# City Manager's Report
## Reichhold Chemical Incident

**Anthony J. DePrima, AICP**

**Presented to the**
**Safety Advisory & Transportation Committee**
**Tuesday, October 10, 2006**

# City Manager's Report - Reichhold Chemical Incident

**Presented to the Safety Advisory & Transportation Committee**
**Tuesday, October 10, 2006**

## Introduction

At the August 28, 2006 City Council meeting, Councilman Ruane asked that I put together a report regarding the circumstances surrounding the "Dow Reichhold Styrene Railcar Chemical Spill" of August 25-26 as it related to the City of Dover. Specifically:

- How and when the City became involved in the August 25 Reichhold Chemical incident.
- How the City's Emergency Operations Plan was utilized in a coordinated response--especially the efforts taken by the City to communicate in a timely manner with the residents of Dover.
- Update on the status and details of the City's training and plans for responding to any incident of this nature.
- Use of the rail yard along New Burton Road for the marshalship and storage of Dow Reichhold train cars should be re-examined by the relevant City of Dover departments.

After giving some basic background information and acknowledgments, I will address each question respectively. It is important to note that this is not intended to be a comprehensive review of the incident, and that I do not consider myself to be an expert in the area of emergency management.

## Acknowledgments

Dover Police Lieutenant Paul Bernat, who also serves as the Emergency Management Coordinator, provided me with a report of the incident (Attachment A) which is a much more detailed account of the incident and serves as the main source for this report. Fire Chief, Brian Bashista, also provided me with a time line of events (Attachment B) and some excellent insight into the incident. Both Lt. Bernat and Deputy Fire Chief, Jason Osika, provided information about the September 2003 Mock Emergency Response Drill.

## Background

At approximately 6:30 p.m, the chemical spill of s*tyrene* was reported to the Cheswold Fire Department by employees of the Dow Reichhold plant. The plant is approximately one mile north of the City of Dover. The styrene was leaking from a railroad tanker car. Styrene is a chemical used in the manufacture of synthetic plastic and rubber. It is a possible carcinogen, has a very strong odor, dissipates almost immediately when spilled, and is volatile. While limited exposure is not harmful, high levels of exposure will create sickness. Twenty-three people became ill due to higher levels of exposure. Odors were

reported as far as South Dover in areas along the Norfolk-Southern rail line. Odors were reported throughout the northern third of Dover. As important as the levels of toxicity of the chemical was the possibility that the tank car could possibly explode due to pressure buildup from chemical reactions occurring within the tank.

The Cheswold Fire Department was immediately dispatched. At 6:58 p.m. Cheswold requested an Engine and Rescue truck from the Dover Fire Department. The Dover Fire Department including Chief Bashista arrived at 7:09 p.m. At 7:15 p.m. the Dover Police Department was notified, and the on-call Lieutenant (and former Emergency Management Coordinator), Benton Counselman, went to the Cheswold Fire Department. In accordance with Delaware procedure, the Cheswold Fire Chief was in charge of the incident command, and the Emergency Operations Center (EOC) was established at the Cheswold Fire Station. According to Lt. Bernat's report, The National Incident Management System (NIMS) was in place, and the Incident Command System (ICS) was in effect with a Unified Command System (UCS). DNREC took over command as the lead agency at around 3:28 a.m. on Saturday after the EOC was moved to the Delaware State Fire School due to the proximity of the Cheswold Fire Station. The incident ended around 9:00 p.m. on Saturday when it was determined that the area was safe.

Regarding public notices, it appears that the first news releases began around 8:30 p.m. on Friday, August 25, and the first of five Reverse 911 messages (Delaware Emergency Notification System) started at 8:54 p.m. The fourth and last message received by City residents was sent 12:16 p.m. on Saturday, August 26, notifying residents that no adverse effects or dangerous conditions existed beyond the 1,500 foot evacuation zone. This notice took over four hours to be sent to 17,495 phones. The last message was sent at 9:10 p.m. on Saturday to residents in the immediate area of the plant informing them that the area was safe. Copies of all notices are included as exhibits in Attachment A.

There were no mandatory evacuations; voluntary evacuation was encouraged within 1,500 feet. Dover Police were active in planning the evacuations of Dover residents if needed. Through the efforts of the Dover Fire Department, Dover High School was opened as an evacuation center. Road closures occurred in the area including Route 13. Dover Police were active in traffic control.

**How and when did the City become involved in the August 25 Reichhold chemical incident?**

Both the Dover Fire Department and Police Department were notified early in the incident. Using 6:42 p.m. as the time the Cheswold Fire Department was dispatched as a benchmark, the Dover Fire Department responded to a 6:58 p.m request for assistance and was on the scene by 7:09 p.m. with an Engine and Rescue truck. Dover Police were notified by 7:15 p.m.. The on-duty shift Lieutenant immediately went to the Cheswold EOC. By 8:00 p.m., Dover police officers were dispatched to various intersections.

Dover Police was involved in the following activities: EOC and ICS participation; additional officers were made available for traffic control; active in evacuation planning of Dover neighborhoods; issued informational press release from Dover Police Department; additional dispatchers made available to assist at the EOC.

The Dover Fire Department was involved in the following: dispatched engine, rescue and foam (perhaps more equipment); Chief served as initial liaison between Cheswold Fire Department and Dover; retrieved chemical and evacuation distance information from Incident Commander; initiated the opening of Dover High School as evacuation center (it appears no one else was thinking about this); assisted in evacuation planning; contacted City Manager.

Due to my being out of town, I missed the first call from Chief Bashista at 7:24 p.m. as well as a call from Mayor Speed at 7:45 p.m. I first learned of the incident when Councilman Carey called me at 8:14 p.m. I spoke with Chief Bashista at 8:16 p.m. and offered manpower and equipment. I spoke with the Mayor and briefed him; he knew about the incident because he was at an affair where a DNREC employee was called to respond. Mayor Speed was able to speak briefly with Chief Horvath. I called the Fire Chief back and asked him to determine if there could be any impact on water supply, and he reported back that there was none. At 9:18 p.m. I called the Systems Operation Center and asked them to call each City Council member to brief them on the situation. I briefed the Council President when she called me at 9:52 p.m. Both the Mayor and I visited the EOC on Saturday morning and were fully briefed on the situation.

**How was the City's Emergency Operations Plan utilized in a coordinated response--especially the efforts taken by the City to communicate in a timely manner with the residents of Dover?**

It is fair to say that the Emergency Operations Plan was not utilized in this coordinated response and probably should not have been since it was outside the Dover city limits. At no point was either I or the Mayor advised by the Police or Fire departments to implement the Plan. The Dover Police and Fire departments played a strong supporting role with the NIMS/ICS system. Activating our own EOC and sending our only public notifications runs counter to the unified command concept. It would have most likely caused additional confusion.

