AGREEMENT REGARDING ALLEGED NON-COMPLIANCE WITH CONSENT DECREE

WHEREAS.

- A. The United States, on behalf of the U.S. Environmental Protection Agency ("EPA"), and Cummins Engine Company, Inc. (now called Cummins Inc.) ("Cummins") (collectively, the "Parties") are parties to a Consent Decree entered in this action on July 1, 1999, as amended, and Cummins and the California Air Resources Board ("CARB") are parties to a California Settlement Agreement of July 1, 1999, as amended;
- B. The United States contends that Cummins violated several provisions of the Consent Decree's Section VI (Requirements for Applications for Certificates of Conformity; Averaging, Banking and Trading) and Section IX (Low NO_x Rebuild Program);
- C. Specifically, the United States contends that Cummins: sought Certificates of Conformity for approximately 11,600 engines equipped with an Auxiliary Emission Control Device ("AECD") that did not operate as set forth in the Consent Decree, leading to excess emissions of approximately 979 tons of NO_x over the life of the engines if uncorrected; used 1101 more Averaging, Banking and Trading ("AB&T") Credits than the amount set forth in the Consent Decree, leading to more than 1000 tons of excess emissions of NO_x; implemented a Low NO_x Rebuild Program for which Cummins failed to timely request the requisite EPA approval (until April 13, 2006); and omitted 26,347 engines from its Low NO_x Rebuild Program that should have been included in the Program and were not included until August 2005, leading to approximately 42 tons excess emissions of NOx over the life of the engines if uncorrected. In addition, Cummins has disclosed to the United States that in 2001 it violated provisions of 40 CFR Part 86 in connection with certification testing of engines under the Consent Decree by its failure to perform test equipment calibrations within applicable time limits set forth in 40 C.F.R. sections 86.1321; 1321(b); 1323(a) & (b) and 1324;
- D. The Parties have engaged in good faith, arms-length negotiations to address the United States' contentions of non-compliance, and, as a result of their negotiations, have consented to the Agreement ("Agreement") set forth herein;
- E. Cummins and CARB are simultaneously entering into a separate Agreement addressing some of the issues addressed herein.

NOW, THEREFORE, without trial, litigation, or adjudication of any issue of fact or law, and without this Agreement constituting an admission by any Party with respect to the matters described above, it is AGREED between the Parties as follows:

I. APPLICABILITY

- 1. This Agreement applies to and is binding upon the United States and upon Cummins, its employees, contractors, agents, successors, and assigns. Unless approved by the Parties in writing, any change in Cummins' ownership or corporate status shall in no way alter Cummins' responsibilities under this Agreement. In any action to enforce this Agreement, Cummins shall not raise as a defense the failure of its officers, directors, agents, servants, contractors, or employees or their successors to take actions necessary to comply with the provisions hereof.
- 2. Cummins shall provide a copy of this Agreement to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Agreement, as well as to any contractor retained to perform work required under this Agreement. Cummins shall require as a term of any such contract performance of the work in conformity with the terms of this Agreement.

II. <u>DEFINITIONS</u>

Unless specifically defined in this Section or elsewhere in this Agreement, terms used herein shall have the meanings referred to or set forth in Section II (Definitions) of the Consent Decree. The following definitions shall apply for purposes of this Agreement.

"Conforming Overheat AECD" means the AECD conforming to Cummins' description of its Overheat AECD as set forth in Appendix B-3 of the Consent Decree and in Cummins' applications for Certificates of Conformity for, inter alia, the engine families listed in Attachment 1.

"Effective Date" means the date upon which the United States provides written notice to Cummins and the Court that the public comment period has closed and that comments received, if any, do not require modification of or the United States' withdrawal from this Agreement.

"Excluded Engines from Low NOx Program" means those 26,347 engines that should have been included in the Low NOx Program but that were omitted, which each had one of the 57 software codes listed in Attachment 2.

