



MEMORANDUM

DATE: May 6, 2013

TO: BAQ Engineering Services; SBEAP; Environmental Liaisons

FROM: Hetal Patel, BAQ Engineering Services

SUBJECT: Fumigation Permitting Guidance

Introduction

The South Carolina Department of Health and Environmental Control, Bureau of Air Quality (Department) has established the following permit guidance for fumigation activities. This guidance will be used to determine the following: what type of permit action is required, how to process permits/exemptions for fumigation activities that emit hazardous air pollutants (HAPs), toxic air pollutants (TAPs), and volatile organic compounds (VOCs), and how state and federal air regulations apply such as SC Regulation 61-62.5, Standards 7 (PSD) and 8 (Toxic Air Pollutants), Clean Air Act Section 112(g), and 40 CFR 70 (Title V).

Fumigation is a method of pest control that completely fills an area with gaseous pesticides or fumigants to suffocate or poison pests. It is utilized for control of pests in buildings (structural fumigation), soil, grain, and produce, and is also used during processing of goods to be imported or exported to prevent transfer of exotic organisms. There are several widely used fumigants, including the following 9 compounds: methyl bromide (HAP, TAP), phosphine (HAP, TAP, 112(r)), 1,3-dichloropropene (HAP, TAP, VOC), chloropicrin, methyl isocyanate (HAP, TAP, VOC, 112(r)), hydrogen cyanide (HAP, TAP, VOC, 112(r)), sulfuryl fluoride, formaldehyde (HAP, TAP, VOC, 112(r)), and idofom.

How South Carolina Will Permit Fumigation

Exempt Fumigation Activities:

1. Fumigation projects at a plant that have potential emissions below exemptible rates under SC Regulations 61-62.1, Section II(b)(2)(h). These projects will be handled in the same manner as all other exemption projects.
2. Agricultural facilities that have seasonal operations such as peach growers. These activities are considered insignificant activities under Title V and Air Permit Exemptions (Insignificant Activity List A(15) and Air Permitting Exemptions List (30)). Agricultural facilities under this section do not include wood product sources/processes.
3. Industries that perform fumigation up to several times a year to control pest infestation. This activity is preventative maintenance for keeping assets in acceptable condition. This

is considered an insignificant activity under Title V and under Air Permit Exemptions (Insignificant Activity List A(4) and Air Permitting Exemptions List (19)).

4. Fumigation activities that are performed in portable containers which are not located at a designated area/building/warehouse/installation/pad. These portable containers do not meet the definition of a Plant as defined in SC Regulation 61-62.1, Section I.

Fumigation Activities that Will Require Permits:

A facility that has a designated building/warehouse/installation/pad or other area where they perform fumigation activities on a permanent basis and the emissions from this designated building/warehouse/installation/pad or other area are > 1000 lb/month of VOC, HAP, and TAP. This type of activity would be considered a stationary source.

Example: A facility has a designated building (or several buildings) where fumigation is to be performed, and they use multiple fumigators. If the total VOC/HAP/TAP emissions from this designated building(s) are > 1000 lb/month, it would require a permit.

Record of Revisions	
DATE	Description of Change
May 6, 2013	Initial Document.