ELM CREEK ENVIRONMENTAL

May 21, 2020

Texas Commission on Environmental Quality
Air Permits Initial Review Team, MC-161
P.O. Box 13087
Austin, Texas 78711-3087

Attention: Samuel Short

Subject: Air Quality Standard Permit for Permanent Concrete Batch Plants
United Ready Mix, LLC – New CN
CBP No. 1 – New RN
Iowa Colony, Brazoria County, Texas

Mr. Short,

On behalf of United Ready Mix, LLC, we are submitting this Air Quality Standard Permit for Permanent Concrete Batch Plants application to authorize the above-referenced concrete batch plant facility located at a site near Iowa Colony, Brazoria County, Texas. The required forms, maps, and supporting documents are attached. The $900 application fee has been forwarded to the TCEQ revenue section. United Ready Mix, LLC will satisfy all applicable requirements of the Air Quality Standard Permit for Permanent Concrete Batch Plants.

Elm Creek Environmental, LLC will serve as the technical representative for United Ready Mix, LLC on this project. **We respectfully request to be copied on all correspondence regarding this project including, but not limited to the public notice package and final approval letter.** If you have any questions regarding this application, please contact us at our office or through email at josh@elmcreekenv.com.

Elm Creek Environmental, LLC

Josh Butler
Principal Consultant

Distribution: Addressee
TCEQ Region 12
Mr. Jose Marcelino – United Ready Mix, LLC
247-001 Project File

United Ready Mix, LLC
Air Quality Standard Permit for Permanent Concrete Batch Plants
CBP No. 1
Iowa Colony, Brazoria County, Texas

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Elm Creek Environmental, LLC
Ph: 214-334-6954
www.elmcreekenv.com

TCEQ Core Data Form

TCEQ Use Only

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal (*Core Data Form should be submitted with the renewal form*) ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN		RN

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (*If an individual, print last name first: eg: Doe, John*) *If new Customer, enter previous Customer below:*

United Ready Mix LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0803555131	32073533344		

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address: 7302 San Angelo St.

City	State	ZIP	ZIP + 4
Houston	TX	77020	7644

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	unitedconstrn@yahoo.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(832) 894-9634		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (*If 'New Regulated Entity" is selected below this form should be accompanied by a permit application*)

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name (*Enter name of the site where the regulated action is taking place.*)

CBP No. 1

23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4	
24. County	Brazoria						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	From the intersection of Sanders Rd. and Bullard Rd. (CR 81), go north on Sanders Rd. for approximately 0.15 miles. Site entrance will be on the right.				
26. Nearest City			State	Nearest ZIP Code	
Iowa Colony			TX	77583	
27. Latitude (N) In Decimal:	29.470355		28. Longitude (W) In Decimal:	-95.420037	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	28	13.28	95	25	12.13

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
3273		327320	

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)

Construction Materials

34. Mailing Address:							
	City		State		ZIP		ZIP + 4	
35. E-Mail Address:	unitedconstrn@yahoo.com						

36. Telephone Number	37. Extension or Code	38. Fax Number (if applicable)
(832) 894 - 9634		( ) -

39. **TCEQ Programs and ID Numbers** Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☒ New Source Review Air PSP CBP	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name: Josh Butler, CES			41. Title: Principal Consultant
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(214) 334 - 6954		(469) 716 - 4019	josh@elmcreekenv.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	United Ready Mix LLC	Job Title:	Owner
Name(*In Print*):	Jose marcelino martinez fiore	Phone:	(832)894 9634
Signature:		Date:	

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I. Registrant Information		
A. Company or Other Legal Customer Name:		
United Ready Mix LLC		
B. Company Official Contact Information (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:)___		
Name: Jose Marcelino Martinez Flores		
Title: Owner		
Mailing Address: 7302 San Angelo St.		
City: Houston	State: TX	ZIP Code: 77020-7644
Phone: (832) 894-9634	Fax:	
E-mail Address: unitedconstrn@yahoo.com		
All permit correspondence will be sent via e-mail.		
C. Technical Contact Information (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:)_____		
Name: Josh Butler, CES		
Title: Principal Consultant		
Company Name: Elm Creek Environmental, LLC		
Mailing Address: 611 S. TX-78, Suite 132		
City: Wylie	State: TX	ZIP Code: 75098-4173
Phone: 972-768-9093	Fax: 469-716-4019	
E-mail Address: josh@elmcreekenv.com		
II. Facility and Site Information		
A. Name and Type of Facility		
Facility Name: CBP No. 1		
Type of Facility:	☒ Permanent ☐ Temporary	
For portable units, please provide the serial number of the equipment being authorized below.		
Serial No: (Pending)	Serial No:	

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II. Facility and Site Information *(continued)*		
B. Facility Location Information		
Street Address:		
If there is no street address, provide written driving directions to the site and provide the closest city or town, county, and ZIP code for the site (attach description if additional space is needed).		
From the intersection of Sanders Rd. and Bullard Rd. (CR 81), go north on Sanders Rd for approximately 0.15 miles. Site entrance will be on the right.		
City: Iowa Colony	County: Brazoria	ZIP Code: 77583
Latitude (nearest second): 29° 28' 13.28" N	Longitude (nearest second): 95° 25' 12.13" W	
C. Core Data Form (**required** for Standard Permits 6004, 6006, 6007, 6008, and 6013).		
Is the Core Data Form (TCEQ Form 10400) attached?	☒ YES ☐ NO	
If "NO," provide customer reference number (CN) and regulated entity number (RN) below.		
Customer Reference Number (CN):		
Regulated Entity Number (RN):		
D. TCEQ Account Identification Number (if known):		
E. Type of Action: ☒ Initial Application ☐ Change to Registration ☐ Renewal ☐ Renewal Certification		
For Change to Registration, Renewal, or Renewal Certification actions provide the following:		
Registration Number:	Expiration Date:	
F. Standard Permit Claimed: 6004		
G. Previous Standard Exemption or PBR Registration Number		
Is this authorization for a change to an existing facility previously authorized under a standard exemption or PBR?	☐ YES ☒ NO	
If "YES," enter previous standard exemption number(s) and PBR registration number(s), and associated effective date in the spaces provided below.		
Standard Exemption and PBR Registration Number(s)	Effective Date	

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II. Facility and Site Information *(continued)*		
H. Other Facilities at this Site Authorized by Standard Exemption, PBR, or Standard Permit		
Are there any other facilities at this site that are authorized by an Air Standard Exemption, PBR, or Standard Permit?	☐ YES ☒ NO	
If "YES," enter standard exemption number(s), PBR registration number(s), and Standard Permit registration number(s), and associated effective date in the spaces provided below.		
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s)	Effective Date	
I. Other Air Preconstruction Permits		
Are there any other air preconstruction permits at this site?	☐ YES ☒ NO	
If "YES," enter permit number(s) in the spaces provided below.		
J. Affected Air Preconstruction Permits		
Does the standard permit directly affect any permitted facility?	☐ YES ☒ NO	
If "YES," enter permit number(s) in the spaces provided below.		
K. Concrete Batch Plant		
☐ Central Mix ☒ Ready Mix ☐ Specialty Mix ☐ Enhanced Controls for Concrete Batch Plants		
1. State Legislators		
State Senator: Senator Larry Taylor - District 11		
State Representative: Representative Dennis Bonnen - District 25		
2. County Judge		
Name: Judge L.M. "Matt" Sebesta, Jr.		
Mailing Address: 111 E. Locust St.		
City: Angleton	State: TX	ZIP Code: 77515

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II. Facility and Site Information *(continued)*		
K. 3. Presiding Officer		
Is the facility located in a municipality or extraterritorial jurisdiction of a municipality?	☒ YES ☐ NO	
If "YES," list the name of the Presiding Officer for the municipality and/or extraterritorial jurisdiction:		
Presiding Officer Name: Michael Byrum-Bratsen		
Title: Mayor		
Mailing Address: 12003 Iowa Colony Blvd.		
City: Arcola	State: TX	ZIP Code: 77583
L. Federal Operating Permit (FOP) Requirements		
Is this facility located at a site that is required to obtain an FOP pursuant to 30 TAC Chapter 122?	☐ YES ☒ NO ☐ To Be Determined	
If the site currently has an existing FOP, enter the permit number:		
Check the requirements of 30 TAC Chapter 122 that will be triggered if this standard permit is approved (*check all that apply).*		
☐ Initial Application for an FOP	☐ Significant Revision for an SOP	☐ Minor Revision for an SOP
☐ Operational Flexibility/Off Permit Notification for an SOP		☐ Revision for a GOP
☐ To be Determined		☒ None
Identify the type(s) of FOP issued and/or FOP application(s) submitted/pending for the site. *(check all that apply)*		
☐ SOP	☐ GOP	☐ GOP application/revision (submitted or under APD review)
☒ N/A	☐ SOP application/revision (submitted or under APD review)	
III. Fee Information *(see Section IX. for address to send fee or go to www.tceq.texas.gov/epay to pay online)*		
A. Fee Amount: $900		
B. Payment Information		
Check/money order/transaction or voucher number: 2732		
Individual or company name on check: United Construction		
Was fee paid online?	☐ YES ☒ NO	

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IV. Public Notice *(if applicable)*		
A. Responsible Person (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:)_____		
Name: Josh Butler, CES		
Title: Principal Consultant		
Company: Elm Creek Environmental, LLC		
Mailing Address: 611 S. TX-78, Suite 132		
City: Wylie	State: TX	ZIP Code: 75098
Phone: 214-334-6954	Fax No.: 469-716-4019	
E-mail Address: josh@elmcreekenv.com		
B. Technical Contact (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other):__		
Name: Josh Butler, CES		
Title: Principal Consultant		
Company: Elm Creek Environmental, LLC		
Mailing Address: 611 S. TX-78, Suite 132		
City: Wylie	State: TX	ZIP Code: 75098
Phone No.: 214-334-6954	Fax No.: 469-716-4019	
E-mail Address: josh@elmcreekenv.com		
C. Bilingual Notice		
Is a bilingual program required by the Texas Education Code in the School District?		☒ YES ☐ NO
Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district?		☒ YES ☐ NO
If "YES," list which language(s) are required by the bilingual program?		
Spanish		

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IV.	**Public Notice** *(if applicable)* ***(continued)***	
D.	Small Business Classification and Alternate Public Notice	
	Does this company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts?	☒ YES ☐ NO
	Is the site a major source under 30 TAC Chapter 122, Federal Operating Permit Program?	☐ YES ☒ NO
	Are the site emissions of any individual regulated air contaminant equal to or greater than 50 tpy?	☐ YES ☒ NO
	Are the site emissions of all regulated air contaminant combined equal to or greater than 75 tpy?	☐ YES ☒ NO
E.	For Concrete Batch Plants	
1.	Public Works Project: Will the plant provide concrete to a public works project, and be located in or contiguous to the right of-way of the public works project? (If "YES," public notice is not required.)	☐ YES ☒ NO
2.	Application in Public Place	☒ YES ☐ NO
Name of Public Place: Manvel Public Library		
Physical Address: 20514B Hwy. 6		
City: Manvel	County: Brazoria	
V.	**Renewal Certification Option**	
A.	Does the permitted facility emit an air contaminant on the Air Pollutant Watch List, and is the permitted facility located in an area on the watch list?	☐ YES ☐ NO
B.	For facilities participating in the Houston/Galveston/Brazoria area (HGB) cap and trade program for highly reactive VOCs (HRVOCs), do the HRVOCs need to be speciated on the maximum allowable emission rates table (MAERT)?	☐ YES ☐ NO
C.	Does the company and/or site have an unsatisfactory compliance history?	☐ YES ☐ NO
D.	Are there any applications currently under review for this standard permit registration?	☐ YES ☐ NO
E.	Are scheduled maintenance, startup, or shutdown emissions required to be included in the standard permit registration at this time?	☐ YES ☐ NO

