## UNITED STATES DISTRICT COURT

### DISTRICT OF MINNESOTA

		Civil Action Number:
UNITED STATES,	)	
PLAINTIFF, and the	)	
	)	
STATE OF MINNESOTA BY THE	)	
MINNESOTA POLLUTION CONTROL	)	
AGENCY,	)	CONSENT DECREE
Plaintiff-Intervenor,	)	
	) .	•
v.	)	
	)	
CORN PLUS,	)	
Defendant.	)	

## **TABLE OF CONTENTS**

I.	JURI	SDICTION AND VENUE	3			
II.	APPLICABILITY4					
III.	FAC	TUAL BACKGROUND	4			
IV.	COM	PLIANCE PROGRAM SUMMARY	5			
V.	COM	PLIANCE PROGRAM	6			
	A.	Installation Of Controls	6			
	B.	Permitting and Modifications	8			
	C.	Emission Limits	9			
	D.	Demonstration of Compliance	11			
	E.	Recordkeeping and Recording	11			
VI.	CIVII	L PENALTY	12			
VII.	STIP	ULATED PENALTIES	14			
VIII	RIGH	IT OF ENTRY	16			
IX.	FORC	CE MAJEURE	17			
X.	DISP	UTE RESOLUTION	20			
XI.	GENI	ERAL PROVISIONS	21			
XII	TERN	MINATION	26			

#### **CONSENT DECREE**

WHEREAS, Plaintiff, the United States of America (hereinafter "Plaintiff" or "the United States"), on behalf of the United States Environmental Protection Agency (herein, "EPA"), has, simultaneously with lodging of this Consent Decree, filed a Complaint alleging that Defendant. Corn-Plus (herein, "Corn Plus" or "Defendant") commenced construction of a major emitting facility and major modifications of a major emitting facility in violation of the Prevention of Significant Deterioration ("PSD") requirements at Part C of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7470-7492, and the regulations promulgated thereunder at 40 C.F.R. § 52.21 (the "PSD Rules");

WHEREAS, Plaintiff further alleged that Defendant commenced construction of an emitting facility or modified an emitting facility without first obtaining the appropriate preconstruction permits and installing the appropriate air pollution control equipment required by 40 C.F.R. § 52.21 and the Minnesota State Implementation Plan ("SIP") approved pursuant to 42 U.S.C. § 7410;

WHEREAS, Plaintiff further alleged that potential air emissions from the Defendant's facility were underestimated;

WHEREAS, the State of Minnesota, through the Minnesota Pollution Control Agency ("MPCA" or "Plaintiff-Intervenor"), has, simultaneously with lodging of this Consent Decree, filed a Complaint in Intervention, alleging that Corn Plus was and is in violation of the Minnesota SIP, by failing to obtain the appropriate pre-construction permits, by failing to accurately report emissions increases, and by failing to install appropriate pollution control

technology, in violation of applicable state laws, including Minnesota Rule ("Minn. R.") 7007.3000;

WHEREAS, in 1993 six hundred and fifty (650) farm families in the Winnebago area in southwestern Minnesota organized themselves into a cooperative known as Corn Plus to build an ethanol plant;

WHEREAS, Corn Plus applied for a minor source permit in September, 1993, and ethanol production began in 1994;

WHEREAS, Corn Plus also produces carbon dioxide for the soft drink industry;

WHEREAS, Corn Plus is a small facility that has produced ethanol in the following quantities:

- 1994 -- 10.87 million gallons
- 1995 -- 15.69 million gallons
- 1996 -- 17.66 million gallons
- 1997 -- 17.04 million gallons
- 1998 -- 18.36 million gallons
- 1999 -- 21.05 million gallons
- 2000 -- 20.60 million gallons
- 2001 -- 36.17 million gallons;

WHEREAS, in 2002, Corn Plus' Board of Directors voted to explore the possibility of investing \$15 million to install new technology to reduce its volatile organic compound emissions and generate energy by burning a by-product;

WHEREAS, Corn Plus is working to test the proposed technology and will install a

thermal oxidizer if the technology will not work;

WHEREAS, on February 7, 2002, the MPCA met with representatives of the ethanol plants in Minnesota, including Corn Plus, to discuss VOC test results, VOC emissions, and related compliance issues;

WHEREAS, on April 30, 2002, Corn Plus executed a letter of commitment to negotiate with EPA and MPCA for the installation of controls on its plant to address the possible exceedance of air quality limits;

WHEREAS, Corn Plus has worked cooperatively with EPA and MPCA regarding the alleged violations and voluntarily provided requested information without information requests under Section 114 of the Act, 42 U.S.C. § 7414;

WHEREAS, the Defendant does not admit the violations alleged in the Complaints:

WHEREAS, the United States and Plaintiff-Intervenor (collectively "Plaintiffs"), and the Defendant have agreed that settlement of this action is in the best interest of the parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter; and

WHEREAS, Plaintiffs and the Defendant consent to entry of this Consent Decree without trial of any issues:

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaints, it is hereby ORDERED AND DECREED as follows:

#### I. JURISDICTION AND VENUE

1. The Complaints state a claim upon which relief can be granted against the Defendant under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C.

§ 1355. This Court has jurisdiction of the subject matter herein and over the parties consenting hereto pursuant to 28 U.S.C. § 1345 and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c).

#### II. APPLICABILITY

2. The provisions of this Consent Decree shall apply to and be binding upon the Plaintiffs and upon the Defendant as well as the Defendant's officers, employees, agents, successors and assigns. In the event Defendant proposes to sell or transfer its facility (i.e., a plant or mill) subject to this Consent Decree before termination of the Consent Decree, it shall advise such proposed purchaser or successor-in-interest in writing of the existence of this Consent Decree, and shall send a copy of such written notification by certified mail, return receipt requested, to the EPA Regional Administrator for the region in which the facility is located before such sale or transfer, if possible, but no later than the closing date of such sale or transfer. The Defendant shall provide a copy of the Consent Decree and the Control Technology Plan required in Paragraph 11 of this Consent Decree to the proposed purchaser or successor-ininterest. In the event the Defendant sells or otherwise assigns any of its right, title, or interest in its facility, prior to termination of the Consent Decree, the conveyance shall not release the Defendant from any obligation imposed by this Consent Decree unless the party to whom the right, title or interest has been transferred agrees in writing to fulfill the obligations of this Consent Decree.

#### III. FACTUAL BACKGROUND AND APPLICABLE DEFINITIONS

3. (a) Corn Plus is a "person" as defined in Section 302(e) of the Act, 42 U.S.C.

§ 7602(e), and the federal and state regulations promulgated pursuant to the Act.

- (b) Corn Plus owns and operates a plant in Winnebago, Minnesota, for the manufacture of ethanol. Corn Plus receives whole corn which is then milled, cooked, and fermented. After fermentation, the raw product is distilled to produce ethanol. Distillation separates the liquid ethanol from the corn meal, which Corn Plus may dry or sell as wet mash for animal feed. The Plaintiffs allege that in the course of these manufacturing activities significant quantities of particulate matter ("PM"), particulate matter at or below 10 microns ("PM<sub>10</sub>"), carbon monoxide ("CO"), volatile organic compounds ("VOCs"), nitrogen oxides ("NOx") and other pollutants are generated, including hazardous air pollutants ("HAPs") listed under Section 112(b)(1), 42 U.S.C. § 7412(b)(1) of the Act. The primary sources of these emissions are the feed dryers, fermentation units, gas boilers, cooling cyclones, ethanol truck load-out systems, and the fugitive dust emissions from the facility operations, including roads.
- (c) Plaintiffs allege that Corn Plus' ethanol plant in Winnebago, Minnesota is a "major emitting facility," as defined by Section 169(1) of the Act, 42 U.S.C. § 7479(1), and the federal and state regulations promulgated pursuant to the Act.
- (d) <u>Definitions:</u> Unless otherwise defined herein, terms used in this Consent Decree shall have the meaning given to those terms in the Act, and the federal and state regulations promulgated pursuant to the Act.

#### IV. COMPLIANCE PROGRAM SUMMARY

4. Corn Plus shall implement a program of compliance at its ethanol distillation facility to attain the emission levels required under this Consent Decree for VOC, PM, PM<sub>10</sub>, CO, NOx and sulfur dioxide ("SO<sub>2</sub>"). Corn Plus' compliance program is summarized below in

Paragraphs 5 through 10, and implemented through Paragraphs 11 through 14 and 17 through 21 of this Consent Decree.

