Prevention of Significant Air Quality Deterioration Review
Weyerhaeuser – Flint River Operations,
located in Oglethorpe, Georgia (Macon County)

FINAL DETERMINATION

SIP Permit Application No. 15956
Title V Permit Application No. 15956
September 2005

State of Georgia
Department of Natural Resources
Environmental Protection Division

Air Protection Branch

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BACKGROUND

On January 14, 2005, Weyerhaeuser – Flint River Operations (Weyerhaeuser) submitted an application for an air quality permit to conduct modifications at the existing pulp mill such that production capabilities are increased by 10 percent. The modifications will take place at Old Stagecoach Road, in Oglethorpe (Macon County), Georgia. The proposed project will occur in two phases. The first phase involves modifications to the chip bin to increase chip feed uniformity to the digester, modifications to the digester wash circulation piping, installation of a digester extraction liquor heat exchanger, and upgrades to the recovery boiler. The second phase will involve replacement of the current cylinder mould decker drum filter and associated filtrate tank and vacuum pump with a wash press and filtrate tank, upgrades to the B-concentrator to allow for increased pressures, upgrades to the dryer winder system, modifications to the recovery boiler solids firing rate, and improvements to the finished pulp roll handling system.

On July 19, 2005, the Division issued a Preliminary Determination stating that the modifications described in Application No. 15956 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the modified equipment.

The Division requested that Weyerhaeuser place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in *The Citizen and Georgian* (legal organ for Macon County) on July 20, 2005. The public comment period expired on August 19, 2005.

During the comment period, comments were received from U.S. EPA Region 4 and the facility. There were no comments received from the general public.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B.

U.S. EPA REGION 4 COMMENTS

Comments were received from Gregg M. Worley, Chief of Air Permits Section, U.S. EPA Region 4, by fax on August 19, 2005. A copy of the comments was received by mail on August 23, 2005. The comments are typed, verbatim, below and were the result of reviews by Mr. James Little and Mr. Stanley Krivo of U.S. EPA Region 4. Mr. Little reviews PSD permits for completeness and enforceability and Mr. Krivo reviews the modeling portion of the permitting activity.

Comment 1 – Best Available Control Technology (BACT) Assessment for Recovery Boiler
For an emissions unit that is being modified without substantial physical changes, an appropriate BACT comparison point is the emissions level the unit has achieved in the past. The proposed SO_2 BACT emissions limit for the recovery boiler is 75 ppmdv (8% O_2) when firing black liquor solids only, 400 ppmdv (8% O_2) when firing fuel oil only, and a prorated ppmdv level when firing a mixture of the two. According to the preliminary determination and the permit application, the proposed limits correspond to an allowable annual emissions rate of 1,298 tons per year (tpy). The past actual SO_2 emissions rate, however, is stated to be approximately 47 tpy, which appears to be based on an emissions concentration of about 5 ppm. We do not understand why the proposed BACT emissions limit needs to be so much higher than past actual emissions. If a high short-term emissions limit is needed to accommodate occasional short-term spikes in emissions, GEPD could consider a second long-term emissions limit to reflect the average SO_2 levels that are more likely to occur. The same consideration might apply to other pollutants as well, but the biggest difference between past actual and future allowable emissions is for SO_2.

> **EPD Response:** Due to the uncertainty of the frequency and duration of SO_2 spikes associated with the modified recovery boiler, the Permittee did not propose a long-term limit. However, there is an existing condition and a new condition that restrict long term SO_2 emissions. The existing requirement, Condition 2.2.1, limits combined annual SO_2 emissions from the Power Boiler, Recovery Boiler, Lime Kiln, and Smelt Tank to 839 tpy. Therefore, annual emissions of SO_2 from the recovery boiler are restricted to far less than 1,298 tpy. The new requirement, Condition 3.3.30, limits fuel oil usage in the recovery boiler through a capacity factor of 10 percent. Again, this limits periods when the facility would use a prorated SO_2 limit or the high-end limit of 400 ppm. No changes have been made as a result of this comment.

