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December 22, 2011
Project: 108.00217.00008

Mr. John Yntema
Combustion Unit Coordinator
Georgia Environmental Protection Division – Air Protection Branch
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Re: Response to EPA Region 4's Comments on PSD Application
Simpson Lumber Company, LLC Meldrim Operations
Meldrim, Georgia

Dear Mr. Yntema:

On behalf of Simpson Lumber Company, LLC (Simpson), SLR International Corp is submitting responses to EPA Region 4's comments on the Prevention of Significant Deterioration (PSD) application.

EPA Comment 1:

The applicant performed a BACT analysis in Section 4 of the application. The BACT analysis uses a five stem "top-down" method to identify the appropriate control technology. The applicant identified several control technologies for VOC emissions in stem 1 of the analysis, including a regenerative thermal oxidizer (RTO). The applicant eliminated this technology in step 2 of the analysis due to the cost for additional equipment to prevent fouling and the cost of replacement due to thermal aging. Although, a RTO may be cost prohibited the applicant must perform a cost analysis in step 4 before eliminating the RTO.

Response:

As outlined in Section 4.1.1 of the application report, the RTO is deemed technologically infeasible due to the high moisture content and low exit temperature in the exhaust stream. As provided in the 1990 NSR Manual (Draft), the control options that are deemed technically infeasible can be eliminated from further consideration in the BACT analysis. Therefore, Simpson believes a cost analysis is not required for the RTO.

Regenerative catalytic oxidizer (RCO) is also not technologically feasible due to the high moisture content and low exit temperature. "The cost for additional equipment to prevent



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fouling and the cost of replacement due to thermal aging” are mentioned in the analysis as added reasons for difficulty in applying RCO to a lumber drying kiln. Since cost is not the main factor in eliminating RCO, Simpson believes a cost analysis is also not required for the RCO.

Furthermore, RTO and RCO were both deemed technologically infeasible for a similar lumber drying kiln in a PSD determination for Langdale Forest Products Company by GA EPD on January 2011. The cost analysis for RTO or RCO was not presented in this determination.

EPA Comment 2:

The applicant did not specify a VOC BACT limit for the lumber drying kilns; however, the emission calculations used to calculate the potential emissions for the new lumber drying kiln was 3.83 lb/MBF, and the emission factor for the converted kiln was 3.93 lb/MBF. It is our understanding that there are VOC BACT limits for wood lumber kilns currently in the permits that are lower than those prepared in the application. In the RACT/BACT/LEAR Clearinghouse other facilities with larger or equivalent capacities had a VOC limit for wood lumber kilns of 3.5 lb/MBF, (e.g., Potlatch Corporation, AR). Based on review of the information available, the lower VOC limits are technically feasible and should be considered as an option in the BACT analysis.

Response:

Simpson agrees that there are VOC BACT limits for wood lumber kilns currently in the permits that are lower than those prepared in the application. However, due to difficulty in testing lumber drying kilns, there were no testing requirements to show compliance with these limits. Simpson has applied best available emission factors to calculate the emissions from the lumber drying kilns. Therefore, Simpson believes emission limits are not required for the proposed kilns.

In addition, the limits as mentioned in EPA’s comment, for example 3.5 lb/MBF at Potlatch Corporation, AR, are for indirect-fired (steam-heated) lumber drying kilns. According to NCASI Technical Bulletin 845 (A Comparative Study of VOC Emissions from Small-Scale and Full-Scale Lumber Kilns Drying Southern Pine, May 2002), the average VOC mass emission rate for an indirect-fired lumber kiln was 3.5 pounds VOCs as carbon (C) per MBF. The proposed project is for the direct fired lumber drying kiln and therefore, the lower VOC limits, as mentioned in the above comment, are not applicable.

Furthermore, Simpson believes that the lower VOC emission limits are in VOC as C per MBF. In comparison, the VOC emission factors used in this application are for total VOC. NCASI emission factor for VOC is converted to total VOC by applying the following method as used in Rayonier Wood Products’ PSD permit issued by GA EPD.

VOC Emission Factor (lb/MBF) = VOC as carbon x 1.133 + lb of methanol/MBF + lb of formaldehyde/MBF

Therefore, Simpson believes that the lower limits are not applicable to the proposed kilns. Due to the difficulty in testing lumber drying kilns, Simpson is requesting that the GA EPD would not impose any emission limits on the proposed kilns and the "proper maintenance and operation" should be applied as BACT.

EPA Comment 3:

The emissions values in the application differ from the values listed in Appendix B, Application Forms. Appendix A contains the emissions the emission calculations for the application. The U.S. Environmental Protection Agency requests a clarification, or an update, to account for the difference.

Response:

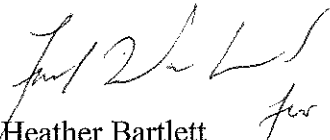
Appendix A of the application report provides the net emission increase calculations for the following activities and equipment: new direct-fired batch drying kiln, modification of existing Kiln #3 and associated increase in operation of the planer mill and fuel silo. The net emissions increase from the proposed modification is calculated by subtracting the actual emissions from the future potential emissions. Simpson has proposed to use the two-year period from 2004 to 2005 to evaluate their actual emissions.

As required in Application Form 1.0, the form includes the potential and actual emissions of the current facility and the potential and actual emissions of the facility after the proposed modification. For the current facility, the potential emissions are based on the current maximum theoretical productions of the units and the actual emissions are based on 2010 actual productions of the units. The potential emissions of the facility after the proposed modification are the potential emissions of the current units that are not affected by the proposed project plus the potential emissions of the current units that are affected by the proposed project plus the potential emissions of the new proposed unit. The actual emissions of the facility after the proposed modification are the actual emissions of the current units that are not affected by the proposed project (based on actual 2010 production) plus the potential emissions of the current units that are affected by the proposed project plus the potential emissions of the new proposed unit.

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Thank you giving us the opportunity to provide responses to EPA Region 4's comments. If you have any questions, please contact Fuad Wadud at (425) 402-8800.

Sincerely,
SLR International Corp


Heather Bartlett
Principal Engineer

cc: Bruce Harris, Plant Manager