#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 4 SAM NUNN ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA GEORGIA 30303-8960

**JUN 0 9** 2010

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Tann A A To

Ms. Mary LeAnn Mynatt Baker, Donelson, Bearman, Caldwell & Berkowitz, PC 265 Brookview Centre Way Suite 600 Knoxville, Tennessee 37919

SUBJECT: Maymead Materials, Inc. Consent Agreement and Final Order Docket No. EPCRA-04-2010-2010(b)

Dear Ms. Mynatt:

Enclosed please find an executed copy of the Consent Agreement and Final Order (CAFO) that resolves the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) matter (Docket No. EPCRA-04-2010-2010(b)) involving Maymead Materials, Inc. The CAFO was filed with the Regional Hearing Clerk, as required by 40 C.F.R. Part 22 and became effective on the date of the filing.

Penalty payment of \$36,186 has been received by the U.S. Environmental Protection Agency, Region 4, Emergency Planning and Community Right-to-Know Act Enforcement Section.

Also enclosed, please find a copy of the "Notice of Securities and Exchange Commission Registrants' Duty to Disclose Environmental Legal Proceedings." This document puts you on notice of your potential duty to disclose to the Security and Exchange Commission (SEC) any environmental enforcement actions taken by the Environmental Protection Agency (EPA). If you have any questions with regards to the SEC's environmental disclosure requirements, you may refer to the contact phone number at the bottom of the SEC Notice.

If you have any questions, please call Mr. Vinson Poole at (404) 562-9186.

Sincerely,

Caron B. Falconer, Chief EPCRA Enforcement Section

Enclosures

Internet Address (URL) • http://www.epa.gov Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 30% Postconsumer)

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4

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IN THE MATTER OF:	) ) Docket Number: EPCRA-04-2010-	2010/h¥-	ພີ ໃຫ້	<b>[</b> <sup>1</sup> ]
Maymead Materials, Inc			:2 - 5	، فی بو ۱۰۹ - ۲۰۰۹ ۱۰۹ - ۲۰۰۹ ۱۰۹ - ۲۰۰۹ ۱۰۹ - ۲۰۰۹ ۱۰۹ - ۲۰۰۹
Respondent.	)	() (***	<u> </u>	
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#### CONSENT AGREEMENT AND FINAL ORDER

#### I. Nature of the Action

I. This is a civil penalty proceeding pursuant to Section 325 of the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11045, and pursuant to the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (Consolidated Rules), codified at 40 C.F.R. Part 22. Complainant is the Director of the Air, Pesticides and Toxics Management Division, Region 4, United States Environmental Protection Agency (EPA). Respondent is Maymead Materials, Inc.

2. Complainant and Respondent have conferred for the purpose of settlement pursuant to 40 C.F.R. § 22.18(b) and desire to resolve this matter and settle the allegations described herein without a formal hearing. Therefore, without the taking of any evidence or testimony, the making of any argument, or the adjudication of any issue in this matter, and in accordance with 40 C.F.R. § § 22.13(b) and 22.18(b), this Consent Agreement and Final Order (CAFO) will simultaneously commence and conclude this matter.

#### II. Preliminary Statements

3. The authority to take action under Section 325 of EPCRA, 42 U.S.C. § 11045, is vested in the Administrator of EPA. The Administrator of EPA has delegated this authority under EPCRA to the Regional Administrators by EPA Delegation 22-3-A, dated May 11, 1994. The Regional Administrator, Region 4, has redelegated this authority to the Director, Air, Pesticides and Toxics Management Division, by EPA Region 4 Delegation 22-3-A, dated November 8, 1994. Pursuant to that delegation, the Director of the Air, Pesticides and Toxics Management Division has the authority to commence an enforcement action as the Complainant in this matter.

4. Respondent is Maymead Materials, Inc. Maymead Materials, Inc., is incorporated in the State of Tennessee and is doing business in the States of Tennessee and North Carolina.

5. Respondent is a "person" as defined in Section 329(7) of EPCRA, 42 U.S.C. § 11049(7).

6. Respondent owns and operates a "facility" as that term is defined by Section 329(4) of EPCRA, 42 U.S.C. § 11049(4).

7. Respondent's facilities are located at:

(a) 164 Bostian Bridge Road, Statesville, North Carolina;

(b) 3684 N.C. Highway 105 S, Boone, North Carolina;

(c) 1529 11<sup>th</sup> Avenue SE, Hickory, North Carolina;

(d) 7418 U.S. Highway 221 North, Marion, North Carolina;

(e) 180 Causby Quarry Road, Morganton, North Carolina;

(f) 183 Jonas Ridge Road, Pineola, North Carolina; and

(g) 731 Prison Camp Road, Mountain City, Tennessee.

