

Tim Keller, Mayor

Environmental Health Department Air Quality Program Interoffice Memorandum



Danny Nevarez, Acting Director

| To: | Permit File | | | | |
|---|---|--|--|--|--|
| From: | Regan Eyerman, Environmental Health Scientist | | | | |
| Date: | November 28, 2018 | | | | |
| Subject: | Permit #0359-M3 and Certificate of Registration, Airs #NM/001/00092, Facility ID: FA0003737; Record ID: PR0009403 | | | | |
| Location: | Coreslab Structures (Albuquerque) Inc., 2800 2 nd St. Sw, Albuquerque, NM 87102, UTMN: 3880319 UTME: 349102 | | | | |
| Proposal: | Coreslab Structures (Albuquerque) Inc. has submitted a construction permit application to the Air Quality Program (Program) of the City of Albuquerque Environmental Health Department for modification to Construction Permit #359-M2-RV1, for their concrete batch plant. The Program received the application on June 6, 2018 and additional information on August 8, 2018. The owner of this facility is Coreslab Structures , 2800 2 nd Street SW, Albuquerque, NM 87102. This application file has been assigned Permit Application No. 359-M3 . | | | | |
| | The 240 yd ³ /hr concrete batch plant facility is located at 2800 2 nd St. SW in Albuquerque, New Mexico. The modification proposes to add a 300 gallon above-ground gasoline tank and two 12 ft ³ /hr sandblasters. The facility includes a concrete plant, which includes storage bins, conveyors, sand and gravel hopper, cement hopper, (2) mixers, (3) 100-ton capacity storage silos, and (6) natural gas fired boilers. | | | | |
| Applicability: | <i>Source Registration, 20.11.40.6 NMAC</i> Any source which emits more than 2000 lbs of any air contaminant per year must obtain a Registration Certificate from the Program. | | | | |
| | <i>Construction Permit, 20.11.41 NMAC</i> 20.11.41.2.C.(1) – Applicable as the applicant will be installing equipment which is subject to 20.11.64 NMAC. | | | | |
| | Permit Fees, 20.11.2 NMAC Permit application review fees: 20.11.2.19.A.(1) – Modification of existing permits for proposed sources with a proposed allowable emission rate equal to or greater than 1 ton per year and less than 5 tons per year: \$839.00. 20.11.2.18.D(3) – Review fee for 40 CFR 63 standards is \$1119.00. The Department received proof of payment of \$1958 on July 16, 2018. Note: CPI Adjusted fees are shown and went into effect January 1, 2018. | | | | |
| Air Quality Permit #0359-M3 Regulatory Review 1 | | | | | |

Annual emissions fee: 20.11.2.21.B – Sources shall pay a minimum annual emissions fee of \$207.00 flat or \$49.00 per ton, whichever is greater.

Note: CPI Adjusted fees are shown and went into effect January 1, 2018.

General Provisions, 20.11.1 NMAC

Emission Standards For Hazardous Air Pollutants For Stationary Sources, 20.11.64 NMAC 20.11.64.12 – **INCORPORATION OF FEDERAL STANDARDS CODIFIED AT 40 CFR PART 63:** Except as otherwise provided, the National Emissions Standards for Hazardous Air Pollutants for Source Categories including the General Provisions thereto, promulgated by the United States Environmental Protection Agency and codified at 40 CFR Part 63, as amended in the Federal Register through July 1, 2004, are hereby incorporated as Air Quality Control Board Regulations of the Albuquerque/Bernalillo County Air Quality Control Board.

 This facility is subject to the requirements of the Federal National Emissions Standard for Hazardous Air Pollutants (NESHAP) found in 40 CFR 63 Subpart CCCCCC – <u>National</u> <u>Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing</u> <u>Facilities</u> as well as the general requirements of 40 CFR 63 Subpart A – <u>General Provisions</u>. The permittee shall comply with the specific requirements of Subpart CCCCCC applicable to new gasoline dispensing facilities.

Visible Air Contaminants, 20.11.5 NMAC

20.11.5.12 -- No person shall cause or allow visible emissions from any source to exceed 20 percent opacity, 6 minute timed average.

Ambient Air Quality Standards, 20.11.8 NMAC

Stationary sources must demonstrate compliance with the Federal and State ambient concentration standards specified in 20.11.8.13 NMAC.

Fugitive Dust Control, 20.11.20 NMAC

20.11.20.12.A – No person shall allow fugitive dust, track out, or transported material from vehicle traffic areas and haul roads to be carried beyond the property line, right-of-way, easement or any other area under control of the person generating or allowing the fugitive dust. To mitigate fugitive dust, all inactive disturbed surface areas must be stabilized and maintained in stable condition by the owner, operator, or person responsible for maintenance of the disturbed surface. Additionally, as cited in the permit application, some sections of the haul roads shall be paved and maintained as specified by 20.11.20.23.A and B NMAC.