Lt. Bernat stated that he had not been contacted in his capacity as the EMC until about 12 Midnight and arrived on the scene in his role as a shift commander at 6:00 a.m. on Saturday. I do believe that he should have been contacted very early in the incident in his capacity as EMC so that he could properly advise the Mayor and City Manager and serve as our liaison. The Mayor is the primary official who activates our Emergency Operations Plan, and the City Manager is the secondary official.

**Update on the status and details of the City's training and plans for responding to any incident of this nature.**

On August 17, 2003 the City of Dover Police and Fire departments participated in a mock emergency operations drill that was intended to simulate a railroad car derailment along New Burton Road near Blue Beach Drive.

The following is the contents of a memo from Lt. Counselman to Chief Horvath regarding the operation:

> *On Sunday August 17, 2003 the Dover Police Department participated in a mock disaster drill that was conducted in the City of Dover, specifically the area of New Burton Road and Blue Beach Drive. Participating members from the*

*Police Department included Major Harding, Captain Taraila, Captain Kurtz, Lieutenant Boney, and writer.*

*Personnel from DEMA, and the Fire Chief of Robbins Hose Company supervised the drill. The scenario for the mock disaster drill consisted of parked chemical rail cars that had been vandalized causing a release of the chemical products from the rail cars. The chemicals involved were vinyl acetate and propane.*

*The Scenario also included several initial victims who had been overtaken by the chemicals as they drove by the incident, and would require the evacuation of the adjacent neighborhood of Crossgates.*

*Other agencies that also participated in the mock disaster drill were the Delaware State Police, Kent County Fire Police, DNREC, Robbins Hose, Camden Fire Company, Little Creek Fire Company and Hazmat Decon Team, DAFB Hazmat Team, Kent County Public Safety, Division of Public Health, Bay Health Medical, (Kent General Hospital), and Southern Pacific Railroad. The mock disaster drill was concluded in approximately six hours.*

In addition to the above drill, Chief Bashista reported a number of operation and pre-planning standards that places Dover in a better position to react to these kinds of situations. For example, all Dover Fire Department trucks carry Hazardous Material Guidebooks, and our dispatch system has a Safety HazMat database that enables dispatch to immediately retrieve information on hazardous chemicals. Attachment C is a sample printout from the database. He also noted that Dover Fire and Police departments have the capability to turn out more manpower than Cheswold in a short period of time. For example, Chief Bashista estimated that 60 firefighters and police officers could contact residents within a 1,500-foot radius within 40 minutes. Also available through the Emergency Operations Plan are employees of the Public Services and Public Utilities departments. The Dover Fire Department has plans for specific possible incidents and drills for them. Pre-plans exist for incidents at the major industrial facilities in Dover. In these plans, Dover would utilize the Dover Air Force Base HazMat Team as it did in the drill.

**Re-examine use of the rail yard along New Burton Road for the marshalship and storage of Dow Reichhold train cars with relevant City of Dover departments.**

The 1996 City of Dover Comprehensive Plan and subsequent updates include the relocations of the New Burton Road switching and storage yard as one of the Transportation Goals. Similarly, the Dover/Kent MPO has this same goal. All departments concur that is still a relevant goal. However, because rail use is regulated by the federal government, it is unlikely that the City or the State has any authority or leverage to move the facility as long as it operates within federal rules. The goal would most likely be accomplished as an economic development incident where a better, more modern location can be developed in partnership with Norfolk-Southern Railroad. Senator Still has asked the Delaware Economic Development Office to prepare an Economic and Environmental Cost Benefit Analysis for moving railroad storage yards away from residential areas.

Ironically, Lt. Bernat found a 1978 Resolution (Attachment D) which calls for the removal of the tank cars from New Burton Road. If anything, this illustrates the difficulty of the task.

**Comments and Recommendations**

The following are some of my observations:

1. We should probably formalize what should occur when the City Manager or Mayor cannot be immediately reached. I suggest that System Operations be contacted and that they be tasked with continually trying to reach the Mayor or City Manager or other City official.

2. This incident calls into question whether the City should consider a fulltime Emergency Management/Homeland Security Coordinator. Lt. Bernat is a key first responder, and it may be difficult for him to separate duties during an emergency. I believe that the new NIMS certification requirements and other Homeland Security duties can now justify a fulltime position. I think the position should be housed in the Public Services Department away from any first responder organizations.

3. Even though the incident was outside of Dover, I think Lt. Bernat should have been informed earlier in his capacity as the City's EMC. In this capacity, he could have acted as a liaison between the "Incident Command" and Mayor and City Manager. While it is unlikely that we would have activated our Emergency Operations Plan, some discussion among the EMC, Mayor and City Manager should have occurred.

4. This incident reveals the long length of time that Reverse 911 takes to contact citizens citywide. The State's system that was used is much more robust than the system used by the City. We cannot rely on Reverse 911 as an emergency notification system. The importance of communications by radio/ television (the Emergency Broadcast System was not utilized in this event), door-to-door contact, and use of mobile public address systems cannot be overlooked.

5. Two new communication systems: public e-mail notification and radio paging for select institutions should also be considered. In this incident, radio paging may not have been effective because schools and offices were closed.

6. Efforts should be re-doubled to find a new home for railroad cars stored on New Burton Road.

**ATTACHMENT A**

# *Dover Police Department*
# *Emergency Management*
# *Dow Reichhold Styrene Rail Car*
# *Chemical Spill*
# *Report*

## *Friday, August 25, 2006, 1830 Hours*
## *Through*
## *Saturday, August 26, 2006, 2000 Hours*

***Report Written By:***
***Lt. Paul M. Bernat***

On Friday, August 25, 2006 at approximately1830 hours there was a chemical spill at Dow Reichhold. Dow Reichhold is located in Cheswold, Delaware, approximately one mile north of the City of Dover. The chemical was Styrene. The Styrene was stored in a railcar that is built to hold 20,000 gallons. The web site http://www.osha.gov/SLTC/styrene/index.html describes Styrene as the following:

> ***Styrene is classified as a possible human carcinogen by the Environmental Protection Agency (EPA) and by the International Agency for Research on Cancer (IARC). Styrene is primarily a synthetic chemical that is used extensively in the manufacture of plastics, rubber, and resins. About 90,000 workers, including those who make boats, tubs, and showers, are potentially exposed to styrene. It is also known as vinylbenzene, ethenylbenzene, cinnamene, or phenylethylene.***

The Dover Police Department dispatch center was advised by Kent Center of the chemical leak on Friday, August 25, 2006 at 1915 hours (45 minutes after the leak was detected). Lt. Benton Counselman was the on call Lieutenant and was immediately notified by DPD dispatch. Lt. Counselman responded to the Emergency Operation Center (EOC) which was located at the Cheswold Fire Station. The National Incident Management System (NIMS) was already in place and the Incident Command System (ICS) was in effect with a Unified Command System (UCS).