Comment 2 – Best Available Control Technology (BACT) Assessment for Recovery Boiler
We recently provided EPD with a list of five BACT determinations made in Region 4 for recovery boiler modification projects over the last two years. Please review these determinations for comparison with the BACT limits proposed for the Weyerhaeuser project.

> **EPD Response:** The EPD and Weyerhaeuser reviewed the additional permit limits and BACT determinations provided by EPA (not all of the limits provided by EPA were BACT limits). These determinations were not in the RBLC database at the time that the application and preliminary determination were prepared. The review did not result in changes to the permit.
>
> For PM/PM_{10} emissions, Weyerhaeuser's proposal (0.021 gr/dscf at 8% oxygen) was equal to or lower than three of four determinations. A fourth determination contains a lower limit of 0.015 gr/dscf at 8% oxygen, however, it also lists the same limit proposed by Weyerhaeuser for periods when one ESP chamber is operating.

For NO_X emissions, Weyerhaeuser's proposal (100 ppmdv at 8% oxygen) is numerically equal to or lower than all of the comparable limits (where standard is in units that can be compared to Weyerhaeuser's limit) except one. It should be noted that Weyerhaeuser has accepted a lower averaging time (12-hours) than the other determinations, which effectively makes the proposal more stringent. There was a single determination of 75 ppmdv, however there was not an averaging time listed. As the preliminary determination noted, the proposed NO_X limit was based on combustion studies by various recovery boiler vendors and data from the installed NO_X CEMS. Further, lowering of the NO_X emissions could result in pollutant increases of CO and SO_2. Weyerhaeuser is located in an area that is sensitive to SO_2 emissions.

For SO_2 emissions, Weyerhaeuser's proposal (75 ppmdv at 8% oxygen) when burning only black liquor solids is in line with or less than three of the comparable BACT determinations, two of which contain monitoring and averaging period requirements that are less stringent than Weyerhaeuser's. One BACT determination contains limits of 31 ppmdv on black liquor solids and 75 ppmdv on fuel oil. However, this determination indicates that the facility burns very low sulfur fuel oil, and the addition of this capability is not economically feasible. Weyerhaeuser currently is not capable of storing and distributing low sulfur fuel oil. Finally, considering that the recovery boiler uses oil during startups, shutdowns, and process upsets, reductions in annual sulfur dioxide emissions based on a fuel change would be minimal. Also, it must be considered that the properties of black liquor solids, and therefore SO_2 emissions, can vary across mills. The information provided by EPA does not indicate the solids content of the black liquor solids. Further reduction in SO_2 emissions could result in an increase of NO_X emissions.

For CO emissions, Weyerhaeuser's proposal (300 ppmdv at 8% oxygen) is numerically equal to or lower than two of the comparable BACT determinations provided by EPA. However, Weyerhaeuser has proposed a more stringent averaging time. The third comparable limit was just slightly lower than Weyerhaeuser's proposal but no averaging time was listed. One determination was approximately two thirds of Weyerhaeuser's proposal, however, a further decrease in CO emissions would result in an increase of NO_X emissions. As the preliminary determination stated, EPD found BACT CO limits to be extremely variable because CO can be the most difficult pollutant to control. The proposed limit is low considering the NO_X/CO relationship and is low compared to the recent RBLC database entries.

For VOC and TRS emissions, Weyerhaeuser's proposals (40 ppmdv and 5 ppmdv at 8% oxygen, respectively) were lower than or equal to the determinations provided by EPA.

Comment 3 – Monitoring of Condensible PM

We understand from discussion with EPD that PM emissions limits are intended to include condensible particles. We request that EPD either (a) confirm that testing methods specified in the permit are adequate for monitoring condensibles, or (b) add a condensible PM test method.