Administration, Enforcement, Inspection, 20.11.90 NMAC

20.11.90.13.A- The owner or operator of any stationary source of an air contaminant shall, upon notification by the Director, maintain records of the nature and amounts of emissions, to which an air quality control emission regulation applies, from the source and any other information as may be deemed necessary by the Director to determine whether the source is in compliance with applicable regulations.

20.11.90.13.E-The Director shall establish a periodic visual surveillance system to detect and investigate apparent violations of visible emission limitations and such complaints relating to apparent violations of the regulations as may occur.

20.11.90.14.A-Upon request of the Director, the person responsible for the emission of air contaminants for which limits are established by the 20.11 NMAC rules shall provide such facilities, utilities, and openings exclusive of instrument and sensing devices, as may be necessary for the proper determination of the nature, extent, quantity and degree of such air contaminants. Such facilities may be either temporary or permanent at the discretion of the person responsible for their provisions; and shall be suitable for determination consistent with emission limits established in these Parts.

Public Notice: Public notice for this permit was published on August 9, 2018 and ran through September 8, 2018. A request for a public information hearing was received by Ms. Esther Abeyta via email on September 1, 2018.

Compliance:

- The following permit conditions apply: The concrete batch plant (process equipment units #2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15) shall be restricted to operate 8 hours per day (7:00 am and 7:00 pm only), 6 days per week, and 12 months per year, not to exceed 2,496 annual hours of operation. This condition has been placed in the permit based on air dispersion modeling of the facility at this location to demonstrate compliance with the National Ambient Air Quality Standards and New Mexico Ambient Air Quality Standards for particulate matter;
- 2. Daily facility concrete production shall not exceed 250 cubic yards between 7:00 am and 7:00 pm. This condition has been placed in the permit based on air dispersion modeling of the facility at this location to demonstrate compliance with the National Ambient Air Quality Standards and New Mexico Ambient Air Quality Standards for particulate matter;
- 3. The sand and gravel process (process equipment units #2, 3, 4, 5, 6, 7, and 8) shall be restricted to a process rate of 46 tons per hour;
- 4. The cement and flyash silo offloading (process equipment units #11, 12, and 13) shall be restricted to a process rate of 6 tons per hour;
- 5. Process equipment units #16, 17, 18, and 21 each shall not exceed 2,190,000 cubic feet per year of annual natural gas usage per 12-month rolling period;
- 6. Process equipment unit #19 shall not exceed 30,660,000 cubic feet per year of annual natural gas usage per 12-month rolling period;
- 7. Process equipment unit #20 each shall not exceed 15,330,000 cubic feet per year of annual natural gas usage per 12-month rolling period;
- 8. Process equipment units #23 and 24 may not operate at the same time;
- 9. Gasoline throughput shall not exceed 4,800 gallons/year;
- 10. The fogging system at the sand/gravel hopper (process equipment unit #2) shall be installed, operated, and maintained at all times during material offloading to the hopper in order to control particulate matter emissions. This condition has been placed in the permit based on air dispersion modeling of the facility at this location to demonstrate compliance with the National Ambient Air Quality Standards and New Mexico Ambient Air Quality Standards for particulate matter;
- 11. The permittee shall ensure the applicable requirements of CFR 40 Part 63 Subpart CCCCCC §63.11116 are met as well as the Subpart A <u>General Provisions</u> of 40 CFR Part 63;
- 12. Emission units #2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21 and 23 shall not cause or allow visible air emissions that exceed 20 percent opacity for any six (6) minute timed average pursuant to 20.11.5.12 NMAC.
- 13. Emission units #1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22 and 23 shall not exceed the emission limits stated in the emissions table. Tons per year emission limits shall be based on a 12-month rolling period.
- 14. Record and maintain a daily log for hours of operations of the concrete batch plant. The log shall include the facility daily start time and the facility daily end time.
- 15. Record and maintain a daily log of the facility daily concrete production in cubic yards.
- 16. Record and maintain an hourly log for sand and gravel, cement, and flyash throughput for the entire facility.

Air Quality Permit #0359-M3 Regulatory Review 3

- 17. Record and maintain a monthly log for the natural gas usage for process equipment units #16, 17, 18, 19, 20 and 21.
- 18. Record and maintain a monthly log of the total monthly gasoline throughput.
- 19. The permittee shall notify the Department in writing of:
 - i. The annual (January 1 through December 31) hours of operation and the annual cubic yards of concrete produced for the concrete batch plant by March 15 every year;
 - ii. The annual (January 1 through December 31) throughput of sand, gravel, cement, and flyash for the concrete batch plant by March 15 every year;
 - iii. The annual (January 1 through December 31) natural gas usage for process equipment units #16, 17, 18, 19, 20 and 21 by March 15 every year; and,
 - iv. The annual (January 1 through December 31) throughput of gasoline by March 15 every year.
- 20. Compliance tests have not been imposed at this time.