V.	**Renewal Certification Option *(continued)***	
F.	Are any of the following actions being requested at the time of renewal:	☐ YES ☐ NO
1.	Are there any facilities that have been permanently shutdown that are proposed to be removed from the standard permit registration?	☐ YES ☐ NO
2.	Do changes need to be made to the standard permit registration in order to remain in compliance?	☐ YES ☐ NO
3.	Are sources or facilities that have always been present and represented, but never identified in the standard permit registration, proposed to be included with this renewal?	☐ YES ☐ NO
4.	Are there any changes to the current emission rates table being proposed?	☐ YES ☐ NO
*Note: If answers to all of the questions in Section V. Renewal Certification Option are "NO," use the certification option and skip to Section VII. of this form. If the answers to any of the questions in Section V. Renewal Certification Option are "YES," the certification option **cannot** be used.*		
*If notice is applicable and comments are received in response to the public notice, the application does not qualify for the renewal certification option.		
VI.	**Technical Information Including State and Federal Regulatory Requirements** **Place a check next to the appropriate box to indicate what you have included in your submittal.** *NOTE: Any technical or essential information needed to confirm that facilities are meeting the requirements of the standard permit must be provided. Not providing key information could result in an automatic deficiency and voiding of the projec*t.	
A.	Standard Permit requirements (Checklists are optional; however, your review will go faster if you provide applicable checklists.)	
Did you demonstrate that the general requirements in 30 TAC Sections 116.610 and 116.615 are met?		☒ YES ☐ NO
Did you demonstrate that emission limitations in 30 TAC Sections 106.261 and 106.262 are met?		☐ YES ☐ NO ☒ N/A
Did you demonstrate that the individual requirements of the specific standard permit are met?		☒ YES ☐ NO
B.	Confidential Information (All pages properly marked "CONFIDENTIAL")	☐ YES ☒ NO
C.	Process Flow Diagram	☒ YES ☐ NO
D.	Process Description	☒ YES ☐ NO
E.	Maximum Emissions Data and Calculations	☒ YES ☐ NO
F.	Plot Plan	☒ YES ☐ NO

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VI. Technical Information Including State and Federal Regulatory Requirements *(continued)*	
Place a check next to the appropriate box to indicate what you have included in your submittal. *NOTE: Any technical or essential information needed to confirm that facilities are meeting the requirements of the standard permit must be provided. Not providing key information could result in an automatic deficiency and voiding of the project.*	
G. Projected Start Of Construction Date, Start Of Operation Date, and Length of Time at Site:	☒ YES ☐ NO
Projected Start of Construction (provide date): 8/01/2020	
Projected Start of Operation (provide date): 8/02/2020	
Length of Time at the Site: Permanent (>180 days)	
VII. Delinquent Fees and Penalties	
This form **will not be processed** until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ Web site at: www.tceq.texas.gov/agency/delin/index.html.	
VIII. Signature Requirements	
The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code, Chapter 382, the Texas Clean Air Act (TCAA) the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.	
Name (printed): Jose Marcelino Martinez Flores	
Signature (original signature required): 	
Date: 05/11/20	

IX. Copies of the Registration		
Copies must be sent as listed below. Processing delays will occur if copies are not sent as noted.		
Air Permits Initial Review Team (APIRT)	Regular, Certified, Priority Mail Mail Code 161, P.O. Box 13087, Austin, Texas 78711-3087 OR Hand Delivery, Overnight Mail Mail Code 161, 12100 Park 35 Circle, Building C, Third Floor, Room 300 W, Austin, Texas 78753	Originals of Form PI-1S, Core Data Form, all attachments. Not required if using ePermits[2].
Revenue Section TCEQ	Regular, Certified, Priority Mail Mail Code 214, P.O. Box 13088, Austin, Texas 78711-3088 OR Hand Delivery, Overnight Mail Mail Code 214, 12100 Park 35 Circle, Building A, Third Floor, Austin, Texas 78753	Original Money Order or Check, Copy of Form PI-1S, Core Date Form. Not required if fee was paid using ePay[3].
Appropriate TCEQ Regional Office	To find your regional office address go to www.tceq.texas.gov/assets/public/comm_exec/pubs/gi/gi-002.pdf or call (512) 239-1250	Copy of Form PI-1S, Core Data Form, and all attachments. Not required if using ePermits[2]
Appropriate Local Air Pollution Control Program(s)	To find your local air pollution control programs go to www.tceq.texas.gov/permitting/air/local_programs.html or call (512) 239-1250	Copy of Form PI-1S, Core Data Form, and all attachments

Reset Form

[2] ePermits located at www3.tceq.texas.gov/steers/
[3] ePay located at www.tceq.texas.gov/epay/

United Ready Mix, LLC
Air Quality Standard Permit for Permanent Concrete Batch Plants
CBP No. 1
Iowa Colony, Brazoria County, Texas

Project Description

United Ready Mix, LLC proposes to authorize a permanent concrete batching facility via the Air Quality Standard Permit for Permanent Concrete Batch Plants. The permanent batching facility will be located near Iowa Colony, Brazoria County, Texas.

The subject facility will be located on site permanently (>180 days) and will have a maximum production rate of 300 cubic yards per hour, no more than 6,000 cubic yards per day, and 800,000 cubic yards per year at a maximum operating schedule of 24 hours per day, 7 days per week, 52 weeks per year, or 8,760 hours per year.

Stationary equipment, stockpiles, and vehicles used for the operation of the subject facility, except for incidental traffic and the site entrance/exit, will be located/operated no less than 50 feet from the property line, as required. Any stockpiles located within 50 feet of the property line will be located within a three-walled bunker that extends at least two feet above the top of the stockpile. The facility's central dust collection system exhaust will be located at least 100 feet from the property line.

Any emissions from planned Startup and Shutdown activities are not expected to be any worse over a full hour than emissions during normal operation, and thus should be included in this permit authorization. Any planned Maintenance activities for this facility will be considered De Minimis (30 TAC 116.119) or authorized under a separate PBR (30 TAC 106), as necessary.

United Ready Mix, LLC will utilize applicable Best Available Control Technology (BACT) guidelines to control emissions. The split silo, cement/fly ash weigh hopper, and batch point are all vented to the central dust collector. All entry and exit roads and main traffic routes associated with the concrete batching facility will be paved with a cohesive hard surface that is maintained intact and capable of being cleaned. Additionally, in-plant roads and traffic areas will be watered so as to minimize dust emissions. Stockpiles will also be watered, as needed, to minimize dust emissions. The subject facility will comply with all property line visible emission requirements and opacity limits listed in the Air Quality Standard Permit for Concrete Batch Plants.

All required TCEQ forms, maps, calculations, and documents are included in this application. United Ready Mix, LLC will comply with all pertinent requirements listed under the Air Quality Standard Permit for Concrete Batch Plants.

United Ready Mix, LLC
Air Quality Standard Permit for Permanent Concrete Batch Plants
CBP No. 1
Iowa Colony, Brazoria County, Texas

Process Description

Washed sand and aggregate material is delivered to the facility via trucks and placed in stockpiles (EPN STK). Other materials used in the batching process such as cement, fly ash, and admixtures are also delivered to the facility via trucks.

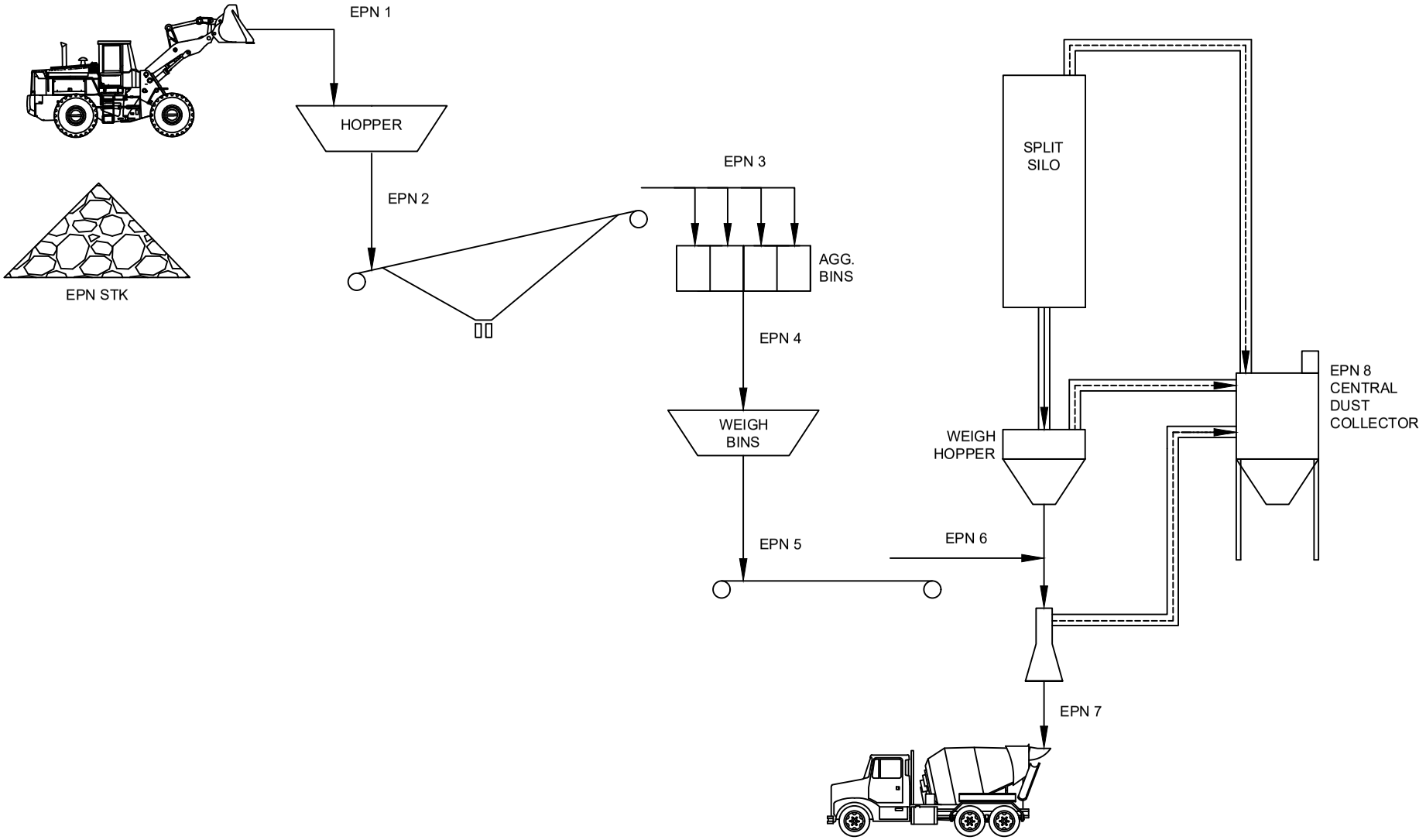
Washed sand and aggregate materials are transported from the stockpile area to the feed hopper via front-end loader (EPN 1). Material from the feed hopper is transferred (EPN 2) to the radial stacker, which is used to transfer (EPN 3) the sand/aggregate material to the aggregate bins. From the aggregate bins, the sand/aggregate material falls (EPN 4) into the weigh bins, where measured amounts of the sand/aggregate material are transferred (EPN 5) onto a conveyor. From the conveyor, the sand/aggregate material is transferred to the mixer trucks at the batch point (EPN 6). The loading of the mixer trucks (EPN 7) accounts for the loading emissions not captured by the central dust collector.

Cement and fly ash are transferred pneumatically to the split silo and are delivered to the weigh batcher for measurement. The specific amount of cement/fly ash needed for the mix is transferred to the batch point where sand and aggregate materials, along with cement, fly ash, water, and admixtures are combined and mixed by the mixer trucks.

Emissions from the split silo, batch point, and the cement/fly ash weigh hopper are controlled by the central dust collector (EPN 8).

Emissions from stockpiles (EPN STK) are calculated based on 1 acre.

Please use the attached flow diagram to follow the process description outlined above.