- 5. Corn Plus shall implement a program to control and minimize fugitive particulate matter emissions from facility operations as set forth in the approved Control Technology Plan required under Part V of this Consent Decree and which is Attachment 1 to this Consent Decree.
- 6. Corn Plus shall demonstrate compliance with the required emission levels on a unit-by-unit basis as set forth in the approved Control Technology.
- 7. Corn Plus shall demonstrate compliance with the emission limits established under this Consent Decree by the use of performance testing, parametric monitoring, recordkeeping and reporting, or initial and periodic compliance testing, where appropriate, as set forth in the approved Control Technology Plan.
- 8. Corn Plus shall maintain records to demonstrate compliance with New Source Performance Standards ("NSPS"), Part 60, Subparts Dc, Kb, and VV, and its fugitive dust management program.
- 9. Corn Plus shall complete and submit for MPCA approval, a source-wide PSD permit application that meets the requirements of this Consent Decree.
- 10. Upon execution of the Consent Decree, Corn Plus shall comply with the provisions of 40 C.F.R. Part 52.

#### V. COMPLIANCE PROGRAM REQUIREMENTS

#### A. <u>Installation Of Controls And Applicable Emission Limits</u>

11. Corn Plus shall implement a plan for the installation of air pollution control technology ("Control Technology Plan") capable of meeting the following emission level

reductions for the identified units in subparagraphs (a) through (j). Corn Plus' Control

Technology Plan, which has been approved by Plaintiffs, is Attachment 1 to this Consent

Decree:

- (a) <u>Feed Dryers</u>: 95 percent reduction of VOC or emissions no higher than 10 parts per million ("PPM") of VOC. The following unit is subject to these limits: EU 037
- (b) Fluidized Bed Boiler: 90 percent reduction of CO emissions or emissions no higher than 100 PPM CO, and reduction of PM, PM10, NOx and SO2 based on operation of pollution control technology specified in the approved Control Technology Plan and as established after initial performance testing pursuant to Paragraph 18 of this Consent Decree.
- (c) Fermentation Units: 95 percent reduction of VOC or if the inlet is less than 200 PPM of VOC, then 20 PPM or lower of VOC. The following units are subject to this limit: EU 013-016, EU 018-019, EU 038-040, EU 046
- (d) Gas Boilers: A limit of 0.04 lbs of NOx per MMBtu. Following installation of the fluidized bed boiler, either EU 008 or EU 045 will be shut-down and the remaining boiler will operate as stand-by only. The following units are subject to these limits: EU 008, EU 045
- (e) Cooler Cyclones: 95 percent reduction of VOC or emissions no higher than 10 PPM of VOC. The following unit is subject to this limit: EU 032
- (f) Fugitive Dust Control PM: A program shall be developed for minimization of fugitive dust emissions from facility operations. The following area is subject to this program: FS 003
  - (g) Ethanol Loadout:

Truck loadout: Design an enclosure for total capture of VOC and operate a closed loop system vented to the feed dryer control equipment for destruction of the captured VOC.

Railcar loadout: All railcars shall be dedicated as ethanol only. The following unit is subject to this limit: FS 004

(h) Fugitive VOC: Implement and comply with the requirements of 40 C.F.R. Part 60, Subpart VV. The following units are

subject to these requirements: FS 005, FS 006

- Additional Requirements for Hazardous Air Pollutants (i) ("HAPs"): Beginning no later than 180 days following the start-up of the last piece of control equipment required in the approved Control Technology Plan, Corn Plus shall continually operate its facility so as not to exceed source-wide allowable emissions of 9.0 TPY for any single HAP or 24.0 TPY for all HAPs based on a 12-month rolling sum, rolled monthly, and recorded monthly. For the first eleven months, beginning no later than 180 days following start-up of the last piece of control equipment required in the approved Control Technology Plan, compliance with the 12-month rolling sum will be demonstrated based on the schedule to meet applicable emission caps as set forth in the approved Control Technology Plan. If, based on emissions testing as set forth in the approved Control Technology Plan, additional control measures are required to meet the 9.0 or 24.0 TPY emission caps, such control measures shall be implemented and included in the operating permit application required under Paragraph 13.
- (j) New Source Performance Standards (NSPS): Identify and implement applicable NSPS requirements codified at 40 C.F.R. Part 60. The following NSPS apply: NSPS subpart Dc (Small Industrial Commercial-Institutional Steam Generating Units less than 29 MW (100 million BTu/hour)); NSPS subpart Kb (Volatile Organic Liquid Storage Vessels); and NSPS subpart VV (Synthetic Organic Chemicals Manufacturing Industry Leak Detection, Monitoring and Repair Requirements)
- 12. Corn Plus shall implement the approved Control Technology Plan in accordance with the schedule set forth in that plan. Corn Plus' approved Control Technology Plan is incorporated by reference herein and made directly enforceable by Plaintiffs under this Consent Decree.

#### B. <u>Permitting And Modifications</u>

13. <u>PSD Permitting</u>: By no later than 180 days following the start-up of the last piece of control equipment required in the approved Control Technology Plan, Corn Plus shall complete and submit for MPCA approval a source-wide PSD-permit application that includes the

requirements of this Consent Decree and the emission level reductions specified in Part V ("Installation of Controls and Applicable Emission Limits") of this Consent Decree.

- 14. Upon execution of this Consent Decree, Corn Plus shall comply with the provisions of 40 C.F.R. Part 52.
- 15. In determining whether a future modification will result in a significant net emissions increase, Corn Plus cannot take credit for any emission reductions resulting from the implementation of the approved Control Technology Plan for netting purposes as defined by 40 C.F.R. § 52.21(b)(3). In addition, the emission reductions of PM, PM<sub>10</sub>, and CO required under this Consent Decree and the applicable NSPS may not be used for any emissions offset, banking. selling or trading program. VOC emissions reductions up to 98 percent of the uncontrolled feed dryer emissions may not be used for any emissions offset, banking, selling or trading program.
- 16. For purposes in establishing whether a future modification will result in a significant net emissions increase, Corn Plus will use, as its baseline for establishing actual emissions, the average rate of the actual emissions of the pollutant after full implementation of, and demonstration of compliance with, the approved Control Technology Plan.

#### C. Emission Limits

- 17. <u>Unit Emission Limits for VOC, CO, PM, PM<sub>10</sub>, NOx, SO<sub>2</sub></u>: Beginning no later than 180 days following the start-up of each piece of control equipment required in its approved Control Technology Plan, Corn Plus shall continually operate each unit in accordance with the operating parameters set forth in the approved Control Technology Plan.
- 18. <u>Unit Emission Limit for PM, PM<sub>10</sub>, NOx and SO<sub>2</sub>:</u> By no later than 45 days following the initial performance test of the control equipment for the fluidized bed boiler as

required in Paragraphs 11(b) and 21, Corn Plus shall propose PM, PM<sub>10</sub>, NOx and SO<sub>2</sub> emission limits based on the data collected from initial performance testing and other available pertinent information. Corn Plus shall immediately comply with the proposed emission limit. MPCA will use the data collected and other available pertinent information to establish limits for PM, PM<sub>10</sub>, NOx and SO<sub>2</sub>. MPCA shall provide written notice to Corn Plus of the established limit and the established limit shall be incorporated into and enforceable under this Consent Decree. If Corn Plus contests the MPCA's proposed limit, Corn Plus shall have 60 days to invoke the Dispute Resolution process pursuant to Part X ("Dispute Resolution") and obtain a stay from the Court. Until a limit is established under the Dispute Resolution process herein, Corn Plus shall comply with the emission limit(s) it proposed under this Paragraph.

19. Source-wide Cap: Beginning no later than 180 days following start-up of the last piece of control equipment required in its approved Control Technology Plan, Corn Plus shall continually operate its facility so as not to exceed the source-wide allowable emission caps of 9.0 TPY for any single hazardous air pollutant or 24.0 TPY for all hazardous air pollutants based on a 12-month rolling sum, rolled monthly, and recorded monthly. For the first eleven months, beginning no later than 180 days following start-up of the last piece of control equipment required in the approved Control Technology Plan, compliance with the 12-month rolling sum will be demonstrated based on a schedule to meet applicable emission caps as set forth in the approved Control Technology Plan. This provision shall survive termination of this Consent Decree until the 9.0 TPY and 24.0 TPY emission caps are amended by or incorporated into a federally-enforceable permit for the facility.

