

# Compliance Headliner

## ***Air Permits: Don't Let Air Regulations Deflate Your Compliance Efforts***

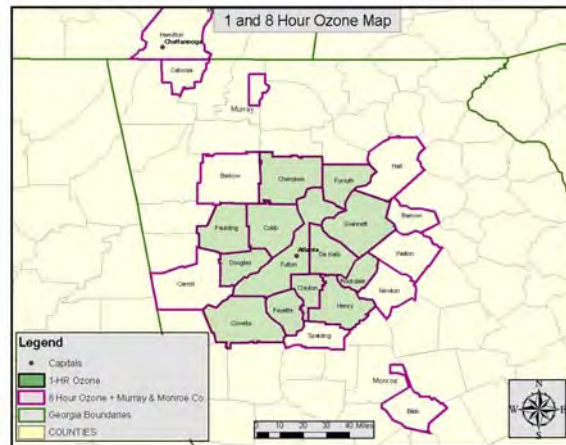
The Clean Air Act (CAA) was originally passed in 1963 by the United States Congress and was amended by the Environmental Protection Agency (EPA) in 1977 and amended in 1990. The CAA was enacted as pollution levels in the United States have been observed to worsen as areas became more and more industrialized. State and local agencies have enacted this same legislation, and in some cases, the state and local agencies had even more stringent regulations than the EPA.

The EPA established threshold values for certain contaminants, such as volatile organic compounds (VOCs), which is any volatile compound of carbon. Solvents, paints, and coatings are just three examples of sources of VOCs. All three states monitor certain air contaminants (including VOCs) as established by EPA regulations. Should these monitored contaminants exceed the established threshold values a number of times over three years, it is considered a problem. In an area where any monitored pollutant concentration exceeds the established threshold value several times over a three year period, whether it is from concentrations generated in that area or from float over concentrations from another area, it is designated a "non attainment area" by the state and federal agencies. Therefore, more stringent corrective action measures are necessary to try to achieve concentrations less than the established threshold values.

Currently, South Carolina has six counties (York, Richland, Lexington, Anderson, Greenville, and Spartanburg) that are non attainment areas, North Carolina currently has twenty nine counties that are defined as non attainment areas, and Georgia has twenty one counties that are classified as non attainment areas. Therefore, air regulations have become more of a hot topic for South Carolina Department of Health and Environmental Control (SCDHEC), North Carolina Department of the Environment and Natural Resources (NCDENR), and Georgia Environmental Protection Division (EPD) as of late. With the emphasis that is now placed on the CAA and air pollution, air permitting regulations are impacting facilities that never thought these regulations relate to them. For instance, the automotive service facilities that utilize paint spray booths, apply spray on bed liners, and/or use parts washers on site may be subject to certain air permitting requirements.



## ***Air Permits: Don't Let Air Regulations Deflate Your Compliance Efforts (Continued)***



Emissions from paint spray booths, spray on bed liners, and parts washers are the three main sources of concern in automotive service and repair shops. These activities produce compounds known as volatile organic compounds (VOCs), which is any volatile compound of carbon. What does that mean to you? In other words, significant sources of VOCs in the automotive shop include: solvents, paints, and coatings. Therefore, VOCs are emitted if you conduct spray paint activities, spray on bedliners, and use parts washers. In this article, we summarized each of these issues for North Carolina, Georgia, and South Carolina. Air Permitting regulations change frequently throughout South Carolina, North Carolina, and Georgia, and all three states based their air regulations on the EPA's 40 CFR Part 60 of the code of federal regulations. Not only do you have to be concerned with the state and federal regulations, but also any local agency ordinances as well. In North Carolina, some of these counties include Mecklenburg, Forsyth, and Buncombe (Western North Carolina Regional Air Quality Agency). These local agencies have just as much power regulating air and environmental issues as State and Federal agencies do. In the following paragraphs we will break down the regulations for each of these topics.

### *Spray Paint Booths and Spray on Bed Liners*

#### ***South Carolina***

If you conduct these activities in the State of South Carolina, there are at least some initial steps that you need to take. All facilities must comply with all applicable 40 CFR 61 and 40 CFR 63 National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) standards. Section 112 (g) of the Clean Air Act (CAA) serves as transitional regulations until the EPA finalizes the MACT standard for automotive body shops (anticipated to be finalized by the EPA in 2009).

