



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

January 3, 2018

Mr. Gregg Bowler
CFO
Carolina Sunrock LLC - Prospect Hill Facility
200 Horizon Drive, Suite 100
Raleigh, NC 27615

Subject: Air Permit No. 10529R01
Carolina Sunrock LLC - Prospect Hill Facility
Prospect Hill, Caswell County, North Carolina
Permit Class: Synthetic Minor
Facility ID# 1700015

Dear Mr. Bowler:

In accordance with your completed application received December 27, 2017, we are forwarding herewith Permit No. 10529R01 to Carolina Sunrock LLC - Prospect Hill Facility, Prospect Hill, Caswell County, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances. Additionally, any emissions activities determined from your air permit application as meeting the exemption requirements contained in 15A NCAC 2Q .0102 have been listed for information purposes as an "ATTACHMENT" to the enclosed air permit. Please note the records retention requirements are contained in General Condition 2 of the General Conditions and Limitations.

If any parts, requirements, or limitations contained in this permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. Such a request will stay the effectiveness of the entire permit. This hearing request must be in the form of a written petition, conforming to G.S. 150B-23 of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Unless a request for a hearing is made pursuant to G.S. 150B-23, this air permit shall be final and binding.

You may request modification of your air permit through informal means pursuant to G.S. 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that the permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under G.S. 150B-23.

Unless exempted by a condition of this permit or the regulations, construction of new air pollution sources or air cleaning devices, or modifications to the sources or air cleaning devices described in this permit must be covered under a permit issued by the Division of Air Quality prior to construction. Failure to do so is a violation of G.S. 143-215.108 and may subject the Permittee to civil or criminal penalties as described in G.S. 143-215.114A and 143-215.114B.

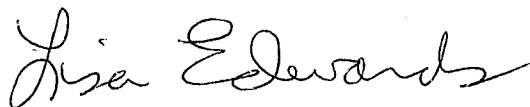
This permit shall be effective from January 3, 2018 until August 31, 2025, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

The Permittee is responsible for carefully reading the entire permit and evaluating the requirements of each permit stipulation. The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. The following changes have been made to the permit stipulations:

- **Permit Condition A.15, for the purpose of complying with 15A North Carolina Administrative Code (NCAC) 2D .1100 "Control of Toxic Air Pollutants," has been administratively amended per your request to remove references to UTM coordinates and replace with state plane coordinates for better accuracy.**

Should you have any questions concerning this matter, please contact Taylor Hartsfield at 336-776-9639.

Sincerely,



Lisa Edwards, P.E., Regional Supervisor
Division of Air Quality, NC DEQ

MTH
Enclosures

c: Winston-Salem Regional Office

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF AIR QUALITY

AIR PERMIT NO. 10529R01

Issue Date: January 3, 2018

Effective Date: January 3, 2018

Expiration Date: August 31, 2025

Replaces Permit: 10529R00

To construct and operate air emission source(s) and/or air cleaning device(s), and for the discharge of the associated air contaminants into the atmosphere in accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina (NCGS) as amended, and other applicable Laws, Rules and Regulations,

Carolina Sunrock LLC - Prospect Hill Facility
 4266 Wrenn Road
 Prospect Hill, Caswell County, North Carolina
 Permit Class: Synthetic Minor
 Facility ID# 1700015

(the Permittee) is hereby authorized to construct and operate the air emissions sources and/or air cleaning devices and appurtenances described below:

Emission Source ID	Emission Source Description	Control System ID	Control System Description
One drum mix, hot mix asphalt plant (250 tons per hour maximum rated capacity) consisting of:			
ES-HMA1 (NSPS I)	Propane/natural gas/No. 2 fuel oil/recycled No. 2 fuel oil/recycled No. 4 fuel oil-fired drum dryer/mixer (80 million Btu per hour maximum heat input)	CD-1	Bagfilter (7,778 square feet of filter area)
ES-S1, ES-S2	Two (2) hot mix asphalt storage silos (150 tons capacity, each)	N/A	N/A
ES-S3, ES-S4, ES-S5	Three (3) hot mix asphalt storage silos (200 tons capacity, each)	N/A	N/A
ES-LO1, ES-LO2	Two (2) truck loadout operations	N/A	N/A
ES-H1	Natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (1.2 million Btu per hour maximum heat input)	N/A	N/A
ES-H2	Natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (1.1 million Btu per hour maximum heat input)	N/A	N/A

