Chemtech Products

Alorton Plant
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Alorton, IL 62205

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Chemtech Products, Inc.
Alorton, IL Site Summary Information

Company Information
Chemtech Products is a leader in the manufacture and sale of aqueous hydrogen fluoride and fluoride salts for a variety of industrial uses. Chemtech has manufactured these chemicals in Alorton, Illinois, since 1968. The major raw material, hydrogen fluoride, has been handled at this site since the 1940s. Hydrogen fluoride is used to produce air conditioning refrigerants, computer chips and fiber optic tubing, while fluoride salts have numerous applications, including fluoridated drinking water, fluoropolymers, fluxes and wood preservatives. At the Alorton plant, the company employs 41 people who live in the surrounding area.

Risk Management Planning
The Environmental Protection Agency (EPA) Risk Management Plan (RMP) Rule created a regulation called Risk Management Program as required by an amendment to the Clean Air Act. The RMP Rule requires facilities with certain quantities of chemicals and other regulated substances on a specific EPA list to disclose certain information. Those facilities must make publicly available their emergency response programs, which include plans to prevent and minimize the effect of incidents; five-year accident histories for listed materials; and "worst case" and "alternative case" scenarios related to potential releases. This information will be written in a risk management plan. The scenarios take into account potential quantities released, weather, wind direction and wind speed. The worst case scenarios assume complete failure of all safety controls and systems and no emergency response. It is important to note that these scenarios are highly unlikely. The deadline for submitting risk management plans to the EPA is June 21, 1999. Chemtech Products has two of the 140 chemicals identified by the EPA above threshold quantities: hydrogen fluoride and ammonia.

Chemtech Products compiled its accident release history for the RMP-listed chemicals for the last five years. According to the RMP Rule, the accident history must include all accidental releases from covered processes that resulted in death, injuries, property damage, evacuation, sheltering-in-place or environmental damage. Accidental releases as defined by the EPA means an unanticipated emission of a regulated chemical into the environment from a stationary source. The five-year accident history, as defined by the RMP, for this site is as follows:

YEAR	1994	1995	1996	1997	1998
Number of RMP Releases	0	0	0	2 *	0

* These incidents involved minor exposures that required medical treatment; however, no lost time was recorded. The quantity or RMP-chemical released in both cases was less that 15 pounds and was below EPA reporting levels. The incidents had no community impact.

Sharing of this information is intended to promote community understanding of local industries and promote an informed dialogue on their chemical accident prevention practices. It is not a prediction of the probability that any of the identified scenarios or potential impacts discussed here will ever occur. The information is based upon Risk Management Plans that are being prepared by Chemtech Products, Alorton, IL facility. Descriptions in the final RMP document submitted by June 21, 1999 may differ from these descriptions due to revisions.

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Example RMP Accidental Release Scenarios for the Chemtech Products, Inc., Alorton, IL Site

The RMP rule defines a worst case incident as the hypothetical release of the entire contents of the largest quantity container of an RMP-listed material within 10 minutes. It assumes weather conditions that would maximize its impact, complete failure of all safety controls and systems, and no emergency response. Because these worst case scenarios are extremely unlikely, the RMP Rule also provides for development of an alternative release scenario. These alternative release scenarios depict a more credible release of an RMP-listed chemical and consider safety systems that are in place.

Chemical	About the Chemical	Accident Prevention In-Place	Example Event	Scenario	Distance of Concern[1]	Emergency Response Measures
Hydrogen Fluoride	Corrosive gas that can be smelled at non-harmful levels; however, exposure to high concentrations can cause severe health effects. Used in or base material for: – Pharmaceuticals – Computer chip production – Stain-resistant fiber coating – Non-stick cookware – Refrigerant for air conditioners – Specialty metals production	– Emergency shutdown capability of transfer lines – Video monitoring in key product areas – Routine safety inspections and current preventative maintenance program – Continuous safety and operator training – Regular process hazard analysis for process units – Periodic emergency response drills coordinated with LEPC and local fire departments – Plant-wide employee participation – Random drug testing for employees	Alternative Case Release Scenario Example: Failure of flange gasket on transfer line	– Total release (15,000 lbs) – In-place systems work – Shutdown system activates – Calm wind, average weather conditions	0.6 miles	– Emergency shutdown system – Emergency transfer system – Water mitigation – On-site weather station/computer modeling program to predict distance and area of concern – Community Alert Network to notify residents within distance and area of concern – Trained emergency response teams
Hydrogen Fluoride	See above	See above	Worst Case Release Scenario Example: Instantaneous storage tank rupture	– Total contents of full storage tank (165,000 lbs) released in 10 minutes – Failure of all existing safety and mitigation systems – Worst possible weather conditions (very calm wind, low humidity) – No emergency response measures taken	16 miles	See above
Ammonia	Corrosive gas that is lighter than air. Strong odor (such as household ammonia) that can be smelled at non-harmful levels; however, exposure to high concentrations can cause severe health effects. Used as cleaner, fertilizer, refrigerant.	– Emergency shutdown capability of transfer lines – Video monitoring in key product areas – Routine safety inspections and current preventative maintenance program – Continuous safety and operator training – Regular process hazard analysis for process units – Periodic emergency response drills coordinated with LEPC and local fire departments – Plant-wide employee participation – Random drug testing for employees	Alternative Case Release Scenario Example: Failure of flange gasket on transfer line	– Total release (28,000 lbs) – In-place systems work – Shutdown system activates – Calm wind, average weather conditions	0.2 miles	– Emergency shutdown system – On-site weather station/computer modeling program to predict distance and area of concern – Community Alert Network to notify residents within distance and area of concern – Trained emergency response teams
Ammonia	See above	See above	Worst Case Release Scenario Example: Instantaneous storage tank rupture	– Total contents of full storage tank (87,500 lbs) released in 10 minutes – Failure of all existing safety systems – Worst possible weather conditions (very calm wind, low humidity) – No emergency response measures taken	3.4 miles	See above

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[1] RMP Distance of Concern: The distance a toxic vapor cloud, fire or explosion from an accidental release will travel before dissipating to the point that serious injuries from short-term exposure will no longer occur. Data

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