Chief Brian Bashista, Dover FD, opened the Dover High School as a shelter. Allen Metheny, Director of Emergency Management for Kent County contacted the Red Cross and requested them to respond to Dover High School shelter.

Captain Boney was notified and responded to the Dover Police Department where he recalled five officers from the previous shift to man traffic positions. At 2000 hours there were officers placed at US 13 and Denny's Rd., US 13 at Scarborough Rd. and Scarborough Rd. at McKee Rd. All mentioned roadways were closed to north bound traffic. Dover Kenton Rd. at Denny's Rd was blocked for east bound traffic. Delaware State Police closed US 13 south bound north of Cheswold. All north bound traffic was diverted to SR1 or Dover Kenton Rd. All Tolls were waived on SR 1.

At approximately 2030 hours Delaware State Police sent out a news release (see Exhibit "B" for content). At 2054 the first Delaware Emergency Notification System (DENS) was sent out. The message was received by 12,955 residents and it took 1 hour and 27 minutes to disseminate the message (see Exhibit "D" for message content).

At 2231 the second DENS message was sent out. The message was received by 12,631 residents and it took 1 hour and 30 minutes to disseminate the message (see Exhibit "E" for message content).

At 2245 the Styrene odor became stronger and the EOC was relocated to the Delaware State Fire School (DSFS). The DSFS is located on Chestnut Grove Rd. just west of the City of Dover. There were several different agencies and disciplines that were in the EOC and in the ICS.

They are as follows:

1. Delaware Emergency Management (DEMA)
2. Department of Natural Resources (DNREC)
3. Delaware State Police
4. Dover Police Department
5. Delaware Department of Transportation (DOT)
6. Delaware Department of Public Health
7. Representatives from Dow Reichhold
8. Representatives from Chevron Phillips
9. HMHTCC Inc. Hazmat consultant contracted by Dow Reichhold

At 2245 hours it was determined that the chemical leak will take between 24 and 48 hours before it will stabilize. It was also determined that the Styrene was polymerizing and venting. The venting was considered to be good in order to relieve pressure that was building in the rail
car. The Styrene was having a chemical reaction (solidifying) which causes the temperature to rise in the railcar. The concern was that if the polymerizing occurs then the vent will seal and the railcar will begin to build pressure and possibly explode. It was determined that the railcar was 11 years old and had good structural integrity. The HazMat consultant HMHTCC advised that if the railcar were to explode, debris could fly as far as one mile.

At 2300 there was a briefing held in the EOC. The expert consultant advised that he had a team from Arkansas coming to assist with the leak. The HazMat team was specialized and bringing special equipment.

Lt. Counselman determined that the one mile radius would affect some of the City of Dover residents. There were three neighborhoods that could be affected: The Meadows, Millcreek and Cedar Chase Apartments. McKee Business Park is also in the mile radius. All hotels in the northern section of the City were advised to shelter in place. Walmart and Sams Club were advised to close and call at 0900 to see if it was safe to reopen.

On Saturday, August 26, 2006 at 0045 hours there was a report that there was no apparent venting from the railcar. The railcar temperature was being closely monitored. There were several reports throughout the early morning where the railcar temperature fluctuated. However, the temperature did not increase to a level that posed an immediate threat.

At approximately 0300 hours Lt. Counselman along with representatives from DSP, DOT, Dover FD and Cheswold FD began to work on an evacuation logistics. It was determined that a one mile evacuation would affect approximately 8,000 people. The decision was made to implement evacuations in 1,500 foot increments if necessary.

At approximately 0328 hours Delaware State Police sent out their second and last news release (see Exhibit "C" for content). DNREC then took over as the lead agency.

On Saturday, August 26, 2006 at 0600 hours Lt. Paul Bernat responded to the EOC. Lt. Counselman briefed Lt. Bernat and was relieved of his duty. At 0705 hours there was a briefing.

It was determined that there would only be voluntary evacuations. The temperature in the railcar was reported to be going down. The railcar was still not venting and that did cause some concern. The EOC was advised that there was safety equipment coming from Arkansas that
would be set up by 0830. The equipment was air quality monitors that were set up near the railcar to monitor the air quality. The railcar temperature was being monitored by the Delaware State Police explosive robot, which held a thermometer. The EOC functioning under NIMS was working on a 0900 press release from the Joint Information Center (JIC) to be disseminated by DEMA.

At 0815 hours there was another briefing. The railcar temperature was determined to be at 156 degrees. There is a threshold of 400 degrees but there was the concern of equipment error. Therefore, it was decided to have a mandatory evacuation for all residents that were within
1,500 feet of the railcar. There were approximately 50 homes in this area. This evacuation did not affect any City of Dover residents.

At 0900 hours Walmart called and was told by Jamie Turner, Director of DEMA not to open. At 0952 it was discovered that Walmart was open. Under the UCS it was determined in the best interest of public safety to have Walmart remain closed. Lt. Bernat called Shawn Allen of Walmart (302-382-6577) and told him that they needed to close due to the possibility of the railcar exploding.

At 0940 hours the third DENS was sent out. The message was received by 23 residents and it took 23 minutes to disseminate the message (see Exhibit "F" for message content). In addition, at 0940 the first DEMA news release was sent out to the media (see Exhibit "I" for content).

At 1023 hours there was another briefing. The railcar temperature climbed to 165 degrees. There were 55 calls that were made by DENS in the 1,500 foot radius. There was discussion that if the railcar were to explode, there was the potential for glass to brake up to 325 feet away and 250 parts per million exposure up to 2,500 feet. This information was coupled by saying that there was no prolonged danger to health and the chemical vapors would dissipate quickly with the strong wind conditions.

At 1150 hours the second DEMA news release was sent out to the media (see Exhibit "J for content). Dover PD released the same message at the same time (see Exhibit "L" for content).

At 1200 hours there was another briefing. The railcar temperature had decreased to 125 degrees and there were minor signs of venting. It was decided to send in a team with turnout
gear and SCBA to evaluate the volume of chemical in the area of the railcar and DOW Reichhold Plant. In addition, the team was to assess the Plant itself and ensure that there was no threat of any other chemical reactions from the chemicals that were inside the plant.

At 1216 hours the fourth DENS was sent out. The message was received by 17,495 residents and it took 4 hours and 21 minutes to disseminate the message (see Exhibit "G" for message content).