"Non-conforming Overheat AECD" means the AECD which was intended to operate as set forth in Appendix B-3 of the Consent Decree, but which in fact operated as set forth in Cummins' October 2003 Defect Report (attached hereto as Attachment 3) and which was installed in the engines listed in Attachment 1.

III. REMEDIAL MEASURES

A. Recall of Engines Equipped with Non-Conforming Overheat AECD

- 3. Cummins shall implement a recall of engines equipped with the Non-Conforming Overheat AECD. In implementing the recall, Cummins shall either disable the Non-Conforming Overheat AECD or replace the Non-Conforming Overheat AECD with the Conforming Overheat AECD. EPA acknowledges that Cummins has already commenced the required recall.
- 4. The recall shall continue for at least two years from the Effective Date of this Agreement.
- 5. Cummins shall establish and maintain records to enable the Parties to monitor the implementation of the recall and to confirm Cummins' calculations required by Paragraph 10, including, but not limited to: the quarterly and cumulative number of engines that have had the Non-Conforming Overheat AECD disabled or reprogrammed with the Conforming Overheat AECD and copies of warranty claim reports for the recall. Cummins shall provide these records to EPA upon request.

B. Recoupment of Excess NO, Tons Related to Overheat AECD

- 6. Cummins shall reimburse 979 NO_x tons to the United States and to California through CARB to compensate for the excess tons generated by the Non-Conforming AECD's installation in approximately 11,600 engines. Cummins shall reimburse tons by permanently retiring any tons designated and/or purchased for this purpose and Cummins cannot use such tons for any additional benefit.
- 7. The 979 tons shall come only from one or more of the following sources: (1) Cummins' on-road AB&T accounts; (2) Cummins' off-road AB&T accounts; or (3) currently valid stationary source NO_x tons purchased on the open market through a licensed broker.
- 8. Except as provided below, the 979 tons may be reimbursed in three or fewer installments. The first installment is due 90 days after the Effective Date. The second installment, if applicable, is due on or before 30 days after the 1st anniversary of the Effective Date. The third installment, if applicable, is due on or before 30 days after the 2nd anniversary of the Effective Date. Annual Interest of five percent (in tons) shall be paid for all tons not reimbursed in the first installment. No installment shall include fewer than 250 tons, except pursuant to Paragraph 10.
- 9. Cummins may subtract from the final installment due under Paragraph 8 the number of tons mitigated through the Overheat AECD recall, as calculated pursuant to paragraph 10 and approved by EPA pursuant to Paragraph 11. If Cummins demonstrates through its EPA-approved calculation required under Paragraph 10 that the number of tons mitigated by Cummins Overheat AECD recall is equal to or greater than the number of tons due in its final installment, then Cummins will not owe any additional tons.
 - 10. No later than fifty days before making the final installment, Cummins shall

calculate the tons mitigated to date through its Overheat AECD recall using warranty claims data for the number of engines recalled and shall submit that calculation to EPA and CARB in the Recoupment Plan required by Paragraph 11. The calculation shall be done by multiplying the number of successfully recalled engines by a factor of 0.05682 tons to determine the tons mitigated. The derivation of this factor is set forth in Attachment 4. EPA (after consultation with CARB) shall either approve the calculation or substitute a revised calculation and shall communicate its approved calculation to Cummins in writing. If EPA substitutes a revised calculation, Cummins shall comply with such substitute calculation unless it disputes EPA's substitute calculation or substitutions provided by EPA and CARB conflict, in which case it shall follow the procedures for Dispute Resolution set forth in Section XVI of the Consent Decree.

11. No later than fifty days prior to the due date of each installment, Cummins shall submit to EPA and to CARB an "Overheat AECD Tons Recoupment Plan" that sets forth how many tons it intends to reimburse in this installment, its calculation of interest due, and its plan for recoupment, including detailed information on the source of the tons it is reimbursing in the installment. EPA shall review this Recoupment Plan and (after consultation with CARB) approve or disapprove it no later than 15 days before the due date of the installment. If the Plan is not approved, EPA shall provide a detailed explanation of its reasons for disapproval and instructions as to how many tons Cummins should reimburse. Cummins shall comply with such instructions unless it disputes EPA's instructions or instructions provided by EPA and CARB conflict, in which case it shall follow the procedures for Dispute Resolution set forth in Section XVI of the Consent Decree.