Emission Source ID	Emission Source Description	Control System ID	Control System Description
One truck mix, concrete batch plant (120 cubic yards per hour maximum rated capacity) consisting of:			
ES-RM1	Cement storage silo (185 tons capacity)	CD-2	Bagfilter (1,433 square feet of filter area)
ES-RM2	Fly ash storage silo (135 tons capacity)		
ES-RM3	Cement/fly ash weigh batcher (5 tons capacity)		
ES-RM4	Truck loadout operation		
One RAP processing operation consisting of:			
ES-CRSH (NSPS OOO)	RAP impact crusher (65 tons per hour maximum rated capacity)	N/A	N/A
ES-CNV (NSPS OOO)	RAP 36" inclined conveyor	N/A	N/A
ES-SCN (NSPS OOO)	RAP 8' x 20' double deck screen	N/A	N/A

in accordance with the completed application 1700015.18A received December 27, 2017 including any plans, specifications, previous applications, and other supporting data, all of which are filed with the Department of Environmental Quality, Division of Air Quality (DAQ) and are incorporated as part of this permit.

This permit is subject to the following specified conditions and limitations including any TESTING, REPORTING, OR MONITORING REQUIREMENTS:

A. SPECIFIC CONDITIONS AND LIMITATIONS

- Any air emission sources or control devices authorized to construct and operate above must be operated and maintained in accordance with the provisions contained herein. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A North Carolina Administrative Code (NCAC), Subchapter 2D .0202, 2D .0503, 2D .0506, 2D .0510, 2D .0515, 2D .0516, 2D .0521, 2D .0524 (40 CFR 60, Subparts I and OOO), 2D .0535, 2D .0540, 2D .0605, 2D .0611, 2D .1100, 2D .1806, 2Q .0304, 2Q .0309, 2Q .0315, 2Q .0317 (PSD and 2Q .0700 Avoidance) and 2Q .0711.
- PERMIT RENEWAL AND EMISSION INVENTORY REQUIREMENT - The Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 2Q .0304(d) and (f). Pursuant to 15A NCAC 2Q .0203(i), no permit application fee is required for renewal of an existing air permit (without a modification request). The renewal request (with AA application form) should be submitted to the Regional Supervisor, DAQ. Also, at least 90 days prior to the expiration date of this permit, the Permittee shall submit the air pollution emission inventory report (with Certification Sheet) in accordance with 15A NCAC 2D .0202, pursuant to N.C. General Statute 143 215.65. The report shall be submitted to the Regional Supervisor, DAQ and shall document air pollutants emitted for the 2024 calendar year.

3. PARTICULATE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0503 "Particulates from Fuel Burning Indirect Heat Exchangers," particulate matter emissions from the fuel burning indirect heat exchangers shall not exceed the allowable emission rates listed below:

Source	Emission Limit (lbs/million Btu)
Natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (1.2 million Btu per hour maximum heat input) (ES-H1)	0.6
Natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (1.1 million Btu per hour maximum heat input) (ES-H2)	0.6

4. PARTICULATE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0506 "Particulates from Hot Mix Asphalt Plants,"

- a. Particulate matter emissions resulting from the operation of a hot mix asphalt plant shall not exceed allowable emission rates. The allowable emission rates are, as defined in 15A NCAC 2D .0506, a function of the process weight rate and shall be determined by the following equation (calculated to three significant figures), where P is the process throughput rate in tons per hour (tons/hr) and E is the allowable emission rate in pounds per hour (lbs/hr).

$$E = 4.9445 * (P)^{0.4376} \quad \text{for } P < 300 \text{ tons/hr, or}$$

$$E = 60 \text{ lbs/hr} \quad \text{for } P \geq 300 \text{ tons/hr}$$

- b. Visible emissions from stacks or vents at a hot mix asphalt plant shall be less than 20 percent opacity when averaged over a six-minute period.
- c. Fugitive dust emissions shall be controlled as required by 15A NCAC 2D .0540 "Particulates From Fugitive Dust Emission Sources."
- d. Fugitive emissions for sources at a hot mix asphalt plant not covered elsewhere under this Rule shall not exceed 20 percent opacity averaged over six minutes.
5. PARTICULATE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0510 "Particulates from Sand, Gravel, or Crushed Stone Operations," the following requirements apply:

- a. The Permittee of a sand, gravel, recycled asphalt pavement (RAP), or crushed stone operation shall not cause, allow, or permit any material to be produced, handled, transported, or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM₁₀ and total suspended particulates.