EPD Response: The BACT limit in the draft permit did not include condensible particulate matter. This portion of the emissions was included in the modeling and netting calculations based on emissions data from NCASI Bulletin No. 884. Based on subsequent conversations with EPA and Weyerhaeuser, a BACT limit for total particulate matter (0.0298 gr/dscf at 8% oxygen) has been added to the permit as Condition 3.3.2.i. A limit for filterable PM (0.021 gr/dscf at 8%

oxygen) will remain in Condition 3.3.2.b for compliance with 40 CFR 60 Subpart BB, 40 CFR 63 Subpart MM, and BACT.
Ongoing compliance with the limit in Condition 3.3.2.b will be based on monitoring total power for the ESP. Compliance with the total particulate matter limit in Condition 3.3.2.i will be based on performance testing. In accordance with the total particulate matter limit, Condition 4.1.3.gg has been added to the permit to include Method 202 for the determination of condensible particulate emissions. Condition 4.2.7.a for initial performance tests for particulate matter and opacity has been modified to clarify that the established ESP total power pertains to the limit in Condition 3.3.2.b for ongoing compliance. The following phrase has been added to Condition 4.2.7.a: "in order to demonstrate compliance with the particulate matter limit in Condition 3.3.2.b." Finally, Condition 4.2.7.d has been added to the permit to require an initial performance test to determine compliance with the total particulate matter limit in Condition 3.3.2.i. The facility will continue to demonstrate compliance through performance testing prescribed in existing Condition 4.2.1.b.

Comment 4 – Netting Analysis
The applicant makes this statement on page 5-4 of the application: "By not conducting a contemporaneous analysis, the VOC emissions decreases from the shutdown of the cylinder mould decker and associated equipment remain creditable for future PSD applicability evaluations." EPD should decide if this is acceptable.

EPD Response: The applicant did not claim credit for the reduction due to the shutdown of the cylinder mould decker and associated equipment because it is an optional part of the PSD modifications. This emission reduction may become creditable should the facility proceed with Phase II of the modifications. At such time that the facility claims these credits they will be reviewed for eligibility.

Comment 5 – Air Quality Impact Analysis - Receptor Grids and Significant Impact Area
We are not certain that we have all the modeling evaluations. Please make sure that all predicted concentrations relied on for the preliminary determination were resolved to a 100-meter receptor grid separation distance. Also please confirm that the SO_2 significant impact area (SIA) of 15 km indicated in the preliminary determination is correct. The modeling results we have indicate an SIA of 6.7 km.

EPD Response: The EPD Data & Modeling Unit has confirmed that the concentrations were resolved to a 100-meter receptor grid. The SIA was revised from 6.7 km to 15 km based on a discrepancy discovered by the Data & Modeling Unit in June 2005. The discrepancy involved the modeled stack conditions for the recovery boiler and power boiler. Although emissions from these units combine into a single stack, the Permittee modeled each unit as having a separate stack flue and emitting from the same coordinate location. This approach did not properly address the exhaust temperature and velocity profiles for the single flue stack. Weyerhaeuser submitted corrected stack condition information through a letter dated July 12, 2005. The EPD re-ran all models with the corrected stack information, which resulted in an increase of the SIA. The facility also passed NAAQS and Increment with the corrected stack information.

Comment 6 – Air Quality Impact Analysis - PM NAAQS Compliance Criteria
Although conservative, the indicated particulate matter annual (highest annual average concentration) and short-term (highest second-high concentration) compliance concentrations are not directly comparable with the PM_{10} national ambient air quality standards (NAAQS). The correct PM_{10} annual concentrations to compare to the NAAQS are the averages of the annual concentrations. The short-term 24-hour NAAQS concentration comparison value is the sixth highest concentrations for the modeled 5-year data period.

> **EPD Response:** The EPD agrees with this guidance. The modeling for the Weyerhaeuser project results in maximum annual average and maximum 24-hour concentrations less than the PSD Significant Impact Level (SIL) for PM_{10} (see Tables 16 and 22 of the preliminary determination). Therefore, a NAAQS analysis for PM_{10} was not required and no changes need to be made as a result of the comment.