C. Recoupment of Excess NO, Tons Not Related to Overheat AECD

- 12. Cummins shall reimburse 1042 tons of NO_x to the United States and to California through CARB to compensate for the excess tons generated by its non-compliance with the Consent Decree exclusive of tons related to the Overheat AECD. Cummins shall reimburse tons by permanently retiring any tons designated and/or purchased for this purpose, and Cummins cannot use such tons for any additional benefit.
- 13. The 1042 tons shall come only from one or more of the following sources: (1) Cummins' on-road AB&T accounts; (2) Cummins' off-road AB&T accounts; or (3) currently valid stationary source NO_x tons purchased on the open market through a licensed broker.
- 14. At least 600 of the 1042 tons under paragraph 13 above shall be tons permanently retired from Cummins' on-road AB&T accounts for medium heavy or heavy duty engines.
- 15. The 1042 tons may be reimbursed in three or fewer installments. The first installment is due 90 days after the Effective Date. The second installment is due on or before 30 days after the 1st anniversary of the Effective Date. The third payment is due on or before 30 days after the 2nd anniversary of the Effective Date. Annual Interest of five percent (in tons)

shall be paid for all tons not reimbursed in the first installment. No installment shall include fewer than 250 tons.

16. No later than fifty days prior to the due date of each installment, Cummins shall submit to EPA and to CARB a "Tons Recoupment Plan Not Related to the Overheat AECD" that sets forth how many tons it intends to reimburse in this installment, its calculation of interest due, and its plan for recoupment, including detailed information on the source of the tons it is reimbursing in the installment. EPA shall review this Recoupment Plan and (after consultation with CARB) approve or disapprove it no later than 15 days before the due date of the installment. If the Plan is not approved, EPA shall provide a detailed explanation of its reasons for disapproval, including any instructions as to how many tons Cummins should reimburse. Cummins shall comply with such instructions unless it disputes EPA's instructions or instructions provided by EPA and CARB conflict, in which case it shall follow the procedures for Dispute Resolution set forth in Section XVI of the Consent Decree.

IV. REPORTING

17. After the Effective Date of this Settlement Agreement, and until Cummins has paid the final installment for recoupment of Non-conforming Overheat AECD tons, Cummins shall include in its written quarterly progress reports pursuant to Paragraph 105 of the Consent Decree the quarterly and cumulative number of engines that have had the Non-conforming Overheat AECD disabled or reprogrammed with the Conforming Overheat AECD.

V. AGREED PENALTY UNDER CONSENT DECREE

18. Cummins shall pay a total penalty of \$950,000 to the United States and to the California Air Resources Board. Within thirty days of the Effective Date of this Agreement, Cummins shall pay an agreed penalty under the Consent Decree to the United States in the amount of \$637,500. Payment shall be made by Electronic Funds Transfer by 4:00 p.m. Eastern Standard Time on the due date to the Department of Justice lockbox bank in accordance with specific instructions to be provided to Cummins upon the Effective Date and shall reference Department of Justice Case No. 90-5-2-1-2136A/1, the civil action number of this matter, and this Paragraph of the Agreement. Cummins shall transmit notice of such payments to the United States in accordance with Paragraph 111 of the Consent Decree. Cummins shall not deduct the payment required by this Paragraph in calculating its federal income tax.

VI. ADDITIONAL STIPULATED PENALTIES UNDER THIS AGREEMENT

- 19. If Cummins fails to submit the calculation required by Paragraph 10 by the deadline set forth in this Agreement, it shall pay to the United States a stipulated penalty of \$500 per day for each day that the calculation is late.
 - 20. If Cummins fails to submit complete Tons Recoupment Plans by the deadlines

set forth in this Agreement, it shall pay to the United States a stipulated penalty of \$500 per day for each day that each Plan is late or incomplete.