TITLE:	DRAWING NO.:	PROJECT NO.:	DATE:	
FLOW DIAGRAM	1/1	247-001	5/21/2020	
SITE:	SCALE:	DRAWN BY:	CHECKED BY:	REVISION:
IOWA COLONY, BRAZORIA COUNTY, TX	NTS	JB	DG	N/A

ELM CREEK ENVIRONMENTAL, LLC
611 S. TX-78, SUITE 132 WYLIE, TX 75098
PHONE: 214-334-6954
WWW.ELMCREEKENV.COM

Concrete Batch Plant Emission Rate Calcuation Worksheet

(June 2019)

Permit No.:	**Pending**	**Project No.:**	**247-001**
Company:	**United Ready Mix, LLC**	**Project Type:**	**PSP CBP**
Plant ID No. or name:	**CBP No. 1**	**County:**	**Brazoria**
City:	**Iowa Colony**	**Date:**	**May 12, 2020**
Reviewer:	**JB**		

Operating Schedule	hours/day	days/week	weeks/year	hours/year
	24	7	52	8,760

Production Rate	$yd^3_{Concrete}$/ hour	**Not to Exceed** $yd^3_{Concrete}$/ year
	300	800,000

Type of Plant	Select "Central Mix" or "Truck Mix"	**Truck Mix**

Concrete Composition	Would you like to use the default composition of concrete?	**Yes**

Standard Composition of One Cubic Yard of Concrete

Material	**lb/yd3**
Aggregate	1,865
Sand	1,428
Cement	491
Supplement	73

Maximum Material Mass Flow Rate

Material	**ton/hr**	**ton/yr**
Aggregate	279.8	746,000
Sand	214.2	571,200
Cement	73.7	196,400
Supplement	11.0	29,200

Material Handling - Coarse Aggregate Transfer Points

Index

Enter the number of Aggregate Transfer Points (Enter 1-9)	6		**Maximum Mass Flow Rate (ton/hr)**	280
Use the maximum material mass flowrate? ("Yes" or "No")	Yes		**Maximum Mass Flow Rate (ton/yr)**	746,000

EPN (Identified on Process Flow Diagram)	1	2	3	4	5	6
Hourly Mass Flow Rate (ton/hr) = 280						
Annual Mass Flow Rate (ton/yr) = 746,000						
Control Efficiency (%)	70	70	70	70	70	70
PM (lb/hr)	0.5791	0.5791	0.5791	0.5791	0.5791	0.5791
PM (ton/yr)	0.7721	0.7721	0.7721	0.7721	0.7721	0.7721
PM10 (lb/hr)	0.2770	0.2770	0.2770	0.2770	0.2770	0.2770
PM10 (ton/yr)	0.3693	0.3693	0.3693	0.3693	0.3693	0.3693
PM2.5 (lb/hr)	0.0419	0.0419	0.0419	0.0419	0.0419	0.0419
PM2.5 (ton/yr)	0.0559	0.0559	0.0559	0.0559	0.0559	0.0559

(Please refer to the Control Efficiency Table at the bottom of the page for commonly accepted controls.)

Material Handling - Sand Transfer Points

Enter the number of Sand Transfer Points (Enter 1-9)	6		**Maximum Mass Flow Rate (ton/hr)**	214
Use the maximum material mass flowrate? ("Yes" or "No")	Yes		**Maximum Mass Flow Rate (ton/yr)**	571,200

EPN (Identified on Process Flow Diagram)	1	2	3	4	5	6
Hourly Mass Flow Rate (ton/hr) = 214						
Annual Mass Flow Rate (ton/yr) = 571,200						
Control Efficiency (%)	70	70	70	70	70	70
PM (lb/hr)	0.1349	0.1349	0.1349	0.1349	0.1349	0.1349
PM (ton/yr)	0.1799	0.1799	0.1799	0.1799	0.1799	0.1799
PM10 (lb/hr)	0.0636	0.0636	0.0636	0.0636	0.0636	0.0636
PM10 (ton/yr)	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848
PM2.5 (lb/hr)	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096
PM2.5 (ton/yr)	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128

(Please refer to the Control Efficiency Table at the bottom of the page for commonly accepted controls.)

Raw Material Stockpile Emissions (EPN STK)

Stockpile Area (acres)	1
Control Efficiency (%)	70
Number of Active Days per Year	365
PM Inactive Emissions (ton/yr)	0.0000
PM10 Inactive Emissions (ton/yr)	0.0000
PM2.5 Inactive Emissions (ton/yr)	0.0000
PM Active Emissions (ton/yr)	0.7227
PM10 Active Emissions (ton/yr)	0.3614
PM2.5 Active Emissions (ton/yr)	0.0542
TOTAL PM Emissions (ton/yr)	**0.7227**
TOTAL PM10 Emissions (ton/yr)	**0.3614**
TOTAL PM2.5 Emissions (ton/yr)	**0.0542**

Material Handling & Stockpiles - Control Efficiency Table and Notes

Control Type	**Control Efficiency %**
Wet Material	50
Water Sprays	70
Chemical foam	80
Partial enclosure	50 - 85
Full enclosure	90
Enclosed by building	Up to 90
Washed Material	95
Washed material with water spray	98.5

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Cement Silo Emission Rates

How many cement silos? (Up to 4)	0
Would you like to use the manufactures filter efficiency?	Yes

Emission Factors - Cement Silo		
lb_{PM}/ton	lb_{PM10}/ton	$lb_{PM2.5}$/ton
0.730	0.470	0.080

Cement Silo	1
Hourly Loading Rate (ton/hr)	0
Annual Loading Rate (ton/yr)	0
Control Efficiency (%)	
PM (lb/hr)	0.0000
PM (ton/yr)	0.0000
PM10 (lb/hr)	0.0000
PM10 (ton/yr)	0.0000
PM2.5 (lb/hr)	0.0000
PM2.5 (ton/yr)	0.0000

NOT APPLICABLE - SILO VENTED TO CENTRAL DUST COLLECTOR

Note: BACT requires a mimimum control efficiency of at least 99%

Supplement Silo Emission Rates

How many supplement silos? (Up to 4)	0
Would you like to use the manufactures filter efficiency?	Yes

Emission Factors - Supplement Silo		
lb_{PM}/ton	lb_{PM10}/ton	$lb_{PM2.5}$/ton
3.14	1.10	0.19

Cement Supplement Silo	1
Hourly Loading Rate (ton/hr)	0
Annual Loading Rate (ton/yr)	0
Control Efficiency (%)	
PM (lb/hr)	0.0000
PM (ton/yr)	0.0000
PM10 (lb/hr)	0.0000
PM10 (ton/yr)	0.0000
PM2.5 (lb/hr)	0.0000
PM2.5 (ton/yr)	0.0000

NOT APPLICABLE - SILO VENTED TO CENTRAL DUST COLLECTOR

BACT requires a mimimum control efficiency of at least 99%

Cement/Supplement Weigh Hopper Emissions

Is there a cement/supplement weigh hopper? (Yes or No)	Yes
Is it equipped with its own dust collector? (Yes or No)	No
If the cement/supplement weigh hopper is vented to another facility, please specify:	Central Dust Collector

The cement/supplement weigh hopper must be vented to another facility equiped with a control device meeting current BACT.

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Truck Loading Emission Rates

What is the central baghouse efficiency? (%)	99.5
Use the Default Suction Shroud Capture Efficiency?	Yes

Default Capture Efficiency % = **97.3**

Central Baghouse Stack Emission Rates (EPN 8)

PM (lb/hr)	0.4601
PM (ton/yr)	0.6135
PM10 (lb/hr)	0.1276
PM10 (ton/yr)	0.1701
PM2.5 (lb/hr)	0.0218
PM2.5 (ton/yr)	0.0291

Truck Loading Fugitive Emission Rates (EPN 7)

PM (lb/hr)	2.554
PM (ton/yr)	3.405
PM10 (lb/hr)	0.708
PM10 (ton/yr)	0.944
PM2.5 (lb/hr)	0.121
PM2.5 (ton/yr)	0.161

Truck Loading Emission Factors		
lb_{PM}/ton	lb_{PM10}/ton	$lb_{PM2.5}$/ton
1.118	0.310	0.053

Material Maximum Throughput

	ton/hr	ton/yr
Aggregate	280	746,000
Sand	214	571,200
Cement	74	196,400
Supplement	11	29,200

Emission Summary

Emission Point Number(s)	Name	PM		PM10		PM2.5	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1 - 6	Material Handling	4.284	5.712	2.043	2.725	0.309	0.413
STK	Stockpiles	-.--	0.723	-.--	0.361	-.--	0.054
8	Central Baghouse Stack	0.460	0.614	0.128	0.170	0.022	0.029
7	Loading Fugitives	2.554	3.405	0.708	0.944	0.121	0.161

***The cement/supplement weigh hopper and silos are vented to the following facility:** **Central Dust Collector**

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References

The purpose of this section is to address the source of the Emission factors and capture efficiencies.
Emission Factors (EF) are in units are lb of pollutant per ton of material (see footnote "a" from AP-42 Ch. 11.12 Table 11.12-2) unless otherwise specified.

Concrete Composition

The default composition of concrete is from AP-42 Ch. 11.12 Concrete Batching.
Footnote "a" from AP-42 Ch. 11.12 Table 11.12-2

Material Handling - Sand and Aggregate Transfer Points

The emission factors are from AP-42 Ch. 11.12 Table 11.12-2
The PM2.5 emission factors are based on a ratio of the aerodynamic particle size multipliers (k multiplier) represented in Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4. The emission factors for PM and PM10 listed in Ch. 11.12 for material transfer points are derived using the Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4 equation. See AP-42 Ch. 11.12 Table 11.12-2 footnote "b".

Raw Material Stockpile Emissions

Emission Factors for the stockpiles have the following units: lb of pollutant per acre per day
The PM active and inactive emission factors are from "Cowherd, Jr., C. *Development Of Emission Factors For Fugitive Dust Sources*. EPA
PM10 is estimated as 50% of PM based on the "k" factors listed in Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4.
The PM2.5 factor is derived from a ratio listed in the Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Dust Emission Factors (Ch. 13.2) and "k" factors listed in Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4.

Material Silos

The emission factors are from AP-42 Ch. 11.12 Table 11.12-2
Emission Factor (EF) Units are lb of pollutant per ton of material
The emission factor for PM2.5 was assumed to be 17.1% of PM10. The value of 17.1% represents the percentage of PM10 that is PM2.5 according to the worst case loading emission factors for a truck mix operation. The PM2.5 factors listed in the AP-42 documents for truck and mixer loading are based on lbPM2.5 per ton cement and cement supplement (see Loading Emission Rates). The worst case percentage of PM2.5 in PM10 from the EPA loading factors is 17.1%.

Cement/Supplement Weigh Hopper Emissions

Emission factors are not quantified for this potential emission point.
Since an emission factor was not quantified there are three preferred approaches: assume the emissions negligible if it vented to another device meeting BACT; treat it as a material drop point and apply a control efficiency; and the outlet grain loading method.
The control efficiency method is used in conjunction with the Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4 equation to estimate emissions. The same wind speed used to develop the aggregate drop point emission factors listed in AP-42 Ch. 11.12 Table 11.12-2 was used in the Ch.13 Equation. The lowest acceptable moisture content of 0.25% was assumed.