Comment 7 – Air Quality Impact Analysis - PSD Increment Expansion
The Weyerhaeuser mill is a baseline source for nitrogen dioxide (NO_2) because it was an existing major source when the NO_2 PSD increments were established in 1988. The final determination should note that the shutdown of the calciner will only be a PSD increment expander for NO_2 because the total facility is a PSD source for the other pollutants. The calciner shutdown does not expand PM_{10} and SO_2 increments.

> **EPD Response:** The EPD agrees with this comment. Further, there are currently no PM_{10} or SO_2 increment expanders and all existing sources are increment consumers.

Comment 8 – Air Quality Impact Analysis - Federal Land Manager (FLM) Review
Because the Weyerhaeuser mill is more than 200 km from the nearest PSD Class I area, no Class I area impacts were assessed. If not already done, FLM concurrence should be obtained for this approach.

> **EPD Response:** The EPD has obtained concurrence from the FLM that no Class I area modeling is required for this project. The FLM did request that a condition be added to the permit that requires the facility to conduct Class I area modeling in the event that any of the emission caps in Condition 2.2.1 of the permit are removed or increased. The condition has been added to the permit as follows:
>
> 2.2.3 In the event that the Permittee seeks to have any emission cap described in Condition 2.2.1 modified to increase allowable emissions of any regulated air pollutant or removed from the Title V permit, the Permittee shall conduct modeling to analyze impacts to Air Quality Related Values (AQRV's), including visibility, at Class I areas. These analyses shall be conducted in accordance with the guidance issued by the Federal Land Managers. The results of the Class I area analysis shall be submitted to the Georgia EPD and the Federal Land Managers with the permit application requesting removal or modification of the emission cap(s).
> [40 CFR 52.21]

Comment 9 – Air Quality Impact Analysis - Modeled Emission Inventory
The NAAQS emission inventory provided by EPD was reviewed and edited by the applicant to eliminate those sources whose contribution to the SIA would be insignificant. Review of the applicant's editing of the EPD-provided NAAQS emission inventory reveals three eliminated emission sources (Frito Lay, Unimin, and Mid-Georgia Cogen) that, because of their close proximity, should be considered as one source for the 20D procedure. If this were done, these three sources would not have been eliminated. In view of the magnitude of the resultant cumulative SO_2 NAAQS modeling and the conservative nature of the PSD increment modeling, it appears that the inclusion of these three sources, located about 50 km from the Weyerhaeuser mill, would not cause concentrations exceeding ambient limits.

> **EPD Response:** The EPD agrees with the comment that the inclusion of the sources would not cause an exceedance of ambient limits. No further modeling is required.

Comment 10 – Air Quality Impact Analysis - Soils and Vegetation
As a reason for no additional soils/vegetation impact analyses, EPD incorrectly states in the preliminary determination (page 39) that all project modeled impacts were less than the significant impact levels (SILs). Short-term SO_2 impacts were greater than the SIL and need additional consideration.

> **EPD Response:** The EPD agrees with the statement concerning the SILs is incorrect. The statement was included in the Preliminary Determination due to an editing error. While the short-term SO_2 impacts did exceed the SIL, the modeling showed compliance well below the SO_2 NAAQS. Therefore, no impact on soils and vegetation is expected.

Comment 11 – Air Quality Impact Analysis - Class II Area Visibility
(a) Because there are no specific ambient visibility standards to address, EPD states on page 41 of the preliminary determination that the provided analysis is for informational purposes only and predicted impacts greater than the screening criteria are not considered adverse impacts. This is not a correct statement. The adverse nature of the impacts must be evaluated on a case-by-case basis. For example, a very frequent visible plume over an airport may be a hazard to operations and be considered an adverse impact. (b) Concerning the delta E and Contrast criteria, these values are not just applicable to Class I areas. The adverse nature of visible plumes in Class II areas should be evaluated taking into consideration the frequency of occurrence and the specific visibility-sensitive areas of concern. (c) The Class II visibility analysis provided in the PSD permit application documents is not complete. The Level-I VISCREEN modeling performed was discounted as inadequate for evaluation with no additional analyses using other VISCREEN levels, other models, or other analysis techniques.

