## A MULTI-INSTITUTIONAL PUBLIC AND PRIVATE RESPONSE TO RISK MITIGATION MEASURES FOR SOIL FUMIGANTS

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The U.S. Environmental Protection Agency (EPA) created new safety measures for soil fumigant pesticides to increase protections for handlers, agricultural workers and bystanders. These measures are to be implemented starting December 2010 with complete roll out by the end of 2011 (Table 1). The major provisions require development of site-specific fumigant management plans, emergency preparedness and response, and the use of personal protection equipment. A multi-disciplinary group representing the NC Agromedicine Institute, NC Department of Agriculture & Consumer Services–Pesticides Section, NC State University – Departments of Horticulture and Plant Pathology, NC Commodity Grower Associations, fumigant applicators and distributors, a private occupational health company, the Southeast Area Wide Pest Management Project, and the Tobacco Trust Fund (TTF) was formed to assist fumigant handlers, farms and other key stakeholders with compliance to the new risk mitigation measures (RiMMs). The group will coordinate and conduct 25 workshops where attendees receive training and materials about the RiMMs, learn how to develop fumigant management plans, and receive materials to comply with the RiMMs. Handlers will also be evaluated for medical clearance, complete respirator fit testing and receive respirators at a subsidized cost (TTF funds). Materials will also be developed for web-based access and for extension agents and other train-the-trainer personnel to broaden the impact of educational outcomes and materials. This project will ease the transition to the new RiMM and sustain the economic viability of farms that depend on soil fumigants as a mechanism for managing important soilborne pests.

Table 1: Implementation of Risk Mitigation Measures and timeline for implementation. From http://www.epa.gov/oppsrrd1/reregistration/soil\_fumigants/

| Risk Mitigation Measure                                  | Currently | 2010 | 2011 |
|--|-----------|------|------|
| Restricted Use (metam sodium/potassium and dazomet only) | ø         | •    | •    |
| New Good Agricultural Practices                          |           | •    | •    |
| Rate reductions  |           | •    | •    |
| Use site limitations                                     |           | •    | •    |
| New handler protections                                  |           | •    | •    |
| Tarp cutting and removal restrictions                    |           | •    | •    |
| Extended worker reentry restrictions                     |           | •    | •    |
| Training information for workers                         |           | •    | •    |
| Fumigant Management Plans                                |           | ۰    | •    |
| First responder and community outreach                   |           | ۰    | •    |
| Applicator training                                      |           | •    | •    |
| Compliance assistance and assurance measures             |           | ۰    | •    |
| Restrictions on applications near sensitive areas        |           |      | •    |
| Buffer zones around all occupied sites                   |           |      | •    |
| Buffer credits for best practices                        |           |      | •    |
| Buffer posting   |           |      | •    |
| Buffer overlap prohibitions                              |           |      | •    |
| Emergency preparedness measures                          |           |      | •    |

ø = methyl bromide and chloropicrin are currently RUPs
° = under development/partial implementation
• = adopt completely