



NC Hazmat Information

February, 2012

139 RRT Reports to NC EOC CY 2011

Potash Corporation, Aurora, NC

The Aurora phosphate operation, located in Beaufort County, NC, is the largest integrated phosphate and mining plant in the world.

The Aurora complex is designed to produce the following:

Bright Dip Additives
Ammonium Polyphosphate
DAB Products
Defluorinated Phosphate
Defluorinated Phosphoric Acid Amber
Diammonium Phosphate
Hydrofluorosilic Acid
Monoammonium Phosphate
Phosbrite
Phosphogypsum
Phosphoric Acid
Phosphoric Acid – Food Grade
Phosphoric Acid – Technical Grade
Silicon Tetrafluoride

The facility includes six sulphuric acid plants, four phosphoric acid plants, a liquid fertilizer (11-37-0) plant, a superphosphoric acid plant, two DAP plants, and a solid fertilizer plant producing DAT, GTSP

granular triple superphosphate) and MAP (monoammonium phosphate).

The facility maintains an aggressive training program for all members of its four emergency response teams (medical, hazardous materials, technical rescue and fire), its emergency management group, and employees and contractors. In addition to the initial training programs for all emergency response team members, annual refresher training is provided along with quarterly drills and exercises. Emergency response equipment is maintained in prime condition and includes a fully equipped ambulance, hazardous materials response vehicle, two fire trucks and sophisticated rescue apparatus.

The emergency response teams operate under the Incident Command System and the primary Incident Commander is the Manager, Health & Safety. All positions in each response team have at least

two alternates and all members of the Emergency Management Group have designated and trained alternates.

The PCS Phosphate Aurora facility coordinates training programs with the local fire and rescue teams. This training includes joint exercises on an annual basis. The public is notified by using the county communications system.

Silicon Tetrafluoride is a colorless, nonflammable, corrosive and toxic gas. Very toxic by inhalation, vapor is heavier than air and exposure to prolonged hear, containers may rupture violently. Mixtures with sodium are shock-sensitive explosives. Silicon Tetrafluoride hydrolyzes rapidly yielding hydrofluoric acid.

Silicon Tetrafluoride

UN # 1859

CAS # 7783-61-1

DOT Hazard Label

Poison Gas & Corrosive

Worst-Case Scenarios

Chlorine and anhydrous ammonia are stored in pressurized storage cylinders and bullets respectively. The worst-case scenario for the facility was assumed to be the release of 195 tons of anhydrous ammonia over a ten-minute period from the storage bullet. The worst-case scenario of chlorine for the facility was assumed to be a complete release of 1 ton over a ten-minute period. These worst case scenarios have off site impacts.

Alternative Case Scenarios

The alternate case scenario for anhydrous ammonia is postulated to be a 6 ton release due to a ruptured pipeline from a railcar to a storage bullet. The amount released is based on the volume contained within the pipeline between the railcar and the storage bullet. This assumes active mitigation with an excess flow valve on the railcar and a check valve on the storage bullet. This alternative release scenario has off site impacts.

The alternative release scenario for chlorine assumed the loading valve being broken off leaving a 3/4 inch hole. Due to the pressure of the tank the entire contents would be released before active mitigation could be implemented. This alternative release scenario has off site impacts.



Feb. Calibration Schedule

Hazmat RRT 2

NCEM CBO

Mgr. & Area 6 & 8

Iredell County
Cleveland County

Ohio EM Agency
RIM&C Facility
1296 Kinnear Rd.
Columbus, OH 43212-1154

Coming July—Ethanol Safety Seminar

Ethanol production, transportation, and use are increasing year after year. As this domestically grown fuel accounts for 10% of our country's fuel supply, many first responders will be tasked with preparing for potential ethanol-related incidents for the first time. It is important that those responsible for safety in their communities are well-prepared and trained for responding to ethanol-related emergencies.

The goal of this seminar is for attendees to gain full ethanol emergency response training experience

that they can put to use immediately in the field as well as pass along to other first response teams. A majority of this training is based on the *Complete Training Guide to Ethanol Emergency Response*, a training package created by the Ethanol Emergency Response Coalition (EERC) that has been distributed throughout the United States and to several countries worldwide.

The Ethanol Safety Seminar focuses on numerous important areas of ethanol safety including an introduction to ethanol and ethanol blended fuels,

chemical and physical characteristics of ethanol and hydrocarbon fuels, transportation of ethanol blended fuels, storage and dispensing locations, fire-fighting foam principles and ethanol, ethanol blended fuel emergencies, and incidents at tank farm and bulk storage locations. Certificates of participation will be distributed following the completion of the seminars.

While primarily targeting first responders, hazmat teams, safety managers, and local emergency planning committees, it is also open to the general public.

Smiths Detection integrates PEAC-WMD Software

Smiths Detection has launched its latest version of its portable and rugged HazMatID chemical identification system.

The HazMatID 360 offers a combination of new features to enable comprehensive data scrutiny and faster decision-making. These include optimized mixture algorithms, larger substance libraries, chemical hazard classification for

not-in-library substances, easy-to-connect Bluetooth wireless communications, and integrated PEAC-WMD software by Aristatek providing critical information management and decision support. Previous generation HazMatID systems can be upgraded to leverage these new capabilities. The HazMatID 360 features the largest spectral library of its kind, more

than doubling the previous standard. The system is capable of identifying more than 32,000 solids, liquids and gels in less than a minute including unknown powders, explosives, homemade precursors, Weapons of Mass Destruction and Toxic Industrial Chemicals. It also incorporates industry-leading PEAC decision support software providing

an additional layer of information management and guidance.

The system's optimized mixture analysis allows effective chemical assessment of a broader range of samples including those that may have been contaminated with more than one material, like water or dirt.

Requests for a Regional Response Team may be initiated by the incident commander, local emergency management coordinator, or N.C. Emergency Management Division's area coordinator. The requester must provide some basic information, such as:

- Substance/chemical name (if known)
- Incident location, size and severity
- Is substance liquid, solid or gas
- Danger present and area threatened
- Fire, health, or explosion hazards
- Evacuations in progress, or contemplated

Have good information or lessons learned?

Submit to:

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You are not forgotten.