> **EPD Response:** (a) The EPD agrees with the comment. The statement should not have been included in the preliminary determination and was the result of an editing error. (b) The EPD agrees with the comment. (c) The EPD agrees that the VISCREEN modeling results contained in the original application were incomplete. In April 2005, the EPD Data & Modeling Unit requested that the facility resubmit the VISCREEN analysis. The final Level II VISCREEN analysis was again conducted for the Montezuma Airport, located about 8 km from the mill. The Level II analysis indicated impacts in the vicinity of the airport to be lower than the applicable screening criteria thresholds.

WEYERHAEUSER – FLINT RIVER OPERATIONS MILL COMMENTS

Comments were received from Mark Johnson, Environmental Affairs Manager, on August 15, 2005.

Comment 1 - Permit Section 3.1.3 (Unit P814)
The methanol tank in the bleaching system is not subject 40 CFR 63 Subpart EEEE (organic liquid distribution NESHAP), based upon guidance published by USEPA in the Federal Register on June 22, 2005 (Volume 70, Number 119, pages 36141-36147). Permit Condition 3.3.28 (in Permit Amendment No. 2631-193-0013-V-01-2 for the power boiler, effective July 6, 2005) should also be removed, for the same reason.

> **EPD Response:** Although conditions pertaining to the bleaching system methanol tank (Source Code P814) have not been added during this permitting action, the issue should be addressed due to the inclusion of 40 CFR 63 Subpart EEEE in the new equipment list (Section 3.1.3) that is part of this permitting action. The commenter is correct concerning the EPA guidance. The Subpart EEEE reference has been removed from the equipment list. Condition 3.3.28 has been deleted as well.

Comment 2 - Permit Section 3.1.3
Reference to Subpart Kb should be removed from the summary table of the draft permit for Units U617, U502 and U605. Permit Condition 3.3.20 in the original permit (V-01-0, effective September 16, 2002) should also be modified to remove all tanks but the methanol tank (P814). The three other tanks are now exempted based on the NSPS revisions (40 CFR Subpart Kb) published October 15, 2003 (Volume 68, Number 199, pages 59328-59333), which defined storage vessels to exclude process flow through tanks such as the black liquor tanks, condensate collection tank, and stripper feed tank.

Reference to Permit Conditions 6.2.28 and 6.2.29 (included in the power boiler permit modification, V-01-2, effective July 6, 2005) should be added to the summary table for the Recovery Boiler U500 and Smelt Dissolving Tank U508, as these pertain to 40 CFR 63 Subpart MM, which remain applicable to these units.

> **EPD Response:** Although conditions pertaining to 40 CFR 60 Subpart Kb tanks have not been added during this permitting action, the issue should be addressed due to the inclusion of 40 CFR 60 Subpart Kb for tanks in the new equipment list (Section 3.1.3) that is part of this permitting action. The commenter is correct concerning the amendment to Subpart Kb. The Subpart Kb references have been removed from the equipment list for the flow through tanks. Conditions 3.3.20 and 6.2.15 have been modified accordingly.
>
> Reference to Conditions 6.2.28 and 6.2.29 have been added to the equipment list (Section 3.1.3) for the recovery boiler and the smelt dissolving tank.

Comment 3 - Permit Condition 3.3.9.j
The installation of this equipment must be optional if Phase II is not completed (see Section 1.3). This could be linked to 7.14.3 for the equipment that would be replaced and adding a requirement for notification of the Division.