- b. Fugitive dust emissions from sand, gravel, RAP, or crushed stone operations shall be controlled by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources."
- c. The Permittee of any sand, gravel, RAP, or crushed stone operation shall control process-generated emissions:
 - i. From crushers with wet suppression (excluding RAP crushers); and
 - ii. From conveyors, screens, and transfer points

such that the applicable opacity standards in 15A NCAC 2D .0521 "Control of Visible Emissions," or 15A NCAC 2D .0524 "New Source Performance standards" are not exceeded.

6. PARTICULATE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0515 "Particulates from Miscellaneous Industrial Processes," particulate matter emissions from the emission sources shall not exceed the allowable emission rates. The allowable emission rates are, as defined in 15A NCAC 2D .0515, a function of the process weight rate and shall be determined by the following equation(s), where P is the process throughput rate in tons per hour (tons/hr) and E is the allowable emission rate in pounds per hour (lbs/hr).

$$E = 4.10 * (P)^{0.67} \quad \text{for } P \leq 30 \text{ tons/hr, or}$$

$$E = 55 * (P)^{0.11} - 40 \quad \text{for } P > 30 \text{ tons/hr}$$

7. SULFUR DIOXIDE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0516 "Sulfur Dioxide Emissions from Combustion Sources," sulfur dioxide emissions from the combustion sources shall not exceed 2.3 pounds per million Btu heat input.
8. VISIBLE EMISSIONS CONTROL REQUIREMENT - As required by 15A NCAC 2D .0521 "Control of Visible Emissions," visible emissions from the emission sources, manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period, except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. However, sources which must comply with 15A NCAC 2D .0524 "New Source Performance Standards" or .1110 "National Emission Standards for Hazardous Air Pollutants" must comply with applicable visible emissions requirements contained therein.
9. 15A NCAC 2D .0524 "NEW SOURCE PERFORMANCE STANDARDS" - For the propane/natural gas/No. 2 fuel oil/recycled No. 2 fuel oil/recycled No. 4 fuel oil-fired drum dryer/mixer (80 million Btu per hour maximum heat input) (ID No. ES-HMA1), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart I, including Subpart A "General Provisions."

- a. NSPS Reporting Requirements - In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
 - i. The date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected source is commenced, postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced sources which are purchased in completed form;
 - ii. The actual date of initial start-up of an affected source, postmarked within 15 days after such date.
 - b. NSPS Emissions Limitations - As required by 15A NCAC 2D .0524, the Permittee shall not discharge or cause the discharge into the atmosphere from any affected source any gases which:
 - i. Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf); or
 - ii. Exhibit 20 percent opacity, or greater.
 - c. NSPS Performance Testing - As required by 15A NCAC 2D .0524, the following performance tests shall be conducted:
 - i. The Permittee shall conduct the testing required at Permit Condition A.13.
10. 15A NCAC 2D .0524 "NEW SOURCE PERFORMANCE STANDARDS" - For the nonmetallic mineral processing equipment (wet material processing operations, as defined in 60.671, are not subject to this Subpart) including RAP impact crusher (65 tons per hour maximum rated capacity) (ID No. ES-CRSH), RAP 36" inclined conveyor (ID No. ES-CNV), and RAP 8' x 20' double deck screen (ID No. ES-SCN), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart OOO, including Subpart A "General Provisions."
- a. NSPS Reporting Requirements - In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
 - i. The actual date of initial start-up of an affected facility, postmarked within 15 days after such date;
 - b. NSPS Emissions Limitations - As required by 15A NCAC 2D .0524 [40 CFR 60.672], the following permit limits shall not be exceeded:
 - i. For affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 (wet material processing operations, as defined in 60.671, and Like-For-Like-Replacement, as allowed in 60.670(d), are not subject to this Subpart):