#### III. EPA's Allegations of Violations

8. Section 312 of EPCRA, 42 U.S.C. § 11022, and the regulations found at 40 C.F.R. Part 370, provide that the owner or operator of a facility that is required to prepare or have available a Material Safety Data Sheet (MSDS) for hazardous chemicals under the Occupational Safety and Health Act of 1970 (OSHA) and regulations promulgated under that Act, shall submit to the Local Emergency Planning Committee (LEPC), the State Emergency Response Commission (SERC), and the fire department with jurisdiction over the facility, on or before March 1 annually, a completed emergency and hazardous chemical inventory form (Tier I or Tier II) as described in 40 C.F.R. Part 370, containing the information required by that part for hazardous chemicals present at the facility at any one time in the calendar year in amounts equal to or greater than 10,000 pounds and containing the information required by that part for extremely hazardous substances (EHS) present at the facility at any one time in amounts equal to or greater than the threshold planning quantity (TPQ) or 500 pounds, whichever is less.

9. At some time during the calendar years of 2006 and 2007, asphalt cement, diesel fuel #2, and diesel fuel #4 were present at the Statesville, North Carolina facility in an amount equal to or greater than 10,000 pounds.

10. At some time during the calendar years of 2005, 2006 and 2007, amines, asphalt cement, diesel fuel #2 and diesel fuel #4 were present at the Boone, North Carolina facility in an amount equal to or greater than 10,000 pounds.

11. At some time during the calendar years of 2006 and 2007, asphalt cement, diesel fuel #2 and diesel fuel #4 were present at the Hickory, North Carolina facility in an amount equal to or greater than 10,000 pounds.

12. At some time during the calendar years of 2005, 2006 and 2007, amines, asphalt cement, diesel fuel #2 and diesel fuel #4 were present at the Marion, North Carolina facility in an amount equal to or greater than 10,000 pounds.

13. At some time during the calendar years of 2006 and 2007, asphalt cement, diesel fuel #2 and diesel fuel #4 were present at the Morganton, North Carolina facility in an amount equal to or greater than 10,000 pounds.

14. At some time during the calendar years of 2005, 2006 and 2007, amines, asphalt cement, diesel fuel #2, and diesel fuel #4 were present at the Pineola, North Carolina facility in an amount equal to or greater than 10,000 pounds.

15. At some time during the calendar years of 2005, 2006 and 2007, amines, asphalt cement, diesel fuel #2 and diesel fuel #4 were present at the Mountain City, Tennessee facility in an amount equal to or greater than 10,000 pounds.

16. Amines, asphalt cement, diesel fuel #2, and diesel fuel #4 are "hazardous chemicals" as defined under Section 329(5) of EPCRA, 42 U.S.C. § 11049(5) for which Respondent is required to prepare or have available an MSDS under OSHA at its facility.

17. Respondent failed to submit a completed Emergency and Hazardous Chemical Inventory Form for amines and/or asphalt cement, diesel fuel #2 and diesel fuel #4 to the SERC, LEPC and fire department with jurisdiction over the respective facilities for the calendar years 2005, 2006 and 2007, respectively, by March 1 of the following year.

18. Respondent violated the reporting requirements of Section 312 of EPCRA,
42 U.S.C. § 11022, at its facilities for calendar years 2005, 2006 and 2007, and is therefore subject to the assessment of civil penalties under Section 325 of EPCRA, 42 U.S.C. § 11045.

19. Pursuant to Section 325(c) of EPCRA, 42 U.S.C. § 11045(c), and 40 C.F.R. Part 19, EPA may assess a civil penalty of not more than \$32,500 for each violation of EPCRA Section 312 that occurred after March 15, 2004, but prior to January 12, 2009. Each day a violation of EPCRA Section 312 continues constitutes a separate violation. Civil penalties under Section 325(c) of EPCRA, 42 U.S.C. § 11045(c), may be assessed by Administrative Order.

#### IV. Consent Agreement

20. For the purposes of this CAFO, Respondent admits the jurisdictional allegations set out above but neither admits nor denies the factual allegations set out above.

21. Respondent waives any right to contest the allegations and its right to appeal the proposed final order accompanying the Consent Agreement.

22. Respondent consents to the assessment of and agrees to pay the civil penalty as set forth in this CAFO.

23. Respondent agrees to complete the Supplemental Environmental Project (SEP) set forth in this CAFO.

24. Respondent certifies that as of the date of its execution of this CAFO, it is in compliance with all relevant requirements of EPCRA at the facility.

25. Compliance with this CAFO shall resolve the allegations of violations contained herein. This CAFO shall not otherwise affect any liability of Respondent to the United States other than as expressed herein. Neither EPA nor Complainant waives any right to bring an enforcement action against Respondent for a violation of any federal or state statute, regulation or permit; to initiate an action for imminent and substantial endangerment; or to pursue criminal enforcement.

26. Complainant and Respondent agree to settle this matter by their execution of this CAFO. The parties agree that the settlement of this matter is in the public interest and that this CAFO is consistent with the applicable requirements of EPCRA.

#### V. Final Order

27. Respondent shall pay a civil penalty of THIRTY THOUSAND ONE HUNDRED EIGHTY-SIX DOLLARS (\$30,186), for the violations alleged in Section III. Payment shall be paid within thirty (30) days of the effective date of this CAFO.

