

North Carolina
Department of Environment and Natural Resources
Division of Air Quality
Chemical Accident Prevention Program-112(r)
Report for USEPA Fiscal Year 2003

North Carolina has 369 Risk Management Program facilities on file as of September 2003, 33 of which are covered by local environmental programs, and 127 programs are water treatment/wastewater facilities. The North Carolina Division of Air Quality (DAQ) Regional Offices share responsibility for the remaining 209 facilities.

The North Carolina Chemical Accident Prevention Program (NC CAPP) anticipates that the 2004 update process will improve the quality of the of the RMP picture in the state. The de-registration or withdrawal of exempt and former facilities from the database will help to purge the list. Moreover, several facilities have substituted chemicals to reduce inventories or change process, as in chloramination at water treatment plants, to fall below reporting threshold quantities. It is not clear how much the list could be expected to shrink, but more than a dozen filers have expressed their intentions to opt out of the program (many will be propane fuel exempted).

Staff Changes

Erin McIntyre was recruited to fill the North Carolina Emergency Management Risk Management Program Planner position in October 2002

Inspections

North Carolina Division of Air Quality Regional Office Inspectors completed 16 facility inspections during FFY 2002. North Carolina Environmental Health Inspectors did not report any water treatment facility inspections during the same period.

Investigations and Site Visits

Scott Bullard, NCDAQ served as an investigative liaison to the United States Chemical Safety Board and assisted EPA OSC Charles Fitzsimmons at the West Pharmaceutical Services Explosion and Fire on January 29, 2003. The facility was found to contain 112(r) substances below threshold quantities and other 112 (r) facilities in the vicinity were also impacted. (The investigation is ongoing at this time and a public meeting was held on 18 June 2003.)

Scott Bullard, NCDAQ and Erin McIntyre, NCEM served as PQV team members on an OSHA PSM and accident investigation (March 17, 2003) into a release of sulfur dioxide and sulfuric acid at PCS Phosphate, Inc that injured 28 on March 11, 2003. The case is

still pending at this time and General Duty Clause implications are yet to be determined. (PCS has a covered ammonia process separate from the sulfuric acid component where the incident occurred.)

The NC Department of Agriculture and Consumer Services requested the NC CAPP to assist on a 21 July 2003 site visit to Motiva Enterprises, LLC regarding the startup of a butane/gasoline blending operation. It was determined that the process is covered by 112(r) and compliance assistance was offered.

Release Activity

Thirty-two (32) accidental releases of 112(r) regulated substances were reported to the North Carolina Emergency Operations Center during the period (total includes transportation incidents). Fifteen (15) of the releases occurred at 112(r) stationary sources and are profiled in Table 1.

The trends for release activity in this period indicate that incidents occur most frequently on Wednesdays. The six-hour period from 1200 to 1800 hours is most active, and anhydrous ammonia is the most often released substance (among 31 incidents).

NC CAPP staff were successful in contacting the majority of the sixty-five (65) facilities threatened by Hurricane Isabel in a twenty-six (26) county region. Calls were intended to verify that weather emergency plans had been activated and to provide assistance where necessary. After the storm, no catastrophic releases were reported and some businesses were able to resume operations if power was intact. (Additional damage assessment information is still forthcoming.)

Table 1 –NC RMP Facility Release Activity, FFY 2003

DATE	TIME	DAY	FACILITY	CITY	COUNTY	CHEMICAL	AMOUNT	NRC#
10/16/02	2300	WE	Perdue Farms	Robersonville	Martin	Ammonia	125 lbs.	626450
11/20/02	1200	WE	Hunter Farms	High Point	Guilford	Ammonia	300 lbs.	629815
12/19/02	941	TH	James Oxygen	Newton	Catawba	Ammonia	UNK	
2/4/03	1140	TU	International Paper	Riegelwood	Columbus	Chlorine dioxide	25 lbs.	635934
2/19/03	1300	WE	Cargill Turkey Products	St. Pauls	Robeson	Ammonia	300 lbs.	637338
2/25/03	1415	TU	Tyson Farms	Wilkesboro	Wilkes	Ammonia	532 lbs.	637793
3/11/03	1130	TU	PCS Phosphate	Aurora	Beaufort	Sulfur dioxide	104 lbs.	638283
4/30/03	1213	WE	Albemarle Hwy 52 WTP	Albemarle	Stanly	Chlorine	UNK	
7/6/03	2215	SU	Perdue Farms	Rockingham	Richmond	Ammonia	51 lbs.	650106
7/26/03	1555	SA	Sara Lee Bakery	Tarboro	Edgecombe	Ammonia	20 lbs.	
7/26/03	1815	SA	Tyson Farms	Wilkesboro	Wilkes	Ammonia	100 lbs.	652040
8/6/03	1110	WE	Miller Brewing Company	Eden	Rockingham	Ammonia	2,500 lbs	653339
8/23/03	100	SA	Smithfield WTP	Smithfield	Johnston	Ammonia	~85 lbs.	654782
9/2/03	1052	TU	International Paper	Riegelwood	Columbus	Hydrogen sulfide	1,000 lbs.	655658
9/2/03	1052	TU	International Paper	Riegelwood	Columbus	Methyl Mercaptan	3,000 lbs.	655658

Enforcement Action

North Carolina had six (6) enforcement cases for the reporting period. A penalty of \$1,470 was assessed in a sulfur dioxide storage co-location case, a compliance assistance letter was issued and a violation was closed by RMP withdrawal. Three Emergency Planning Community Right to Know Act (EPCRA) referrals were made with one resulting in over \$60,000 in penalties via EPA Region 4. Also, an ongoing multi-media case with United Organics Corporation will continue in federal court even though the RMP filing has been withdrawn.