- 21. If Cummins fails to reimburse the approved number of Tons of NOx by the deadlines set forth in this Agreement, it shall pay to the United States a stipulated penalty of \$500 per day for each day the payment is late.
- 22. If Cummins fails to pay the penalty set forth in Paragraph 18 by the deadline, it shall pay to the United States a stipulated penalty of \$1000 per day for each day the payment is late.

VII. EFFECT OF AGREEMENT

- 23. Upon completion by Cummins of all its obligations under this Agreement, this Agreement resolves the United States' potential claims for stipulated, administrative, and civil penalties and other relief enforcing the Consent Decree with respect to:
- (a) Cummins's use of the Non-conforming Overheat AECD on approximately 11,600 engines sold for use in recreational vehicles and school buses during model years 2000 through 2003 (as set forth in Cummins' October 2003 defect report) including, inter alia, the engine families listed in Attachment 1;
- (b) Cummins' use of 1101 more HHDDE credits in its on-road A B&T account than the amount of credits provided in the Consent Decree (as outlined in Cummins' 208 Response letter of July 13, 2004, as supplemented);
- (c) Cummins' exclusion of 26,347 engines from its Low NO_x Rebuild Plan (as outlined in Attachment 2); and
- (d) Cummins' failure to timely submit its October 1999 Revised Low NO_x Rebuild Plan for EPA approval, until April 13, 2006.
- 24. This Agreement also resolves the United States' potential civil and administrative claims for relief with respect to Cummins' self-disclosed violation of provisions of 40 C.F.R. Part 86 by its failure in 2001 to perform test equipment calibrations within applicable time limits set forth in 40 C.F.R. sections 86.1321; 1321(b); 1323(a) & (b) and 1324.
- 25. In consideration of the actions that will be performed and the payments that will be made by Cummins under the terms of this Agreement:
- (a) EPA shall not base a determination under Section 207(c)(1) of the Act, 42 U.S.C. § 7541, that the Engines equipped with the non-conforming Overheat AECD do not conform to the regulations prescribed under Section 202 of the Act, 42 U.S.C. § 7521, or a determination under Section 206(b) of the Act, 42 U.S.C. § 7525(b), to suspend or revoke a Certificate of Conformity, on the basis that engines contain the Non-conforming Overheat AECD; and

- (b) EPA shall not base a determination under Section 207(c)(1) of the Act, 42 U.S.C. § 7541, that Cummins' model year 1998 through 2002 HHDDE engines do not conform to the regulations prescribed under Section 202 of the Act, 42 U.S.C. § 7521, or a determination under Section 206(b) of the Act, 42 U.S.C. § 7525(b), to suspend or revoke a Certificate of Conformity, on the basis that Cummins had insufficient HHDDE AB&T credits to offset the projected emissions from such engines.
- 26. This Agreement does not pertain to any matter other than those expressly specified in Paragraphs 23-25. Nothing in this Agreement shall relieve Cummins of its obligation to comply with applicable Federal, State and local laws and regulations, and this Agreement does not resolve the liability, if any, of any person or entity for any civil claims or claims for stipulated penalties other than the claims referred to in Paragraphs 23-25, or for any criminal claims.
- 27. This Agreement does not limit, enlarge, or affect the rights of any Party to the Consent Decree as against any third parties. Nothing in this Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Agreement.