#### D. <u>Demonstration Of Compliance</u>

- 20. Corn Plus shall demonstrate continuous compliance with the emission limits established under this Consent Decree by the use of parametric monitoring, recordkeeping and reporting, as set forth in the approved Control Technology Plan.
- 21. By no later than 180 days following the start-up of the last piece of control equipment required in the approved Control Technology Plan, Corn Plus shall demonstrate through emissions testing of each emissions unit as specified in the approved Control Technology Plan, conducted in accordance with a MPCA and U.S. EPA approved test protocol, that it has met the required destruction efficiency and/or emission limit. Corn Plus shall follow all testing requirements in Minnesota Rule 7017. Corn Plus shall retest the fluidized bed boiler for VOCs, CO, PM, PM<sub>10</sub> NOx and SO<sub>2</sub> no less than annually for the effective period of the Consent Decree. Corn Plus shall retest all other units in accordance with MPCA's policy regarding performance testing frequency.
- 22. Corn Plus shall maintain control technology performance criteria monitoring data and records as set forth in the approved Control Technology Plan, and shall make them available to the Plaintiffs upon demand as soon as practicable.

#### E. <u>Recordkeeping And Reporting Requirements</u>

23. Beginning with the first full calendar quarter following lodging of this Consent

Decree, Corn Plus shall submit written reports within 30 days following each calendar quarter to

MPCA and U.S. EPA that itemize Consent Decree requirements and the approved Control

Technology Plan requirements, the applicable deadlines, the dates the tasks were completed, unit
emissions data and data to support Corn Plus' compliance status with the terms of this Consent

Decree. Reports shall be sent to the addresses identified in Paragraph 57 ("Notice"). Emissions data may be submitted in electronic format.

- 24. Corn Plus shall preserve and retain all records and documents now in its possession or control, or which come into its possession or control, that support the reporting and compliance requirements under this Part for a period of three years following the termination of this Consent Decree, unless other regulations require the records to be maintained longer.
- 25. All notices, reports or any other submissions from Corn Plus shall contain the following certification and may be signed by an owner or operator of the company responsible for environmental management and compliance:

"I certify under penalty of law that I have personally examined the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

#### VI. CIVIL PENALTY

26. Within thirty (30) calendar days of entry of this Consent Decree, the Defendant shall pay to the Plaintiffs a civil penalty pursuant to Section 113 of the Act, 42 U.S.C. § 7413 and Minn. Stat. § 115.071, in the amount of \$42,076 (Forty-Two Thousand and Seventy-Six Dollars). Pursuant to the Act, the following factors were considered in determining a civil penalty, in addition to other factors as justice may require, the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation, payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the

violation.

27. Of the total penalty, \$21,038, shall be paid to the United States by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number 90-5-2-1-07784. and the civil action case name and case number of the District of Minnesota. The costs of such EFT shall be Corn Plus' responsibility. Payment shall be made in accordance with instructions provided to Corn Plus by the Financial Litigation Unit of the U.S. Attorney's Office in the District of Minnesota. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. Corn Plus shall provide notice of payment, referencing the USAO File Number and DOJ Case Number 90-5-2-1-07784, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Paragraph 57 ("Notice"). The total remaining amount, \$21,038 in civil penalties, shall be paid to the Plaintiff-Intervenor the State of Minnesota. Of that amount, \$16,038 shall be paid within thirty (30) calendar days of entry of this Consent Decree as a judgment of the Court. The remaining \$5,000 will only be paid to the Plaintiff-Intervenor the State of Minnesota if Corn Plus decides not to utilize alternative technology as described in the approved Control Technology Plan. The \$5,000 shall be paid within fourteen (14) days of the date of Corn Plus' written notice to the MPCA and EPA that Corn Plus will not utilize alternative technology. Payment to the Plaintiff-Intervenor the State of Minnesota shall be made in the form of a certified check payable to the Minnesota Pollution Control Agency and delivered to:

> Enforcement Penalty Coordinator Minnesota Pollution Control Agency 520 Lafayette Road St. Paul, Minnesota 55155-4194

- 28. The Defendant shall pay statutory interest on any over due civil penalty or stipulated penalty amount at the rate specified in 31 U.S.C. § 3717. Upon entry of this Consent Decree, this Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with Rule 69 of the Federal Rules of Civil Procedure, the Federal Debt Collection Procedure Act, 28 U.S.C. § 3001-3308, Minnesota Statute Chapter 16D and other applicable federal and state Authority. The Plaintiffs shall be deemed a judgment creditor for purposes of collection of any unpaid amounts of the civil and stipulated penalties and interest.
- 29. No amount of the \$37,076 civil penalty to be paid by Corn Plus shall be used to reduce its federal or state tax obligations.

#### VII. STIPULATED PENALTIES

- 30. The Defendant shall pay stipulated penalties in the amounts set forth below to the Plaintiffs, to be paid 50 percent to the United States and 50 percent to the Plaintiff-Intervenor, for the following:
- (a) for each day of failure to propose PM, PM<sub>10</sub>, NOx, and SO<sub>2</sub> emissions limits under Paragraph 18:

1st through 30th day after deadline \$ 250

31st through 60th day after deadline \$ 500

Beyond the 60<sup>th</sup> day \$1,000

(b) for each day of failure to meet the deadlines for installation of control technology systems set forth in the Control Technology Plan and applying for, or obtaining, permits under Paragraph 13:

1st through 30th day after deadline \$800

31st through 60th day after deadline \$1,200

Beyond 60th day \$2,000

(c) for failure to conduct a compliance test as required by Paragraph 21, per day per unit:

1st through 30th day after deadline \$ 250 31st through 60th day after deadline \$ 500

Beyond 60th day \$1,000

- (d) for failure to demonstrate compliance with emission limits set forth in the approved Control Technology Plan or emission limits set pursuant to Part V Section C ("Emission Limits"): \$5000 per emissions test for each pollutant
- (e) for each failure to submit reports or studies as required by Part V Section E ("Recordkeeping and Reporting Requirements") of this Consent Decree, per day per report or notice:

1st through 30th day after deadline \$ 250 31st through 60th day after deadline \$ 500 Bevond 60th day \$1,000

- (f) for failure to pay or escrow stipulated penalties, as specified in Paragraphs 31 and 32 of this section, \$500 per day per penalty demand.
- (g) for failure to notify the Plaintiffs pursuant to Paragraph 2 of Corn Plus' sale or transfer of the facility, \$250 per day.
  - 31. Corn Plus shall pay stipulated penalties upon written demand by the Plaintiffs no

later than thirty (30) days after Defendant receives such demand. Stipulated penalties shall be paid to the Plaintiffs in the manner set forth in Part VI ("Civil Penalty") of this Consent Decree.

- 32. Should Corn Plus dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of the stipulated penalty for failure to pay a penalty due to the Plaintiffs by placing the disputed amount demanded by the Plaintiffs, not to exceed \$20,000 for any given event or related series of events at any one plant, in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of Part X within the time provided in Paragraph 31 for payment of stipulated penalties. If the dispute is thereafter resolved in Defendant's favor, the escrowed amount plus accrued interest shall be returned to the Defendant. Otherwise the Plaintiffs shall be entitled to the escrowed amount that was determined to be due by the Court plus the interest that has accrued on such amount, with the balance, if any, returned to the Defendant.
- 33. The Plaintiffs reserve the right to pursue any other remedies for violations of this Consent Decree to which they are entitled. The Plaintiffs will not seek stipulated penalties and civil or administrative penalties for the same violation of the Consent Decree.

#### VIII. RIGHT OF ENTRY

34. Any authorized representative of the EPA or MPCA, or an appropriate federal or state agency, including independent contractors, upon presentation of proper credentials and in compliance with the facility's safety requirements, shall have a right of entry upon the premises of Corn Plus' plant identified herein at Paragraph 3(b) at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment, and inspecting and copying all records maintained by Defendant required by this

Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA and MPCA to conduct tests and inspections under Section 114 of the Act, 42 U.S.C. § 7414, and Minnesota Statute §§ 116.07 and 116.091 or any other applicable law.