28. Respondent shall pay the penalty by forwarding a cashier's or certified check, payable to: "Treasurer, United States of America," to one of the following addresses:

<u>By Mail:</u>	Overnight:
U.S. Environmental Protection Agency	U.S. Bank
Fines and Penalties	Natalie Pearson (314) 418-4087
Cincinnati Finance Center	1005 Convention Plaza
P.O. Box 979077	Mail Station SL-MO-C2GL
St. Louis, Missouri 63197-9000	St. Louis, Missouri 63101

The check shall reference on its face the name and the Docket Number of the CAFO.

29. At the time of payment, Respondent shall send a separate copy of the check, and a written statement that payment has been made in accordance with this CAFO, to the following persons at the following addresses:

Regional Hearing Clerk U.S. EPA, Region 4 61 Forsyth Street, S.W. Atlanta, Georgia 30303

Vinson Poole U.S. EPA, Region 4 Air, Pesticides & Toxics Management Division 61 Forsyth Street, S.W. Atlanta, Georgia 30303

Saundi Wilson U.S. EPA, Region 4 Office of Environmental Accountability 61 Forsyth Street, S.W. Atlanta, Georgia 30303

30. For the purposes of state and federal income taxes, Respondent shall not be entitled, and agrees not to attempt, to claim a deduction for any civil penalty payment made pursuant to this CAFO. Any attempt by Respondent to deduct any such payments shall constitute a violation of this CAFO.

#### VI. Supplemental Environmental Project

Respondent shall undertake and complete, the approved Pollution Reduction SEP, 31. (Attachment A), within 90 days of the effective date of this CAFO. Maymead Materials, Inc., will purchase the necessary materials, and install and operate a complete Astec Double Barrel Green System at each of the Statesville, North Carolina and the Mountain City, Tennessee facilities. Respondent has estimated the cost of this project to be ONE HUNDRED THIRTY FIVE THOUSAND FIVE HUNDRED SIXTY DOLLARS (\$135,560) for the purchase and installation. EPA has agreed to value the SEP at \$113,198. In order for Respondent to receive credit for the SEP, it must fully and timely complete the SEP project. If Respondent does not fully and timely complete the project, it shall be required to pay a stipulated penalty pursuant to Paragraph 38, irrespective of the amount of money the Respondent has spent. Respondent has represented in the SEP Proposal that installation and operation of each Astec Double Barrel Green system is expected to result in: (1) an estimated reduction of over five tons per year of air pollutants, including sulfur dioxide, nitrogen oxides, carbon monoxide, and volatile organic compounds (based on an estimated 11.8 percent reduction in recycle #4 fuel oil usage); and (2) an estimated reduction of over 308 pounds per year of toxic and hazardous air pollutants, as evidenced in Attachment A (Enclosure C).

32. Respondent agrees that EPA may inspect the facilities at any time in order to confirm that the SEP is being undertaken in conformity with the representations made herein.

33. No later than thirty (30) calendar days after the completion of the project, Respondent shall submit to EPA a SEP Completion Report. The Report shall be sent to the EPCRA Enforcement Section, to the attention of Vinson Poole at the address provided above. The Report shall include the following:

(a) an affidavit from an authorized company official, attesting that the SEP has been completed or explaining in detail any failure to complete it; and

(b) copies of appropriate documentation, including invoices and receipts, showing a total expenditure of ONE HUNDRED THIRTY FIVE THOUSAND FIVE HUNDRED SIXTY DOLLARS (\$135,560), or greater, was spent on the purchase and installation of the equipment described in paragraph 31.

Upon request, Respondent shall send EPA any additional documentation requested by EPA.

34. Within 6 months after the completion of the SEP, Respondent shall submit an Emissions Reduction Report documenting the reductions in fuel use and emissions of air pollutants as a result of performing the SEP. The report shall include a summary of fuel records that will compare fuel usage prior to the installation and operation of the new system, to fuel usage after the system has been installed and operated for 6 months. Additionally, the report shall include summaries of testing, sampling and monitoring results of air pollutant emissions that are expected to be reduced by the new system, and shall compare pre-installation results to post-installation results. Failure of Respondent to satisfactorily demonstrate substantial achievement of estimated pollution reduction stated in paragraph 31 and Attachment A shall be considered a failure to completely and fully complete the SEP, and Respondent shall be required to pay a stipulated penalty pursuant to Paragraph 38, irrespective of the amount of money the Respondent has spent.

35. For Federal Income Tax purposes, Respondent agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEP.

36. Respondent certifies that, as of the date this CAFO is signed, it is not required to perform any part of the SEP by any federal, state or local law, regulation, permit or order, or by any agreement or grant. Respondent further certifies that, as of this date, it has not received and is not negotiating to receive, credit for any part of the SEP in any other enforcement action of any kind.

37. Any public statement, oral or written, by Respondent making any reference to the SEP shall include the following language:

"This project was undertaken in connection with the settlement of an enforcement action taken by the U.S. Environmental Protection Agency for violation of Section 312 of the Emergency Planning and Community Right-to-Know Act of 1986."

38. If Respondent fails to timely and fully complete any part of the SEP in accordance with the requirements of paragraph 31, including the failure to achieve expected reductions in emissions of air pollutants as specified in paragraph 31, Respondent shall pay a stipulated penalty to EPA in the amount of NINETY THOUSAND FIVE HUNDRED FIFTY EIGHT DOLLARS (\$90,558).