EPD Response: The commenter is correct that Condition 3.3.9.j is effective upon completion of Phase II of the project. Condition 7.14.3 had been modified to read as follows:

> Cylinder Mould Decker P400, Cylinder Mould Decker Filtrate Tank P408, and Cylinder Mould Decker Vacuum Pump P409 shall be permanently decommissioned upon startup of Wash Press P450 and Filtrate Tank P451. Condition 3.3.9.j shall be effective at such time that the Permittee completes construction of Phase II of the mill production expansion project.
> [391-3-1-.02(6)(b)(1) and 40 CFR 70.6(a)(3)(i)]

Comment 4 - Permit Condition 4.2.9
The wording: "Smelt Tank 5" should be replaced with *"Smelt Dissolving Tank U508."*

In accordance with 40 CFR 63.864(j)(3) and (4), Weyerhaeuser requests the following wording be included: *"The Permittee may conduct additional performance tests to expand the range of values for the minimum pressure drop and scrubbant flow rate."*

EPD Response: The changes have been made as requested.

Comment 5 - Permit Condition 5.2.2
The wording: "Recovery Furnace 5" should be replaced with *"Recovery Boiler U500."*

EPD Response: The change has been made as requested. This was a typographical error.

Comment 6 - Power Boiler permit modification (V-01-2, effective July 6, 2005), Condition 6.1.7.b(vii)
Proposed Permit Condition 4.2.9 requires reestablishing minimum pressure drop and scrubbant flow during additional initial performance testing, which would be required by proposed Condition 4.2.8, plus any additional testing to expand the operating ranges. Conditions 6.1.7.b.vii(A) and (B) in the power boiler permit modification (V-01-2, effective July 6, 2005) specify these values and therefore, should be modified to: *"Any 3-hour period which the average pressure drop or scrubbant flow rate measured and recorded in accordance with Condition 5.2.2.c for the Smelt Tank Scrubber CDU5 falls below the values determined in accordance with Condition 4.2.9."*

EPD Response: Although Condition 6.1.7.b(vii) was not added to the permit as a result of this permitting action, it is necessary to address the issue because additional performance testing for Smelt Dissolving Tank U508 (which is controlled by Smelt Tank Scrubber CDU5) has been required. Condition 6.1.7.b(vii) currently reads as follows:

> Period of monitoring exceedances reported for Conditions 6.1.7.b.vii(A) and 6.1.7.b.vii(A) shall be a violation of 40 CFR 63 Subpart MM when six or more 3-hour average parameter values (excluding periods of startup, shutdown, or malfunction) within any 6 month reporting period are outside the parameter limits listed below. For purposes of determining the number of non-opacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.
> [40 CFR 63.864(k)(2)(iii) and 40 CFR 63.864(k)(3)]

(A) Smelt Tank Scrubber U508 pressure drop less than 9.1 inches of water column.
(B) Smelt Tank Scrubber U508 scrubbant flow rate less than 360 gpm.

Paragraphs (A) and (B) of the condition has been changed to read as follows:

(A) Smelt Tank Scrubber U508 pressure drop less than 9.1 inches of water column or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.
(B) Smelt Tank Scrubber U508 scrubbant flow rate less than 360 gpm or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.

The current excursion values will remain in the permit in the event that the planned modifications do not take place.

Comment 7 - Power Boiler permit modification (V-01-2, effective July 6, 2005), Condition 6.1.7.c.iv

Proposed Permit Condition 4.2.9 requires reestablishing minimum pressure drop and scrubbant flow during additional initial performance testing, which would be required by proposed Condition 4.2.8, plus any additional testing to expand the operating ranges. Conditions 6.1.7.c.iv(A) and (B) in the power boiler permit modification (V-01-2, effective July 6, 2005) specify these values and therefore, should be modified to: *"Any 3-hour period which the average pressure drop or scrubbant flow rate measured and recorded in accordance with Condition 5.2.2.c for the Smelt Tank Scrubber CDU5 falls below the values determined in accordance with Condition 4.2.9."*