#### IX. FORCE MAJEURE

- 35. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, Defendant shall notify the Plaintiffs in writing as soon as practicable, but in any event within twenty (20) business days of when Defendant first knew of the event or should have known of the event by the exercise of due diligence. In this notice Defendant shall specifically reference this Paragraph of this Consent Decree and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by Defendant to prevent or minimize the delay and the schedule by which those measures will be implemented. Defendant shall adopt all reasonable measures to avoid or minimize such delays.
- 36. Failure by Defendant to provide notice to Plaintiffs of an event which causes or may cause a delay or impediment to performance shall render this Part IX voidable by the Plaintiffs as to the specific event for which the Defendant has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.
- 37. The United States or MPCA shall notify the Defendant in writing regarding the Defendant's claim of a delay or impediment to performance as soon as practicable, but in any event within thirty (30) days of receipt of the Force Majeure notice provided under Paragraph 35. If the Plaintiffs agree that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the Defendant, including any entity controlled by the

Defendant, and that the Defendant could not have prevented the delay by the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. The Defendant shall not be liable for stipulated penalties for the period of any such delay.

- 38. If the Plaintiffs do not accept the Defendant's claim that a delay or impediment to performance is caused by a force majeure event, to avoid payment of stipulated penalties, the Defendant must submit the matter to this Court for resolution within twenty (20) business days after receiving notice of the Plaintiffs' position, by filing a petition for determination with this Court. Once the Defendant has submitted this matter to this Court, the Plaintiffs shall have twenty (20) business days to file its response to said petition. If the Defendant submits the matter to this Court for resolution and the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the Defendant, including any entity controlled by the Defendant, and that the Defendant could not have prevented the delay by the exercise of due diligence, the Defendant shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.
- 39. The Defendant shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that the Defendant could not have prevented the delay by the exercise of due diligence. The Defendant shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one

compliance date based on a particular event may, but does not necessarily, result in an extension of a subsequent compliance date or dates.

- 40. Unanticipated or increased costs or expenses associated with the performance of the Defendant's obligations under this Consent Decree shall not constitute circumstances beyond the control of the Defendant, or serve as a basis for an extension of time under this Part.

  However, failure of a permitting authority to issue a necessary permit in a timely fashion is an event of Force Majeure where the Defendant has taken all steps available to it to obtain the necessary permit including but not limited to:
  - (a) submitting a timely and complete permit application;
- (b) responding to requests for additional information by the permitting authority in a timely fashion; and
- (c) prosecuting appeals of any disputed terms and conditions imposed by the permitting authority in an expeditious fashion.
- 41. Notwithstanding any other provision of this Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of Defendant delivering a notice of Force Majeure or the parties' inability to reach agreement.
- 42. As part of the resolution of any matter submitted to this Court under this Part IX, the parties by agreement, or this Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the Plaintiffs or approved by this Court. Defendant shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

#### X. DISPUTE RESOLUTION

- 43. The dispute resolution procedure provided by this Part X shall be available to resolve all disputes arising under this Consent Decree, including but not limited to emission limits established by the MPCA in Part V Section C ("Emission Limits"), except as otherwise provided in Part IX regarding Force Majeure.
- 44. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the parties to this Consent Decree to another advising of a dispute pursuant to this Part X. The notice shall describe the nature of the dispute, and shall state the noticing party's position with regard to such dispute. The party receiving such a notice shall acknowledge receipt of the notice and the parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.
- 45. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the Plaintiffs and the Defendant, unless the parties' representatives agree to shorten or extend this period.
- 46. In the event that the parties are unable to reach agreement during such informal negotiation period, the Plaintiffs shall provide the Defendant with a written summary of their position regarding the dispute. The position advanced by the Plaintiffs shall be considered binding unless, within forty-five (45) calendar days of the Defendant's receipt of the written summary of the Plaintiffs position, the Defendant files with this Court a petition which describes the nature of the dispute, and includes a statement of the Defendant's position and any

supporting data, analysis, and/or documentation relied on by the Defendant. The Plaintiffs shall respond to the petition within forty-five (45) calendar days of filing.

- 47. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Part X may be shortened upon motion of one of the parties to the dispute.
- 48. Notwithstanding any other provision of this Consent Decree, in dispute resolution, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of invocation of this Part X or the parties' inability to reach agreement. The final position of the Plaintiffs shall be upheld by the Court if supported by substantial evidence in the record as identified and agreed to by all the Parties.
- 49. As part of the resolution of any dispute submitted to dispute resolution, the parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. Defendant shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

#### XI. GENERAL PROVISIONS

50. Effect of Settlement. This Consent Decree is not a permit; compliance with its terms does not guarantee compliance with any applicable federal, state or local laws or regulations. To the extent that the terms of this Consent Decree conflict with the terms of any air quality permit, the terms of this Consent Decree shall control during the effective period of the Consent Decree.

51. Resolution of Claims. Satisfaction of all of the requirements of this Consent Decree constitutes full settlement of and shall resolve all past civil and administrative liability of the Defendant to the Plaintiffs for the violations alleged in the United States' and Plaintiff-Intervenor's Complaints and all civil and administrative liability of the Defendant for any violations at its facility based on facts and events that occurred during the relevant time period under the following statutory and regulatory provisions: (a) NSPS, 40 C.F.R. Part 60, including subparts Dc, Kb, and VV; (b) National Emission Standards for Hazardous Air Pollutants, 40 C.F.R. Part 63, pursuant to Sections 112(d) and 112(g) of the Act; (c) PSD requirements at Part C of the Act and the regulations promulgated thereunder at 40 C.F.R. § 52.21, and the Minnesota regulations which incorporate and/or implement the above-listed federal regulations in items (a) through (c); (d) all air permit requirements under Minn. R. 7007.0050-7007.1850; (e) air emissions fee requirements under Minn. R. 7002.0025-7002.0095; (f) performance standards for stationary sources under Minn. R. 7011.0010-7011.9990, performance tests under Minn. R. 7017.2001-7017.2060; (g) notification, recordkeeping and reporting requirements under Minn. R. 7019.0100-7019.2000; and (h) emission inventory requirements under Minn. R. 7019.3000-7019.3100. For purposes of this Consent Decree, the "relevant time period" shall mean the period beginning when the United States' claims and/or Plaintiff-Intervenor's claims under the above statutes and regulations accrued through the date of entry of this Consent Decree. During the effective period of the Consent Decree, certain emission units shall be on a compliance schedule and any modification to these units, as defined in 40 C.F.R. § 52.21, which is not required by this Consent Decree is beyond the scope of this resolution of claims. This provision shall survive the termination of the Consent Decree.

- 52. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendant of its obligation to comply with all applicable federal, state and local laws and regulations. Subject to Paragraphs 33 and 51, nothing contained in this Consent Decree shall be construed to prevent or limit the United States' or MPCA's rights to obtain penalties or injunctive relief under the Act or other federal, state or local statutes or regulations, including but not limited to, Section 303 of the Act, 42 U.S.C. § 7603.
- 53. Third Parties. Except as otherwise provided by law, this Consent Decree does not limit, enlarge or affect the rights of any party to this Consent Decree as against any third parties. Nothing in this Consent Decree should be construed to create any rights, or grant any cause of action, to any person not a party to this Consent Decree.
- 54. <u>Costs.</u> Each party to this Consent Decree shall bear its own costs and attorneys' fees through the date of entry of this Consent Decree.
- 55. <u>Public Documents</u>. All information and documents submitted by the Defendant to the Plaintiffs pursuant to this Consent Decree shall be subject to public inspection, unless subject to legal privileges or protection or identified and supported as business confidential by the Defendant in accordance with 40 C.F.R. Part 2 and Minnesota Statute §§ 13.37 and 116.075.
- 56. Public Comments Federal Approval. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and consideration of any comments. The United States reserves the right to withdraw or withhold consent if the comments regarding this Consent Decree discloses facts or considerations which indicate that

this Consent Decree is inappropriate, improper or inadequate. The Defendant and the Plainitff-Intervenor consent to the entry of this Consent Decree.

57. Notice. Unless otherwise provided herein, notifications to or communications with the United States, EPA, MPCA or the Defendant shall be deemed submitted on the date they are postmarked and sent either by overnight receipt mail service or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the United States, EPA, MPCA or the Defendant is required by the terms of this Consent Decree, it shall be addressed as follows:

As to the United States:

Thomas L. Sansonetti
Assistant Attorney General
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044-7611

As to the U.S. EPA:

Bruce Buckheit
Director, Air Enforcement Division
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail Code 2242-A
Washington, DC 20004

and the EPA Regional office for the region in which the facility is located:

Region 5:

Cynthia A. King U.S. EPA, Region 5 C-14J 77 W. Jackson Blvd.