For purposes of this paragraph, whether Respondent has fully and timely completed the SEP and satisfactorily demonstrated substantial achievement of estimated pollution reduction, and whether Respondent made a good faith effort to do so shall be in the sole discretion of EPA.

39. If Respondent fails to timely submit a SEP Completion Report as required by paragraph 33 of this CAFO, or the Emissions Reduction Report required by paragraph 34 of this CAFO, Respondent shall pay to the United States a stipulated penalty of \$100 for each calendar day that the report is late.

40. Respondent shall pay any stipulated penalties that accrue under this CAFO within 15 calendar days of the receipt by Respondent of written demand from EPA for such penalties. Such penalties shall be paid in accordance with the procedures set forth above for the payment of the civil penalty.

41. Pursuant to 31 U.S.C. § 3717, EPA is entitled to assess interest and penalties on debts owed to the United States and a charge to cover the cost of processing and handling a delinquent claim. Interest will therefore begin to accrue on the civil penalty from the effective date of this CAFO if the penalty is not paid by the date required. Interest will be assessed at the rate established by the Secretary of Treasury pursuant to 31 U.S.C. § 3717. A charge will be assessed to cover the costs of debt collection, including processing and handling costs and attorney fees. In addition, a penalty charge will be assessed on any portion of the debt that remains delinquent more than ninety (90) days after payment is due.

42. Complainant and Respondent shall bear their own costs and attorney fees in this matter.

43. This CAFO shall be binding upon the Respondent, its successors and assigns.

44. The following individual represents EPA in this matter and is authorized to receive service for EPA in this proceeding:

Caron B. Falconer U.S. EPA, Region 4 Air, Pesticides & Toxic Management Division 61 Forsyth Street, S.W. Atlanta, Georgia 30303 (404) 562-8451

#### V. Effective Date

45. The effective date of this CAFO shall be the date upon which the CAFO is filed with the Regional Hearing Clerk.

AGREED AND CONSENTED TO:

Maymead Materials, Inc.

By: _	Letim	mynto	Date: 4/7/10
Name:	LeA~~	Mynott	(Typed or Printed)
Title: C	Counsel F.	r Maymenh M	<u>به: م</u> ربع (Typed or Printed)

U.S. Environmental Protection Agency

By:		Date: 5/2/10
	Kenneth R! Lapierre, Acting Director	•
	Air, Pesticides & Toxics	
	Management Division	
	Region 4	

APPROVED AND SO ORDERED this \_\_\_\_\_ day of \_\_\_\_\_, 2010 Susan B. Schub

Regional Judicial Officer

#### CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing

Consent Agreement and Final Order, in the Matter of Maymead Materials, Inc.,

EPCRA-04-2010-2010(b), on the parties listed below in the manner indicated:

Caron B. Falconer (Via EPA's internal mail) U.S. EPA, Region 4 Air, Pesticides & Toxics Management Division 61 Forsyth Street Atlanta, Georgia 30303

Robert Caplan U.S. EPA, Region 4 Office of Environmental Accountability 61 Forsyth Street Atlanta, Georgia 30303

Ms. Mary LeAnn Mynatt Baker, Donelson, Bearman, Caldwell & Berkowitz, PC 265 Brookview Centre Way, Suite 600 Knoxville, Tennesee 37919

Date: 6-9-10

DelleBallo

(Via EPA's internal mail)

Requested)

(Via Certified Mail - Return Receipt

Patricia A. Bullock, Regional Hearing Clerk United States Environmental Protection Agency, Region 4 Atlanta Federal Center 61 Forsyth Street, S.W. Atlanta, GA 30303 (404) 562-9511

# Attachment A



265 BROOKVIEW CENTRE WAY SUITE 600 KNOXVILLE, TENNESSEE 37919 PHONE, 865,549 7000 FAX, 865,525,8369

www.bakerdonelson.com

MARY LEANN MYN NTF Direct Dial: (865) 549-7206 Direct Facsimile: (865) 633-7206 Email address: Imynatig bakerdonelson com

May 22, 2009

#### VIA CERTIFIED MAIL AND EMAIL

Mr. Robert Caplan United States Environmental Protection Agency Region 4 Atlanta Federal Center 61 Forsyth Street Atlanta, Georgia 30303-8960

Re: Maymead Materials SEP

Dear Bob:

Maymead Materials ("Maymead") would like to present its proposed Supplemental Environmental Project ("SEP") related to its Statesville, North Carolina and Mountain City, Tennessee facilities. As briefly discussed in the interim status email to you on April 17, 2009, Maymead is proposing to install an Astec Double Barrel Green System at both locations. Although this system will provide Maymead with nominal cost savings in reduced fuel consumption, the purposes of purchasing the systems are reduced emissions and the elimination of visible "blue" smoke.

#### The Technology

The Astec system uses "warm mix technology," which allows asphalt to be prepared and placed at lower temperatures, without losing the necessary low viscosity. This is accomplished through Astec's multi-nozzle device, which mixes water and asphalt cement together to create small bubbles. Please see Enclosure A Brochure for more detailed information on the system.