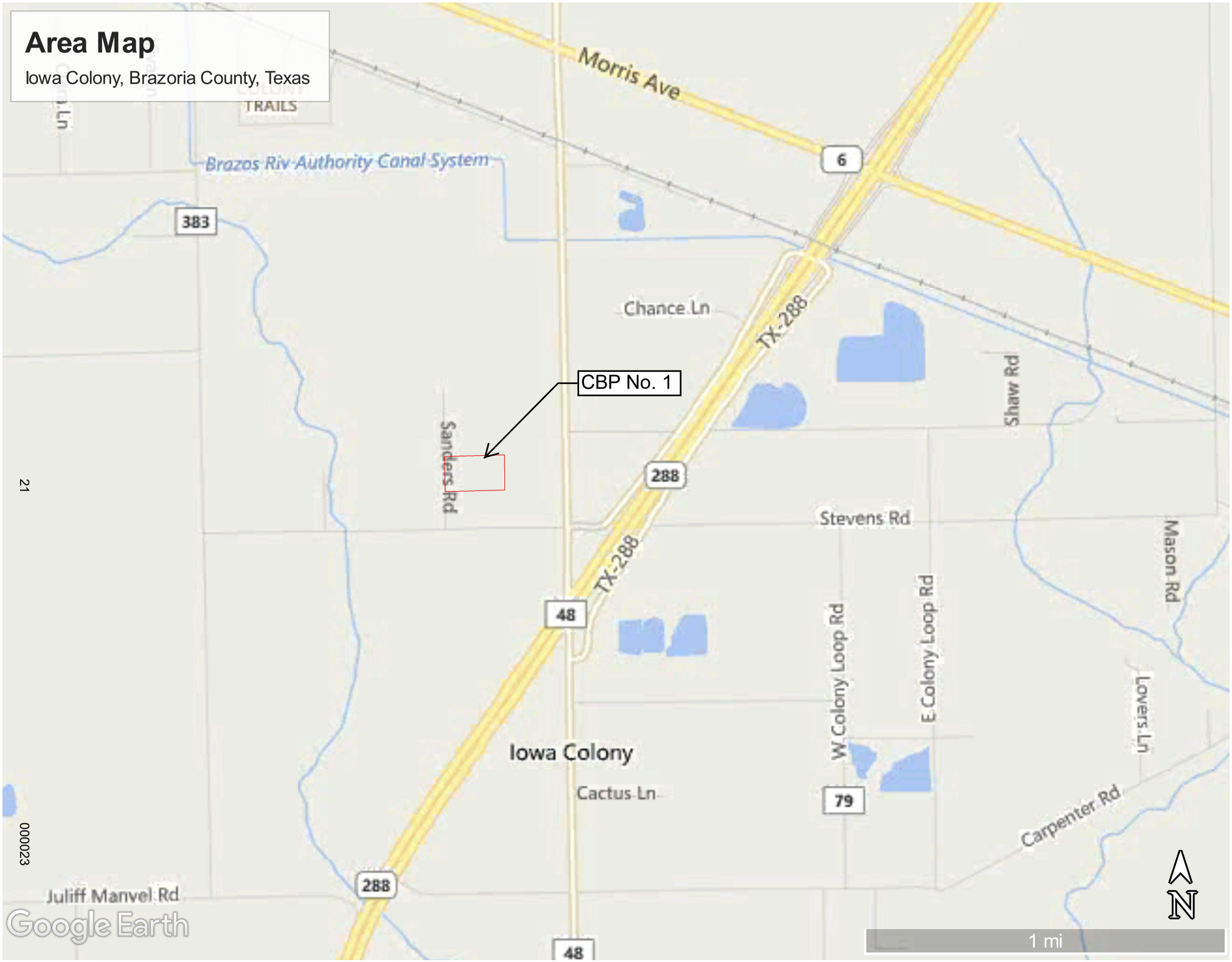
Loading Emission Rates

PM Emission Factor (EF) Units are lb of pollutant per ton of cement and cement supplement.
Emission factors (PM & PM10) are from AP-42 Ch. 11.12 Table 11.12-2.
The emission factors for PM2.5 are located in AP-42 Ch. 11.12 Background Document Table 18.6.

The default emissions captured by the suction shroud is the average listed in AP-42 Ch 11.12 Background Document Table 17.1 and Table 17.2.

Area Map

Iowa Colony, Brazoria County, Texas



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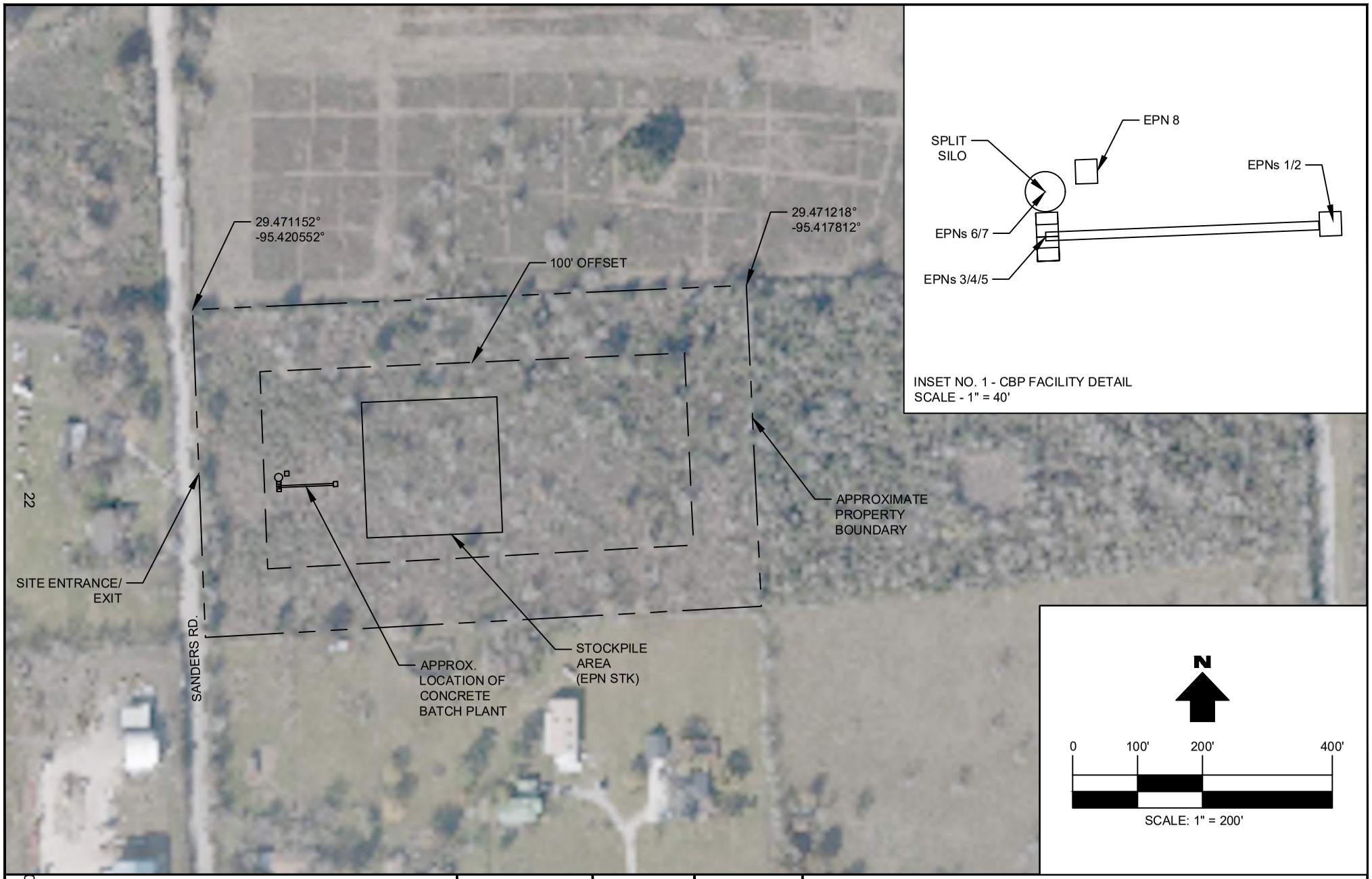

INSET NO. 1 - CBP FACILITY DETAIL
SCALE - 1" = 40'

SCALE: 1" = 200'

TITLE:	DRAWING NO.:	PROJECT NO.:	DATE:
PLOT PLAN	1/1	247-001	5/13/2020

SITE:	SCALE:	DRAWN BY:	CHECKED BY:	REVISION:
IOWA COLONY, BRAZORIA COUNTY, TX	1" = 200'	JB	JB	N/A

ELM CREEK ENVIRONMENTAL, LLC
611 S. TX-78, SUITE 132 WYLIE, TX 75098
PHONE: 214-334-6954
WWW.ELMCREEKENV.COM

Texas Commission on Environmental Quality
Air Quality Standard Permits
General Requirements Checklist
Title 30 Texas Administrative Code §§116.610-116.615

Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the rule number. The SP forms, tables, checklists, and guidance documents are available from the TCEQ, Air Permits Division web site at: www.tceq.texas.gov/permitting/air/nav/standard.html.

Most Standard Permits require registration with the commission's Office of Permitting, Remediation, and Registration in Austin. The facilities and/or changes to facilities can be registered by completing a Form PI-1S, "Registration for Air Standard Permit." This checklist should accompany the registration form to expedite any registration review.

CHECK THE MOST APPROPRIATE ANSWERS AND FILL IN THE REQUESTED INFORMATION		
Rule	**Questions/Description**	**Response**
116.610(a)(1)	Are there net emissions increases associated with this registration?	☒ YES ☐ NO
	If "YES," will net emission increases of air contaminants from the project, other than those for which a National Ambient Air Quality Standard (NAAQS) has been established, meet the emission limits of § 106.261 or § 106.262?	☐ YES ☐ NO ☒ N/A
	If "NO," does the specific standard permit exempt emissions from this limit?	☒ YES ☐ NO
Attach emissions summary and calculations:		
116.610(a)(3)	Do any of the Title 40 Code of Federal Regulations Part (CFR) 60, New Source Performance Standards apply to this registration?	☐ YES ☒ NO
If "YES," list subparts:		
116.610 (a)(4)	Do any Hazardous Air Pollutant requirements apply to this registration?	☐ YES ☒ NO
If "YES," list subparts		
116.610 (a)(5)	Do any maximum achievable control technology (MACT) standards as listed under 40 CFR Part 63 or Chapter 113, Subchapter C (National Emissions Standard for Hazardous Air for Source Categories) apply to this registration?	☐ YES ☒ NO
If "YES," list subparts:		
116.610(a)(6)	Will additional emission allowances under Chapter 101, Subchapter H, Division 3, Emissions Banking and Trading, need to be obtained following this registration?	☐ YES ☒ NO
116.611(a)(1-6)	Is the following documentation included with this registration:	☒ YES ☐ NO
	Emissions calculations including the basis of the calculations?	☒ YES ☐ NO
	Quantification of all emission increases and/or decreases associated with this project?	☒ YES ☐ NO
	Sufficient information demonstrating that this project does not trigger PSD or NNSR review?	☒ YES ☐ NO
	Description of efforts to minimize collateral emissions increases associated with this project?	☒ YES ☐ NO
	Process descriptions including related processes?	☒ YES ☐ NO
	Description of any equipment being installed?	☒ YES ☐ NO

Texas Commission on Environmental Quality
Air Quality Standard Permits
General Requirements Checklist
Title 30 Texas Administrative Code §§116.610-116.615

Rule	Question/Description	Response
116.614	Are the required fee and a copy of the check or money order provided with the application?	☒ YES ☐ NO
116.615(1)	Will emissions from the facility comply with all applicable rules and regulations of the commission adopted under Texas Health and Safety Code, Chapter 382, and with the intent of the Texas Clean Air Act?	☒ YES ☐ NO
116.615(2)	Do you understand that all representations with regard to construction plans, operating procedures, and maximum emission rates in this registration become conditions upon which the facility will be constructed and operated?	☒ YES ☐ NO
116.615(3)	Do you understand that all changes authorized by this registration need to be incorporated into the facility's permit if the facility is currently permitted under §116.110 (relating to Applicability)?	☒ YES ☐ NO
List all related permit numbers:		
116.615(9)617(e)(1)	Will all air pollution emission capture and abatement equipment be maintained in good working order?	☒ YES ☐ NO
116.615(10)	Will the facility comply with all applicable rules and regulations of the TCEQ, the Texas Health and Safety Code, Chapter 382, and the Texas Clean Air Act?	☒ YES ☐ NO

Save Form Reset Form

Air Quality Standard Permit for Concrete Batch Plants
Registration Checklist

The following checklist has been developed so the Texas Commission on Environmental Quality (TCEQ), Air Permits Division (APD) can confirm that the concrete batch plant meets the standard permit requirements. Please read all questions and select YES, NO, N/A, or give specific information for the facility. If the concrete batch plant does not meet all conditions of this standard permit, it will not be allowed to operate under the standard permit and must apply for a case-by-case preconstruction permit as required under Title 30 Texas Administrative Code (TAC) §116.110. Sections 3 through 7 are requirements for all concrete batch plant standard permit applications. Sections 8, 9, and 10 are specific requirements required for either temporary, permanent, or specialty plants.