EPD Response: Although Condition 6.1.7.c(iv) was not added to the permit as a result of this permitting action, it is necessary to address the issue because additional performance testing for Smelt Dissolving Tank U508 (which is controlled by Smelt Tank Scrubber CDU5) has been required. Condition 6.1.7.c(iv) currently reads as follows:

> Any three-hour period during which the average pressure drop or scrubbant flow rate measured and recorded in accordance with Condition 5.2.2.c from Smelt Tank Scrubber CDU5 is below the following values:
>
> (A) Pressure drop: 9.1 inches of water column.
> (B) Scrubbant flow rate: 360 gpm.

Paragraphs (A) and (B) of the condition has been changed to read as follows:

(A) Pressure drop: 9.1 inches of water column or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.
(B) Scrubbant flow rate: 360 gpm or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.

The current excursion values will remain in the permit in the event that the planned modifications do not take place.

Comment 8 - Permit Condition 6.1.7.c.xii

Due to inherent variability in the combustion and recovery processes, Weyerhaeuser requests that the excursion for minimum oxygen concentrations measured during the initial performance test be defined as: *"Any 3-hour period which the average Flue Oxygen concentration for the Recovery Boiler U500 falls below 75% of the values determined in accordance with Condition 4.2.7.c."*

EPD Response: Condition 6.1.7.c(xii) is the excursion condition for the oxygen monitoring designed to provide reasonable assurance with the VOC and CO BACT limits:

> Any 3-hour period during which the average Flue Oxygen concentration for Recovery Furnace U500 falls below the concentration determined in accordance with Condition 4.2.7.

The corresponding testing requirements are found in Condition 4.2.7.c.

> Within 60 days, but no later than 180 days, of achieving maximum operating rate for Recovery Boiler U500 after completion of Phase I of the modifications to increase capacity, the Permittee shall conduct an initial performance tests for the following:
> [40 CFR 52.21; 40 CFR 60 Subpart Db; 40 CFR 60 Subpart BB; 40 CFR 63 Subpart MM; 40 CFR 63 Subpart S; 391-3-1-.02(2)(b); 391-3-1-.02(2)(e)]
>
> c. Carbon monoxide and volatile organic compounds. During the performance tests the Permittee shall establish the minimum flue oxygen concentration to be used in determining an excursion under Condition 6.1.7.c.

It was the intention of the EPD not to place a specific percentage in the permit with respect to establishing the oxygen excursion level. This is because the acceptable excursion level can be highly dependent on the outcome of the performance testing. For example, if testing reveals that the compliance margin for a pollutant is relatively small, a specific percentage value set prior to testing may not provide a reasonable assurance of on-going compliance. The permit would then have to be amended. It was the intention of the EPD to allow the facility to submit a requested excursion value with justification supported by the performance testing results. These results may or may not correspond to the 75% requested by the comment.

The EPD has made the following change to Condition 4.2.7.c to clarify that the EPD is not specifying a hard cut off for oxygen excursions in this permit.

> Within 60 days, but no later than 180 days, of achieving maximum operating rate for Recovery Boiler U500 after completion of Phase I of the modifications to increase capacity, the Permittee shall conduct an initial performance tests for the following:
> [40 CFR 52.21; 40 CFR 60 Subpart Db; 40 CFR 60 Subpart BB; 40 CFR 63 Subpart MM; 40 CFR 63 Subpart S; 391-3-1-.02(2)(b); 391-3-1-.02(2)(e)]
>
> c. Carbon monoxide and volatile organic compounds. During the performance tests, the Permittee shall collect data necessary to establish the ~~minimum~~ flue oxygen concentration to be used in determining an excursion under Condition 6.1.7.c. The Permittee shall submit the excursion value to the Division as part of the performance test report. The Permittee shall provide, in writing, justification for the selected excursion value(s).