VIII. GENERAL PROVISIONS

- 28. The provisions of Section XV (Force Majeure) of the Consent Decree shall apply to any Force Majeure event asserted by Cummins in connection with this Agreement. Any dispute arising under this Agreement shall be resolved in accordance with the Section XVI (Dispute Resolution) of the Consent Decree. This Agreement is entered into in furtherance of the objectives of the Consent Decree. Cummins shall allow access, provide access to information, and retain documents relating to the implementation of this Agreement in accordance with Sections XVIII (Right of Entry) and XIX (Access to Information and Retention of Documents) of the Consent Decree.
- 29. The records required by this Agreement, including those required by Paragraph 5, shall be retained by Cummins in accordance with the record retention requirements of Section XVIII (Access to Information and Retention of Documents) of the Consent Decree.
- 30. There shall be no modification of this Agreement without written agreement of the Parties.
- 31. This Agreement does not address, or by its own terms preclude, partial termination of the Consent Decree pursuant to the terms of Paragraph 154(a) of the Consent Decree.
- 32. This Agreement contains the entire agreement between the United States and Cummins with respect to the subject matter hereof. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Agreement.

- 33. The Assistant Attorney General of the Environment and Natural Resources Division of the Department of Justice and the undersigned representative of Cummins each certify that he or she is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the Party he or she represents.
- 34. The United States intends to file a "Notice of Agreement Regarding Alleged Non-compliance with Consent Decree" with the Court advising it of the issues addressed herein and the Parties' agreement. Following the filing of the Notice, the United States will publish notice of this Agreement in the Federal Register and the Agreement shall be subject to a public comment period of not less than 30 days. The United States may withdraw or withhold its consent to this Agreement if comments received disclose facts or considerations indicating that this Agreement is inappropriate, improper, or inadequate. After the conclusion of the comment period, the United States will advise Cummins and the Court whether it continues to consent to this Agreement.
- 35. The United States and Cummins agree that the provisions of paragraph 151 of the Consent Decree apply to this Agreement.

Signature Page

FOR PLAINTIFF, UNITED STATES OF AMERICA

SUE ELLEN WOOLDRIDGE

Assistant Attorney General

Environment and Natural Resources Division

U.S. Department of Justice

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LESLIE A. KIRBY-MILES, Attorney-Adviser Air Enforcement Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

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Air Enforcement Division
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Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

Signature Page

FOR DEFENDANT, Cummins Inc.

CHRISTINE M. VUJOVICH

Vice President Cummins Inc.

500 Jackson Street

Columbus, IN 47203-3005

Attachment 1 - Engine families

Model Year	EPA Family Name	Cummins Family Name
2000	YCEXH0505CAG	413N
2000	YCEXH0505CAH	4130
2000	YCEXH0505CAI	413P
2000	YCEXH0540LAA	563A
2001	1CEXH0505CAN	413N
2001	1CEXH0505CAO	413O
2001	1CEXH0505CAP	413P
2001	1CEXH0540LAA	563A
2001	1CEXH0540LAC	563C
2002	2CEXH0505CAN	413N
2002	2CEXH0505CAQ	413Q
2002	2CEXH0540LAC	563C
2003	3CEXH0505CAN	413N
2003	3CEXH0505CAQ	413Q
2003	3CEXH0540LAC	563C

Attachment 2 - Engine Software Codes Improperly Excluded from Low NO_x Program

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<u>1550</u>

October 15, 2003

Ms. Khesha Jennings
Engine Programs Group
Certification and Compliance Division
U.S. Environmental Protection Agency
Mail Code 6403J
501 3rd Street NW
Washington, DC 20001

ADR 03-07

SUBJECT: Emissions Defect Report - ISC/ISL Variable Speed Fan engines

In accordance with the procedures outlined in 40 CFR 85, Subpart T, we are submitting the following emissions defect information report:

- 1. CORPORATE NAME: Cummins Inc.
- 2. **DEFECT DESCRIPTION:** Engines were shipped that had different fan control logic than what was described in AECD documentation. These engines did not deactive the overheat AECD at 5 deg_F above the fan fully-on temperature as described in our AECD description. Cummins mistakenly chose to deactivate the AECD at the fan fully off temperature instead of per the definition of fan off as being when it begins to modulate off per the Consent Decree Appendix B.
- 3. DESCRIPTION OF AFFECTED ENGINES:

Engines in families 413N, 413O, 413P, 413Q, 563A, 563C (since 1998) built until May 1, 2003 used in applications with variable speed fans which includes some RVs, coaches, and shuttle buses.