Affected Facility	Pollutant	Emission Limit
Crushers	Visible Emissions	15% opacity
Fugitive emissions from conveyor belts, screening operations, and other affected facilities	Visible Emissions	10% opacity

- ii. For affected facilities that commenced construction, modification, or reconstruction on or after April 22, 2008 (wet material processing operations, as defined in 60.671, and Like-For-Like-Replacement, as allowed in 60.670(d), are not subject to this Subpart):

Affected Facility	Pollutant	Emission Limit
Crushers	Visible Emissions	12% opacity
Fugitive emissions from conveyor belts, screening operations, and other affected facilities	Visible Emissions	7% opacity

- c. NSPS Monitoring Requirements - As required by 15A NCAC 2D .0524 [40 CFR 60.674], the following monitoring shall be conducted:
- i. For any affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008 that uses wet suppression to control emissions (Like-For-Like-Replacement, as allowed in 60.670(d), is not subject to this Subpart), the Permittee shall:
 - A. Perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression systems.
 - B. Initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles.
- d. NSPS Recordkeeping Requirements - As required by 15A NCAC 2D .0524 [40 CFR 60.675], the following recordkeeping requirements shall be conducted:
- i. Each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, shall be recorded in a logbook (in written or electronic form).
 - ii. The logbooks (in written or electronic form) shall be maintained on-site and made available to DAQ personnel upon request.
- e. NSPS Performance Testing - As required by 15A NCAC 2D .0524, the following performance tests shall be conducted:

- i. The Permittee shall conduct the testing required at Permit Condition A.13.
 - f. Like-For-Like-Replacement - As provided in 40 CFR 60.670(d), when an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of 40 CFR 60.672, 60.674, and 60.675 except as provided for in 60.670(d)(3). The Permittee shall comply with the reporting requirements of 40 CFR 60.676(a). Equipment covered under 40 CFR 60.670 shall comply the requirements of 15A NCAC 2D .0521.
11. NOTIFICATION REQUIREMENT - As required by 15A NCAC 2D .0535, the Permittee of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:
 - a. Notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:
 - i. the name and location of the facility,
 - ii. the nature and cause of the malfunction or breakdown,
 - iii. the time when the malfunction or breakdown is first observed,
 - iv. the expected duration, and
 - v. an estimated rate of emissions.
 - b. Notify the Director or his designee immediately when the corrective measures have been accomplished.

This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.

12. FUGITIVE DUST CONTROL REQUIREMENT - As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints are received or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f).

"Fugitive dust emissions" means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

13. **TESTING REQUIREMENT** - Under the provisions of North Carolina General Statute 143-215.108 and in accordance with 15A NCAC 2D .0605, the Permittee shall demonstrate compliance with the emission limit(s) by testing the emission source(s) for the specified pollutant(s) as follows:

Affected Source(s)	Pollutant	Target Parameter	Test Method
Propane/natural gas/No. 2 fuel oil/recycled No. 2 fuel oil/recycled No. 4 fuel oil-fired drum dryer/mixer (80 million Btu per hour maximum heat input) (ES-HMA1)	Filterable Particulate Matter	As per 15A NCAC 2D .0506 and 2D .0524	Method 5
	Condensable Particulate Matter		Method 202
Crushers	Visible Emissions	20% Opacity	Method 9
Fugitive emissions from conveyor belts, screening operations, and other affected facilities		As per 15A NCAC 2D .0524	

- a. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR 60, Appendix A;
- b. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and reporting requirements;
- c. The Permittee shall arrange for air emission testing protocols to be provided to the DAQ prior to testing. Testing protocols are not required to be pre-approved by the DAQ prior to testing. The DAQ shall review testing protocols for pre-approval prior to testing if requested by the Permittee at least 45 days before conducting the test.
- d. To afford the Regional Supervisor, DAQ, the opportunity to have an observer present, the Permittee shall PROVIDE the Regional Office, in WRITING, at least 15 days notice (or 7 days notice, if only Method 9 is involved) of any required performance test(s).
- e. Within 60 days after achieving the maximum production rate at which the affected source(s) will be operated, but not later than 180 days after the initial start-up of the affected source(s), the Permittee shall conduct the required performance test(s) and submit two copies of a written report of the test(s) to the Regional Supervisor, DAQ.
- f. The Permittee shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
- g. This permit may be revoked, with proper notice to the Permittee, or enforcement procedures initiated, if the results of the test(s) indicate that the facility does not meet applicable limitations.