So what does that mean to you if you own or operate an automotive body shop or conduct spray on bed liner finishing? First and foremost, a construction permit needs to be applied for at your facility. This will include having process flow diagrams for all air pollution emitting processes located at the facility. Also, air dispersion modeling and analysis will be conducted as part of the construction permit process. The construction permit must be reviewed and signed by a South Carolina registered Professional Engineer. Once the state reviews the construction permit application, they may determine that an operating permit be required.

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### *Georgia and North Carolina*

In Georgia and North Carolina, all facilities must comply with air regulations found in 40 CFR 60 Subpart MM §60.392. This section states that you must have your equipment performance tested to calculate the levels of emission of VOCs. The emission limit for a prime coat operation is 0.17 kilograms of VOC per liter per hour of applied coating. The emission limit for each guide coat operation is 1.4 kilograms of VOC per liter per hour of each applied coating. The emission limits for each topcoat operation is 1.47 kilograms of VOC per liter per hour of applied coating.

So what does that mean if you own or operate an automotive body shop? First and foremost, the VOC emission testing must be conducted on your surface coating equipment. If the emissions exceed levels discussed above, a permit is required for your facility. The construction permit does need to be reviewed and signed by a Georgia registered Professional Engineer.

### *Cold Clean Parts Washers*

Cold cleaning parts washers are those, such as sink washers and System One, which uses a batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point.

### *South Carolina*

The regulations applicable to *Spray Paint Booths and Spray on Bed Liners*, as previously discussed in this article, apply to the parts washers as well because parts washers emit the same VOCs as spray paint booths and spray on bedliners do. Therefore, emissions from the parts washers have to be measured and added to the emissions from spray on paint and bed liners. The total emissions from all of these sources would be included on the construction permit prepared for SCDHEC.

### *Georgia*

In Georgia, the regulations for cold clean parts washers are fairly simple. Emission testing is not required for cold cleaning parts washers in Georgia. However, there are some simple rules that need to be followed:

- The parts washer shall be equipped with a cover to prevent the escape of volatile organic compounds. This cover **MUST** remain closed at all times when the parts washer is not in use.
- The parts washer shall be equipped with a method of draining cleaned parts prior to removing them from the parts washer.
- When being used, the solvent spray must be a solid, fluid stream (not a fine, atomized, or shower type spray) and at a pressure which does not cause excessive splashing.
- If the solvent volatility is 0.60 psi or greater ( if you use Crandall's Crandall Clean solvent the volatility is 0.097 psi, therefore the rules below do not apply) at 100°F then the following control devices need to be used:
  1. Freeboard that gives a freeboard ratio of 0.7 or
  2. Water cover (solvent must be insoluble in and heavier than water);
  3. Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption.
- Waste solvent shall be stored only in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

## ***Air Permits: Don't Let Air Regulations Deflate Your Compliance Efforts (Continued)***

### ***North Carolina***

The state of North Carolina and all of its local entities have the same regulations that apply to cold cleaning parts washer operations. Emission testing is not required for cold cleaning parts washers in North Carolina. However, the following regulations do apply to parts washers at facilities:

- The parts washer shall be equipped with a cover that has been designed so that it may be opened with one hand;
- The parts washer must be equipped with mechanisms that allow for the cleaned parts to drain;
- A permanent conspicuous label, summarizing the operating requirements;
- The cover **MUST** remain closed whenever parts are not being handled in the cleaner;
- All parts must be drained for at least 15 seconds or until dripping from the part stops;
- If used, supply a solvent spray which is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure which does not cause excessive splashing.

As you can see above, the air regulations can get complicated whether you are located in attainment or non-attainment areas of South Carolina, North Carolina, or Georgia. Each of these states offer small business assistance programs that can assist in the emission testing and permitting. The following is a list of ways to contact them:

#### **South Carolina Small Business Assistance Program**

Webpage: <http://www.scdhec.net/eqc/admin/html/sbap.asp>

Telephone: 1-800-819-9001

#### **Georgia Small Business Environmental Assistance Program**

Webpage: <http://www.gasmallbiz.org/>

Telephone: 1-877-427-6255

#### **North Carolina Small Business Environmental Assistance Program**

Webpage: <http://www.envhelp.org/html/sb.html>

Telephone: 1-877-623-6748

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