There was discussion of what additional schools would be used for shelter if a mile evacuation were to occur. The schools were Dover High School (already open for shelter), Smyrna High School, John Basset Moore Middle School and Postlethwaite Middle School.
There was also discussion on potential busses being used for evacuation. In addition, the City of Dover Critical care and Life Support list was checked to see if any City residents would need to be transported by ambulance.

At 1430 hours there was another briefing. The railcar was reported to be puffing out the relief valve. Information was given that an inhibitor to help stabilize the railcar was in route from Chevron Phillips. There were representatives from Chevron Phillips (chemical company that sold the chemical to DOW Reichhold) at this briefing. It was determined that there should be two other railcars on the Plant premises. It was later determined that one railcar was empty and en-route to Houston, Texas. The other railcar was found and reported to be near the faulty railcar.

Lt. Bernat was relieved of duty by Lt. Getek at 1600 hours. There was another briefing at 1615 hours. The other railcar that was on site was determined to be in good condition with an ambient temperature. It was reported that there were no gaskets left in the railcar and lazy vapors present, which means that the railcar was not under pressure. The chemical was still polymerizing but the lack of gaskets allowed the railcar to vent.

At approximately 1700 hours the incident scene was confined to the fence line of the Plant property. The air quality was monitored and it was determined that the Styrene odor could not be detected from 30 feet away.

At 1907 Chief Carr, Cheswold Fire Department, removed fire apparatus from the Plant scene. DNREC was remaining at the scene to monitor the air quality. The railcar was solidifying, which was the preferred result.

At 2000 hours the evacuated citizens were allowed to return to their residence. Dover High School shelter was closed and the evacuees were allowed to return to their residence. A news release was sent out along with another DENS message advising that the emergency was over.

At 2045 hours the third and final DEMA news release was sent to the media (see Exhibit “K” for content). At 2110 hours the fifth and final DENS message was sent. The message was received by 22 residents and it took 20 minutes to disseminate the message (see Exhibit “H” for message content).

See Exhibit “A” Map of affected area.
See Exhibit “B” First Delaware State Police News Release.
See Exhibit “C” Second Delaware State Police News Release.
See Exhibit “D” First Delaware Emergency Notification System Message.
See Exhibit “E” Second Delaware Emergency Notification System Message.
See Exhibit “F” Third Delaware Emergency Notification System Message.
See Exhibit “G” Fourth Delaware Emergency Notification System Message.
See Exhibit “H” Fifth Delaware Emergency Notification System Message.
See Exhibit “I” First DEMA News Release.
See Exhibit “J” Second DEMA News Release.
See Exhibit “K” Third DEMA News Release.
See Exhibit “L” Dover PD News Release.
See Exhibit “M” Friday, August 25, 2006 personnel roster with times and assignments worked.
See Exhibit “N” Saturday, August 26, 2006 personnel roster with times and assignments worked.

# *Exhibit "A"*

## *Dow Reichhold Chemical Plant*
## *Cheswold, Delaware*

***(Photo obtained from USGS TerraServer March 16, 1992)***



# *Exhibit "B"*

**First News Release 2030 Hours**

# *Delaware State Police Media Release*

**Original Release: Chemical Release**

Released August 25, 2006

**Dover**- On August 25, 2006 at approximately 6:30 p.m. a chemical release occurred at the Reichhold Chemical Plant located at 144 Fork Branch Road in Dover. The chemical release was visible above a railcar which was parked on the plant site.

Currently, multiple state and local agencies are at work in and around the scene. The railcar possibly contained a substance called Styrene. This is substance is potentially flammable and an inhalation hazard which causes irritation.

A five mile radius has been established from the incident scene. Residents in the area are not all being evacuated; however, those at home are asked to stay in their residence. It is advised that residents shut off their air conditioners and close their vents. If anyone wishes to be evacuated, they may go to Dover High School.

Currently, ten people civilians have been treated at Kent General Hospital. A command post is sent up at the Cheswold Fire Company. Any media personnel are asked to refrain from attempting to get to the scene for safety reasons. Please meet at the Delaware State Police Academy.

Several Roads are closed; however, the main road closure involves Route 13 from Dennys Road to State Road 42.

Residents are asked to refrain from calling 911 except in cases of emergencies as circuits area jamming.

An additional release will follow.

## *Exhibit "C"*

**Second News Release 0330 hours**

# Delaware State Police News Release

*Corporal Jeffrey C. Whitmarsh*
Cell 302.598.5188 Pager 302.598.5188
Text paging through http://www.vtext.com
http://www.state.de.us/dsp/pio/newsroom.htm.

---

**Update- Chemical Release**
*** Any additional inquiries, until otherwise advised, into this incident are to be made to DEMA Representative Rosanne Pack at 302-222-6573 or DNREC Representative Melinda Carl at 302-632-1078.**
**Released August 26, 2006**

The cause of the chemical release is still unknown at this time. Crews from various state agencies are still on scene attempting to contain the chemical- which has been confirmed as styrene. Experts who deal specifically in styrene and other areas surrounding this type of event are currently flying into Delaware to assist. Crews have put monitors in place on the site of Reichhold as well as in the surrounding area that detect the presence of styrene.

Since the event occurred, 23 people had been treated and released from Kent General Hospital. They suffered flu like symptoms which came to pass with time and treatment at the hospital.

Officials have advised that limited exposure to styrene is not harmful as one will be able to smell it in the air and not suffer any of its effects. Styrene is described as having a sickly, syrupy chemical odor. At higher levels, one who is exposed to styrene will experience flu like symptoms as did those already affected when the incident occurred.

Traffic in the area of Dover and Cheswold are still affected at this time. DELDOT has updated their web site as to those roads affected by this incident. The web site is http://www.deldot.gov/.

At this time, mandatory evacuations are not enforced. A five mile radius has been identified as a "stay in doors" area. Those who live within five miles of the Reichhold Plant are advised to turn off their air conditions and close their vents. Those persons who do not wish to remain at home are advised they can go to Dover High School for shelter.

The command post for this incident has been move to the Delaware State Fire School.

An additional release will follow on August 26, 2006 by either Rosanne Pack or Melinda Carl.

# *Exhibit "D"*

## *First Delaware Emergency Notification System Message*

Friday, August 25, 2006

| | |
|---|---|
| Message sent: | 2054 hours |
| Message completed: | 2221 hours |
| Messages received: | 12,955 |
| Duration: | 1 hour 27 minutes |

Hello this is Kent County, Delaware 911. All residents receiving this message need to go to their house. Remain inside with their doors and windows shut until further notice. There is a chemical leak at Reichhold Chemical on Fork Branch Road. As stated you need to stay in your house with doors and windows shut until you receive another phone call. Thank you.