- h. The Permittee shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate, or at a lesser rate if specified by the Director or his delegate.
- i. All associated testing costs are the responsibility of the Permittee.
- j. When determining compliance with the visible emissions limit from fugitive emissions from crushers, conveyor belts, screening operations, and other affected facilities (as described in 60.672(b) or 60.672(e)(1)), the duration of the Method 9 test must be 30 minutes (five 6-minute averages). Compliance with the fugitive visible emissions limits must be based on the average of the five 6-minute averages.
- k. For any affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008 that does not use wet suppression to control emissions, the Permittee shall repeat the performance tests within five (5) years of the previous test.
 - i. If an affected facility relies on water carryover from upstream wet suppression to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement provided that the Permittee conducts periodic inspections of the upstream wet suppression that is responsible for controlling fugitive emissions from the affected facility and designates which upstream wet suppression systems will be periodically inspected at the time of the initial performance test.

14. FABRIC FILTER REQUIREMENTS including cartridge filters, baghouses, and other dry filter particulate collection devices - As required by 15A NCAC 2D .0611, particulate matter emissions shall be controlled as described in the permitted equipment list.

- a. Inspection and Maintenance Requirements - To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall perform, at a minimum, an annual (for each 12-month period following the initial inspection) internal inspection of each bagfilter system. In addition, the Permittee shall perform periodic inspections and maintenance as recommended by the equipment manufacturer.
- b. Recordkeeping Requirements - The results of all inspections and any variance from manufacturer's recommendations or from those given in this permit (when applicable) shall be investigated with corrections made and dates of actions recorded in a logbook. Records of all maintenance activities shall be recorded in the logbook. The logbook (in written or electronic format) shall be kept on-site and made available to DAQ personnel upon request.

15. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT - Pursuant to 15A NCAC 2D .1100 "Control of Toxic Air Pollutants," and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Affected Source(s)	Toxic Air Pollutant	Emission Limit
Propane/natural gas/No. 2 fuel oil/recycled No. 2 fuel oil/recycled No. 4 fuel oil-fired drum dryer/mixer (80 million Btu per hour maximum heat input) (ES-HMA1) controlled by bagfilter (CD-1)	Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC (7778394))	4.91 lbs/yr
	Benzene (71-43-2)	3,470 lbs/yr
	Formaldehyde (50-00-0)	3.19 lbs/hr
	Mercury, vapor (Component of HGC) (7439-97-6)	0.0624 lbs/24-hrs
	Nickel metal (Component of NIC) (7440-02-0)	1.51 lbs/24-hrs
Natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (1.2 million Btu per hour maximum heat input) (ES-H1)	Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC (7778394))	0.168 lbs/yr
	Benzene (71-43-2)	0.0861 lbs/yr
	Formaldehyde (50-00-0)	0.00113 lbs/hr
	Mercury, vapor (Component of HGC) (7439-97-6)	0.000346 lbs/24-hrs
	Nickel metal (Component of NIC) (7440-02-0)	0.000346 lbs/24-hrs
Natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (1.1 million Btu per hour maximum heat input) (ES-H2)	Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC (7778394))	0.154 lbs/yr
	Benzene (71-43-2)	0.0789 lbs/yr
	Formaldehyde (50-00-0)	0.00104 lbs/hr
Natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (1.1 million Btu per hour maximum heat input) (ES-H2)	Mercury, vapor (Component of HGC) (7439-97-6)	0.000317 lbs/24-hrs
	Nickel metal (Component of NIC) (7440-02-0)	0.000317 lbs/24-hrs
Five (5) hot mix asphalt storage silos (ES-S1 through ES-S5)	Benzene (71-43-2)	5.12 lbs/yr, each
	Formaldehyde (50-00-0)	0.0210 lbs/hr, each
Two (2) truck loadout operations (ES-LO1 and ES-LO2)	Benzene (71-43-2)	2.84 lbs/yr, each
	Formaldehyde (50-00-0)	0.000732 lbs/hr, each
One truck mix, concrete batch plant (ES-RM1 through ES-RM4) controlled by bagfilter (CD-2)	Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC (7778394))	2.31 lbs/yr
	Nickel metal (Component of NIC) (7440-02-0)	0.0185 lbs/24-hrs