#### The System's Cost

The cost to purchase and install the Astec system is \$67,780.00 for each facility, or \$135,560.00 total cost. Please see Enclosure B Quote prepared by Astec.

#### The Environmental Benefits, Current and Projected Emissions

Implementing the Astec system will result in an estimated reduction of over five tons per year of air pollutants, including sulfur dioxide, nitrogen oxides, and carbon monoxide. In addition, there will be a reduction of over 308 pounds per year of Toxic and Hazardous Air Pollutants. These are per-facility reductions. Please see Enclosure C Emissions Reduction Chart. These numbers were calculated using the North Carolina Department of Environment and Natural Resources ("NCDENR") Asphalt Emissions Calculator. These numbers do not include reduced emissions as a result of reduced fuel usage. As

K MLM 226842 v4 2014902-000005 5/22/2009

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Mr. Robert Caplan May 22, 2009 Page 3

#### Enclosures

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cc: Mr. Wiley Roark (via email w/encl.) Mr. Sean Mackey (via email w/encl.)

K MLM 226842 v4

2014902-000005 5/22/2009

# DOUBLE BARREL GREEN

The benefits of warm mix asphalt such as reduced energy consumption, lowered emissions, and elimination of visible smoke ore well-known in the hot mix industry. Warm mix technology ollows mix to be prepared and placed at lower temperatures, typically 50°F to 100°F lower, than conventional hot mix. To achieve this, the viscosity of the asphalt cement [ACI must remain free flowing (low viscosity) at the reduced temperatures. Maintaining a low viscosity at lower temperatures allows mix to flow freely through storage, transfer and placement equipment and also is more easily worked by hand.

Unfortunately, all of the previous technologies for warm mix production rely on additives, special asphalt cement,



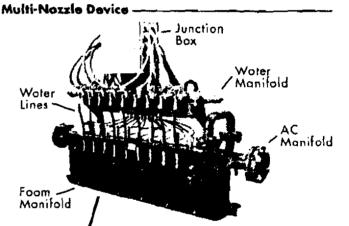
special procedures and/or special AC delivery systems to achieve low viscosities at low temperatures. The additives are expensive and add significant cost per ton of mix. The "Astec Multi-nozzle Device" eliminates the need for expensive additives and special asphalt cement by mixing a small amount of water and AC together to create microscopic bubbles. These small bubbles

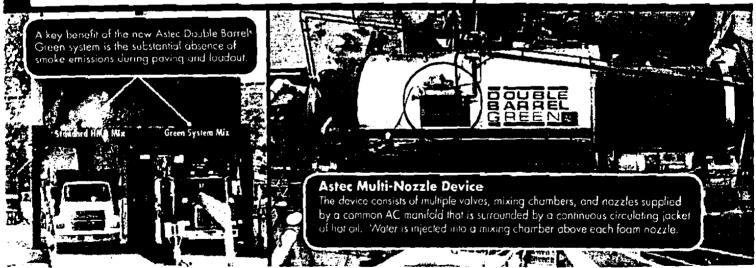
bubbles. These small bubbles act to reduce the viscosity of the AC coating on the rock thereby allowing the mix to be handled and worked at lower temperature.

Each nozzle is capable of passing AC and producing foam for 50 tph of production. The 10 production valveassemblies in the multi-nozzle arrangement are capable of passing AC and producing foam for production rates up to 500 tph when all valves are opened. As production rate varies, a computer control opens and closes these AC solenoid valves so that each valve assembly and nozzle operates in a narrow range of AC flow and back pressure to achieve consistent foaming in the foaming chamber. In addition to the 10 valve assemblies used for production, an eleventh valve (not shown) is located on the manifold for retrieving AC samples.

- Improved Workablilty
- No Smoke No Smell
- High Percentage Recycle Mix with Standard Grade of Asphalt
- Longer Life Pavement
- 14% Less Fuel
- 14% Higher Production

Water is delivered to the system via a positive displacement piston pump capable of delivering water at pressures in excess of 150 psig. Water pump speed is modulated proportionally to the speed of the liquid AC pump to accurately meter water into the AC valve-nozzle ossemblies. Individually controlled water solenoid valves control the flow of water into each nozzle for each nozzle assembly so that water solenoid valves open at the same time each of the AC solenoid valves open. PLC control provides for smooth and consistent operation of all of the valves as production rates increase or decrease. Water is supplied to the system via a skid-mounted 550-gallon corrosian-free water reservoir with an automatic filling valve that will keep the container full as long as water is supplied to it. If supply water is last, a low-water alarm alerts plant personnel quickly so the problem may be resolved quickly without wasting mix.