Actions Taken:

- 6/6/2018 Received application
- 8/8/2018 Received additional information regarding new gasoline tank and application ruled administratively complete
- 9/1/2018 Request for PIH received by Esther Abeyta
- 9/10/2018 Received additional information regarding new sandblasters
- 9/24/2018 Permit extension request approved by Department Director
- 10/5/2018 Request for hearing approved by Department Director
- 11/27/2018 Proof of public notice sent by applicant

Annual Fees: Pursuant to Permit Fees, 20.11.2.21.B NMAC, annual fee of \$343 (7 tpy @ \$49.00 per ton)

| | Emission Unit Number | | NOx tpy | CO tpy | VOC tpy | SO ₂ tpy | TSP tpy |
|----------|--|----------------------------------|------------|-----------|------------|------------------------|------------|
| I | | | tpy | ւթյ | ւթյ | ւթյ | ւթյ |
| 1 | | Haul Road | | | | | 0.58 |
| 2 | | Sand/Gravel Hopper | | | | | 0.32 |
| 3 | | Incline Truss Conveyor | | | | | 0.08 |
| 4 | | Shuttle Conveyor | | | | | 0.08 |
| 5 | | Storage Bins Offloading | | | | | 0.32 |
| 6 | | Weigh Belt Conveyor | | | | | 0.17 |
| 7 | 7 Incline Truss Conveyor 8 Mixer Loading (w/ Baghouse) | | | | | | 0.17 |
| 8 | | | | | | | 0.03 |
| 9 | Mixer Loading (w/ | | | | | | 0.03 |
| 10 | Cement # 1 Silo (w/ | | | | | | 0.02 |
| 11 | | Cement # 2 Silo (w/ Baghouse) | | | | | 0.02 |
| 12 | $E_{1} = 1 C_{1} (\dots / D_{n-1}, \dots, \dots)$ | | | | | | 0.02 |
| 13 | 13 Cement Hopper Offloading | | | | | | 0.07 |
| 14 | 14 Boiler #1 | | 0.11 | 0.09 | 0.007 | 0.0007 | 0.008 |
| 15 | | Boiler #2 | 0.11 | 0.09 | 0.007 | 0.0007 | 0.008 |
| 16 | | Boiler #3 | 0.11 | 0.09 | 0.007 | 0.0007 | 0.008 |

Air Quality Permit #0359-M3 Regulatory Review

| 17 | Boiler #4 | 1.53 | 1.29 | 0.08 | 0.005 | 0.12 |
|----------------|--------------------|------|------|-------|--------|-------|
| 20 | Boiler #5 | 0.77 | 0.64 | 0.04 | 0.005 | 0.06 |
| 21 | Boiler #6 | 0.11 | 0.09 | 0.007 | 0.0007 | 0.008 |
| 22 | Aggregate Handling | | | | | 0.11 |
| 23 | Gasoline Tank | | | 0.03 | | |
| Total = 7 tons | | 3 | 2 | 0 | 0 | 2 |

Process Equipment Table

| Process Equipment Unit | Unit Description | Manufacturer | Model Number | Serial Number | Date of Mfg. Equipment | Rated Process Capacity | Unit Subject To NSPS |
|------------------------------|----------------------------------|---|-----------------|------------------|---------------------------|---------------------------|----------------------------|
| 1 | Haul Road | N/A | N/A | N/A | N/A | N/A | N/A |
| 2 | Sand/Gravel Hopper | Advanced Concrete Technologies, Inc. | Shop Built | Shop Built | July 1999 | 15 ton capacity | No |
| 3 | Incline Truss Conveyor Belt | Advanced Concrete Technologies, Inc. | 24" x 140' | Unknown | July 1999 | 325 tph | No |
| 4 | Shuttle Conveyor | Advanced Concrete Technologies, Inc. | 24" x 25' | Unknown | July 1999 | 325 tph | No |
| 5 | Storage Bins (6) | Advanced Concrete Technologies, Inc. | N/A | Unknown | July 1999 | 325 ton capacity | No |
| 6 | Weigh Belt Conveyor | Advanced Concrete Technologies, Inc. | N/A | Unknown | July 1999 | 1,000 tph | No |
| 7 | Incline Truss Conveyor Belt | Advanced Concrete Technologies, Inc. | 42" x 163' | Unknown | July 1999 | 1,000 tph | No |
| 8 | 2-Way Diverter Head | Advanced Concrete Technologies, Inc. | 2-Way | Unknown | July 1999 | 1,000 tph | No |
| 9 | Mixer # 1 With Dust Collector | Advanced Concrete Technologies, Inc. | 3750-PCS | N/A | July 1999 | 3.3 yd ³ | No |
| 10 | Mixer # 2 With Dust Collector | Advanced Concrete Technologies, Inc. | 3750-PCS | N/A | July 1999 | 3.3 yd ³ | No |
| 11 | Cement Silo With Baghouse | Advanced Concrete Technologies, Inc. | N/A | N/A | July 1999 | 100 ton capacity | No |
| 12 | Cement Silo With Baghouse | Advanced Concrete Technologies, Inc. | N/A | N/A | July 1999 | 100 ton capacity | No |
| 13 | Flyash Silo With Baghouse | Advanced Concrete Technologies, Inc. | N/A | N/A | July 1999 | 100 ton capacity | No |
| 14 | Cement Screw Conveyors (6) | Advanced Concrete Technologies, Inc. | ZF 219-73 | N/A | July 1999 | 60 tph each | No |
| 15 | Cement Hopper | Advanced Concrete Technologies, Inc. | N/A | N/A | July 1999 | 27 tph | No |