- a. Restrictions - To ensure compliance with the above limits, the following restrictions shall apply:
- i. Hot mix asphalt production shall not exceed 1,488,581 tons per calendar year.
 - ii. The height of the bagfilter (ID No. CD-1) stack shall not be less than 30 feet and shall be located using the State Plane Coordinate System of 1983 (SPCS83), at North Carolina (NC) Zone 3200 1949534.2294 US Survey Feet Easting (ftUSE), 911524.2842 US Survey Feet Northing (ftUSN).
 - iii. The height of the bagfilter (ID No. CD-2) stack shall not be less than 35 feet and shall be located at SPCS83 NC Zone 3200 1949688.0981 ftUSE, 911577.4571 ftUSN.
 - iv. The height of the natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (ID No. ES-H1) stack shall not be less than 9 feet and shall be located at SPCS83 NC Zone 3200 1949519.9903 ftUSE, 911470.5899 ftUSN.
 - v. The height of the natural gas/No. 2 fuel oil-fired liquid asphalt cement heater (ID No. ES-H2) stack shall not be less than 15 feet and shall be located at SPCS83 NC Zone 3200 1949581.5974 ftUSE, 911489.8935 ftUSN.
 - vi. The heights of the two (2) hot mix asphalt storage silo (ID No. ES-S1 and ES-S2) release points shall not be less than 65 feet. The heights of the three (3) hot mix asphalt storage silo (ID No. ES-S3, ES-S4 and ES-S5) release points shall not be less than 60 feet.
 - vii. The heights of the two (2) truck loadout operation (ID No. ES-LO1 and ES-LO2) release points shall not be less than 12 feet.
 - viii. If any actual (as-built) values (coordinates) differ from those submitted by the Permittee that was used in the modeling analysis submitted as a part of permit application No. 1700015.17A, the Permittee shall notify the DAQ and provide the new values. The DAQ will re-evaluate the validity of the original modeling analysis and notify the Permittee in writing whether additional modeling is required. The Permittee shall not operate the affected sources until written approval from the DAQ is received.
- b. Reporting Requirements - For compliance purposes, within 30 days after each calendar year, regardless of the actual emissions, the following shall be reported to the Regional Supervisor, DAQ:
- i. The total amount [tons] of hot mix asphalt produced for the previous calendar year.

- c. Recordkeeping Requirements - The following recordkeeping requirements apply:
- i. The Permittee shall record in a log book (in written or electronic format) the monthly quantity [tons] of hot mix asphalt produced.
 - ii. The log book shall be made available to DAQ personnel upon request.
 - iii. All records shall be kept on site for a minimum of three years.

16. CONTROL AND PROHIBITION OF ODOROUS EMISSIONS - As required by 15A NCAC 2D .1806 "Control and Prohibition of Odorous Emissions" the Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.
17. ZONING SPECIFIC CONDITION - In accordance with 15A NCAC 2Q .0304, prior to construction or operation of the facility under this permit, the Permittee shall comply with all lawfully adopted local ordinances that apply to the facility at the time of construction or operation of the facility. The local zoning authority shall have the responsibility of enforcing all lawfully adopted local zoning or subdivision ordinances.
18. PERMIT REOPENING - In accordance with N.C.G.S. 143-215.108(c), upon the Director becoming aware of any credible air emissions data not previously considered by the DAQ during the application review process, the Director may require the Permittee to submit additional information including, but not limited to, emissions estimates and air dispersion modeling. Based on this information, the Director may modify and reissue the permit with additional emission controls and/or additional operational restrictions necessary to demonstrate compliance with any applicable regulation.
19. LIMITATION TO AVOID 15A NCAC 2Q .0501 - Pursuant to 15A NCAC 2Q .0315 "Synthetic Minor Facilities," to avoid the applicability of 15A NCAC 2Q .0501 "Purpose of Section and Requirement for a Permit," as requested by the Permittee, facility-wide emissions shall be less than the following:

Pollutant	Emission Limit (Tons per consecutive 12-month period)
SO ₂	100
CO	100

- a. Operations Restrictions - To ensure emissions do not exceed the limitations above, the following restrictions shall apply:
- i. The amount of asphalt produced shall be less than 1,488,581 tons per consecutive 12-month period.
 - ii. The sulfur content of the recycled No. 4 fuel oil shall be limited to 0.5% sulfur by weight.

b. Recordkeeping Requirements

i. The Permittee shall record monthly and total annually the following:

A. The amount [tons] of asphalt produced.

ii. Fuel supplier certification shall be kept on-site and made available to DAQ personnel upon request.

c. Reporting Requirements - Within 30 days after each calendar year, regardless of the actual emissions, the Permittee shall submit the following:

i. Emissions and/or operational data listed below. The data should include monthly and 12 month totals for the previous 12-month period.

A. The amount [tons] of asphalt produced.

B. The facility-wide SO₂ and CO emissions [tons].

ii. A summary of the fuel certification records for the previous 12 months.

20. LIMITATION TO AVOID 15A NCAC 2D .0530 "PREVENTION OF SIGNIFICANT DETERIORATION" - In accordance with 15A NCAC 2Q .0317, to comply with this permit and avoid the applicability of 15A NCAC 2D .0530 "Prevention of Significant Deterioration," as requested by the Permittee, emissions shall be limited as follows:

Affected Source(s)	Pollutant	Emission Limit (Tons Per Consecutive 12-month Period)
Facility Wide	SO ₂	250

21. VENDOR SUPPLIED RECYCLED No(s). 2 and 4 FUEL OIL REQUIREMENTS - In accordance with Rule 2Q .0317, the Permittee is avoiding the applicability of Rule 2Q .0700 by using recycled fuels which are equivalent to their virgin counterparts. The Permittee is allowed to use the recycled fuel oil(s) as follows:

a. Specifications - The recycled fuel oil(s) shall be equivalent to unadulterated fossil fuel by meeting the following criteria:

Constituent/Property	Allowable Level
Arsenic	1.0 ppm maximum
Cadmium	2.0 ppm maximum
Chromium	5.0 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	
No. 2	100°F minimum
No. 4	130°F minimum
Sulfur	
No. 2	0.5% maximum (by weight)
No. 4	2.0% maximum (by weight)
Ash	1.0% maximum

- b. The Permittee is responsible for ensuring that the recycled fuel oil(s), as received at the site, meet(s) the approved criteria for unadulterated fuel. The Permittee is held responsible for any discrepancies discovered by DAQ as a result of any sampling and analysis of the fuel oil(s).
- c. Recordkeeping Requirements - The Permittee shall maintain at the facility for a minimum of three years, and shall make available to representatives of the DAQ upon request, accurate records of the following:
- i. The actual amount of recycled fuel oil(s) delivered to, and combusted at the facility on an annual basis.
 - ii. Each load of recycled fuel oil received shall include the following:
 - A. A delivery manifest document clearly showing the shipment content and amount, its place and date of loading, and place and date of destination.
 - B. A batch specific analytical report that contains an analysis for all constituents / properties listed above. Analytical results of the samples representative of the recycled oil shipment from the vendor shall be no more than one year old when received.
 - C. Batch signature information consisting of the following: a batch number, tank identification with batch volume of recycled oil, date and time the batch completed treatment, and volume(s) delivered.
 - D. A certification indicating that the recycled fuel oil does not contain detectable PCBs (<2ppm).
- d. The DAQ reserves the right to require additional testing and/or monitoring of the recycled fuel oil(s) on an annual basis or without notice.

22. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT** - Pursuant to 15A NCAC 2Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions, where one or more emission release points are obstructed or non-vertically oriented, do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711(a). The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 2Q .0711(a).