# *Exhibit "E"*

## *Second Delaware Emergency Notification System Message*

Friday, August 25, 2006

| | |
|---|---|
| Message sent: | 2231 hours |
| Message completed: | 2359 hours |
| Messages received: | 12,631 |
| Duration: | 1 hour 30 minutes |

Hello this is Kent County, Delaware 911 Center calling. We need anyone within in a 5 mile radius of Reichhold Chemical, south of Cheswold, to remain in their houses with their doors and windows shut. We do not want you outside breathing the air unless you really have to. This is a true emergency. If you have any questions we don't want you to call 911 unless it is a true emergency. Tune in to your local TV and radio stations for more information. Thank you.

# *Exhibit "F"*

## *Third Delaware Emergency Notification System Message*

Saturday, August 26, 2006
Message sent: 0940 hours
Message completed: 0949 hours
Messages received: 23
Duration: 9 minutes

This is the Delaware Emergency Notification System with an emergency message.

Kent County and the State of Delaware are requesting Citizens within 1,500 feet of Dow Reichhold facility to evacuate their residence as a precautionary safety measure. Local, County, and State officials are jointly working the incident to a safe conclusion.

A temporary shelter is open at Dover High School in the event you need temporary shelter. We ask you to close your windows and shut off your air conditioner.

We will periodically update the news media on developments.

# *Exhibit "G"*

## *Fourth Delaware Emergency Notification System Message*

Saturday, August 26, 2006
Message sent: 1216 hours
Message completed: 1637 hours
Messages received: 17,495
Duration: 4 hours 21 minutes

This is the Delaware Emergency Notification System with an emergency message for your safety.

Based on current actions taking place at Dow Reichhold, Kent County and the State of Delaware has determined that no current adverse health effects or dangerous conditions currently exist beyond the 1,500 foot evacuation zone. Please understand emergency responders are constantly reassessing the situation and conditions may change as the incident continues. In the event that the incident status changes immediate phone notification will take place to re-establish a shelter-in-place or evacuation requirement. We request your diligence while in the area in monitoring for incoming calls. The previous shelter-in-place request and air conditioner restrictions have been lifted. Status reports will be available on your local radio station or website, but emergency notice will, as always, be reported through the DENS. Please refrain from using 911 for questions or concerns regarding the incident status as we are attempting to keep these clear for actual emergencies.

# *Exhibit "H"*

## *Fifth Delaware Emergency Notification System Message*

Saturday, August 26, 2006
Message sent: 2110 hours
Message completed: 2130hours
Messages received: 22
Duration: 20 minutes

This is the Delaware Emergency Notification System with an important message.

Based on the current actions at Dow Reichhold, Kent County and the State of Delaware has determined that all residents and businesses in the previously announced evacuation area are now free to return home and resume normal operations. The area is now safe for everyone. If anyone continues to have concerns about this incident you are invited to call an emergency helpline at 302-213-6655. Again that number is 302-213-6655.

**First DEMA News Release 0940**
**Saturday, August 26, 2006**

# *Exhibit "I"*

165 Brick Store Landing Road

Smyrna, DE 19977

302-659-3362 or 1-877-SAY DEMA

FAX 302-659-6855

## News Release

**DOW REICHHOLD SPECIALTY LATEX LLC**

**FOR IMMEDIATE RELEASE FOR FURTHER INFORMATION**

Saturday, August 26, 2006 **CONTACT:** Rosanne Pack

(302) 659-2210

(302) 222-6573

Melinda Carl
(302) 632-1078

**PRECAUTIONARY EVACUATION ORDERED FOR 1,500-FOOT RADIUS FROM DOW REICHHOLD PLANT**

Cheswold, Delaware - August 26, 2006

An evacuation order has been issued by Kent County, Delaware Emergency Management Agency, and local emergency response officials for an area within a 1,500-foot radius of the Dow Reichhold Specialty Latex Plant located at 144 Fork Branch Road in north Dover. Those residing in the area that includes Fork Branch, Salisbury, Denney's and McKee roads, are to leave their residence until official notice is given that it is safe to return. A Red Cross Shelter is open in Dover High School. Those evacuating may go to the shelter or to family or friends homes until further notification. Those evacuating should take all medications that may be required and remember that pets are not allowed in Red Cross shelters. Public safety officials and hazardous materials experts issued the evacuation order as a precautionary measure to ensure the safety of those who are in close proximity to the plant. This action follows a chemical release of styrene that occurred at the plant at 6:30 p.m., August 25. DEMA Director Jamie Turner said officials would rather err on the side of caution and risk minor inconvenience to some residents than risk any possible injury to anyone. As soon as monitoring of the release sites indicates that residents can return safely, official notice

**First DEMA News Release Continued**

will be issued through the media.

Delaware State Police will supervise evacuation routes. Evacuees should follow all instructions of emergency personnel and should continue to monitor the Emergency Alert System (EAS) for updated information and instructions. The Delaware Emergency Management Agency (DEMA) recommends that people within a mile of the plant monitor the Emergency Alert System (EAS) stay informed about the situation. EAS stations include:
WDEL-AM 1150
WDSD-FM 92.9
WJBR-AM 1290
WILM-AM 1450
WKEN-AM 1600
WSTW-FM 93.7
WDOV-AM 1410

**Second DEMA News Release**
**1150 Saturday, August 26, 2006**

# *Exhibit "J"*

165 Brick Store Landing Road

Smyrna, DE 19977

302-659-3362 or 1-877-SAY DEMA

FAX 302-659-6855

## News Release

**DOW REICHHOLD SPECIALTY LATEX LLC**

**FOR IMMEDIATE RELEASE FOR FURTHER INFORMATION**

Saturday, August 26, 2006

Time:11:50 a.m.

**CONTACT:** Rosanne Pack

(302) 659-2210

(302) 222-6573

Melinda Carl
(302) 632-1078

**DELAWARE NOTIFICATION SYSTEM MESSAGE ADVISES PUBLIC OF REICHHOLD UPDATE**

A Delaware Emergency Notification System safety message was recently issued to advise the public of the status of the chemical release incident at Dow Reichhold Specialty Plant located at 144 Fork Branch Road north of Dover. Based on current monitoring at Dow Reichhold, incident specialists, Kent County and the State of Delaware have determined that there are no conditions that would cause adverse health effects at this time. There are no dangerous conditions currently existing beyond the 1,500 foot evacuation zone. Residents within the 1,500 foot radius of the plant are asked to evacuate as a precautionary safety measure. Those outside the evacuation zone radius no longer need to shelter in place. However, they should continue to

**Second DEMA News Release Continued**

monitor media outlets and their telephones for additional DENS messages.

The public is asked to understand that emergency responders are constantly reassessing the situation and conditions may change as the incident continues. By monitoring the media and home telephones, the public in the area will be continually advised.