#### Chicago, IL 60604

Compliance Tracker Air Enforcement Branch, AE-17J U.S. EPA, Region 5 77 W. Jackson Blvd. Chicago, IL 60604

As to Corn Plus:

Corn Plus General Manager 711 Sixth Avenue Winnebago, MN 56098

and

(Counsel for Corn Plus)

Gerald L. Seck Larkin, Hoffman, Daly & Lindgren, Ltd. 1500 Wells Fargo Plaza 7900 Xerxes Avenue South Bloomington, MN 55431

Peder A. Larson
Peder Larson & Associates, PLC
5200 Willson Road
Suite 150
Minneapolis, MN 55424

As to Plaintiff-Intervenor the State of Minnesota, through the MPCA:

Rhonda Land Minnesota Pollution Control Agency 520 Lafayette Road N St. Paul, MN 55155-4194

Kathleen L. Winters Office of the Attorney General NCL Towers Suite 900 445 Minnesota Street St. Paul, MN 55101-2127

- 58. <u>Change of Notice Recipient</u>. Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.
- 59. <u>Modification</u>. There shall be no modification of this Consent Decree without written agreement of all the parties. There shall be no material modification of this Consent Decree without the written agreement of the parties and by Order of the Court. Prior to complete termination of the requirements of this Consent Decree pursuant to Paragraph 61, the parties may, upon motion to the Court, seek to terminate provisions of this Consent Decree.
- 60. <u>Continuing Jurisdiction</u>. The Court retains jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, or modification. During the term of this Consent Decree, any party may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

#### XII. TERMINATION

after the Defendant satisfies all requirements of this Consent Decree and has operated the control technologies identified in the approved Control Technology Plan in compliance with the emission limits established under this Consent Decree for 12 months. At such time, if the Defendant believes that it is in compliance with the requirements of this Consent Decree, and has paid the civil penalty and any stipulated penalties required by this Consent Decree, then the Defendant shall so certify to the Plaintiffs, and unless the Plaintiffs object in writing with specific reasons within forty-five (45) days of receipt of the certification, the Court shall order

that this Consent Decree be terminated on Defendant's motion. If the United States or MPCA				
objects to the Defendant's certification, then the matter shall be submitted to the Court for				
resolution under Part X ("Dispute Resolution") of this Consent Decree. In such case, the				
Defendant shall bear the burden of proving that this Consent Decree should be terminated.				
So entered in accordance with the foregoing thisday of, 2002.				
United States District Court Judge				
District of Minnesota				

## FOR PLAINTIFF, UNITED STATES OF AMERICA:

Thomas L. Sansonetti
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice
10th & Pennsylvania Avenue N W

Tom Sansonetti

Date

Date 9.10.02

Senior Counsel Environment and Natural Resources Division U.S. Department of Justice

Dianne M. Shawley

Washington, DC 20530

1425 New York Avenue, N.W.

Washington, DC 20005

Cynthia A. King

Special Trial Attorney

US EPA Region 5

77 W. Jackson Street

Chicago, IL 60604

Date

United States Attorney District of Minnesota

THOMAS B. HEFFELFINGER

United States Attorney

BY: FRIEDRICH A. P. SIEKERT

Assistant U.S. Attorney Attorney ID No. 142013

District of Minnesota

U.S. Courthouse

300 S. 4<sup>th</sup> Street

Suite 600

Minneapolis, MN 55415

## FOR U.S. ENVIRONMENTAL PROTECTION AGENCY:

John Peter Suarez

Assistant Administrator

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

Ariel Rios Building

1200 Pennsylvania Avenue, N.W.

Washington, DC 20460

30

## FOR U.S. ENVIRONMENTAL PROTECTION AGENCY:

Thomas V. Skinner Regional Administrator

U.S. Environmental Protection Agency

Region 5

77 West Jackson Street

Chicago, IL 60604

31

# FOR THE PLAINTIFF-INTERVENOR, THE STATE OF MINNESOTA POLLUTION CONTROL AGENCY:

Commissioner Karen A. Studders Minnesota Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155

Date 100/2012

Kathleen L. Winters Office of the Attorney General NCL Towers Suite 900 445 Minnesota Street St. Paul, MN 55101-2127

## FOR DEFENDANT, CORN PLUS

Kett A. Kr Conval Monager	Date 8-27-62
(pane), The	
Corn Plus	
711 Sixth Avenue	
Winnebago, MN 56098	
	<i>(</i> 2
his low	Date 8-26 02
Gerald L. Seck	
Larkin, Hoffman, Daly & Lindgren, Ltd.	
1500 Wells Fargo Plaza	
7900 Xerxes Avenue South	
Bloomington, MN 55431	
$\mathcal{A} \mathcal{A}$	
fly / w	Date 8-26-02
Peder A. Larson	
Peder Larson & Associates, PJC	
5200 Willson Road	
Suite 150	

Minneapolis, MN 55424

150 N. Patrick Boulevard, Suite 180 Brookfield, WI 53045-5854 Telephone (262) 879-1212 Fax (262) 879-1220

## **Control Technology Plan**

**Corn Plus** 

Winnebago, Minnesota

**August 20, 2002** 

RMT, Inc. | Corn Plus

A SCORNPLUS (FINAL CTP).DOC

# **Table of Contents**

1.	Introduction						
2.	Emission Units Requiring Pollution Control Equipment						
3.	Engineering Design Criteria for Pollution Control Equipment						
4.	Proposed Emission Limits from Pollution Control Equipment						
5.	Pollution Co	ontrol Equipment Installation Schedule					
6.	Proposed M	onitoring Parameters for Pollution Control Devices					
7.	Pollution Co	ontrol Device Performance Test Schedule and Test Methods Used					
8.	Fugitive Dus	st Emission Control Program					
List o	of Appendic	ces					
Appe	ndix A	Letter from RPMG					
Appe	Appendix B Vendor Guarantee of NO <sub>x</sub> Emissions						
Appe	Appendix C Site Map for Existing Paved Roads						
Appe	ndix D	Emission Calculations for Group NO <sub>x</sub> Limits					

# Section 1 Introduction

On\_\_\_\_\_\_, 2002, Corn Plus signed a consent decree that requires Corn Plus to implement a program of compliance at the ethanol plant it operates in Winnebago, Minnesota. Corn Plus prepared and submitted this Control Technology Plan (CTP) as an integral part of the consent decree. This CTP fulfills the requirement of the consent decree and has been reviewed and approved by the United States Environmental Protection Agency (USEPA) and the Minnesota Pollution Control Agency (MPCA) as part of the consent decree.

#### This CTP includes the following items:

- Identification of all units to be controlled;
- Engineering design criteria for all proposed controls capable of meeting the emission levels required by Part V of the Consent Decree;
- Proposed short-term and long-term emission limits and controlled outlet concentrations for each pollutant as appropriate;
- A schedule for expedited installation with specific milestones applicable on a unit-by-unit basis;
- Proposed monitoring parameters for all control equipment and parameter ranges;
- Identification of all units to be emission tested under Paragraph 11 of the Consent Decree and a schedule for initial tests and retest;
- The test methods that will be used to demonstrate compliance with the emissions levels set forth in the Consent Decree; and
- Program for minimization of fugitive dust emissions from facility operations.

# Section 2 Emission Units Requiring Pollution Control Equipment

The following emission units and fugitive sources have been designated as affected units in the consent decree and have emission limits requiring pollution control technology. Corn Plus is currently evaluating two options for complying with the Consent Decree: installation of a fluidized bed boiler (FBB) (Scenario #1) or installation of a thermal oxidizer (TO) and heat recovery boiler (Scenario #2). Both scenarios are described in this CTP.

