

**South Carolina Department of Health and Environmental Control  
Bureau of Air Quality**

**February 15, 2012**

**Response to Comments  
Public Notices #10-057-TV-RE, #10-078-TV-RE-H  
Roseburg Forest Products South, LP (Holly Hill MDF)  
Part 70 (Title V) Operating Permit Renewal  
Holly Hill, Orangeburg County, South Carolina  
Operating Permit TV-1860-0038**

The following is the South Carolina Department of Health and Environmental Control (SC DHEC) Bureau of Air Quality's (Department) response to a written comment made during the formal comment period regarding the draft Title V Operating Permit Renewal (TV-1860-0038) for Roseburg Forest Products South, LP (Holly Hill MDF Plant). The comment period was open July 21, 2010, through August 19, 2010, then extended until November 23, 2010. The written comment included a request for a public hearing. The public hearing was held on November 16, 2010, at Holly Hill Elementary School library in the city of Holly Hill, in Orangeburg County. The comment received regarding the draft permit is available for viewing at <http://www.scdhec.gov/environment/baq/PermittingDecisions/>, and at the SC DHEC Columbia office located at 2600 Bull Street, Columbia, SC 29201. A hardcopy can be requested by contacting our Freedom of Information Office at (803) 898-3817.

**Comment:** Hexavalent chromium (chromium-6) is one of the pollutants that this company emits. Chromium-6 is documented to have severely harmful effects on human health, even in small quantities. For the well-being of the environment, factory workers, and nearby inhabitants, it is necessary that a detailed review be conducted regarding this chemical. Roseburg facility is located in a cluster of other factories that also emit Chromium-6. The review must target Roseburg plant and also nearby industries combined. These industries are directly adjacent to an environmentally sensitive area. Chromium excursions have been recorded by DHEC downstream at the juncture of Four Hole Swamp and US 78, which further strengthens assertions that special attention to this matter is required. In addition, I would like to request a public hearing at which an independent, disinterested toxicologist presents a comprehensive assessment of the potential hazards that the reopening of this facility could effect.

**Responses:**

- a. Chromium-6: Chromium-6 is a compound that is present in wood and is emitted when the facility operates the boiler. The source of Chromium-6 is residual resin on wood and/or dust that is burned in a wood-fired boiler. Chromium-6 is a listed EPA Hazardous Air Pollutant (HAP), also called a Toxic Air Pollutant (TAP).
- b. Regulatory Requirement: Although the EPA has set ambient standards for criteria pollutants (particulate matter, nitrogen dioxide, sulfur dioxide, ozone, carbon monoxide, lead), the EPA has not set national ambient standards for TAPs. However, South Carolina has set maximum allowable concentrations for TAP emissions under SC Regulation 61-

62.5, Standard 8 - Toxic Air Pollutants. If facility wide emissions of a TAP are emitted below a specified amount, called the de minimis rate, an air dispersion modeling demonstration is not required. A review of the maximum Chromium-6 emissions rate indicates this facility is below the de minimis rate for Chromium-6. The de minimis rate for Chromium-6 is 0.03 lb/day. The facility's potential Chromium-6 emission rate is 0.00128 lb/hr (0.0288 lb/day). Additionally the permit limits the amount of chromium that can be emitted when burning wood fiber or sanderdust that contains resin.

- c. Multiple Facility Impacts: The Department is required to evaluate each individual facility's emissions to determine compliance with the state and federal air quality regulations. In accordance with Section 48-1-100(A) of South Carolina Pollution Control Act, the Department must issue a permit if an applicant submits an application that meets all applicable Department standards.
- d. Impacts to Water Quality: It is the responsibility of the SC DHEC's Bureau of Water to review all water quality and discharge permit applications that are required by the facility. As required by Section 303(d) of the Clean Water Act, states are required to develop a list of waterbodies that do not meet water quality standards every two years. The 303(d) list is a list of impaired waterbodies. The commenter referred to an area (juncture of Four Hole Swamp and US 78) that is a sampling site for the Edisto River Watershed Water Quality Assessment. The 2004 assessment showed Chromium-6 excursions for this site; therefore, this site was added to 303(d) list. No excursions have been shown since the 2004 assessment and therefore Chromium-6 was removed from the list and has not been listed on any subsequent list at this monitoring location. The 303(d) lists can be found at the following website:

<http://www.scdhec.gov/environment/water/tmdl/index.htm#303d>.

Further analysis of the most recent statewide water quality data show no Chromium-6 standards violations within the watershed in which the facility resides nor in any nearby water body. This facility has water quality permits for non-contact cooling water and industrial storm water. Examination of these water quality permits indicate that Chromium-6 is not known to be associated with the facility's water discharge and is thus not considered to be a significant parameter for permit limits or monitoring.

- e. Toxicologist Review Request: SC DHEC scheduled a conference call with the state toxicologist and the commenter to discuss chromium-6 issues. The conference call was held on February 3, 2011.