In the event that the incident status changes, immediate DENS phone notification will be enacted to reestablish a shelter-in-place or evacuation requirement. To reiterate, the previous shelter in place request and air conditioner restrictions have been lifted.

Status reports will be available on your local radio stations or www:state.de.us/dema, and emergency notice will be reported through the Delaware Emergency Notification System.

Please do not call 911 for questions or concerns regarding the incident status. It is important to keep these lines open for actual emergencies.

A portion of Rt. 13 at Cheswold remains closed. The tolls, north- and southbound at the Denneys Road exit are waived, all other Route 1 tolls are in effect.

The Delaware Emergency Management Agency (DEMA) recommends that people within a mile of the plant monitor the Emergency Alert System (EAS) to stay informed of the status. EAS stations include:
WDEL-AM 1150
WDSD-FM 92.9
WJBR-AM 1290
WILM-AM 1450
WKEN-AM 1600
WSTW-FM 93.7
WDOV-AM 1410

# *Exhibit "K"*

**Third DEMA News Release**
**2045 Sunday, August 27, 2006**

165 Brick Store Landing Road
Smyrna, DE 19977
302-659-3362 or 1-877-SAY DEMA
FAX 302-659-6855

## News FOR IMMEDIATE RELEASE

**Saturday, August 26, 2006 FOR FURTHER INFORMATION**
**CONTACT:** Rosanne Pack
**Time: 8:45 p.m.** (302) 222-6573 (battery down, please call after 10:30 p.m. or Sunday morning)
Melinda Carl
(302) 632-1078

**EVACUATION ORDER TERMINATED FOLLOWING ASSESSMENT OF DOW REICHHOLD PLANT STATUS**

The evacuation order for the area within a 1,500-foot radius of the Dow Reichhold Specialty Latex Plant located at 144 Fork Branch Road in north Dover has been terminated. Those who evacuated the area may return to their homes. Businesses that closed as a result of a styrene leak at the plant may reopen immediately, and any area school classes or church services may be conducted as scheduled on Sunday, August 27.

Monitoring and assessment of the styrene leak from a railroad tanker car at the plant site provided information that allowed public safety officials and hazardous materials experts to determine that there are no current health hazards to the public. Delaware Natural Resources and Environmental Control Emergency Response Team monitoring equipment and equipment provided by HMHTTC Response Incorporated showed no readings of styrene in the air at the plant and in the area surrounding the plant.

DNREC Emergency Response Team and HMHTTC will continue to monitor air quality at the rail road car and the plant through the night and at least through Sunday morning.

Area residents who have health concerns and questions may call 302-213-6655; toll free, to speak with a nurse and/or a toxicologist. The number is activated Saturday evening, August 26, 9 p.m. - midnight, and Sunday, August 27, 7 a.m. – 12 midnight.

--- END ---

# *Exhibit "L"*

News Releases
From the Dover, Delaware Police

**News Release From DEMA**
**Complaint Number: N/A**
Date of Incident: 08/26/06
This News Release was entered 08/26/06 by Captain, Lester Boney

**Location of Incident:**
City of Dover and surrounding area

**Crime/Nature**
This is the Delaware Emergency Notification System with an emergency message for your safety.
Based on current actions taking place at Dow Reichold, Kent County and the State of Delaware, has determined that no current adverse health effects or dangerous conditions currently exist beyond the 1,500 foot evacuation zone.
Please understand emergency responders are constantly reassessing the situation and conditions may change as the incident continues.
In the event that the incident status changes, immediate telephone notification will take place to reestablish a shelter-in-place or evacuation requirement.
We request while in the area, monitor your telephone for incoming calls for updates.
The previous shelter in place request and air conditioner restrictions have been lifted.
Status reports will be available on your local radio station or www.state.de.us/DEMA, comma but emergency notice, will, as always be reported through the Delaware Emergency Notification System. Please refrain from using 911 for questions or concerns regarding the incident status as we are attempting to keep these lines clear for actual emergencies.

Dover Police Department News Release Center
Please Email comments or problems with this site to
Paul Cookson, Computer Technician for the Dover Police Department

Developed and Hosted by Delaware.net
©2006 Delaware.Net, Inc.

# *Exhibit "M"*

***Dow Reichhold Styrene Leak***
***Friday, August 25, 2006 1830 hrs. – Saturday, August 26, 2006 2000 hrs.***

## *Friday, August 25, 2006*

| *Officer* | *Assignment* | *Time* | *Hours* | *Hourly Rate* | *OT Rate* | *Total Wages* |
|---|---|---|---|---|---|---|
| *Captain Lester Boney | OIC | 2030-0200 | 5.5 | $38.24 | $57.36 | $210.32 |
| *Lt. Benton Counselman | OIC | 2000-0700 | 11 | $34.45 | $51.68 | $378.95 |
| Cpl. Brian sherwood | Road Closure Assignment | 2000-2300 | 3 | $27.67 | $41.51 | $83.01 |
| Ptlm. J. Miller | Road Closure Assignment | 2000-2330 | 3.5 | $19.73 | $29.60 | $69.06 |
| Pfc C. Turner | Road Closure Assignment | 2100-2400 | 3 | $21.90 | $32.85 | $65.70 |
| Ptlw. J. King | Road Closure Assignment | 2000-2400 | 4 | $20.98 | $31.47 | $83.92 |
| Pfc. Greg Hopkins | Road Closure Assignment | 2030-2400 | 3.5 | $26.22 | $39.33 | $91.77 |
| Cpl. Chad Bernat | Road Closure Assignment | 2230-0300 | 4.5 | $28.82 | $43.23 | $129.69 |
| Ptlm. Pete Martineck | Road Closure Assignment | 2330-0300 | 3.5 | $18.34 | $27.51 | $64.19 |
| Ptlm. Robert Roswell | Road Closure Assignment | 2330-0730 | 8 | $20.98 | 31.47 | $167.84 |
| 911 Supervisor C. Kober | Assist 911 Center | 2100-0100 | 4 | $22.82 | 34.23 | $91.28 |
| | | Shift Differential | 48 | $1.10 | | $52.80 |
| | | | | | **Friday Total** | **$1,488.53** |
| | | | | | **Friday Total Hours** | **53.5** |