Unit Designation #	Unit Description	Control Equipment ID	Control Equipment Description
EU 013	Thin Stillage Tank	CE 003	Wet Scrubber
EU 014	Process Condensate Storage Tank	CE 003	Wet Scrubber
EU 015	Fermentation Tank #1	CE 003	Wet Scrubber
EU 016	Fermentation Tank #2	CE 003	Wet Scrubber
EU 018	Fermentation Tank #3	CE 003	Wet Scrubber
EU 019	Fermentation Tank #4	CE 003	Wet Scrubber
EU 021	Yeast Tank	CE 003	Wet Scrubber
EU 038	Fermentation Tank #6	CE 003	Wet Scrubber
EU 039	Fermentation Tank #5	CE 003	Wet Scrubber
EU 040	Beer Well	CE 003	Wet Scrubber
EU 046	Fermentation Tank #7	CE 003	Wet Scrubber
EU 032	Cooling/Separating Cyclone	CE 007 <sup>(2)</sup>	Wet Scrubber (will be replaced by FBB or TO)
EU 037	Dryer #1 (Ronning)	CE 006 <sup>(4)</sup>	Multiclone
		Unassigned	FBB or TO
EU 044	Dryer #2 <sup>(3)</sup>	CE 007	Wet Scrubber
		CE 009	Multiclone
		Unassigned	ТО

Unit Designation #	Unit Description	Control Equipment ID	Control Equipment Description
EU 008 and EU 045 <sup>(1)</sup>	Boiler #1 and Boiler #2	None	Low NO <sub>x</sub> Burner
FS 004	Ethanol Loadout	Unassigned	FBB or TO
FS 005, FS 006	Valve, Flange, and Seal Fugitive Emissions	None	LDAR (VOC)
FS 003	Haul Roads	None	Paved Roads
To Be Assigned	Fluidized Bed Boiler	To Be Assigned	Bagfilter

#### Notes:

- 1 Corn Plus plans to shut down one of the two existing gas-fired boilers and the remaining boiler will operate as standby only. A decision as to which boiler to remove from service has not yet been made.
- 2 Will be removed since emission unit will be vented to proposed fluidized bed boiler or thermal oxidizer.
- 3 Dryer #2 (EU 044) and the associated wet scrubber (CE 007) and multiclone (CE 009) will be removed if FBB is installed.
- 4 Will be removed if FBB is installed.

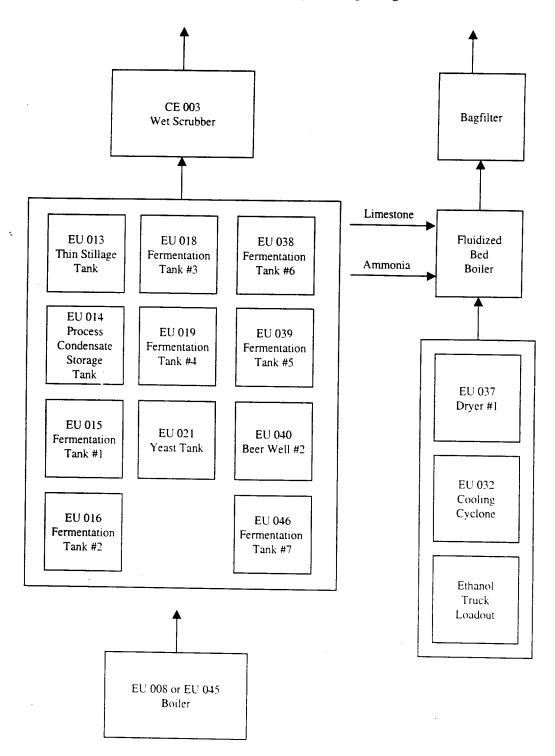
# Section 3 Engineering Design Criteria for Pollution Control Equipment

After identifying the affected units that require installation of air pollution control technology, Corn Plus conducted a design and engineering review of each unit to select the pollution control technology that would achieve the emission level reductions identified in the consent decree.

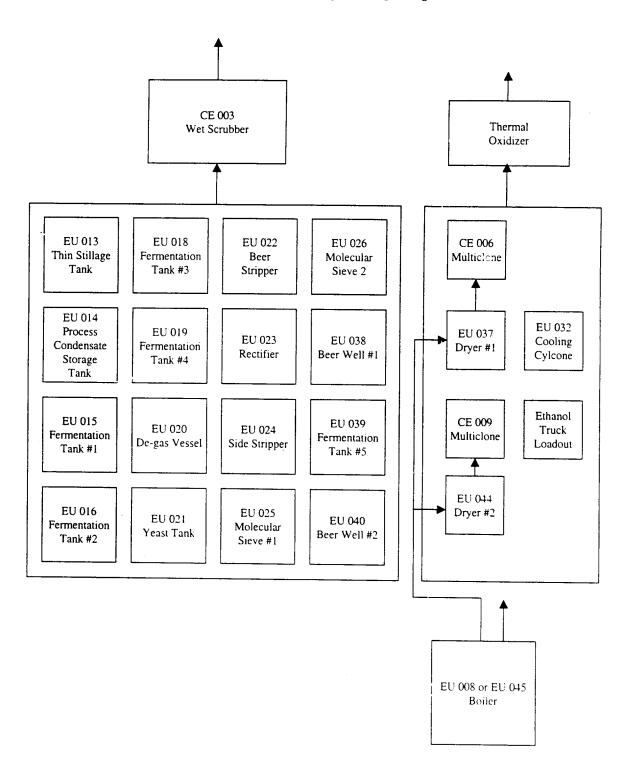
Process Description	Control Device #	Control Device Description	Operating Parameters
Fermentation	CE 003	Wet Scrubber	Pressure Drop = $3.5$ to $4.5$ in. $H_2O$ Water flow rate $\approx 33$ gpm
DDGS Dryer #1, Cooling Cyclone, Ethanol Truck Loadout (Scenario #1)	Unassigned	Fluidized Bed Boiler with bagfilter, limestone injection, and ammonia injection <sup>(1)</sup>	Temperature ≥ 1,600°F Residence Time ≥ 8 sec Parameters for limestone injection and ammonia injection to be determined during design
DDGS Dryer #1, DDGS Dryer #2 Cooling Cyclone, Ethanol Truck Loadout (Scenario #2)	Unassigned	Thermal Oxidizer	Temperature ≥ 1,300°F  NO <sub>x</sub> ≤ 0.04 lb/MMBtu
Boilers	NA	Low NO <sub>x</sub> burners	Design Fuel Input Rate = 87.8 MMBtu/hr each NO√ ≤ 0.04 lb/MMBtu

Note 1: Limestone injection and ammonia injection will be installed upon MPCA/USEPA acceptance as BACT.

The following flow diagram presents the affected units and associated control technology for Scenario #1 as determined by the results of engineering design criteria.



The following flow diagram presents the affected units and associated control technology for Scenario #2 as determined by the results of engineering design criteria.



# **Section 4**

# Proposed Emission Limits from Pollution Control Equipment

Ethanol truck loadout shall vent to: 1) the fluidized bed boiler; or 2) the thermal oxidizer; at any time that control equipment is in operation. Ethanol truck load out shall be limited to 4 million gallons per year of uncontrolled operation. Emissions from load out from rail cars will not be collected since the rail cars are dedicated to ethanol (see letter from RPMG – Appendix A).

The exhaust from the fermentation scrubber (CE 003) is typically routed to Dixie Carbonics as feed to their dry ice manufacturing process. However, if the Dixie Carbonics plant is shut down, then the scrubber would vent to the atmosphere.

Unless otherwise stated, all controlled emission limitations apply at all times except during periods when the process equipment is not operating or during previously planned startup and shutdown periods, and malfunctions as defined in 40 CFR Section 63.2. These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, Corn Plus shall minimize emissions to the greatest extent practicable. To the extent practical, startup and shutdown of control technology systems will be performed during times when process equipment is also shut down for routine maintenance.

Any deviations from the requirements in Section 4 shall be reported in quarterly reports unless more frequent reporting is required by state or federal regulation.

# Fluidized Bed Boiler Scenario

Process Description	Control Device #	Control Device Description	Pollutant	Short Term Emission Rate	Long Term Emission Rate
Fermentation Scrubber	CE 003	Wet Scrubber	VOC	95% reduction or outlet concentration less than or equal to 20 ppm if the inlet concentration is less than 200 ppm; lb/hr limits to be established based on performance testing under the process outlined in paragraph 18.	
			HAPs		12-month rolling sum source wide limit of 9.0 TPY for any single HAP and 24.0 TPY for total HAPs.
DDGS Dryer #1, Cooling Cyclone, Ethanol Truck Loadout (Scenario #1)	To be assigned	Fluidized bed boiler with bagfilter, limestone injection, and ammonia injection <sup>(1)</sup>	СО	≤100 ppm	
			NΟ	To be established pursuant to paragraph 18 of the Consent Decree.	
Note 1: Limestone in			PM/PM <sub>10</sub>	To be established pursuant to paragraph 18 of the Consent Decree.	

Note 1: Limestone injection and ammonia injection will be installed upon MPCA/USEPA acceptance as BACT.