Comment 9 - Permit Section 6.1.7.a.xxi
The word "expect" should be replaced with the word *"except."*

EPD Response: The change has been made as requested. This was a typographical error.

Comment 10 - Permit Section 7.14.4
The reference to Condition 6.2.25 should be changed to *Condition 6.2.32*.

EPD Response: The change has been made as requested. This was a typographical error.

WEYERHAEUSER – FLINT RIVER OPERATIONS MILL CLARIFICATIONS

Weyerhaeuser submitted several clarifications the facility believed should be made concerning the Preliminary Determination. However, the Preliminary Determination document is not reissued after the comment period has expired. Instead, the EPD has summarized the requested clarifications here.

Clarification 1 – Page 2, Tables 1 and 2
Weyerhaeuser requests that the description of the values for potential emissions of PM/PM_{10} also notes the inclusion of condensable particulate matter, which results in a higher total than the particulate matter values in the permit application.

EPD Response: US EPA Region 4 has stated that condensible particulate matter should be included for comparison to the PSD Significant Emission Rate thresholds for particulate matter and for particulate matter modeling. The EPD recognized that while condensibles had been included in the modeling, the facility has not included condensibles in the tables for comparison to PSD thresholds. The EPD corrected this issue. Tables 1 and 2 are presented in accordance with EPA guidance and include condensible particulate matter.

Clarification 2 – Page 6
The last sentence in the paragraph discussing 40 CFR Subpart D should be changed to: *"The subpart does not apply to the recovery boiler because the unit is subject to a 10% annual capacity factor for fossil fuel."*

EPD Response: The sentence suggested by the Permittee is also acceptable. The EPD's sentence was written to indicate that the annual capacity factor is in fact low because fuel oil is burned in a limited fashion.

Clarification 3 – Page 7
The paragraph on Subpart Kb should be appended with: *"…but excludes process flow through tanks such as the black liquor tanks, condensate collection tank, and stripper feed tank. The methanol tank in the bleaching system is the only tank subject to this subpart, based on revisions published October 15, 2003."*

EPD Response: Please see the response to facility Comment 2.

Clarification 4 – Page 7

The first paragraph on Subpart BB should be changed from 10 percent oxygen for the recovery boiler particulate limit to 8 percent.

EPD Response: The Permittee is correct. This was a typographical error.

Clarification 5 – Page 7
The smelt dissolving tank and the lime kiln should be added to the equipment listed as subject to 40 CFR 63 Subpart A, because they are subject to 40 CFR 63 Subpart MM.

> **EPD Response:** The commenter is correct that the smelt dissolving tank and lime kiln are subject to 40 CFR 63 Subpart A. The information in the preliminary determination was written to address only those emission units that are undergoing modification.

Clarification 6 – Pages 7 and 8
The paragraphs on 40 CFR 63 Subpart A and Subpart EEEE should be modified, reflecting the change in applicability of Subpart EEEE as discussed above for Permit Section 3.1.3.

> **EPD Response:** Please see the response to facility Comment 1.

Clarification 7 – Page 28
Table 13 should show that Wet Scrubbers are ranked first.

> **EPD Response:** The EPD acknowledges that numerals "1" and "2" in Table 13 of the preliminary determination were reversed. The remainder of the table is correct. The typographical errors did not impact the BACT analysis.

Clarification 8 – Page 41
The visibility impairment assessment passed with a Level-2 VISCREEN analysis rather than a Level-1 analysis.

> **EPD Response:** The Permittee is correct. The visibility assessment was based on a Level-II VISCREEN analysis.

EPD CHANGES

The EPD corrected two typographical errors that were found in the draft permit. The words "dioxde" and "conduced" in Conditions 4.2.7.a and 4.2.7.b have been changed to "dioxide" and "conducted," respectively.

APPENDIX A

AIR QUALITY PERMIT

2631-193-0013-V-01-3

APPENDIX B

WRITTEN COMMENTS
RECEIVED DURING
COMMENT PERIOD