Facility Type		
Check the facility type authorized ☐ Temporary Concrete Batch Plant (Complete Sections 3-7 and 8) ☒ Permanent Concrete Batch Plant (Complete Sections 3-7 and 9) ☐ Specialty Concrete Batch Plant (Comp Sections 3-7 and 10)		
Condition Number and Description		
(3)	**Administrative Requirements**	
(3)(A)	Are the form PI-1S, Registrations for Air Standard Permit, Table 11, Fabric Filters, Table 20, Concrete Batch Plants attached?	☒ YES ☐ NO
	If applicable, is Table 29 Reciprocating Engines attached?	☐ YES ☐ NO ☒ N/A
	Will copies of all information be mailed to the Air Permits Division, the TCEQ regional office, and all applicable local programs?	☒ YES ☐ NO
(3)(B)	Was the $900 fee sent to the TCEQ Revenue Section? (The fee is not required if the facility meets the requirements of being in or adjacent to the right of way of a public works project.)	☒ YES ☐ NO
(3)(C)	Has construction and/or operation begun on the facility?	☐ YES ☒ NO
(3)(G)	Will this facility qualify for relocation under section (8)(F)? (If yes, the facility will be exempt from public notice requirements in section (4) of this standard permit.)	☐ YES ☒ NO
(3)(H)	Will construction commence within 18 months of written approval from the Executive Director in accordance with 30 TAC § 116.120(a)(1), Voiding of Permits?	☒ YES ☐ NO
(3)(J)	Will records be maintained and kept for a rolling 24 months?	☒ YES ☐ NO
(3)(K)	Will abatement equipment failure or emissions deviations in excess of paragraph (5)(B)(iii) be reported in accordance with 30 TAC Chapter 101, General Air Quality Rules as appropriate?	☒ YES ☐ NO

(4)	**Public Notice**	
(4)	Will the public notice requirements be followed in accordance in 30 TAC Chapter 39, Public Notice?	☒ YES ☐ NO
	Is this a temporary facility that is exempt from public notice under 30 TAC § 116.178(b), Relocations and Changes of Location of Portable Facilities? If Yes, please provide a map indicating where the public works right of way is located and the location of the proposed plant. Also provide the name of the project or Texas Department of Transportation project number.	☐ YES ☒ NO
(5)	**General Requirement**	
(5)(A)	Will all cement/flyash storage silos, weigh hoppers, and auxiliary storage tanks be vented to a fabric/cartridge filter or a central fabric/cartridge filter system?	☒ YES ☐ NO
(5)(B)(i)	Will fabric/cartridge filters and collection systems be operated properly with no tears or leaks?	☒ YES ☐ NO
(5)(B)(ii)	Will filter systems (including any central filter system) be designed to meet a minimum control efficiency of at least 99.5 percent at particle sizes of 2.5 microns and smaller?	☒ YES ☐ NO
(5)(B)(iii)	Will all filter systems meet visible emissions performance standards?	☒ YES ☐ NO
(5)(B)(iv)	Will cement and/or flyash silo filter exhausts be equipped with sufficient illumination to observe visible emissions performance if filled during non-daylight hours?	☒ YES ☐ NO
(5)(C)(i)	Will conveying systems to and from the storage silos be properly operated, remain totally enclosed, and maintained with no tears or leaks?	☒ YES ☐ NO
(5)(C)(ii)	During cement/flyash storage silo filling, except for connecting or disconnecting, will you keep a standard of having no visible emissions for more than 30 seconds in any six-minute period from the conveying system?	☒ YES ☐ NO
(5)(D)	Is there an automatic shut-off or warning device installed on each bulk storage silo?	☒ YES ☐ NO
(5)(D)(i)	If an automatic shut-off device is installed, will it shut down the loading operations on each bulk storage silo or auxiliary storage tank prior to reaching capacity?	☐ YES ☐ NO ☒ N/A

(5)	**General Requirement** *(continued)*	
(5)(D)(ii)	If a warning device is used, will it alert operators in sufficient time to prevent an adverse impact on the pollution abatement equipment or other parts of the loading operation?	☒ YES ☐ NO ☐N/A
	Do you regularly prevent particle build-up on visible warning devices?	☒ YES ☐ NO ☐N/A
(5)(D)(iii)	Will warning devices or shut-off systems be tested at least monthly during operations and records kept indicating test and repair results in accordance with Section (3)(J) of this standard permit?	☒ YES ☐ NO
(5)(E)	The following methods will be used to control emissions from in-plant roads and traffic areas:	☒ YES ☐ NO
(5)(E)(i)	Watering.	☒ YES ☐ NO
(5)(E)(ii)	Treated with dust-suppressant chemicals (as described in the application of aqueous detergents, surfactants, and other cleaning solutions in the de minimis list).	☐ YES ☒ NO
(5)(E)(iii)	Covered with a material such as, (but not limited to), roofing shingles or tire chips and used in combination with (i) or (ii) above.	☐ YES ☒ NO
(5)(E)(iv)	Paved with a cohesive hard surface that is maintained intact and cleaned.	☒ YES ☐ NO
(5)(F)	Will dust emissions from all stockpiles be minimized at all times by sprinkling with water, dust-suppressant chemicals, or covered?	☒ YES ☐ NO ☐N/A
(5)(G)	Will all material spills be immediately cleaned up and contained or dampened so dust emissions are minimized?	☒ YES ☐ NO ☐N/A
(5)(H)	Will visible emissions leave the property for more than 30 seconds in duration in any six-minute period during normal plant operations as determined using EPA Test Method 22?	☐ YES ☒ NO
	Will quarterly visible emission observations be performed and recorded in accordance with Section (3)(J) of this standard permit?	☒ YES ☐ NO
	If visible emissions exceed Test Method 22 criteria, will immediate corrective action be taken and documented?	☒ YES ☐ NO
(5)(I)	Will the concrete batch plant be located at least 550 feet from any crushing plant or hot mix asphalt plant?	☒ YES ☐ NO
	If no, will the concrete batch plant operate at the same time as the crushing plant or hot mix asphalt plant?	☐ YES ☐ NO ☒N/A

(5)	**General Requirement** *(continued)*	
(5)(J)	Are multiple concrete batch plants being operated on the same site?	☐ YES ☒ NO
	Will site production limits be maintained per Sections (8), (9), or (10)?	☒ YES ☐ NO
(5)(K)	Will any concrete additives emit volatile organic compounds (VOC)?	☐ YES ☒ NO
(6)	**Engines**	
(6)(A)	Will the horsepower (or combined horsepower) of the stationary compression ignition internal combustion engine(s) exceed 1,000 horsepower?	☐ YES ☐ NO ☒ N/A
(6)(C)	Will the engine exhaust stack be a minimum of eight feet tall?	☐ YES ☐ NO ☒ N/A
(6)(D)	Will fuel for the engine be liquid fuel with a maximum sulfur content of no more than 0.0015 percent by weight and not consist of a blend containing waste oils or solvents?	☐ YES ☐ NO ☒ N/A
(7)	**Planned Maintenance, Startup, and Shutdown (MSS) Activities**	
	Will planned maintenance activities receive separate authorization or meet the conditions of 30 TAC § 116.119, De Minimis Facilities or Sources?	☒ YES ☐ NO
(8)	**Additional Requirements for Temporary Concrete Batch Plants**	
(8)(A)	Will the site production rate be limited to 300 cubic yards in any one hour (cy/hr) not to exceed 6,000 cubic yards per day?	☐ YES ☐ NO
(8)(B)	Will the suction shroud be vented to a fabric or cartridge filter system with a minimum of 5,000 actual cubic feet per minute (acfm)?	☐ YES ☐ NO
(8)(C)	Will the truck drop point be sheltered by an intact three-sided curtain or equivalent dust control technology that extends below the mixer truck-receiving funnel?	☐ YES ☐ NO
(8)(D)(i)	Will the suction shroud baghouse exhaust be located at least 100 feet from any property line? *Note: For concrete batch plants that supply concrete for a single public works project, the property line measurements for purposes of compliance with this standard permit shall be made to the outer boundaries of the designated public property, roadway project and associated rights-of-way.*	☐ YES ☐ NO
(8)(D)(ii)	Will all stationary equipment, stockpiles, or vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) be located or operated at least 50 feet from any property line?	☐ YES ☐ NO ☐ N/A

(8)	Additional Requirements for Temporary Concrete Batch Plants *(continued)*	
(8)(E)(i)	In lieu of meeting the distance requirements in (8)(D) (ii), will the roads and other traffic areas within the buffer distance be bordered by dust suppressing fencing or other barriers along all traffic routes or work areas?	☐ YES ☐ NO ☐N/A
(8)(E)(ii)	Will these borders be constructed to a height of at least 12 feet?	☐ YES ☐ NO ☐N/A
(8)(E)(iii)	Will stockpiles be contained within a three-walled bunker that extends at least two feet above the top of the stockpile?	☐ YES ☐ NO ☐N/A
(8)(F)(i)	Is a registered portable facility moving to a site for support of a public works project in which the proposed site is located in or contiguous to the right-of-way of the public works project?	☐ YES ☐ NO
(8)(F)(ii)	Is a registered portable facility moving to a site in which a portable facility was located at the site at any time during the previous two years and was the site subject to public notice?	☐ YES ☐ NO
(8)(G)	If (8)(F) conditions are met, forward the required information to the appropriate regional office for final decision.	
(9)	**Additional Requirements for Permanent Concrete Batch Plants**	
(9)(A)	Will the site production rate be limited to no more than 300 cubic yards in any one hour, not to exceed 6,000 cubic yards per day?	☒ YES ☐ NO
(9)(B)	Will the suction shroud or other pickup device be installed at the batch drop point (drum feed for central mix plants)?	☒ YES ☐ NO
	Will the suction shroud or other pickup device be vented to a fabric or cartridge filter system with a minimum of 5,000 acfm?	☒ YES ☐ NO
(9)(C)	Will the truck drop point be sheltered by an intact three-sided curtain or equivalent dust control technology that extends below the mixer truck-receiving funnel?	☒ YES ☐ NO
(9)(D)(i)	Will the suction shroud baghouse exhaust be located at least 100 feet from any property line?	☒ YES ☐ NO ☐N/A
(9)(D)(ii)	Will all stationary equipment, stockpiles, or vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) be located or operated at least 50 feet from any property line?	☒ YES ☐ NO ☐N/A
(9)(E)(i)	In lieu of meeting the distance requirements in (9)(D)(ii), will the roads and other traffic areas within the buffer distance be bordered by dust suppressing fencing or other barriers along all traffic routes or work areas?	☐ YES ☐ NO ☒N/A

(9)	Additional Requirements for Permanent Concrete Batch Plants *(continued)*	
(9)(E)(ii)	Will these borders be constructed to a height of at least 12 feet?	☐ YES ☐ NO ☒ N/A
(9)(E)(iii)	Will stockpiles be contained within a three-walled bunker that extends at least two feet above the top of the stockpile?	☐ YES ☐ NO ☒ N/A
(9)(F)	Will all entry and exit roads and main traffic routes associated with the operation of the concrete batch plant (including batch truck and material delivery truck roads) be paved with a cohesive hard surface that can be maintained intact and cleaned?	☒ YES ☐ NO
	Will all batch trucks and material delivery trucks remain on the paved surface when entering, conducting primary function, and leaving the property?	☒ YES ☐ NO
	Will all other traffic areas, except entry and exit roads and main traffic routes, be maintained using the control requirements of subsection (5)(E) of this standard permit.	☒ YES ☐ NO
(10)	**Additional Requirements for Specialty Concrete Batch Plants**	
(10)(A)	Will the site production rate be limited to no more than 30 cubic yards per hour?	☐ YES ☐ NO
(10)(B)	As an alternative to the requirement in subsection (5)(A) of this standard permit, will the cement/fly ash weigh hopper be vented inside the batch mixer?	☐ YES ☐ NO
(10)(C)(i)	Will the dust emissions at the batch mixer be controlled using a suction shroud or other pickup device delivering air to a fabric or cartridge filter?	☐ YES ☐ NO ☐ N/A
(10)(C)(ii)	Will the dust emissions at the batch mixer be controlled using an enclosed batch mixer feed?	☐ YES ☐ NO ☐ N/A
(10)(C)(iii)	Will the dust emissions at the batch mixer be controlled by conducting the entire mixing operation inside an enclosed process building?	☐ YES ☐ NO ☐ N/A
(10)(D)	Will all vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) be located or operated at least 25 feet from any property line?	☐ YES ☐ NO ☐ N/A
(10)(E)(i)	In lieu of meeting the distance requirements in (10)(D), will the roads and other traffic areas within the buffer distance be bordered by dust suppressing fencing or other barriers along all traffic routes or work areas?	☐ YES ☐ NO ☐ N/A
(10)(E)(ii)	Will these borders be constructed to a height of at least 12 feet?	☐ YES ☐ NO ☐ N/A

Reset Form

Texas Commission on Environmental Quality
Table 11
Fabric Filters

Tables, checklists, and guidance documents pertaining to air quality permits are available from the Texas Commission on Environmental Quality (TCEQ) Air Permits Division (APD) website at www.tceq.texas.gov/permitting/air.

