

North Carolina
Department of Environment and Natural Resources
Division of Air Quality
Chemical Accident Prevention Program-112(r)
Report for USEPA Fiscal Year 2002

North Carolina has 352 RMP programs as of September 2002, 28 of which are covered by local environmental programs, and 116 programs are water treatment/wastewater facilities. The North Carolina Division of Air Quality (DAQ) Regional Offices share responsibility for the remaining 208 facilities of which 103 are permitted and 105 are not air permit holders.

The report that follows outlines the comprehensive efforts of the North Carolina Chemical Accident Prevention toward 112(r) implementation with one exception. It is difficult to adequately illustrate the impact and influence of the events of September 11, 2001 on the NC 112(r) program in the context of this document. Nevertheless, it is a challenge of expanded effort with respect to chemical release prevention, both accidental and intentional. Moreover, the NC 112(r) program is committed to an emerging homeland security and defense mission.

Staff Changes

Scott Bullard was recruited to fill the North Carolina Risk Management Program (NCRMP) Coordinator position on 5 November 2001 following more than a year vacancy period. Also, Tina Howard resigned as the North Carolina Emergency Management Risk Management Program Planner on 30 August 2002 and interviews for a replacement have been completed.

Inspections

North Carolina Division of Air Quality Regional Office Inspectors completed 11 facility inspections during FFY 2002. North Carolina Environmental Health Inspectors completed 14 water treatment facility inspections during the same period.

Investigations

Thirty-nine (39) accidental releases of 112(r) regulated substances were reported to the North Carolina Emergency Operations Center from January to September 2002 (total includes transportation incidents). The NCRMP Coordinator led four (4) investigations during this reporting cycle. The incidents included multiple releases of anhydrous ammonia from a poultry processing plant, improper RMP implementation by a specialty batch chemical manufacturer /large volume waste generator, ethylene oxide gas

sterilization for state mail facilities, and bulk anhydrous ammonia storage for selective catalytic reduction (SCR) processes at coal-fired power plants.

Please refer to the enforcement section for additional information on the first two items. The ethylene oxide case has been limited to technical support to date. The ammonia case at coal-fired power plants is ongoing with respect to compliance assistance and is a growing concern with the introduction of SCR technology throughout the industry in North Carolina.

Enforcement Action

North Carolina had nine (9) enforcement cases for the reporting period. Also, the State had some limited involvement in an EPA General Duty Clause case and offered assistance pending the outcome of an EPA CAA 114 Request for Information letter. Two (2) Notices of Violation were issued and subsequently closed. Five (5) cases were pending further action at the time of this report. North Carolina OSHA is involved in two of them including a full-scale process quality verification (PQV) action at a poultry processing facility with a history of anhydrous ammonia releases.

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 four county LEPCs that represent a broad demographic sample of the state. Also, North Carolina applied for an EPA CEPP Technical Assistance Grant (2002-2004) to support the performance testing of the new shelter-in-place programs via release exercises.

Training

North Carolina and EPA Region IV hosted the Risk Management Program- Basics and Techniques (165.19) Courses 6-9 May 2002 at the North Carolina Department of Transportation's Chief Engineer's Conference Facility. The course statistics were as follows: in the Basics Course 25 of 26 students received certificates and in the Techniques Course 21 of 25 students earned certificates. The students commented that the courses were very informative and more applied skill training was desired. Some students requested specific process training; for example, ammonia refrigeration.

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. Nevertheless, the goal remains to create a multi-agency working agreement among five state agencies and three local programs to cover all 112(r) facilities within the state.

112(r) Task Force

The NCRMP Coordinator led four (4) quarterly meetings attended by program staff from the majority of implementation partner agencies (average attendance~15). A subcommittee is developing the audit process and addressing training needs for inspectors.

Outcomes for Projected Activities for FFY 2002:

- **Fertilizer and food distribution plants awareness campaign**

A list was obtained from the USDA and has been modified to fit the needs of the Chemical Accident Prevention Program. This data will be incorporated in a larger scale effort to address the ammonia hazard and any potential non-filer issues in the next year.

- **RMP Newsletter**

The newsletter is a valuable ongoing project that is evolving into an electronic format, but it is not feasible to become completely paperless since some recipients are not equipped to access it. The newsletter will be continued as long as funding permits and web development and updating is the next logical direction of expanding outreach.

- **Shelter-in-place project**

Four counties have been chosen as pilot programs to test and to demonstrate the shelter-in-place concept. The purchase process of the kits has begun and it is still in the initial acquisition stages.

- **LEPC meetings**

Participation and outreach with LEPCs are continuous priorities and shelter-in-place and site security issues have become the focal points of interest. Likewise, the 112(r) program strives to include North Carolina Hazardous Materials Regional Response Teams (RRT) in inspections, investigations and exercises. Also, the North Carolina State Emergency Response Commission (SERC) has not met since December 2001 and it is undergoing a transition into a homeland security group that the NC 112(r) program will serve and support.

- **Off-Site Consequence Analysis (OCA) brochure**

A draft version of "North Carolina Chemical Accident Prevention Program Procedures for Responding to Public Risk Management Plan Requests" is under revision by attorneys from the Department of Crime Control and Public Safety. Also, the revised document will be referred to the legal affairs section of the Department of Environment and Natural Resources for additional comments and guidance. When finalized, the procedures and other information will be incorporated into an easy-to-read guide for LEPCs.

- **Special Events**

NC 112(r) staff participated in three outreach presentations during the reporting period. Host agencies included: New Hanover County (EPCRA workshop and the Wilmington Safety School); Durham County Environmental Affairs Board; and NCDENR Air Quality Committee. Also, Matt Taylor, EPA Region IV, visited the Raleigh office on June 19, 2002 for a program overview.

- **112r Inspector Training**

EPA Courses (165.19) as prior noted. 112(r) staff also participated in the following: EPA Region III International HazMat Spills Prevention Conference (Dec. 2001), Wake County Business Environmental and Safety Training Conference (Feb. 2002), and the North Carolina Hazardous Materials Conference (Aug. 2002).

- **Statewide Exercises**

Three facility specific 112(r) emergency exercises were held during the reporting period and focused on accidental release preparedness. Most statewide exercises were either reconfigured or cancelled following the September 11th incidents. The large-scale exercises that occurred focused on regional civilian and military security issues, Metropolitan Medical Response Systems activities and Nunn-Lugar-Dominici domestic preparedness. 112(r) Staff also participated in planning for and participating in the first State Oil Spill exercise. The tabletop exercise originally involved a 112(r) regulated facility, but later moved to a sister company. The successful exercise involved wide participation from federal, state and local environmental protection, emergency management, emergency response, and environmental advocacy agencies.

Projected Activities for FFY 2003:

- Complete the hiring process and begin training a new North Carolina Emergency Management Risk Management Program Planner.
- 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.
- 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.
- Update the program procedures and policy manual including finalizing the draft on "Responding to Public Risk Management Plan Requests."

- Update internet web pages and continue producing the RMP newsletter as funding allows.
- Finalize interagency agreements and facilitate a team effort to address the five-year facility inspection target (June 2004).
- Complete shelter-in-place kit purchasing and deployment to LEPC pilot programs (Tech. Asst. Grant 2001-2003).
- 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.