- 4. (i) NUMBER OF ENGINES AFFECTED: 11,586
 - (ii) PLANT ADDRESS:

Consolidated Diesel Corporation Whitakers, NC

NOTE: The filing of a Defect Information Report is not conclusive as to the applicability of the Production Warranty provided by section 207(a) of the Clean Air Act.

- 5. EVALUATION OF EMISSIONS IMPACT AND DRIVEABILITY PROBLEMS: . Each engine that was used with a variable speed fan will experience a 0.10% increase in lifetime NOx emissions.
- 6. EMISSIONS DATA RELATING TO DEFECT: Cummins estimates the overheat AECD to be on twice as much with the wrong thresholds. The attached tons estimate calculates the 0.10% NOx increase using the incorrect logic.
- 7. MITIGATION UNDER AUDIT POLICY: Cummins has satisfied all of the criteria of mitigation contained in the EPA Audit Policy, as follows:
- **a.** <u>Systematic Discovery</u> The situation was made known to Cummins thru Cummins review of AECD thresholds.
- b. Voluntary Discovery Cummins discovered this error on its own.
- c. <u>Prompt Disclosure</u> Disclosure is made after pertinent information was confirmed in accordance with Defect Reporting Requirements of 15 days, well below the 21 days required in the EPA Audit Policy.
- **d.** <u>Correction and Remediation</u> Cummins has implemented a Temporary Repair Practice that directs the field to change the calibration on such engines upon service that turns off the overhead AECD. A running change has been implemented that removes the AECD on production engines.
- e. Prevent Recurrence See d.
- f. No Repeat Violation See d.
- g. No Harm Cummins believes the 0.10% increase in NOx to be minimal harm.
- h. Cooperation Cummins continues to cooperate with EPA on these and other matters.

8. ANTICIPATED MANUFACTURER FOLLOW-UP: A Temporary Rapair Practice will be issued to the field to repair the affected engines when they are serviced.

Sincerely,

Victor A Schneider Manager - Engine Certification Mail Code 60702

PHONE: 812-377-8942 FAX: 812-377-8739

Attachment

NOTE: The filing of a Defect Information Report is not conclusive as to the applicability of the Production Warranty provided by section 207(a) of the Clean Air Act.

Attachment 4 - Derivation of Emission Factor in Paragraph 10

The emission factor of 0.05682 tons per engine used in Paragraph 10 of the Settlement was derived from this formula:

 $(206,000 \text{ miles}/306,000 \text{ miles}) \times (979 \text{ tons}/11,600 \text{ engines}) = 0.05682 \text{ tons per engine}$

The formula above was arrived at in the following manner:

- (1) According to EPA's Mobile Model 6, the subject engines (engines containing the Non-Conforming Overheat AECD that are in applications containing variable speed engines) run approximately 306,000 miles over their lifetime, taking into consideration early obsolescence and other factors.
- (2) The subject engines were built on average in 2001. They operate approximately 20,000 miles per year.
- (3) For purposes of this calculation, there is an assumption that, on average, the subject engines will will be recalled either through Cummins' reprogramming with a Conforming Overheat AECD or disabling the Non-Conforming Overheat AECD in 2006, or five years after the subject engines were built. Therefore, the subject engines will run approximately 100,000 miles until the recall and will have approximately 206,000 miles of life remaining after they are recalled.
- (4) Cummins has calculated that the subject engines produce an excess of 979 tons of NO_x emissions during their lifetime.
- (5) There are approximately 11,600 subject engines. The formula divides the total tonage (979) by 11,600 subject engines.

According to the formula, the incremental emissions for one engine for its full life is 979 divided by 11,600. The percentage of the emissions saved (or not emitted) due to the recall during the average remaining life of these engines is 206,000 divided by 306,000. Therefore, the incremental savings for one recalled engine is 0.05682 tons per engine recalled.