EPA Grants

North Carolina received an EPA CEPP Technical Assistance Grant (2001-2003) to support the development of shelter-in-place kits and to promote the concept among North Carolina local emergency planning committees (LEPC). A pilot program is underway with Edgecombe County's LEPCs and Sara Lee Bakery of Tarboro, North Carolina to prepare for a potential anhydrous ammonia release. Procurement for ninety (90) shelter-in-place kits is nearly complete and a table-top exercise will be forthcoming in the fall or winter. A full scale exercise will follow and will be supported by the EPA CEPP Technical Assistance Grant 2002-2004.

Training

Three NC Chemical Accident Prevention Program representatives participated in OSHA's Process Safety Management 345 course, March 2003 in Raleigh, North Carolina. Scott Bullard taught a portion of the course on 40 CFR Part 68 and 29 CFR Part 119 and secured two or more additional slots when the course is offered again.

Erin McIntyre attended several courses offered by the North Carolina Division of Emergency Management, to include Exercise Design, Introduction to Emergency Management, and Basic Public Information Officer.

Inter-agency Agreements

The North Carolina Chemical Accident Prevention Program exists as a product of interagency collaboration and is coordinated by the Division of Air Quality. Memoranda of Agreements have been completed with the Division of Emergency Management and the Division of Environmental Health. Agreements are unsigned to date with the Division of Water Quality, the Department of Agriculture and Consumer Services, the Department of Labor OSHA, and the Mecklenburg County Department of Environmental Protection. A legislative change in jurisdiction regarding anhydrous ammonia has made it necessary to revise the proposed agreement with Agriculture. Also, Mecklenburg County has received full program delegation status during this period and additional agreements will have to be arranged with partner agencies.

112(r) Task Force

The NCRMP Coordinator led two (2) quarterly meetings attended by program staff from the majority of implementation partner agencies (average attendance~15). Inclement weather altered the regular schedule with cancellations and postponements. All parties are working toward the update process and preparing to help with de-registrations and withdrawals as they arise.

Outcomes of Projected Activities for FFY 2003:

- Complete the hiring process and begin training a new North Carolina Emergency Management Risk Management Program Planner. *Hiring completed and training is underway.*
- Training priorities will focus on participating in NC OSHA's Process Safety Management Course and NC DAQ's Compliance Workshop. Also, if resources allow, the program will attempt to revive a "hands-on-training" program of single day site inspection exercises led by senior staff at host 112(r) facilities. *Staff participated in the OSHA PSM course. The NCDAQ Compliance Workshop set for March 2003 was cancelled. Other training initiatives, including ammonia refrigeration training, have been postponed due to staffing and resource constraints.*
- Chemical accidental release efforts will target anhydrous ammonia facilities including, but not limited to food processing refrigeration sites and coal-fired power plants. Participation in tabletop and full-scale exercises will continue. *Staff participated in table-top and full scale ammonia release exercises at Duke Energy's Cliffside Steam Station. Staff is involved in the planning and design of a tabletop exercise at Sara Lee Bakery in Tarboro.*
- Update the program procedures and policy manual including finalizing the draft on "Responding to Public Risk Management Plan Requests." *This item has been delayed due to staff time and resource limitations.*
- Update internet web pages and continue producing the RMP newsletter as funding allows. *These items have been delayed due to staff time and resource limitations. An outreach effort is being planned to communicate EPA's 2004 update instructions to North Carolina's regulated community.*
- Finalize interagency agreements and facilitate a team effort to address the five-year facility inspection target (June 2004). *These items have been delayed due to staff time and resource limitations.*
- Complete shelter-in-place kit purchasing and deployment to LEPC pilot programs (Tech. Asst. Grant 2001-2003). *Procurement for ninety kits is almost complete with educational outreach and exercises set to begin over the next few months.*
- Monitor for non-filers by combining NC OSHA Process Safety Management database with Title V air permit facility listings and NC 112(r) facility

registrations. Anhydrous ammonia filers will be checked via modified USDA Fertilizer Plant and Food Processor Lists. *These items have been delayed due to staff time and resource limitations. A shift in focus has occurred toward chemical vulnerability assessments and a methamphetamine problem that involves the theft of anhydrous ammonia.*

- **Special Events**

NC CAPP staff participated in the following: CEPP Implementation Meeting (October 2003); Duke University's Environmental Leadership Symposium: Dealing with Disasters (November 2003); Wake County Business Environmental and Safety Training Conference (Feb. 2003), and the North Carolina Hazardous Materials Conference (Aug. 2003).

Projected Activities for FFY 2004

- Provide compliance assistance and support for EPA's five-year RMP update process.
- Provide planning and technical support to homeland security partners via vulnerability assessments and analysis
- Address program implementation shortfalls with respect to 1998 delegation application and inter-agency agreements
- Attempt to incorporate 112(r) files and actions in IMPAQ (internal information management system)