable chemicals, combustible chemicals, acid chemicals, and combinations of these and other chemicals as well as from these same types of chemicals located within trenches, pipes, equipment, and other locations throughout the facility. The OSC must take actions especially in the event that the current operator of the facility is unable to continue to do so. The OSC contacted the ERRS contractor on this day and requested assistance and response.

Site Description and Background

The Site is located in a mixed industrial and residential area of Trainer, Delaware County, Pennsylvania. The Site includes a chemical manufacturing facility (which includes about 200 tanks), several buildings, a laboratory, a water treatment facility, and many processing vessels, equipment items, systems, and pipelines which are used in or are related to the chemical manufacturing processes. The facility abuts an active railroad carrying freight and passenger traffic. Many residences exist near to the facility. The Site drains to Stoney Creek and discharges wastewater to a regional wastewater treatment authority (DELCORA).

Stoney Creek Technologies primarily manufactures corrosion inhibitors, fuel additives, and oil additives. On April 12, 2007, the OSC was notified by EPA Region III that the facility had declared bankruptcy and that chemical substances remained at the facility which may pose a threat. The OSC reviewed the April 4, 2007, bankruptcy Order dismissing Stoney Creek Technologies' bankruptcy case, coordinated with Pennsylvania Department of Environmental Protection (PADEP) and local authorities, and initiated an evaluation of the Site. The OSC participated in information-gathering meetings and visits to the facility between April 13 and April 17, 2007.

Between April 13 and April 17, 2007, the OSC learned that the facility has been experiencing financial

difficulties and legal issues for quite some time. Some of these troubles resulted from relationships between Stoney Creek Technologies and other companies interested in the facility's technology and materials. Stoney Creek Technologies' bankruptcy case had been dismissed by the Court and a Trustee was not assigned due, in part, to the environmental and public safety conditions present. Stoney Creek Technologies has an outstanding complaint against another company which may affect any ownership determinations relating to some of the chemicals at the facility. The facility has had violations of environmental regulations or permits or past environmental releases or fires. The facility is not currently able to afford all of its day-to-day expenses.

The facility currently contains about 3 million gallons of flammable or combustible chemicals that pose a threat of release and fire and over 11 million pounds of total chemical production inventory which includes flammable, combustible, and corrosive chemicals. Other chemical materials are also present in drums, small containers, open containers, water treatment vessels, fuel vessels, piles, trenches, drains, and other places.

The facility uses, among other things, a vaporized nitrogen system to minimize the fire threat posed by the flammable and combustible chemicals contained within certain tanks and connected to a solvent recovery system. The facility uses the same nitrogen system to maintain a low moisture condition in oleum and acid tanks at the facility; increased moisture in the acid tanks may lead to the generation of flammable hydrogen gas. The facility has a wastewater treatment plant that treats process and storm water before discharge.

The nitrogen system, water treatment plant, and other pollution control or security features of the facility rely upon electricity to prevent fire or chemical release. The electricity was scheduled to be shut off by the power company on 13 April 2007 due to lack of payment. EPA and PADEP communicated environmental concerns to the power company and were able to extend the delivery of power to April 20, 2007 (contributing the urgency of the situation and this Special Bulletin activation of CERCLA funding). PADEP continues to coordinate with the power company regarding the delivery of power.

Chemicals at the Site include methanol, heptane, morpholine, oleum (fuming sulfuric acid), acetic acid, sodium hydroxide and many other compounds. Methanol, sulfuric acid, acetic acid, and sodium hydroxide are hazardous substances since they are listed under 40 CFR Part 302.

The most significant threats posed by the Site include: 1) the potential generation and release of flammable vapors which, if ignited by a static spark or other ignition source, pose a serious risk of fire and explosion; 2) the potentially violent reaction between oleum and moisture; and, 3) the potential off-Site migration of untreated water and liquids present in the trenches and drains and process areas influent to the on-Site wastewater treatment plant. These threats are significantly increased if the power should be cut and/or the facility work force vacates the premises rendering the systems maintain the chemical inventory inoperable. These threats would result in the release of hazardous substances constituting a "release" as defined in Section 101(22) of CERCLA, as amended, 42 U.S.C. § 9601(22).

III. Threats to Public Health or Welfare or the Environment

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a Removal Action. Paragraphs (b) (2) (i), (iii), (vi) and (vii) of Section 300.415 directly apply as follows to the conditions as they exist at the Stoney Creek Technologies Site. These conditions will exist if the facility is unable to reliably supply energy and a workforce to maintain stable conditions at the facility. Existing information indicates that this situation will likely soon occur.

