

## Adam County's Chemical Explosion Leaves Bay at Risk

By Jason Zheng

On June 8<sup>th</sup> 2015, at 3:30am EST in Adam County, Pennsylvania, a [chemical fire](#) engulfed the Miller Chemical and Fertilizer Corporation building. The fire lasted [almost three hours](#), however fumes hovered the atmosphere because of the barrels of chemicals that was heated and exploded during the process. The Patriot-News stated that millions gallon of water were used to fight the chemical fire, however, authorities were well aware of the fact chemical fire could not be subdued with water, on the contrary it fuels it.

The chemicals have been identified with the aid of Miller Chemical's inventory (according to state licenses) these chemicals carry harm against contact by skin, respiration and exposure. Contaminates such as, nitrates and total organic carbon were discovered in water due the runoff water by firefighting. Small bodies of water are mainly connected to the Conewago Creek watershed to the Susquehanna River and then the into the Chesapeake Bay estuary.

In this investigation there are many ways to approach this study, however we will evaluate it by the incorporation of previous environmental policies for both watersheds, the current developing policies and the primary impact the [33,606 acres Conewago Creek's runoff](#) has affected on the Chesapeake Bay as whole. This brief will start out examining the pre-existing policies of the Conewago Creek and Chesapeake Bay.

The Chesapeake Bay is the main developer of economy in the Eastern part of the United States. [To protect and conserve](#) the watershed, President Barack Obama issued the [Executive Order](#) 13508 on May 2009 and the final strategy on May 2010. The aim of this order is to protect and conserve the remaining of the watershed and to “develop federal leadership, action and accountability”. This order further applied to watersheds and/or small bodies of water that flow into the Chesapeake (e.g. Conewago Creek).

The people of Dauphin, Lebanon, and Lancaster Counties of Pennsylvania partnered with Pennsylvania State University to create [Conewago Creek Initiative](#), an effort to restore and stabilize the Conewago Creek. The USDA Natural Resource Conservation Service (NRCS) is also one of the primarily organization that educate farmers on reducing nutrients and sediment runoff into the Bay. NRCS actions are funded through the 2008 Farm Bill Chesapeake Bay Watershed Initiative with a [\\$72 million dollar budget](#) for three years. The efforts made to conserve the Conewago Creek has been successful, however due to Miller's chemical spill, this event left the creek in its worst condition.

The current conditions of the Conewago Creek is devastating. A whited foam lays on top of the creek water, killing marine animals as it drains toward the Susquehanna River. It is to be estimated that the numbers of [20,000 to 100,000 fish](#) were killed prior the chemical fire. Marine life within 10 to 15 mile radius were all depleted, however the main cause remain unknown, but state authorities believe the main culprit was the runoff due to firefighting. Local authorities have also stated that the containments has not affected the Susquehanna River because evidence gather displayed that the Conewago Creek was the only watershed affected. However, the

resident in [Wrightsville](#) were told to “voluntarily” reduce their usage of water because the county cut off water supplies from the river. Even though the [investigation of Susquehanna River](#) has not been completed yet, as a precautionary measure, this brief will further examine how this chemical spill can Chesapeake Bay negatively.

If these chemical solvents were present in the Susquehanna River, it would make authorities harder for it to control. Given the fact that the counties that reside near the Conewago Creek have failed to properly secure the watershed and its marine life, if these chemical reaches its way down the Bay, economic, political and social policies would also pummeled. These factors will be examine in its own paragraph respectively.

Economically, the chemical spill will destroy the fishing industry of the Chesapeake Bay. The Bay is responsible for two-third of the nation’s seafood industry, ranging from fishes to shellfishes. When the chemical spill strikes, without a doubt the Bay’s economy will pummel and the prices of seafood will increase due to high demands, especially in the summer months.

Politically, the previous [Executive Order 13580](#) will need to be amend, which will cause a political rouse because of the amount of funds that can be required to restore the Bay and its marine life, are to be taken from American taxpayers or other organizational funds. However, the investment in the Bay may generate a greater amount because of reconstructed fishing industry.

Socially, people from around the states travel to beaches (e.g. Virginia Beach and Ocean City) that are connected to the Chesapeake Bay. However, when the Bay becomes contaminated, these national tourist attractions will be put on delayed, which can also impacts businesses that generate their revenue by the tourists.

As President Obama’s [Executive Order 13508](#) states to “develop federal leadership, action and accountability”, it has been almost a week since the explosion, the federal government has not taken any form of leadership, action or accountability. It can be understood that the Conewago Creek belongs to the counties of Pennsylvania jurisdiction, however with the chemical infested Conewago Creek connecting the Susquehanna River and finally into the Chesapeake Bay, there should be more awareness and/or allowing someone to take actions of this environmental disaster.

The Miller Company erected their fertilizer building nearby water—Slagle Run which connects into Conewago Creek, it is dangerous before the explosion occurred. If the company, state of Pennsylvania, and federal government did not bother to relocate the building, then it was only a matter of time the fuse went off and causing an environmental disaster.