A. Emission Point Number (EPN) and Emission Point Name	
EPN: 8	Emission Point Name: Central Dust Collector
B. Manufacturer and Model Numbers (No.)	
Manufacturer No.: Vince Hagan	Model No.: VH-1094JP

C Name of Source(s) or Equipment Being Controlled

Name	EPN	FIN
Batch Point	EPN 7	
Split Silo/Weigh Hopper		

D. Type of Particulate Controlled

Cement Dust	Fly Ash	Aggregate Dust

E. Gas Stream Characteristics

Design Maximum	Average Expected Flow Rate (acfm)	Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
6,500	6,500	Ambient	Inlet:	Outlet: <0.01
Pressure Drop (inches of H_2O	**Water Vapor Content of Effluent Stream (lb water/lb dry air)**		**Fan Requirements**	
			hp: 15	ft^3/min.:

F. Particulate Distribution (By Weight)

Micron Range	Inlet %	Outlet %
0.0-0.5		
0.5-1.0		
1.0-5.0		
5-10		
10-20		
over 20		

G. Filter Characteristics

Filtering Velocity (acfm/ft^2 of Cloth)	Bag Diameter (inches)	Bag Length (feet)	Total Number of Bags
6:1	6	7	100

Texas Commission on Environmental Quality
Table 11
Fabric Filters

H. Bag Rows	
Indicate the arrangement of the baghouse bag filter rows.	☐ Staggered ☒ Straight
I. Walkways	
Will walkways be provided between banks of bags?	☐ YES ☒ NO
J. Filtering Material	
Identify the filtering media: Polyester Felt	
Any additional coating or treatment of the baghouse material: None	
K. Cleaning of the Filter(s)	
Describe Bag Cleaning Method and Cycle: Automatic Pulse-Jet	
L. Cost	
Capital Installed Cost:	
Annual Operating Cost:	

Note: Attach the details regarding the principle of operation and an assembly drawing (front and top view) of the abatement device drawn to scale clearly showing the design, size and shape.
If the device has bypasses, safety valves, etc., include in the drawing and specify when such bypasses are to be used and under what conditions.

Texas Commission on Environmental Quality
Table 20
Concrete Batch Plants

The following table is designed to help you confirm that you meet the requirements of Title 30 Texas Administrative Code Chapter 116. Tables, checklists, and guidance documents pertaining to air quality permits are available from the Texas Commission on Environmental Quality Air Permits Division website at www.tceq.texas.gov/permitting/air/air_permits.html.

Please Complete the Following				
Company Name: United Ready Mix, LLC				
Plant identification or name: CBP No. 1				
Type of plant:	☒ Permanent	☐ Temporary	☐ Specialty Mix	
Type of batching that will be accomplished	☒ Wet (Rotary Mix Truck)	☐ Dry	☐ Central Mix	
Maximum production rates:	cubic yards/hour 300	cubic yards/year 800,000		
Maximum operations:	hours/day 24	days/week 7	weeks/year 52	hour/year 8,760
Does the facility operate at night?			☒ YES	☐ NO
Is a completed table 11 "Fabric Filters," submitted with this application for each fabric filer?			☒ YES	☐ NO
Silo Information:				
How many silos will this plant have? 1 (Split)				
What is the volume of each silo (cubic feet)? 4,097				
Explain the method of loading silo(s): Pneumatic				
Is each silo equipped with overload warning device?			☒ YES	☐ NO
What type of abatement device will be used on silo vent(s)? Central Dust Collector				
How will the batch drop to truck, or central mixer be controlled to prevent dust emissions? ☒ Suction shroud with exhaust air to central fabric filter *(If checked, attach a completed Table 11, "Fabric Filters.")* ☐ Flexible discharge spouts with water fog ring *(If checked, attach design drawing.)* ☐ Other type of abatement device (If checked, explain in detail and attach design-drawing.)				
What is the distance from the water fog ring or central bag house stack to the nearest property line (ft.): ~130				
How will the cement weigh hopper be vented? ☐ Cement Fly Ash Silo Fabric Filter (If checked, attach a completed Table 11, "Fabric Filters.") ☒ Central Fabric Filter (If checked, attach a completed Table 11, "Fabric Filters.") ☐ Other *(Please indicate)*				

Texas Commission on Environmental Quality
Table 20
Concrete Batch Plants

The following table is designed to help you confirm that you meet the requirements of Title 30 Texas Administrative Code Chapter 116. Tables, checklists, and guidance documents pertaining to air quality permits are available from the Texas Commission on Environmental Quality Air Permits Division website at www.tceq.texas.gov/permitting/air/air_permits.html.

Please Complete the Following *(continued)*			
Will the sand and aggregate be washed prior to delivery at your facility?			☒ YES ☐ NO
What is the number of acres or square feet which will be covered by aggregate stockpiles?			
1 acres or 43,560 square feet			
Water sprays will be used at the following locations: (Stockpiles will be sprinkled with water, as necessary)			
☐ Stockpiles	☐ Aggregate Bin Outlets	☐ Convey or Transfer Points	☐ Screens
How will plant roads be treated to prevent dust emissions?			
☒ Paved and Cleaned *(asphalt or concrete)*	☐ Chemical Sprayed	☒ Water Sprinkled	☐ Gravel
☐ Paved and Vacuumed			

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Amendments to the Air Quality Standard Permit for Concrete Batch Plants

Effective Date December 21, 2012

(1) Applicability

(A) This air quality standard permit authorizes concrete batch plant facilities that meet all of the conditions listed in sections (1) through (7) and one of sections (8), (9), or (10). If a concrete batch plant operates using sections (8), (9), or (10) of this standard permit and operational changes are proposed that would change the applicable section, the owner or operator shall reregister for the concrete batch plant standard permit prior to operating the change.

(B) This standard permit does not authorize emission increases of any air contaminant that is specifically prohibited by a condition or conditions in any permit issued under Title 30 Texas Administrative Code (30 TAC) Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, at the site.

(C) This standard permit does not relieve the owner or operator from complying with any other applicable provision of the Texas Health and Safety Code (THSC), Texas Water Code, rules of the Texas Commission on Environmental Quality (TCEQ), or any additional state or federal regulations.

(2) Definitions

(A) Auxiliary tank - storage containers used to hold raw materials for use in the batching process not including petroleum products and fuel storage tanks.

(B) Cohesive hard surface - An in-plant road surface preparation including, but not limited to: paving with concrete, asphalt, or other similar surface preparation where the road surface remains intact during vehicle and equipment use and is capable of being cleaned. Cleaning mechanisms may include water washing, sweeping, or vacuuming.

(C) Concrete batch plant - For the concrete batch plant standard permit, it is a plant that consists of a concrete batch facility and associated abatement equipment, including, but not limited to: material storage silos, aggregate storage bins, auxiliary storage tanks, conveyors, weigh hoppers, and a mixer. Concrete batch plants can add water, Portland cement, and aggregates into a delivery truck, or the concrete may be prepared in a central mix drum and transferred to a delivery truck for transport. This

definition does not include operations that meet the requirements of 30 TAC § 106.141, Batch Mixer or 30 TAC § 106.146, Soil Stabilization Plants.

(D) Dust suppressing fencing or other barrier - A manmade obstruction that is at least 12 feet high that is used to prevent fugitive dust from stationary equipment stockpiles, in-plant roads, and traffic areas from leaving the plant property.

(E) Permanent concrete batch plant - For the concrete batch plant standard permit, it is a concrete batch plant that is not a temporary or specialty concrete batch plant.

(F) Related project segments - For plants on a Texas Department of Transportation right-of-way, related project segments are one contract with multiple project locations or one contractor with multiple contracts in which separate project limits are in close proximity to each other. A plant that is sited on the right-of-way is usually within project limits. However, a plant located at an intersection or wider right-of-way outside project limits is acceptable if it can be easily associated with the project.

(G) Right-of-way of a public works project - Any public works project that is associated with a right-of-way. Examples of right-of-way public works projects are public highways and roads, water and sewer pipelines, electrical transmission lines, and other similar works. A facility must be in or contiguous to the right-of-way of the public works project to be exempt from the public notice requirements listed in Texas Health and Safety Code, § 382.056, Notice of Intent to Obtain Permit or Permit Review; Hearing.

(H) Site - The total of all stationary sources located on one or more contiguous or adjacent properties, which are under common control of the same person (or persons under common control).

(I) Specialty concrete batch plant - For the concrete batch plant standard permit, it is a concrete batch plant with a low production concrete mixing plant that manufactures concrete less than or equal to 30 cubic yards per hour (cu yd/hr). These plants are typically dedicated to manufacturing precast concrete products, including but not limited to burial vaults, septic tanks, yard ornaments, concrete block and pipe, etc. This does not include small repair projects using mortar, grout, gunite, or other concrete repair materials.

(J) Stationary internal combustion engine - For the concrete batch plant standard permit, it is any internal combustion engine that remains at a location for more than 12 consecutive months and is not defined as a

nonroad engine according to 40 Code of Federal Regulations (CFR) 89.2, Definitions.

(K) Temporary concrete batch plant - For the concrete batch plant standard permit, it is a concrete batch plant that occupies a designated site for not more than 180 consecutive days or that supplies concrete for a single project (single contract or same contractor for related project segments), but not for other unrelated projects.

(L) Traffic areas - For the concrete batch plant standard permit, it is an area within the concrete batch plant that includes stockpiles and the area where mobile equipment moves or supplies aggregate to the batch plant and trucks supply aggregate and cement.

(3) Administrative Requirements

(A) The owner or operator of any concrete batch plant seeking authorization under this standard permit shall register in accordance with 30 TAC § 116.611, Registration to Use a Standard Permit. Owners or operators shall submit a completed, current form PI-1S Registrations for Air Standard Permit, Table 11, Fabric Filters, Table 20, Concrete Batch Plants, and a Concrete Batch Plant Standard Permit checklist.

(B) Owners or operators shall also comply with 30 TAC § 116.614, Standard Permit Fees, when they are required to complete public notice under section four of this standard permit.

(C) No owner or operator of a concrete batch plant shall begin construction or operation without obtaining written approval from the TCEQ executive director.

(D) The time period in 30 TAC § 116.611(b) (45 days) does not apply to owners or operators registering plants under this standard permit.

(E) Beginning December 21, 2012, all new and modified sources must comply with this standard permit.

(F) Renewals shall comply with this standard permit on the later of:

(i) December 21, 2014; or

(ii) the date the facility's registration is renewed.

(G) Owners or operators of temporary concrete plants seeking registration and those already registered for this standard permit that qualify for relocation

under subsection (8)(F) are exempt from public notice requirements in section (4) of this standard permit.

(H) During start of construction, the owner or operator of a plant shall comply with 30 TAC § 116.120(a)(1), Voiding of Permits, and commence construction within 18 months of written approval from the Executive Director.

(I) Owners or operators are not required to submit air dispersion modeling as a part of this concrete batch plant standard permit registration.

(J) Owners or operators shall keep written records on site for a rolling 24-month period. Owners or operators shall make these records available at the request of TCEQ personnel or any air pollution control program having jurisdiction. Records shall be maintained on-site for the following including, but not limited to:

(i) 30 TAC § 101.201, Emissions Event Reporting and Recordkeeping Requirements;

(ii) 30 TAC § 101.211, Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements;

(iii) production rate for each hour and day of operation that demonstrates compliance with subsection (8)(A),(9)(A), or (10)(A) of this standard permit, as applicable;

(iv) all repairs and maintenance of abatement systems;

(v) Material Safety Data Sheets for all additives and other chemicals used at the site;

(vi) road cleaning, application of road dust control, or road maintenance for dust control;

(vii) stockpile dust suppression;

(viii) silo warning device or shut-off system tests;

(ix) quarterly visible emissions observations and any corrective actions required to control excess visible emissions;

(x) demonstration of compliance with subsection (6)(B) of this standard permit; and

(xi) type of fuel used to power engines authorized by this standard permit.

(K) Owners or operators will document and report abatement equipment failure or visible emissions deviations in excess of paragraph (5)(B)(iii) in accordance with 30 TAC Chapter 101, General Air Quality Rules as appropriate.