A. 300.415 (b) (2) (i) "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants"

The Site is situated in a mixed residential and industrial area of Trainer, Pennsylvania. If the facility is unable to operate and maintain its workforce or loses power due to its inability to pay, the chemicals at the facility would pose a significant threat of release and potential exposure to nearby human populations. Many of the chemicals are volatile organic compounds and would release to the air in the absence of the operating vapor recovery or pollution controls. If the vapors from the chemicals at the site do not ignite when they are released, they will migrate to downwind populations. These residents would then be potentially exposed to the chemicals at the facility. For example, inhalation of acid chemicals at the facility could damage tissue within the respiratory system. For example, inhalation of organic compounds such as methanol could be toxic to the nervous system. If the wastewater treatment plant is not operative, chemicals at the site could also release through water migration pathways. If the chemicals do not ignite when released, these chemicals (untreated) could seriously impact the regional waste water treatment authority's ability to treat area wastewater from many sources and/or discharge to nearby Stoney Creek.

b. 300.415 (b) (2) (iii) “Hazardous substances or Pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release”

The Stoney Creek Technologies Site includes about 200 tanks and about 1000 drums. Many of these tanks and drums contain chemicals and mixtures of chemicals described herein. The chemicals in the tanks are most safely maintained within the tanks when certain systems (e.g., nitrogen system) are operated. Without a workforce or without electrical power, these systems will become much less effective at preventing a release of chemicals to the environment.

C. 300.415(b)(2)(vi) “Threat of fire or explosion”

Many of the chemicals and chemical mixtures at the Stoney Creek Technologies Site are flammable or combustible. In addition, Oleum, an acid, reacts with metals to produce flammable hydrogen gas. The facility uses nitrogen in the airspace of the tanks to reduce the oxygen content and prevent the airspace of the tanks from becoming flammable. Many tanks are connected by a common venting system which sweeps air from the tanks and prevents buildup of vapors which could endanger the integrity of the chemicals and containment. Ignition of vapors in the venting system could travel to many tanks. The facility has suffered fire events in tanks and also in trenches conveying wastewater to the wastewater treatment plant. The OSC has coordinated with the local fire chief and verified that the fire chief has significant concerns about the fire threat posed by the chemicals at the plant especially if the facility loses power or a trained workforce. Fire prevention and fire suppression and emergency notification systems at the facility rely on electricity.

D. 300.415 (b) (2) (vii) “The availability of other appropriate federal or state response mechanisms to respond to the release”

The Commonwealth of Pennsylvania Department of Environmental Protection has requested assistance in mitigating the potential threats posed by this Site as the financial resources to completely address this Site are currently unavailable. PADEP is significantly contributing to the response by coordinating with utility providers and assuring the continuation of energy.

IV. Endangerment Determination

The OSC has determined, based on information gathered from the removal site evaluation that the threatened release of a hazardous substances at this Site presents an imminent and substantial endangerment to public health, welfare or the environment. For this reason, the OSC initiated an immediate removal action.

V. Actions

At this time the OSC intends to reduce the potential for increasing threats by assuring that systems and tasks necessary to maintain the security of the chemicals described herein are continued in the absence of a workforce or reliable source of energy. The OSC intends to initiate actions that will maintain security and minimize the potential for fire or environmental release should the facility be unable to do so. Existing information indicates that such a condition may be imminent. The OSC intends to work towards finding potentially responsible parties to complete the necessary removal action. Other actions may follow.

Actions:

1. Mobilize personnel and equipment to the Site to implement response actions;
2. Provide security to prevent unauthorized entry/removal to/from the facility;
3. Identify, evaluate, and arrange for or operate facility systems (e.g., nitrogen system), or take other similar actions, necessary to minimize the potential for fire or chemical reaction or release;
4. Arrange for treatment or treat wastewaters (and other liquids or chemicals) prior to discharge from the Site to standards currently applicable to the discharge of such waters (as identified by PADEP and DELCORA) through the wastewater treatment plant or through implementation of similar actions;
5. Continue to coordinate with PADEP and assure that energy continues to be provided to the facility to minimize the potential for fire or chemical reaction or release.

The proposed removal action will attain Applicable or Relevant and Appropriate Requirements (ARARs) to the extent practicable given the exigencies of the situation. The OSC is initiating response under exigent conditions. The OSC has identified the current discharge requirements imposed upon the facility by agreement between the facility, DELCORA, and PADEP as a potential ARAR.

The current owner/operator of the property on which the Site is located has been verbally notified of the conditions at the Site and the potential CERCLA Liability as an owner/operator. The OSC will continue to forward all available information to EPA enforcement personnel to ensure that full notice and evaluation of potentially responsible parties can be accomplished. The property owner/operator has stated that he was financially unable to comply with all the health, safety, and environmental concerns that need to be addressed at the Site.

response.epa.gov/stoneycreek