# Fluidized Bed Boiler Scenario (continued)

Process Description	Control Device #	Control Device Description	Pollutant	Short Term Emission Rate	Long Term Emission Rate
			VOC	95% reduction or ≤ 10 ppm; lb/hr limit to be established based on performance testing under the process outlined in paragraph 18.	
			SO <sub>2</sub>	To be established based on performance testing under the process outlined in paragraph 18.	
			HAPs		12-month rolling sum total facility emission cap of 9.0 TPY for any single HAP and 24.0 TPY for total HAPs.
Boiler #1	None	Low NO <sub>x</sub> Burners	NO <sub>x</sub>	0.04 lb/MMBtu	

# Thermal Oxidizer Scenario

Process Description	Control Device #	Control Device Description	Pollutant	Short Term Emission Rate	Long Term Emission Rate
Fermentation Scrubber	CE 003	Wet Scrubber	VOC	95% reduction or outlet concentration less than or equal to 20 ppm if the inlet concentration is less than 200 ppm; lb/hr limits to be established based on performance testing under the process outlined in paragraph 18.	
			HAPs		12-month rolling sum source wide limit of 9.0 TPY for any single HAP and 24.0 TPY for total HAPs.
DDGS Dryer #1, DDGS Dryer #2, Cooling Cyclone, Ethanol Truck Loadout (Scenario #2)	To be assigned	Thermal Oxidizer	CO	90% reduction or emissions no higher than 100 ppm	
			NOx		12-month rolling sum Dryer #1 and #2, TO, and Boiler #1 and #2 Group NO <sub>x</sub> cap of 68 TPY (see Appendix D)
			PM/PM <sub>10</sub>	Test and set pursuant to paragraph 18 of the Consent Decree	

Thermal Oxidizer Scenario (continued)

Process Description	Control Device #	Control Device Description	Pollutant	Short Term Emission Rate	Long Term Emission Rate
			VOC	95% reduction or 10 ppm outlet concentration; lb/hr limits to be established based on performance testing under the process outlined in paragraph 18.	
÷			HAPs	·	12-month rolling sum total facility emission cap of 9.0 TPY for any single HAP and 24.0 TPY for total HAPs.
Boiler #1 Boiler #2	EU008 EU045	Low NO <sub>x</sub> Equivalent	NOx		12-month rolling sum Dryer #1 and #2, TO, and Boiler #1 and #2 Group NO <sub>x</sub> cap of 68.0 TPY (see Appendix D)

For all source-wide emission limits during the first 11 months of operation, the facility will maintain the following source-wide limits in tons per year:

		Mo 1		_										
	WK1	Wk2	Wk3	Wk4	Mo 2	Mo 3	Mo 4	Mo 5	Мо б	Mo 7	Mo 8	Mo 9	Mo 10	Mo 11
NOx for Boilers #1, #2, Dryers #1, #2, and TO <sup>(1)</sup>	2	4	6	8	16	23	30	37	44	50	55	59	62	65
Individual HAP/ Total HAPs <sup>(2)</sup>		1	.6 .0		3.2 6.0	4.0 9.0	4.8 12	5.6 14	6.4 16	7.2 18	8.0 20	8.2	8.5 22	8.8 23

Note 1: These limits apply to Scenario #2.

Note 2: These limits apply to Scenario #1 and Scenario #2.

### Recordkeeping (Scenario #2)

Record fuel usage weekly for each unit subject to the  $NO_x$  group emissions cap. Calculate the  $NO_x$  group emissions from the previous week and the  $NO_x$  Group emissions from the previous 51 weeks (52 week rolling sum). Calculate the total 52-week rolling sum for  $NO_x$  emissions from all units according to Equation 1:

$$\sum_{i=1}^{n} E_{n_i} = \sum_{i=1}^{x} \left[ NG_{x_i} \left( \frac{MMBtu}{week} \right) \bullet EF_{x} \left( \frac{lb}{MMBtu} \right) \bullet 0.0005 \left( \frac{ton}{lb} \right) \right]$$
 Eqn 1

where:

x = number of units;

*n* = number of weeks of interest;

 $\sum_{i=1}^{n} E_{x_i} = \text{sum of weekly NO}_x \text{ emissions from unit x (tons/52 weeks)};$ 

 $NGx_i = i^{th}$  week natural gas usage of emission unit x (MMBtu/week); and

 $EF_x$  = unit specific emission factor determined by stack testing.

# Section 5 Pollution Control Equipment Installation Schedule

Corn Plus will be evaluating the feasibility of both scenarios in parallel and will select one of them no later than January 31, 2003. The first table shows the schedule for the FBB scenario and the second table shows the schedule for the TO scenario. The milestone dates in each schedule also apply to equipment needed for control of emissions from the cooling cyclone and ethanol loadout processes.

#### Fluidized Bed Boiler Scenario

Description	Date				
Final Engineering Completed	January 31, 2003				
Submit a Letter of Intent to the MPCA selecting either a TO or FBB technology	January 31, 2003				
Begin Equipment Ordering	January 31, 2003				
Fluid Bed Construction	August 1, 2003				
Boiler Installation	December 23, 2003				
System Start-up	March 16, 2004				
System Operation by Corn Plus	June 8, 2004				

#### Thermal Oxidizer Scenario

Description	Date
Submit TO Design Criteria and Manufacturer Information to the MPCA for approval to become an enforceable part of the CTP if applicable	October 29, 2002
Submit a Letter of Intent to the MPCA selecting either a TO or FBB technology	January 31, 2003
Order TO	February 15, 2003
Submit an emissions study projecting future actual emissions to the MPCA	February 28, 2003
Submit suggested Consent Decree modifications to incorporate TO installation and actual emission projections with TO	March 15, 2003
TO System Start-up	October 31, 2003

# Section 6

# **Proposed Monitoring Parameters for Pollution Control Devices**

The consent decree requires that monitoring parameters be established for affected pollution control devices. Corn Plus is proposing the following monitoring parameters for each of the affected pollution control devices. Any deviations of monitoring frequency, recordkeeping and/or operating range shall be reported in quarterly reports unless more frequent reporting is required by state or federal regulation.

#### Fluidized Bed Boiler Scenario

Control Device #	Control Device Description	Parameter Monitored	Operating Range	Monitoring Frequency		
CE 003	Wet Scrubber	Liquid Flow Rate	≥ 33 gallons per minute	Daily		
		Pressure Drop	3.5 to 4.5 inches of H <sub>2</sub> O	Daily		
To be assigned	igned Boiler Temperature		≥ 1,600°F	Continuously		
			To be determined	To be determined		
		Syrup feed rate <sup>(1)</sup>	To be determined	24-hour average		
		Pressure drop across bagfilter	To be determined	Daily		
FS 005, FS 006	Leak Detection	In accordance with 40 CFR 60 Subpart VV				

Note 1: The appropriate Ammonia: Syrup feed ratio will be determined during initial performance testing.

### Thermal Oxidizer Scenario

Control Device #	Control Device Description	Parameter Monitored	Operating Range	Monitoring Frequency
CE003	Process	Water Flow Rate	> 33 gpm	Daily
	Scrubber	Pressure Drop	3.5 to 4.5 inches of water column	Daily
To be assigned	Thermal Oxidizer	Temperature	> 1,300°F	Continuous
FS005, FS006	Leak Detection	As stated in 40 CFR Subpart VV	As stated in 40 CFR Subpart VV	As stated in 40 CFR Subpart VV
EU037	DDGS Dryer #1	Syrup Feed	TBD	24-hour average
		Beer Feed	TBD	24-hour average
EU044	DDGS Dryer #2	Syrup Feed	TBD	24-hour average
		Beer Feed	TBD	24-hour average
NO <sub>x</sub> Group	·			TAT 11
EU037	DDGS Dryer #1			Weekly monitor and record fuel
EU044	DDGS Dryer #2			usage and type for
EU008	Boiler #1	Fuel Usage		each unit, calculate NOx emissions
EU 045	Boiler #2			weekly based on
To be assigned	то			latest stack test data

# Section 7

# Pollution Control Device Performance Test Schedule and Test Methods Used

The following schedule and methods will be used to demonstrate initial compliance with the emission limits contained in Section 4 of this Control Technology Plan. Performance testing will be performed pursuant to schedule provided in the Consent Decree.