Enclosure B Astec Quote

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Enclosure C Emissions Reduction Chart

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Nickel & Compounds ( Carbon disuffide ( Tetrachlorodibenzo-p-dioxin, 2,3,7,8- (		0.026334	14.478348	12.7699	1.7084
Tetrachlorodibenzo-p-dioxin, 2,3,7.8- (	H) 75150	0.001041	[		
		001041	0.572362	0.5048	0.0675
	H) 1746016	0.000000	0.00000.0	0.0000	0.0000
Arsenic & Compounds (TH)		0.000234	0.128696	0.1135	0.0152
Benzene (	°H) 71432	0.165554	91.021099	80.2806	10.7405
Benzo(a)pyrene	(T) 50328	0.000007	0.004054	0.0036	0.0005
Beryllium & compounds (	H) BEC	0.000000	0.000000	0.0000	0.0000
Cadmium & compounds (	H) CDC	0.000171	0.094224	0.0831	0.0111
Hexachlorodibenzo-p-dioxin 1,2,3,6,7,8	(T) 57653857	0.000000	0.000000	0.0000	0.0000
Perchioroethylene (tetrachioroethylene) (	H) 127184	0.000134	0.073596	0.0649	0.0087
Trichloroethylene (	H) 79016	0.000000	0.000000	0.0000	0.0000
Napthalene	H) 91203	0.275413	151.421114	133.5534	17.8677
Phosphorus Metal, Yellow or White	H) 7723140	0.011704	6.434821	5.6755	0.7593
Polycyclic Organic Matter	H) POM	0.367840	202.237272	178.3733	23.8640
Propionaldehyde	H) 123386	0.054340	29.875957	26.3506	3.5254
Quinone	H) 106514	0.066880	36.770408	32.4315	4.3389
Selenium compounds	H) SEC	0.000146	0.080435	0.0709	0.0095
Trimethylpentane, 2,2,4-	H) 540841	0.016767	9.218488	8.1307	1.0878
Antimony & Compounds		0.000075	0.041367	0.0365	0.0049
Chromium - All/Total	H) CRC	0.002299	1.263983	1.1148	0.1491
Cobait compounds		0.000011	0.005975	0.0053	0.0007
Ethyl benzene	H) 100414	0.107123	58.896081	51.9463	6.9497
Lead and Lead compounds		0.006270	3.447226	3.0405	0.4068
Methyl bromide		0.000418	0,228989	0.2020	0.0270
		0.001912	1.051368	0.9273	0.1241
Ethyl chloride (chloroethane)		0.000004	0.002007	0.0018	0.0002
Methyl chloride (		0.000261	0.143368	0.1265	0.0169
Ху!епе, о- (	ويستيب والمراد	0.004294	2.361021	2.0824	0.2786
	TOTALS:		2,613.59	2,305.19	308.40

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#### Pollutant Emission Rates - Dillman DuoDrum

Customer:	Maymead Materials (87-005 / 95-001)
Location:	Statesville, NC
Drums:	RDB-942 Stationary 9' x 42' Double Barrel Drum Mixer
Burner:	Hauck StarJet SJ-750; 150mBtu/hr gas/oil burner with heavy oil kit
PM Control:	SBH-65 Stationary 65,000 ACFM Pulse Jet Baghouse;

# HOT MIX ASPHALT PRODUCTION

Production Capacity:

Annual Production: Max RAP per mix: RAP Usage per year: Avg AC per mix: Total Airflow: Standard Airflow: Heat Input: Exhaust Temperature: Exhaust Moisture:

390	tph
780000	lb/hr
415447	tpy
50	%
50	%
5	%
65000	ACFM
33094	DSCFM
<u>9</u> 7.5	l mbtu/hr
240	F
32.5	%

<u>68</u>1

NOTES:
Plant rated capacity based on production of 300 conventional-type surface mix with uniformly grade clean virgin aggregate having maximum 5% composi moisture at sealevel.
DSCFM = dry standard cubic feet/minute; airflc corrected to 68F, 1 atm, dry;
Heat input based on firing rate required for give production rate and operaing conditions

gal/year

# Burner Fuels - Net Heating Values & Usage Rates: 143100 Btu/gai 0.5 % sulfur

7.26E+05

<b>Recycle No</b>	. 4
Fuel Oil:	

			FACTOR	11- 11	
COMPOUNDS	CASRN	MW	ib/10 <sup>3</sup> gal	lb/hr	ton/year
Sulfur Dioxide (SO <sub>2</sub> )	7446-09-5	64,06	142*5	24.2	12.9
Carbon Monoxide (CO)	630-08-0	<u>28.0</u> 1	71.25	48.5	25.9
Carbon Dioxide (CO <sub>2</sub> )	124-38-9	44	22384	15251.2	8123.1
Oxides of Nitrogen (NO,)	10102-44-0	46.05	30.175	20.6	11.0
VOC (as $C_3H_9$ )	74-98-6	44.1	17.5	11.9	6.4

gal/hr

## WARM MIX ASPHALT PRODUCTION

Production Capacity:	390	tph	NOTES:
Froduction capacity.	780000	lb/hr	Plant rated capacity based on production of 250F
Annual Production:	415447	tpy	conventional-type surface mix with uniformly graded,
Max RAP per mix:	<u> </u>	ዀ	clean virgin aggregate having maximum 5% composite
RAP Usage per year:	<u>50</u>	%	moisture at sealevel.
Avg AC per mix:	5	%	DSCFM = dry standard cubic feet/minute; airflow
Total Airflow:	<u> </u>	ACFM	corrected to 68F, 1 atm, dry;
Standard Airflow:	30925	DSCFM	Heat input based on firing rate required for given
Heat Input:	86	mbtu/hr	production rate and operaing conditions
Exhaust Temperature:	215	F	
Exhaust Moisture:	32.5	%	