***Officer elected to take compensatory time**

***Officer elected to take compensatory time**

# *Exhibit "N"*

***Dow Reichhold Styrene Leak***
***Friday, August 25, 2006 1830 hrs. – Saturday, August 26, 2006 2000 hrs.***

## Saturday, August 26, 2006

| Officer | Assignment | Time | Hours | Hourly Rate | OT Rate | Total Wages |
|---|---|---|---|---|---|---|
| *Captain Lester Boney | OIC | 0900-1900 | 10 | $38.24 | $57.36 | $382.40 |
| Lt. Paul Bernat | OIC | 0600-1600 | 10 | $34.45 | $51.68 | $344.50 |
| Lt. Steve Getek | OIC | 1600-2130 | 5.5 | $34.45 | $51.68 | $189.48 |
| Lt. James Hosfelt | Scarborough Rd @ US 13 | 0300-0800 | 5 | $34.45 | $51.68 | $172.25 |
| Sgt. William Kent | Rove | 1530-2130 | 6 | $31.61 | $47.42 | $189.66 |
| Cpl. Chris Hernmance | US 13 @ W. Denny's Rd | 1530-2130 | 6 | $27.67 | $41.51 | $166.02 |
| Pfc. Larry Simpkiss | US 13 @ W. Denny's Rd | 1600-2100 | 5 | $25.04 | $37.56 | $125.20 |
| Pfc Paul Kuntzi | Scarborough Rd @ Mckee Rd | 1530-2130 | 6 | $25.04 | $37.56 | $150.24 |
| Pfc Mickie Price | Scarborough Rd @ US 13 | 1530-2130 | 6 | $23.79 | $35.69 | $142.74 |
| Pfc Brian Allen | Road Closure Assignment | 0630-2130 | 15 | $21.90 | $32.85 | $328.50 |
| Ptlm. Chris Bumgarner | Kenton Rd @ W. Denny's Rd | 1530-2130 | 6 | $18.34 | $27.51 | $110.04 |
| Ptlm. S. Musemici | Road Closure Assignment | 0630-1630 | 10 | $19.73 | $29.60 | $197.30 |
| Pfc Lance Chandler | Road Closure Assignment | 0630-1800 | 11.5 | $25.04 | $37.56 | $287.96 |
| Pfc Christian White | Road Closure Assignment | 0800-1800 | 10 | $26.75 | $40.13 | $267.50 |
| 911 Supervisor C. Kober | Assist 911 Center | 0900-1500 | 6 | $22.82 | 34.23 | $136.92 |
| Dispatcher L. Jackson | Assist 911 Center | 0700-1900 | 12 | $19.18 | 28.77 | $230.16 |
| Dispatcher C. Bradford | Assist 911 Center | 1000-1500 | 5 | $19.18 | 28.77 | $95.90 |
| Dispatcher D. Gillcrese | Assist 911 Center | 1600-1900 | 3 | $19.18 | 28.77 | $57.54 |
| | | Shift Differential | 46 | $1.10 | | $50.60 |
| | | | | | **Saturday Total** | **$3,624.91** |
| | | | | | **Grand Total** | **$5,113.43** |
| | | | | | **Saturday Total Hours** | **138** |
| | | | | | **Grand Total Hours** | **191.5** |

***Officer elected to take compensatory time**

# ATTACHMENT B

## TIME LINE FROM FIRE CHIEF BRIAN BASHISTA

On Friday August 25, 2006 I was first notified of a rail car incident in Cheswold at 18:42 hours by Chief Bundek of Little Creek Fire Company who was late for dinner with myself and Deputy Chief Osika because of his stations response to the incident, at 18:56 I was notified by cell phone from the Dover Fire Dispatcher that it sounded like they had a serious incident in Cheswold. At 18:58 Cheswold requested Dover FD assistance at which time myself and Deputy Chief Osika could smell a strong chemical odor in Bicentennial Village. The following is a chronological order of events according to a taped recording of the incident which we have on record at Dover FD.

18:42 Cheswold Dispatched to incident
18:58 Cheswold request an Engine & Rescue from Dover FD
19:07 Cheswold request a Sert Level III response (DEMA)
19:09 Dover Units Arrive in Cheswold including myself.
19:19 I request information from Cheswold Incident Commander on type of chemical, evacuation distance and it's possible effects on the City of Dover.
19:23 I leave a message for the City Manager and also contact the Council President to advise them of the situation. Several minutes later the City Manger calls me back and I brief him on the situation. The City Manager offers any city resources which are needed for the incident.
19:38 Cheswold request the Dover FD Foam Unit.
20:01 I am requested to report to the Cheswold FD command post to act as the liaison between Cheswold and the City of Dover. When I arrive I'm told that they are working on a evacuation announcement.
20:05 DEMA gives the authority to Kent 911 to do a reverse 911 call for a 5 mile radius for shelter in place.
20:11 Because I felt city residents could possibly have to be evacuated in North Dover I called the Dover FD dispatcher and had him make the notifications to open Dover High School as an evacuation point.
20:33 New Castle County Hazmat Team arrives in Cheswold.
20:43 Dover High is opened and awaiting any possible evacuees.
20:47 I request an EMS unit respond to Dover High to assist with evacuees.
20:48 I inform the Cheswold Fire Chief that I've opened Dover High, we discuss an alternate site outside the 5 mile radius if it was needed however decide against it.
22:31 Dover FD Units return to Fire Station 2 and stage until released by the Cheswold Incident Commander.
02:00 I attend a meeting at the Delaware State Fire School along with the Cheswold incident commander, DSP and Dover PD. We discuss evacuation options including evacuating the City of Dover, I adamantly expressed my opinion of sheltering in place and at most evacuating from Cedar Chase Apartments north if it was found we needed to do so.

# ATTACHMENT C

## STYRENE MONOMER, [INHIBITED]

**NOAA Number:** *4553*
**CAS Number:** *100-42-5*
**Ambient State:** *Not Listed*
**Formula:** *C8H8*
**HazMat Label:** *FLAMMABLE LIQUID*

**Cameo ID Number:** *04553*
**United Nations Number:** *2055*
**Level of Concern:** *.00000000 PPM*
**STCC:** *4907265*
**RTECS:** *WL3675000*

### NFPA Codes

**Hazard:** *2-Moderate Hazard*
**Fire:** *3-Serious Hazard*
**Reactivity:** *2-Moderate Hazard*
**Special:**



### SARA Specific Information

**Extremely Hazardous:** *No*
**313 Report Required:** *Yes*
**CERCLA Reporting:** *Yes*
**Reportable Quantity:**
**Threshold Planing Quantity:** *1000*
**Identified in RCRA:** *No*

RECEIVED
OCT 0 5 2006
Mayor/City Manager

### Material Safety Data Sheet

**Exposure Hazards**

FLAMMABLE. CONTAINERS MAY EXPLODE IN FIRE. Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. Vapor is heavier than air and may travel considerable distance to a source of ignition and flash back. At elevated temperatures such as in fire conditions, polymerization may take place which may lead to container explosion. (USCG, 1991)