### Fluidized Bed Boiler Scenario (Scenario #1)

Emission Unit/Control System	Pollutant Tested	Proposed EPA Test Method
Fluidized bed boiler	CO	Method 1, 2, 3B, 4, and 10
exhaust (DDGS dryer/	NO <sub>x</sub>	Method 1, 2, 3B, 4, and 7E
cooling cyclone/truck loadout) <sup>(1)</sup>	PM/PM <sub>10</sub> Inlet and Outlet	Method 1, 2, 3B, 4, 5 and 202
	VOC Inlet	Method 1, 2, 3B, 4, 25 (unless the outlet concentration is < 50 ppm, then 25A will be used)
	VOC Outlet, Speciated VOCs/HAPs	Method 1, 2, 3B, 4, Method 18 NCASI CI/WP-98.01 and 25 (unless the outlet concentration is < 50 ppm, then 25A will be used)
	SO <sub>2</sub>	Method 1, 2, 3B, 4, and 6C
Fermentation/wet scrubber (inlet and outlet)	Total VOC, Speciated VOCs/HAPs,	Method 1, 2, 3A, 4, and 18 NCASI CI/WP-98.01 for HAPs. VOCs will be tested in accordance with a test protocol approved by the parties.
Boiler #1 <sup>(2)</sup>	NO <sub>λ</sub>	Method 1, 2, 3B, 4, and 7E

Note 1: Inlet and outlet of FBB will be tested for VOC emissions. The FBB inlet will be tested for CO only if the outlet test results are above 100 ppm. All other pollutants will be tested at outlet only.

Note 2: Testing is only required if the boiler abandons its stand-by only status established in paragraph 11(d) of the Consent Decree.

### Thermal Oxidizer Scenario (Scenario #2)

Process Description	Unit/Control Device/Stack Vent#	Unit/Control Device Description	Pollutants	Proposed EPA Test Method
DDGS Dryer	EU037/	TO	CO (Inlet and	Method 1, 2, 3B, 4, and 10
#1, DDGS	EU044/	(if applicable)	Outlet)	
Dryer #2, Cooling	EU032/ FS004		NO <sub>x</sub>	Method 1, 2, 3B, 4, and 7E
Cyclone, Ethanol Truck	CE (to be assigned)/		PM/PM <sub>10</sub> Inlet and Outlet	Method 1, 2, 3B, 4, 5 and 202
Loadout	SV (to be		VOC Inlet	Method 1, 2, 3B, 4, 25 (unless the
	assigned)			outlet concentration is < 50 ppm, then 25A will be used)
			VOC Outlet,	Method 1, 2, 3B, 4, Method 18
5	!		Speciated	NCASI CI/WP-98.01 and 25
			VOCs/HAPs	(unless the outlet concentration is
Fermentation	CE003/	Due	NOCT 1	< 50 ppm, then 25A will be used)
Scrubber	SV003	Process Scrubber for	VOC Inlet and Outlet	Method 1, 2, 3 or 3A, 4, Method
Scrubber	3,003	VOC Control	Outlet	18 NCASI CI/WP-98.01 and VOC
		voc connor		test method as approved by the parties in the Performance Test
				Plan Protocol.
Boiler #1	EU008/ SV008	Boiler	NOx	Method 1, 2, 3B, 4, and 7E
Boiler #2	EU045/ SV011	Boiler	NO <sub>x</sub>	Method 1, 2, 3B, 4, and 7E

# **Section 8**

# **Fugitive Dust Emission Control Program**

The fugitive dust emission control program for Corn Plus includes paving of existing roads used for truck and car traffic. The tank farm area will also be paved prior to December 30, 2002. A site map showing the existing paved roads is attached.

Corn Plus will implement the following actions to minimize fugitive dust emissions:

- Perform weekly inspections of the roads. Document that the inspection was performed and describe any corrective actions taken.
- Sweep the roads as required. As required includes, but is not limited to:
  - Silt that has accumulated to visible levels on the road surface
  - Observable fugitive emissions caused by car/truck traffic on Corn Plus roads

Any deviations from the fugitive dust control program shall be reported in quarterly reports unless more frequent reporting is required by state or federal regulation.

# Appendix A Letter from RPMG



# RENEWABLE PRODUCTS MARKETING GROUP, LLC

Highway 19 East = PO Box A \* Withhoop, MN 55388-0429 \* 507-647-5008 \* Fex 507-647-5010

July 30, 2002

#### USEPA /MPCA/ DOJ:

All of the railcars furnished by Renewable Products Marketing Group are dedicated ethanol cars. The ethanol plants affiliated with RPMG are Al-Corn Clean Fuels, Chippewa Valley Ethanol Co-op, Corn Plus, Diversified Energy Company and Heartland Corn Products.

Sincerely,

Todd Kruggel Chief Manager

# Appendix B Vendor Guarantee of NO<sub>x</sub> Emissions

#### STACK EMISSION DATA FOR FIRETUBE BOILERS WITH NATURAL GAS AND JBC LANGE BURNER

	% of DFG (Volume)	SCF per 10 <sup>4</sup> Bin	Liss. per 10 <sup>6</sup> Btu	PPM	Comments
CO,	10:10	йж, мул <b>улынын</b> я көлүм <b>1636,00</b> а	~*************************************	iters.	Orașt & Calculation
O,	3.00	306.00	25.80	die pe	Orset & Calculation
co	NOL	0,20 ,	0.07	90	Colorimetric
N <sub>2</sub>	\$6.90	8873.00	3 1654,80	5	Orașt & Calculation
HO	7	2237,00	6.16	i K	Calculations
TOTAL	₹ 100.00		6.56	N. C.	
Particulates	1	CARTINI I	W Coop of	1	EPA Method 5
NOx	· · · · · · · · · · · · · · · · · · ·		3-17035	30	Chemilaminescent
Hydrocarbon	0,001	经营业的。全	0.004	10	Flame Impiration
SOx	NOT	PPERADE	OGAS	È	

NOTE: Burner adjusted for 15% excess air

#### CONDITIONS

CONVERSION DATA

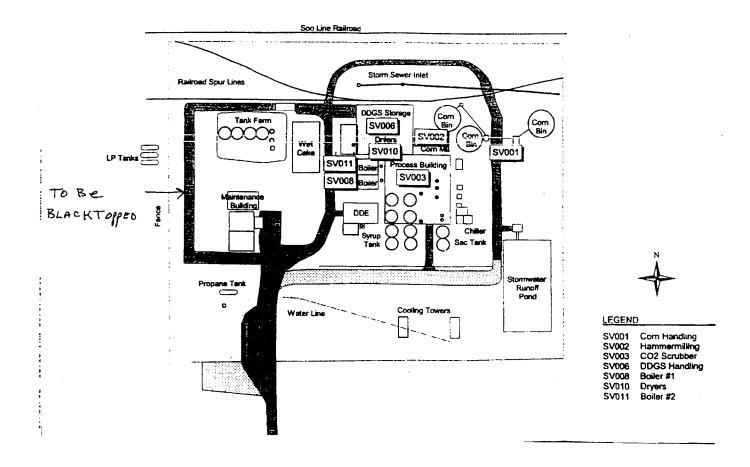
H <sub>2</sub> C	22.31% (WL) 68.98% (WL)	1 PPM = 1 Part Per Million = 0.0001%
S HHV Sp. Gr.	0.00% (Wt.) 1,000 Bu/R.3 0.619	SCF - Standard Cubic Feet at 60°F and at 14.7 pm

### MOLECULAR WEIGHTS USED

CO	-	28	N, ==	28
4	=	44	NOx =	46 for NO.
H,O	D*	18	50x =	64 for SQ,
0,	=	32	CH <sub>4</sub> =	16

Revised October 2, 1995

# Appendix C Site Map for Existing Paved Roads



# Appendix D Emission Calculations for Group NO<sub>x</sub> Limits

#### Corn Plus

### Emission Calculations for Dryers, Boiler and TO NOx Limit for Scenario #2

All units burning only pipeline quality natural gas for 344 days per year Assume 0.04 lbs/MMBtu average emission factor and 8260 hours of operation per year.

Boiler, dryers, and TO burning propane for 500 hours per year

Assume 0.08 lbs/MMBtu for propane fired units

Source	Capacity (MMBtu/hr)	Source	Capacity (MMBtu/hr)
Dryer #1	50	Dryer #1	50
Dryer #2	50	Dryer #2	50
Boiler #1	87.8	Boiler #1	87.8
Boiler #2	87.8	Boiler #2	87.8
TO	91.1	TO	91.1
Total	366.7	Total	366.7

0.04 lbs/MMBtu X 367 MMBtu/hr =

0.08 lbs/MMBtu X 366.70 MMBtu/hr =

	ibs/nr	IPY	_
NOx	14.668	60.58	Natural Gas
	29.336	7.33	Propane
		68.0	Total