Air Quality Permit #0359-M3 Regulatory Review

| Process Equipment Unit | Unit Description | Manufacturer | Model Number | Serial Number | Date of Mfg. Equipment | Rated Process Capacity | Unit Subject To NSPS |
|------------------------------|-------------------------------|----------------------------|---------------------------|------------------|---------------------------|---------------------------|----------------------------|
| 16 | Boiler # 1 | Vapor Energy | 500 | 98-052 | 1998 | 500,000 Btu/hr | No |
| 17 | Boiler # 2 | Vapor Energy | 500 | 598E-84 | 1984 | 500,000 Btu/hr | No |
| 18 | Boiler # 3 | ABCO | 500 | 7978-100 | 1998 | 500,000 Btu/hr | No |
| 19 | Boiler # 4 | Kemco System | 70/4B | 20575 | 1998 | 7,000,000 Btu/hr | No |
| 20 | Boiler # 5 | Johnson Gas | SP 3500 | 7057EV | 1998 | 3,500,000 Btu/hr | No |
| 21 | Boiler # 6 | Vapor Energy | 500 | N8-417-E-85 | 1985 | 500,000 Btu/hr | No |
| 22 | Above-ground Gasoline Tank | N/A | N/A | N/A | 2018 | 300 gallons | No |
| 23 | Sandblaster | Clemco Industries Corp. | Clemco Classic Blaster | 453989 | 2008 | 12 ft ³ /hr | No |
| 24 | Sandblaster | Clemco Industries Corp. | Clemco Classic Blaster | M65E-1287 | 2017 | 12 ft ³ /hr | No |

Air Pollution Control Equipment

| Process Equipment # | Type of Control Equipment | Manufacturer | Model Number | Serial Number | Rated Process Rate | Control Efficiency |
|---------------------------|--------------------------------------|---|-----------------|------------------|-----------------------|-----------------------|
| 9 | Dust Collector | Advanced Concrete Technologies, Inc. | N/A | N/A | N/A | 98% |
| 10 | Dust Collector | Advanced Concrete Technologies, Inc. | N/A | N/A | N/A | 98% |
| 11 | Pulsejet Baghouse (14 Cartridges) | Advanced Concrete Technologies, Inc. | FL3J24 | N/A | 1,500 ACFM | 99% |
| 12 | Pulsejet Baghouse (14 Cartridges) | Advanced Concrete Technologies, Inc. | FL3J24 | N/A | 1,500 ACFM | 99% |
| 13 | Pulsejet Baghouse (14 Cartridges) | Advanced Concrete Technologies, Inc. | FL3J24 | N/A | 1,500 ACFM | 99% |
| 23 | Wetblast | Clemco Industries Corp. | N/A | N/A | N/A | 50-93% |
| 24 | Wetblast | Clemco Industries Corp. | N/A | N/A | N/A | 50-93% |

Table A Actual Emissions Above-ground Gasoline Tank

Actual VOC emissions for the gasoline tank have been calculated utilizing AP-42, Section 5.2, the permit application values for annual throughput of gasoline products and assuming vapor recovery is utilized in every transaction.

| Emissions Unit # | Annual Throughput (gallons) | Emission Rate Calculations | Total Emissions |
|------------------|-----------------------------------|--|--------------------|
| 23 | 4,800 | 4,800 gal/yr x 0.013 lbs/gal x1 ton /2000 lb | 0.03 tons/yr |

AP-42 does not provide a way to estimate emissions from sandblasting, but the operation is performed with a wetblast attachment.