**General Description**

Styrene monomer inhibited is a clear colorless liquid with an aromatic odor. It is used to make plastics, paints, and synthetic rubber, and to make other chemicals. It has a flash point of 90 deg. F. Its vapors are irritating to the eyes and mucous membranes. If it becomes contaminated or is subjected to heat, it may polymerize. If the polymerization takes place inside a container, the container is subject to violent rupture. It is lighter than and insoluble in water. Its vapors are heavier than air. It weighs 7.6 lbs/gallon. ((c) AAR, 1991)

**Fire Fighting Techniques**

Do not extinguish fire unless flow can be stopped or safely confined. Use water in flooding quantities as fog. Solid streams of water may spread fire. Cool all affected containers with flooding quantities of water. Apply water from as far a distance as possible. Use foam, dry chemical, or carbon dioxide. ((c) AAR, 1991) \

**Protective Clothing**

Wear chemical protective suit with self-contained breathing apparatus. (USCG, 1991)

Material_____Rating_____
AL PET/PVC
FABRIC.....LT 1 hour
BARRICADE
FABRIC.....GT 3 hours
BLUE MAX
FABRIC.....GT 3 hours
BUTYL
FABRIC.....LT 1 hour
CHEMTUFF
FABRIC.....LT 1 hour
CPE
FABRIC.....1-3 hours
NAT RUB
GLOVES.....LT 1 hour

**Material Safety Data Sheet**

NAT RUB+NEOP+NBR
GLOVES.....LT 1 hour
NEOP
GLOVES.....LT 1 hour
NITRILE
GLOVES.....LT 1 hour
NITRILE+PVC
FABRIC.....LT 1 hour
GLOVES.....LT 1 hour
PE/EVAL/PE
GLOVES.....GT 3 hours
PTFE TEFLON
FABRIC.....GT 3 hours
PVAL
GLOVES.....GT 3 hours
PVC
GLOVES.....LT 1 hour
RESPONDER
FABRIC.....GT 3 hours
SARANEX23P
FABRIC.....LT 1 hour
SILVER SHIELD
GLOVES.....GT 3 hours
VITON/CHLOROBUTYL
FABRIC.....GT 3 hours

**Containment and Non-Fire**

Keep sparks, flames, and other sources of ignition away. Keep material out of water sources and sewers. Build dikes to contain flow as necessary. Attempt to stop leak if without undue personnel hazard. Use water spray to knock-down vapors. Land spill: Dig a pit, pond, lagoon, holding area to contain liquid or solid material. Dike surface flow using soil, sand bags, foamed polyurethane, or foamed concrete. Absorb bulk liquid with fly ash, cement powder, or commercial sorbents. Apply "universal" gelling agent to immobilize spill. Apply approriate foam to diminish vapor and fire hazard. Water spill: Use natural barriers or oil spill control booms to limit spill travel. Use surface active agent (e.g. detergent, soaps, alcohols), if approved by EPA. Inject "universal" gelling agent to solidify encircled spill and increase effectiveness of booms. If dissolved, in region of 10 ppm or greater concentration, apply activated carbon at ten times the spilled amount. Remove trapped material with suction hoses. Use mechanical dredges or lifts to remove immobilized masses of pollutants and precipitates. ((c) AAR, 1991)

**Health Hazards**

VAPOR: Irritating to eyes, nose and throat. If inhaled, will cause dizziness or loss of consciousness. LIQUID: Will burn skin and eyes. Harmful if swallowed. (USCG, 1991)

**First Aid**

If this chemical contacts the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately. Contact lenses should not be worn when working with this chemical.\If this chemical contacts the skin, flush the contaminated skin with water. Where there is evidence of skin irritation, get medical attention.\If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform mouth-to-mouth resuscitation. Keep the affected person warm and at rest. Get medical attention as soon as possible.\If this chemical has been swallowed, get medical attention immediately. (NIOSH, 1994)

**Properties**

Flash Point: 88 F (cc) (USCG, 1991)\\Lower Exp Limit: 1.1 % (USCG, 1991)\\Upper Exp Limit: 6.1 % (USCG, 1991)\\Auto Igtn Temp: 914 F (USCG, 1991)\\Melting Point: -23.1 F (USCG, 1991)\\Vapor Pressure: 5.12 mm at 70 F (USCG, 1991)\\Vapor Density (air = 1): Not Applicable. (USCG, 1991)\\Specific Gravity, Liquid: 0.906 at 68 F (USCG, 1991)\\Boiling Point: 293.4 F at 760 mm (USCG, 1991)\\Molecular Weight: 104.15 (USCG, 1991)\\IDLH: 700 ppm (NIOSH, 1994)\\TLV TWA: 50 ppm ((c)ACGIH, 1991)\\TLV STEL: 100 ppm ((c)ACGIH, 1991)

# ATTACHMENT D

ADOPTED JUNE 12, 1978

RESOLUTION - CONRAIL'S STORAGE OF GASEOUS MATERIALS

By motion of Mr. McDonough, seconded by Mr. Witt, Council by a unanimous roll call vote, adopted the following resolution.

WHEREAS, the Mayor and Council of the City of Dover have been made aware of the fact that Consolidated Rail Corporation in its railroad operations has been permitting railcars to stand and remain for extended periods of time on railroad tracks adjoining residential areas in the City of Dover which cars contain hazardous chemicals and materials; and

WHEREAS, emergency situations have been created in the past by cars containing hazardous chemicals being permitted to remain on the railroad sidings adjacent to residential areas, one particular occasion requiring the immediate evacuation of residents of the area; and

WHEREAS, railcars carrying hazardous chemicals and materials which have been permitted to remain adjacent to residential areas in other cities and towns throughout the country have caused emergency situations resulting in death, serious injuries to persons and destruction of property; and

WHEREAS, the Mayor and Council of the City of Dover are deeply concerned that the continued practice of allowing railcars containing hazardous material to remain for periods of time adjacent to residential areas in the City of Dover will result in a disaster which may cause death or serious personal injury to residents of the City of Dover or serious destruction of property.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF DOVER, IN COUNCIL MET:

1. That the Mayor and Council of the City of Dover hereby declare that a state of emergency exists and a nuisance is thereby created by Consolidated Rail Corporation and any other rail carrier which permits railcars containing hazardous materials to remain on railroad sidings or railroad tracks for extended periods of time adjacent to residential areas within the City of Dover.

2. That the Mayor and Council of the City of Dover strongly urge Consolidated Rail Corporation and any other rail carrier not to permit at any time in the future railcars carrying hazardous materials and chemicals to remain on railroad sidings or tracks adjacent to residential areas in the City of Dover for any period of time other than the normal movement and passage of said railcars.

3. That the City Clerk is hereby directed to deliver this resolution and copies of the same to Consolidated Rail Corporation; to members of the Congress representing the State of Delaware; and to designated members of the General Assembly.