#### Burner Fuels - Net Heating Values & Usage Rates:

Recycle No. 4	143100	Btu/gal	0.5	% sulfur	PERCENT	11.8%
Fuel Oil:	601	gal/hr	6.40E+05	gai/year	<b>REDUCTIO</b>	11.0%

4/13/2009

#### ASTEC INDUSTRIES, INC.

#### BLUE SMOKE (FUGITIVE) NO GREEN SYSTEM

#### Customer: Maymead Materials (87-005 / 95-001) Statesville, NC Location:

Orums:	RDB-942 Stationary 9' x 42' Double Barrel Drum Mixer
Burner:	Hauck StarJet SJ-750; 150mBtu/hr gas/oil burner with heavy oil kit
PM Control:	SBH-65 Stationary 65,000 ACFM Pulse Jet Baghouse;

Production capacity:	390	tph	Plant's rated capacity is based on production of 300°
Asphalt Volatility (V): Mix Temperature:	-0.50 325	F	conventional-type surface mix with uniformly graded, clean virgin aggregate having maximum 5% composite moisture at sealevel.

#### Plant Load-out Emission Factors:

Organic PM:

TOC

#### Total PM: EF = $0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-22+3)}$ $\mathsf{EF} = 0.00141(-\mathsf{V})\mathsf{e}^{((0.0251)(T+460)-20.43)}$ $\mathsf{EF} = 0.0172(-\mathsf{V})\mathsf{e}^{((0.0251)(T+160)(20.13))}$ $\mathsf{EF} = 0.00558(-\mathsf{V})\mathsf{e}^{((0.0251)(\mathsf{T} + 460) \cdot 20.43)}$

CO Plant Load-out Emission Rates:

Total PM:	0.204	lb/hr	uncontrolled rates
Organic PM:	0.133	lb/hr	see below
TOC	1.622	lb/hr	see below
CO	0.526	ib/hr	uncontrolled

Silo Filling Emission Factors:

Total PM: Organic PM: тос

CO

 $\mathsf{EF} = 0.000332 + 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$  $\mathsf{EF} = 0.00105(-\mathsf{V})\mathsf{e}^{((0.0251)(T-460)\cdot 20.43)}$ 

 $\mathsf{EF} = 0.0504(-\mathsf{V})\mathsf{e}^{((0.0251)(T+460)-20.43)}$  $\mathsf{EF} = 0.00488(-\mathsf{V})\mathsf{e}^{((0.0251)(7+460)-20.43)}$ 

Silo Filling Emission Rates:

Total PM:	0.228	ib/hr	uncontrolled values
Organic PM:	0.099	lb/hr	see below
TOC	4.753	lb/hr	see below
	0.460	lb/hr	uncontrolled

0.000586	lb/ton
0.000254	ib/ton
0.012187	/b/ton
0.001180	lb/ton

0.000522

0.000341

0.004159

0.001349

lb/ton

lb/ton

lb/ton

lb/ton

5/21/2009

Astec Industries, Inc.

		Unc	ontroile	d Emissi	ions
Pollutant	CAS #	Load-out	Emissions	Silo Filling	Emission
		EF (%)	lb/hr	EF (%)	lb/hr
/0C		94	1.52E+00	100	4.75E+00
Methane	74 32 8	6.5	1.05E-01	0.26	1.24E-02
Acetone	67-64-1	0.046	7.46E-04	0.055	2.61E-03
Sthylene	74-85-1	0.71	1.15E-02	1.1	5.23E-02
Total non-VOC.non-	HAPs	7.3	1.18E-01	1.4	6.65E-02
<u>Benzene</u>	71-43-2	0.052	8.43E-04	0.032	1.52E-03
Bromometnane	74-83-9	0.0096	1.56E-04	0.0049	2.33E-04
2 Butanone	<u> 28-93-3</u>	0.049	7.95E-04	0.039	1.85E-03
Carbon Disuride	75-15-0	0.013	2.11E-04	0.016	7.60E-04
Chloroethane	75-00-3	0.00021	3.41E-06	0.004	1.90E-04
Chloromethane	/4-87-3	0.015	2.43E-04	0.023	1.09E-03
Cumene	92-82-8	0.11	1.78E-03	Not D	etected
Ethylbenzene	100-41-4	0.28	4.54E-03	0.038	1.81E-03
Formaldehyde	50-00-0	0.088	1.43E-03	0.69	3.28E-02
<u>e-Hexane</u>	100-54-3	0.15	2.43E-03	0.1	4.75E-0.
Isooctane	540-84-1	0.0018	2.92E-05	0.00031	1.47E-05
Methylene Chloride	75-09-2	Not De	tected	0.00027	1.28E-05
Styrene	100-42-5	0.0073	1.18E-04	0.0054	2.57E-04
Tetrachloroethane	127-184-4	0.0077	1.25E-04	Not D	etected
Toluene	100-88-3	0.21	3.41E-03	0.062	2.95E-03
Trichlorofluoromethane	75-69-4	0.0013	2.11E-05	Not D	etected
m-/p-Xylene	1330-20-7	0.41	6.65E-03	0.2	9.51E-03
<u>o-Xylene</u>	95-47-6	0.08	1.30E-03	0.057	2.71E-03
Total Volatile Organic	HAPs	1.5	2.43E-02	1.3	6.18E-02

# BLUE SMOKE (FUGITIVE) NO GREEN SYSTEM

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Astec Industries, Inc.