(4) Public Notice

The owner or operator shall follow the notice requirements in 30 TAC Chapter 39, Public Notice, unless a temporary concrete batch plant is exempted from public notice under 30 TAC § 116.178(b), Relocations and Changes of Location of Portable Facilities.

(5) General Requirements

(A) Owners or operators shall vent all cement/flyash storage silos, weigh hoppers, and auxiliary storage tanks to a fabric/cartridge filter or to a central fabric/cartridge filter system except as allowed by subsection (10)(B).

(B) Owners or operators shall maintain fabric or cartridge filters and collection systems by meeting all the following:

(i) operating them properly with no tears or leaks;

(ii) using filter systems (including any central filter system) designed to meet a minimum control efficiency of at least 99.5 percent at particle sizes of 2.5 microns and smaller;

(iii) meeting a performance standard of no visible emissions exceeding 30 seconds in any six-minute period as determined using United States Environmental Protection Agency (EPA) Test Method (TM) 22; and

(iv) sufficiently illuminating silo filter exhaust systems when cement or fly ash silos are filled during non-daylight hours to enable a determination of compliance with the visible emissions requirement in paragraph (5)(B)(iii) of this standard permit.

(C) When transferring cement/flyash, owners or operators shall:

(i) totally enclose conveying systems to and from storage silos and auxiliary storage tanks, operate them properly, and maintain them with no tears or leaks; and

(ii) maintain the conveying system using a performance standard of no visible emissions exceeding 30 seconds in any six-minute period as

determined using EPA TM 22, except during cement and flyash tanker connect and disconnect.

(D) The owner or operator shall install an automatic shut-off or warning device on storage silos.

(i) An automatic shut-off device on the silo shall shut down the loading of the silo or auxiliary storage tank prior to reaching its capacity during loading operations, in order to avoid adversely impacting the pollution abatement equipment or other parts of the loading operation.

(ii) If a warning device is used, it shall alert operators in sufficient time to prevent an adverse impact on the pollution abatement equipment or other parts of the loading operation. Visible warning devices shall be kept free of particulate build-up at all times.

(iii) Silo and auxiliary tank warning devices or shut-off systems shall be tested at least once monthly during operations and records shall be kept indicating test and repair results according to subsection (3)(J) of this standard permit. Silo and auxiliary tank loading and unloading shall not be conducted with inoperative or faulty warning or shut-off devices.

(E) Owners or operators shall control emissions from in-plant roads and traffic areas at all times by:

(i) watering them; or

(ii) treating them with dust-suppressant chemicals as described in the application of aqueous detergents, surfactants, and other cleaning solutions in the de minimis list; or

(iii) covering them with a material such as, (but not limited to), roofing shingles or tire chips and used in combination with (i) or (ii) of this subsection; or

(iv) paving them with a cohesive hard surface that is maintained intact and cleaned.

(F) Owners or operators shall use water, dust-suppressant chemicals, or cover stockpiles, as necessary to minimize dust emissions.

(G) Owners or operators shall immediately clean up spilled materials. To minimize dust emissions, owners or operators shall contain, or dampen spilled materials.

(H) There shall be no visible fugitive emissions leaving the property. Observations for visible emissions shall be performed and recorded quarterly. The visible emissions determination shall be made during normal plant operations. Observations shall be made on the downwind property line for a minimum of six minutes. If visible emissions are observed, an evaluation must be accomplished in accordance with U.S. Environmental Protection Agency (EPA) Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, TM 22, using the criteria that visible emissions shall not exceed a cumulative 30 seconds in duration in any six-minute period. If visible emissions exceed the Test Method 22 criteria, immediate action shall be taken to eliminate the excessive visible emissions. The corrective action shall be documented within 24 business hours of completion.

(I) The owner or operator shall locate the concrete batch plant operating under this standard permit at least 550 feet from any crushing plant or hot mix asphalt plant. The owner or operator shall measure from the closest point on the concrete batch plant to the closest point on any other facility. If the owner or operator cannot meet this distance, then the owner or operator shall not operate the concrete batch plant at the same time as the rock crusher, concrete crusher, or hot mix asphalt plant.

(J) When operating multiple concrete batch plants on the same site, the owner or operator shall comply with the appropriate site production limits specified in sections (8), (9), or (10) of this standard permit. If engines are being used for electrical power or equipment operations, then the site is limited to a total of 1,000 hp in simultaneous operation. There are no restrictions to engine operations if the engines will be on site for less than 12 consecutive months.

(K) Concrete additives shall not emit volatile organic compounds (VOCs).

(L) Any claim under this standard permit shall comply with:

(i) 30 TAC § 116.604, Duration and Renewal of Registrations to Use Standard Permits;

(ii) 30 TAC § 116.605(d)(I), Standard Permit Amendment and Revocation;

(iii) 30 TAC § 116.614;

(iv) the public notice processes established in THSC, § 382.055, Review and Renewal of Preconstruction Permit;

(v) the public notice processes established in THSC, § 382.056;

(vi) the contested case hearing and public notice requirements established in 30 TAC § 55.152(a)(2), Public Comment Period; and

(vii) the contested case hearing and public notice requirements established in 30 TAC § 55.201(h)(i)(C), Requests for Reconsideration or Contested Case Hearing.

(6) Engines

(A) This standard permit authorizes emissions from a stationary compression ignition internal combustion engine (or combination of engines) of no more than 1000 total horsepower.

(B) Owners or operators of concrete batch plants that include a stationary compression ignition internal combustion engines shall comply with additional applicable engine requirements in 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, and any other applicable state or federal regulation.

(C) Engine exhaust stacks shall be a minimum of eight feet tall.

(D) Fuel for the engine shall be liquid fuel with a maximum sulfur content of no more than 0.0015 percent by weight and shall not consist of a blend containing waste oils or solvents.

(7) Planned Maintenance, Startup, and Shutdown (MSS) Activities

This standard permit authorizes operations including planned startup and shutdown emissions. Maintenance activities are not authorized by this standard permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119, De Minimis Facilities or Sources.

(8) Additional Requirements for Temporary Concrete Plants

(A) The owner or operator shall limit site production to no more than 300 cubic yards in any one hour and no more than 6,000 cubic yards per day.

(B) The owner or operator shall use a suction shroud or other pickup device at the batch drop point (drum feed for central mix plants) and vent it to a fabric or cartridge filter system operating with a minimum of 5,000 actual cubic feet per minute (acfm) of air.

(C) For truck mix plants, the owner or operator shall shelter the drop point by an intact three-sided curtain, or equivalent dust control technology that extends below the mixer truck-receiving funnel.

(D) The owner or operator shall maintain the following minimum plant buffer distances from any property line, except for temporary concrete plants approved to operate in the right of way of a public works project:

(i) The suction shroud baghouse exhaust shall be at least 100 feet from any property line.

(ii) The owner or operator shall not locate or operate stationary equipment, stockpiles, or vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) within 50 feet from any property line.

(E) In lieu of meeting the buffer distance requirement for roads and stockpiles in subsection (8)(D) of this standard permit owners or operators shall:

(i) construct dust suppressing fencing or other barriers as a border around roads, other traffic areas and work areas;

(ii) construct these borders to a height of at least 12 feet; and

(iii) contain stockpiles within a three-walled bunker that extends at least two feet above the top of the stockpile.

(F) The appropriate TCEQ regional office may approve, without the need of public notice referenced in section (4) of this standard permit, the relocations of a temporary concrete batch plant that has previously been determined by the commission to be in compliance with the technical requirements of the concrete batch plant standard permit version adopted at registration that provides the information listed under subsection (8)(G) and meets one of the following conditions:

(i) A registered portable facility and associated equipment are moving to a site for support of a public works project in which the proposed site is located in or contiguous to the right-of-way of the public works project; or

(ii) A registered portable facility is moving to a site in which a portable facility has been located at the site at any time during the previous two years and the site was subject to public notice.

(G) For relocations meeting subsection (8)(F) of this standard permit, the owner or operator must submit to the regional office and any local air

pollution control agency having jurisdiction at least 12 business days prior to locating at the site:

(i) The company name, address, company contact, and telephone number;

(ii) The regulated entity number (RN), customer reference number (CN), applicable permit or registration numbers, and if available, the TCEQ account number;

(iii) The location from which the facility is moving (current location);

(iv) A location description of the proposed site (city, county, and exact physical location description);

(v) A scaled plot plan that identifies the location of all equipment and stockpiles, and also indicates that the required distances to the property lines can be met;

(vi) A scaled area map that clearly indicates how the proposed site is contiguous or adjacent to the right-of-way of a public works project (if required);

(vii) The proposed date for start of construction and expected date for start of operation;

(viii) The expected time period at the proposed site;

(ix) The permit or registration number of the portable facility that was located at the proposed site any time during the last two years, and the date the facility was last located there. This information is not necessary if the relocation request is for a public works project that is contiguous or adjacent to the right-of-way of a public works project; and

(x) Proof that the proposed site had accomplished public notice, as required by 30 TAC Chapter 39. This proof is not necessary if the relocation request is for a public works project that is contiguous or adjacent to the right-of-way of a public works project.

(9) Additional Requirements for Permanent Concrete Plants

(A) The owner or operator shall limit site production to no more than 300 cubic yards in any one hour and no more than 6,000 cubic yards per day.

(B) The owner or operator shall install a suction shroud or other pickup device at the batch drop point (drum feed for central mix plants) and vent it to a fabric/cartridge filter system with a minimum of 5,000 acfm.

(C) For truck mix plants, the owner or operator shall shelter the drop point by an intact three-sided curtain, or equivalent dust control technology that extends below the mixer truck-receiving funnel.

(D) The owner or operator shall maintain the following minimum plant buffer distances from any property line:

(i) The suction shroud baghouse exhaust shall be at least 100 feet from any property line;

(ii) The owner or operator shall not locate or operate stationary equipment, stockpiles, or vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site), within 50 feet from any property line.

(E) In lieu of meeting the buffer distance requirements for roads and stockpiles of paragraph (9)(D)(ii) of this standard permit, the owner or operator shall:

(i) construct dust suppressing fencing or other barriers as a border around roads, other traffic areas, and work areas;

(ii) construct these borders to a height of at least 12 feet; and

(iii) contain stockpiles within a three-walled bunker that extends at least two feet above the top of the stockpile.

(F) The owner or operator shall pave all entry and exit roads and main traffic routes associated with the operation of the concrete batch plant (including batch truck and material delivery truck roads) with a cohesive hard surface that can be maintained intact and shall be cleaned. All batch trucks and material delivery trucks shall remain on the paved surface when entering, conducting primary function, and leaving the property. The owner or operator shall maintain other traffic areas using the control requirements of subsection(5)(E) of this standard permit.

(10) Additional Requirements for Specialty Concrete Batch Plants

(A) The owner or operator shall limit site production to no more than 30 cubic yards per hour.

(B) As an alternative to the requirement in subsection (5)(A) of this standard permit, the owner or operator may vent the cement/fly ash weigh hopper inside the batch mixer.

(C) The owner or operator shall control dust emissions at the batch mixer feed so that no outdoor visible emissions occur by one of the following:

(i) using a suction shroud or other pickup device delivering air to a fabric or cartridge filter;

(ii) using an enclosed batch mixer feed; or

(iii) conducting the entire mixing operation inside an enclosed process building.

(D) The owner or operator shall not operate vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) within a minimum buffer distance of 25 feet from any property line.

(E) In lieu of meeting the buffer distance requirement for roads and other traffic areas in subsection (10)(D) of this standard permit, owners or operators shall:

(i) construct dust suppressing fencing or other barriers as a border around roads, other traffic areas, and work areas; and

(ii) construct these barriers borders to a height of at least 12 feet.

