March 25, 2013

Ms. Marian Massoth
Air Permitting Chief
Kansas Department of Health and Environment
1000 SW Jackson, Suite 310
Topeka, KS 66612-1366

Dear Ms. Massoth:

This letter is in response to your November 13, 2012 email requesting the EPA's review of Columbian Chemicals' (Columbian) Prevention of Significant Deterioration (PSD) applicability analysis (revised November 8, 2012) for a Heat Exchanger Project at Unit 2 of its Hickok Plant. This analysis concluded that the emissions changes resulting from this project do not exceed PSD significance levels and therefore, no further PSD analysis is required.

Columbian had requested that its submission be treated as confidential. The EPA has not substantiated Columbian's claim that the information submitted qualifies as confidential business information (CBI) but we are currently treating the information as CBI and following the requirements of 40 C.F.R. Part 2, subpart B.

The definition of projected actual emissions at 40 C.F.R. 52.21(b)(41) (which is adopted by reference at K.A.R. 28-19-350) provides for the exclusion, in calculating any emissions increase that result from the project, of that portion of the unit's emissions *following* a project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth. The EPA notes that in Columbian's analysis, when calculating the emissions following the project that the existing unit could have accommodated, Columbian used the efficiency or yield of the unit *before* the project. Because the project will increase the production yield and purportedly lower the emissions per unit produced, Columbian's calculations should use the yield of the unit *after* the project using the production rate the unit could have accommodated during the baseline period and exclude any demand growth that is related to the project. This will calculate and exclude any emissions that could have been previously accommodated and are unrelated to the modification from the projected actual emissions *following* the project, as required by the regulations.

The EPA also has the following recommendations:

1. We recommend KDHE request that Columbian provide a detailed rationale for how it determined the portion of the unit's emissions following the project that it was capable of accommodating. Columbian's submittal simply makes a blanket assertion about what the unit was capable of accommodating but does not explain how Columbian arrived at this production level. The record should be supported with details that support Columbian's blanket assertion.

As an example of what might constitute a more detailed rationale, there are at least two potential methods of arriving at the production level the unit is capable of accommodating. First, Columbian could identify actual production rates over some period of time that the unit could consistently achieve, and then annualize those rates. For example, a time period where the unit had a peak production rate could be annualized (so long as that rate could be consistently achieved) and adjusted for any required outages. Second, Columbian could identify the physical constraints at the unit that limited its production and determine the unit's capability based on the maximum rate allowed by these constraints. This second method would require more detailed justification and supporting engineering analysis/calculations since it would not solely rely on actual production data.

In addition, KDHE or Columbian may be able to conceive of other acceptable methods for providing additional support for determining the production rate the unit was capable of accommodating.

2. Pursuant to 40 C.F.R. 52.21(b)(41)(ii)(c), any emissions excluded from the projected actual emissions must be *unrelated* to the project. Columbian makes another blanket assertion that the demand growth is unrelated to the project. However, since the project will increase both the production yield and the production capacity, some or all of the increased production may be related to the project. Therefore, we recommend that KDHE request that Columbian provide additional support for this assertion. One potential method of doing so is to look at company documents related to the funding request for the project, to see if Columbian internally discussed the project as being unrelated to projected future production rates. For instance, internal company documents may indicate whether Columbian internally discussed the project as being unrelated to projected future production rates. After examining any additional information that Columbian has that indicates whether any of the demand growth is related to the project, KDHE may determine that none, some, or all of the demand growth emissions Columbian excluded in its calculations were related to the project and therefore not excludable. Again, KDHE or Columbian may be able to conceive of other methods for supporting the assertion that any projected future production, including that related to demand growth, is unrelated to the project.

Furthermore, if the additional analysis described above demonstrates that the project does exceed PSD significance levels, we note that the EPA believes that flue gas desulfurization (for sulfur dioxide) and selective catalytic reduction (for oxides of nitrogen) would be technically and economically feasible at many carbon black facilities in the United States and thus could be Best Available Control Technology at this facility.

If you have any questions about these comments, please feel free to contact Ward Burns at (913) 551-7960.

Sincerely

/S/

Mark A. Smith
Chief
Air Permitting and Compliance Branch

cc: Phillip Brooks, USEPA-HQ
Peter Keller, EPA-RTP
Melina Williams, USEPA-HQ