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#### BLUE SMOKE (FUGITIVE) W/ GREEN SYSTEM INSTALLED

	[	Unc	ontrolle	d Emissi	ions
Pollutant   CAS #		Load-out		Silo Filling	
	1	EF (%)	lb/hr	EF (%)	lb/hr
Acenaphthene	33-32-9	0.26	5.26E-05	0.47	7.08E-05
Acenaphhthylene	208-96-8	0.028	5.67E-06	0.014	2.11E-06
Anthracene	120-1207	0.07	1.42E-05	0.13	1.96E-05
Benzo(a)anthracene	56-55-3	0.019	3.85E-06	0.056	8.44E-06
Benzo(b)fluoranthene	205-99-2	0.0076	1.54E-06	Not D	etected
Benzo(k)fluoranthene	207-08-9	0.0022	4.45E-07	Not D	etected
Benzo(g,h,i)perviene	191-24-2	0.0019	3.85E-07	Not D	etected
Benzo(a)pyrene	50-32-8	0.0023	4.65E-07	Not D	etected
Benzo(e)pyrene	192-97-2	0.0078	1.58E-06	0.0095	1.43E-06
Chrysene	218-01-9	0.103	2.08E-05	0.21	3.16E-05
Dibenz(a,h)anthracene	53-40-3	0.00037	7.49E-08	Not D	etected
Huoranthene	206-44-0	0.05	1.01E-05	0.15	2.26E-05
Indeno(1,2,3-cd)pyrene	193-39-5	0.00047	9.51E-08	Not D	etected
2-Methylnaphthalene	91-57 <u>-6</u>	2,38	4.82E-04	5.27	7.94E-04
Naphthalene	91-20-3	1,25	2.53E-04	1.82	2.74E-04
Perylene	(198-55-1)	0.022	4.45E-06	0.03	4.52E-06
Phenanthrene	35-01-8	0.81	1.64E-04	1.8	2.71E-04
Pyrene	129-00-J	0,15	3.04E-05		6.63E-05
<u>TOTAL PAH HAP</u>	°s	5,93	1.20E-03		1.72E-03
Phenol	108.95.2	1.18	2.39E-04	Not D	)etected

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Astec Industries, Inc.

### BLUE SMOKE (FUGITIVE) REDUCTION COMPARISON

# SILO FILLING OPERATIONS

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	HOT MIX	WARM MIX NO RAP	PERCENT
Total PM	0 2.38	0.145	36.7%
Organic PM	0.099	0.015	84.8%
TOC	4.753	0.723	34.8%
co	0.460	0.070	34.8%

# TRUCK LOAD-OUT OPERATIONS

HOT MIX	WARM MIX	PERCENT
	NO RAP	REDUCTION
0.204	0.091	55.4%
0.133	0.020	84.8%
1.622	0.247	84.8%
0.5.26	0.080	84.8%
	0.133 1.622	HOT MIX         NO RAP           0.204         0.091           0.133         0.020           1.622         0.247

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O BE COMPLETED BY THE ORIGINATING O	FFICE:
(Attach a copy of the final order and transmittal letter	
Saundi Wilson	on
	(Name) (Date)
n the Region 4, ORC, OEA	at (404) 562+ 9504
(Office)	(Telephone Number)
Non-SF Judicial Order/Consent Decree USAO COLLECTS	Administrative Order/Consent Agreement FMO COLLECTS PAYMENT
SF Judicial Order/Consent Decree	Oversight Billing - Cost Package required: Sent with bill
DOJ COLLECTS	Not sent with bill
Other Receivable	Oversight Billing - Cost Package not required
This is an original debt	This is a modification
PAYEE: Maynead Material	
(Name of person and/or Com	pany/Municipality making the payment)
The Total Dollar Amount of the Receivable: \$	, ,
(If installments, attach schedule of amo	ounts and respective due dates. See Other side of this form.)
	JUID - JUIU (6)
The Case Docket Number:	
The Site Specific Superfund Account Number:	
The Designated Regional/Hendoussters Program Office:	
The IFMS Accounts Receivable Control Number is:	Date
If you have any questions, piease call:	of the Financial Management Section at:
OISTRUBUTION:	
A. <u>JUDICIAL ORDERS</u> : Copies of this form with an attached a should be mailed to:	copy of the front page of the FINAL JUDICIAL ORDER
1.         Debt Tracking Officer         2.           Environmental Enforcement Section         3.           Department of Justice RM 1647         P.O. Box 7611, Benjamin Franklin Station           Montanan D. 2014         3.	
Washington, D.C. 20044	
B. ADMINISTRATIVE ORDERS: Copies of this form with an	a attached copy of the front page of the Administrative Order should be

1.	Originating Office	3.	Designated Program Office
2	Regional Hearing Clerk	4.	Regional Counsel (EAD)