ELM CREEK ENVIRONMENTAL

Appendix A
Update to Air Permit Application Submitted to TCEQ on 7/1/2020

Texas Commission on Environmental Quality
Form PI-1S
Registrations for Air Standard Permit
(Page 6)

IV.	**Public Notice** *(if applicable)* ***(continued)***	
D.	Small Business Classification and Alternate Public Notice	
	Does this company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts?	☒ YES ☐ NO
	Is the site a major source under 30 TAC Chapter 122, Federal Operating Permit Program?	☐ YES ☒ NO
	Are the site emissions of any individual regulated air contaminant equal to or greater than 50 tpy?	☐ YES ☒ NO
	Are the site emissions of all regulated air contaminant combined equal to or greater than 75 tpy?	☐ YES ☒ NO
E.	For Concrete Batch Plants	
1.	Public Works Project: Will the plant provide concrete to a public works project, and be located in or contiguous to the right of-way of the public works project? (If "YES," public notice is not required.)	☐ YES ☒ NO
2.	Application in Public Place	☒ YES ☐ NO
Name of Public Place: Manvel Public Library		
Physical Address: 20514 Hwy. 6		
City: Manvel	County: Brazoria	
V.	**Renewal Certification Option**	
A.	Does the permitted facility emit an air contaminant on the Air Pollutant Watch List, and is the permitted facility located in an area on the watch list?	☐ YES ☐ NO
B.	For facilities participating in the Houston/Galveston/Brazoria area (HGB) cap and trade program for highly reactive VOCs (HRVOCs), do the HRVOCs need to be speciated on the maximum allowable emission rates table (MAERT)?	☐ YES ☐ NO
C.	Does the company and/or site have an unsatisfactory compliance history?	☐ YES ☐ NO
D.	Are there any applications currently under review for this standard permit registration?	☐ YES ☐ NO
E.	Are scheduled maintenance, startup, or shutdown emissions required to be included in the standard permit registration at this time?	☐ YES ☐ NO

ELM CREEK ENVIRONMENTAL

Appendix B
Update to Air Permit Application Submitted to TCEQ on 10/1/2020

Concrete Batch Plant Emission Rate Calculation Worksheet

Permit No.:	**161495 (Pending)**	**Project No.:**	**247-001**
Company:	**United Ready Mix, LLC**	**Project Type:**	**PSP CBP**
Plant ID No. or name:	**CBP No. 1**	**County:**	**Brazoria**
City:	**Iowa Colony**	**Date:**	**October 1, 2020**
Reviewer:	**JB**		

Operating Schedule	hours/day	days/week	weeks/year	hours/year
	24	7	52	8,760

Production Rate	$yd^3_{Concrete}$/ hour	**Not to Exceed** $yd^3_{Concrete}$/ year
	300	800,000

Type of Plant	Select "Central Mix" or "Truck Mix"	**Truck Mix**

Concrete Composition	Would you like to use the default composition of concrete?	**Yes**

Standard Composition of One Cubic Yard of Concrete

Material	lb/yd3
Aggregate	1,865
Sand	1,428
Cement	491
Supplement	73

Maximum Material Mass Flow Rate

Material	ton/hr	ton/yr
Aggregate	279.8	746,000
Sand	214.2	571,200
Cement	73.7	196,400
Supplement	11.0	29,200

Material Handling - Coarse Aggregate Transfer Points

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Enter the number of Aggregate Transfer Points (Enter 1-9)	6	**Maximum Mass Flow Rate (ton/hr)**	280
Use the maximum material mass flowrate? ("Yes" or "No")	Yes	**Maximum Mass Flow Rate (ton/yr)**	746,000

EPN (Identified on Process Flow Diagram)	1	2	3	4	5	6
Hourly Mass Flow Rate (ton/hr) = 280						
Annual Mass Flow Rate (ton/yr) = 746,000						
Control Efficiency (%)	98.5	98.5	98.5	98.5	98.5	98.5
PM (lb/hr)	0.0290	0.0290	0.0290	0.0290	0.0290	0.0290
PM (ton/yr)	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386
PM10 (lb/hr)	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138
PM10 (ton/yr)	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185
PM2.5 (lb/hr)	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021
PM2.5 (ton/yr)	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028

Control Efficiency of 98.5% utilized to account for wet material (due to the use of water to control dust) and material being pre-washed.

Material Handling - Sand Transfer Points

Enter the number of Sand Transfer Points (Enter 1-9)	6	**Maximum Mass Flow Rate (ton/hr)**	214
Use the maximum material mass flowrate? ("Yes" or "No")	Yes	**Maximum Mass Flow Rate (ton/yr)**	571,200

EPN (Identified on Process Flow Diagram)	1	2	3	4	5	6
Hourly Mass Flow Rate (ton/hr) = 214						
Annual Mass Flow Rate (ton/yr) = 571,200						
Control Efficiency (%)	98.5	98.5	98.5	98.5	98.5	98.5
PM (lb/hr)	0.0067	0.0067	0.0067	0.0067	0.0067	0.0067
PM (ton/yr)	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090
PM10 (lb/hr)	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032
PM10 (ton/yr)	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
PM2.5 (lb/hr)	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
PM2.5 (ton/yr)	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006

Control Efficiency of 98.5% utilized to account for wet material (due to the use of water to control dust) and material being pre-washed.

Raw Material Stockpile Emissions (EPN STK)

Stockpile Area (acres)	1
Control Efficiency (%)	98.5
Number of Active Days per Year	365
PM Inactive Emissions (ton/yr)	0.0000
PM10 Inactive Emissions (ton/yr)	0.0000
PM2.5 Inactive Emissions (ton/yr)	0.0000
PM Active Emissions (ton/yr)	0.0361
PM10 Active Emissions (ton/yr)	0.0181
PM2.5 Active Emissions (ton/yr)	0.0027
TOTAL PM Emissions (ton/yr)	**0.0361**
TOTAL PM10 Emissions (ton/yr)	**0.0181**
TOTAL PM2.5 Emissions (ton/yr)	**0.0027**

Control Efficiency of 98.5% utilized to account for wet material (due to the use of water to control dust) and material being pre-washed.

Material Handling & Stockpiles - Control Efficiency Table and Notes

Control Type	**Control Efficiency %**
Wet Material	50
Water Sprays	70
Chemical foam	80
Partial enclosure	50 - 85
Full enclosure	90
Enclosed by building	Up to 90
Washed Material	95
Washed material with water spray	98.5

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Cement Silo Emission Rates

How many cement silos? (Up to 4)	0
Would you like to use the manufactures filter efficiency?	Yes

Emission Factors - Cement Silo		
lb_{PM}/ton	lb_{PM10}/ton	$lb_{PM2.5}$/ton
0.730	0.470	0.080

Cement Silo	1
Hourly Loading Rate (ton/hr)	0
Annual Loading Rate (ton/yr)	0
Control Efficiency (%)	
PM (lb/hr)	0.0000
PM (ton/yr)	0.0000
PM10 (lb/hr)	0.0000
PM10 (ton/yr)	0.0000
PM2.5 (lb/hr)	0.0000
PM2.5 (ton/yr)	0.0000

NOT APPLICABLE - SILO VENTED TO CENTRAL DUST COLLECTOR

Note: BACT requires a mimimum control efficiency of at least 99%

Supplement Silo Emission Rates

How many supplement silos? (Up to 4)	0
Would you like to use the manufactures filter efficiency?	Yes

Emission Factors - Supplement Silo		
lb_{PM}/ton	lb_{PM10}/ton	$lb_{PM2.5}$/ton
3.14	1.10	0.19

Cement Supplement Silo	1
Hourly Loading Rate (ton/hr)	0
Annual Loading Rate (ton/yr)	0
Control Efficiency (%)	
PM (lb/hr)	0.0000
PM (ton/yr)	0.0000
PM10 (lb/hr)	0.0000
PM10 (ton/yr)	0.0000
PM2.5 (lb/hr)	0.0000
PM2.5 (ton/yr)	0.0000

NOT APPLICABLE - SILO VENTED TO CENTRAL DUST COLLECTOR

BACT requires a mimimum control efficiency of at least 99%

Cement/Supplement Weigh Hopper Emissions

Is there a cement/supplement weigh hopper? (Yes or No)	Yes
Is it equipped with its own dust collector? (Yes or No)	No
If the cement/supplement weigh hopper is vented to another facility, please specify:	Central Dust Collector

The cement/supplement weigh hopper must be vented to another facility equiped with a control device meeting current BACT.

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Truck Loading Emission Rates

What is the central baghouse efficiency? (%)	99.5
Use the Default Suction Shroud Capture Efficiency?	Yes

Default Capture Efficiency % = **97.3**

Central Baghouse Stack Emission Rates (EPN 8)

PM (lb/hr)	0.4601
PM (ton/yr)	0.6135
PM10 (lb/hr)	0.1276
PM10 (ton/yr)	0.1701
PM2.5 (lb/hr)	0.0218
PM2.5 (ton/yr)	0.0291

Truck Loading Fugitive Emission Rates (EPN 7)

PM (lb/hr)	2.554
PM (ton/yr)	3.405
PM10 (lb/hr)	0.708
PM10 (ton/yr)	0.944
PM2.5 (lb/hr)	0.121
PM2.5 (ton/yr)	0.161

Truck Loading Emission Factors		
lb_{PM}/ton	lb_{PM10}/ton	$lb_{PM2.5}$/ton
1.118	0.310	0.053

Material Maximum Throughput

	ton/hr	ton/yr
Aggregate	280	746,000
Sand	214	571,200
Cement	74	196,400
Supplement	11	29,200

Emission Summary

Emission Point Number(s)	Name	PM		PM10		PM2.5	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1 - 6	Material Handling	0.214	0.286	0.102	0.136	0.015	0.021
STK	Stockpiles	-.--	0.036	-.--	0.018	-.--	0.003
8	Central Baghouse Stack	0.460	0.614	0.128	0.170	0.022	0.029
7	Loading Fugitives	2.554	3.405	0.708	0.944	0.121	0.161

***The cement/supplement weigh hopper and silos are vented to the following facility:** **Central Dust Collector**

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References

The purpose of this section is to address the source of the Emission factors and capture efficiencies.
Emission Factors (EF) are in units are lb of pollutant per ton of material (see footnote "a" from AP-42 Ch. 11.12 Table 11.12-2) unless otherwise specified.

Concrete Composition

The default composition of concrete is from AP-42 Ch. 11.12 Concrete Batching.
Footnote "a" from AP-42 Ch. 11.12 Table 11.12-2

Material Handling - Sand and Aggregate Transfer Points

The emission factors are from AP-42 Ch. 11.12 Table 11.12-2
The PM2.5 emission factors are based on a ratio of the aerodynamic particle size multipliers (k multiplier) represented in Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4. The emission factors for PM and PM10 listed in Ch. 11.12 for material transfer points are derived using the Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4 equation. See AP-42 Ch. 11.12 Table 11.12-2 footnote "b".

Raw Material Stockpile Emissions

Emission Factors for the stockpiles have the following units: lb of pollutant per acre per day
The PM active and inactive emission factors are from "Cowherd, Jr., C. *Development Of Emission Factors For Fugitive Dust Sources*. EPA
PM10 is estimated as 50% of PM based on the "k" factors listed in Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4.
The PM2.5 factor is derived from a ratio listed in the Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Dust Emission Factors (Ch. 13.2) and "k" factors listed in Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4.

Material Silos

The emission factors are from AP-42 Ch. 11.12 Table 11.12-2
Emission Factor (EF) Units are lb of pollutant per ton of material
The emission factor for PM2.5 was assumed to be 17.1% of PM10. The value of 17.1% represents the percentage of PM10 that is PM2.5 according to the worst case loading emission factors for a truck mix operation. The PM2.5 factors listed in the AP-42 documents for truck and mixer loading are based on lbPM2.5 per ton cement and cement supplement (see Loading Emission Rates). The worst case percentage of PM2.5 in PM10 from the EPA loading factors is 17.1%.

Cement/Supplement Weigh Hopper Emissions

Emission factors are not quantified for this potential emission point.
Since an emission factor was not quantified there are three preferred approaches: assume the emissions negligible if it vented to another device meeting BACT; treat it as a material drop point and apply a control efficiency; and the outlet grain loading method.
The control efficiency method is used in conjunction with the Aggregate Handling and Storage Piles AP-42 Ch. 13.2.4 equation to estimate emissions. The same wind speed used to develop the aggregate drop point emission factors listed in AP-42 Ch. 11.12 Table 11.12-2 was used in the Ch.13 Equation. The lowest acceptable moisture content of 0.25% was assumed.

Loading Emission Rates

PM Emission Factor (EF) Units are lb of pollutant per ton of cement and cement supplement.
Emission factors (PM & PM10) are from AP-42 Ch. 11.12 Table 11.12-2.
The emission factors for PM2.5 are located in AP-42 Ch. 11.12 Background Document Table 18.6.

The default emissions captured by the suction shroud is the average listed in AP-42 Ch 11.12 Background Document Table 17.1 and Table 17.2.