- a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- b. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".
- c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Benzo(a)pyrene (Component of 83329/POMTV & 56553/7PAH) (50-32-8)	2.2			
Beryllium Metal (unreacted) (Component of BEC) (7440-41-7)	0.28			
CFC-11 (Trichlorofluoromethane) (75-69-4)			140	
Cadmium Metal, elemental, unreacted (Component of CDC) (7440-43-9)	0.37			
Carbon disulfide (75-15-0)		3.9		
Chromium (VI) Soluble Chromate Compounds (Component of CRC) (SolCR6)		0.013		
Fluorides (sum of all fluoride compounds as mass of F ion) (16984-48-8)		0.34	0.064	
Hexane, n- (110-54-3)		23		
Hydrogen sulfide (7783-06-4)		1.7		
MEK (methyl ethyl ketone, 2-butanone) (78-93-3)		78		22.4
Manganese & compounds (MNC)		0.63		
Methyl chloroform (71-55-6)		250		64
Methylene chloride (75-09-2)	1600		0.39	

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Perchloroethylene (tetrachloroethylene) (127-18-4)	13000			
Phenol (108-95-2)			0.24	
Styrene (100-42-5)			2.7	
Toluene (108-88-3)		98		14.4
Xylene (mixed isomers) (1330-20-7)		57		16.4

B. GENERAL CONDITIONS AND LIMITATIONS

1. In accordance with G.S. 143-215.108(c)(1), TWO COPIES OF ALL DOCUMENTS, REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, REQUESTS FOR RENEWAL, AND ANY OTHER INFORMATION REQUIRED BY THIS PERMIT shall be submitted to the:

Regional Supervisor
North Carolina Division of Air Quality
Winston-Salem Regional Office
450 West Hanes Mill Road
Suite 300
Winston-Salem, NC 27105
336-776-9800

For identification purposes, each submittal should include the facility name as listed on the permit, the facility identification number, and the permit number.

2. RECORDS RETENTION REQUIREMENT - In accordance with 15A NCAC 2D .0605, any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years, unless another time period is otherwise specified.
3. ANNUAL FEE PAYMENT - Pursuant to 15A NCAC 2Q .0203(a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.
4. EQUIPMENT RELOCATION - In accordance with 15A NCAC 2Q .0301, a new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.
5. REPORTING REQUIREMENT - In accordance with 15A NCAC 2Q .0309, any of the following that would result in previously unpermitted, new, or increased emissions must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application regarding facility emissions;
- b. changes that modify equipment or processes of existing permitted facilities; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

6. In accordance with 15A NCAC 2Q .0309, this permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. In accordance with G.S. 143-215.108(c)(1), the facility shall be properly operated and maintained at all times in a manner that will affect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air cleaning device(s) and appurtenances.
7. In accordance with G.S. 143-215.108(c)(1), this permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
8. In accordance with G.S. 143-215.108(c)(1), this issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
9. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.
10. In accordance with 15A NCAC 2D .0605, reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
11. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
12. Pursuant to North Carolina General Statute 143-215.3(a)(2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

13. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.
14. PERMIT RETENTION REQUIREMENT - In accordance with 15A NCAC 2Q .0110, the Permittee shall retain a current copy of the air permit at the site. The Permittee must make available to personnel of the DAQ, upon request, the current copy of the air permit for the site.
15. CLEAN AIR ACT SECTION 112(r) REQUIREMENTS - Pursuant to 15A NCAC 2D .2100 "Risk Management Program," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan with the USEPA in accordance with 40 CFR Part 68.
16. PREVENTION OF ACCIDENTAL RELEASES - GENERAL DUTY - Pursuant to Title I Part A Section 112(r)(1) of the Clean Air Act "Hazardous Air Pollutants - Prevention of Accidental Releases - Purpose and General Duty," although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release. **This condition is federally-enforceable only.**
17. GENERAL EMISSIONS TESTING AND REPORTING REQUIREMENTS - If emissions testing is required by this permit, or the DAQ, or if the Permittee submits emissions testing to the DAQ in support of a permit application or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow all DAQ procedures including protocol approval, regional notification, report submittal, and test results approval.

Permit issued this the 3rd of January, 2018.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



Lisa Edwards, P.E.

Regional Supervisor

By Authority of the Environmental Management Commission

Air Permit No. 10529R01

Insignificant / Exempt Activities

Source ID	Source Description	Exemption Regulation	Source of TAPs?	Source of Title V Pollutants?
IES-1	Above ground storage tank containing fuel oil (20,000 gallons capacity)	2Q .0102 (g)(4)	Yes	Yes
IES-2, IES-3	Two (2) above ground storage tanks containing liquid asphalt cement (30,000 gallons capacity, each)	2Q .0102 (g)(14)(B)	Yes	Yes

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1. Because an activity is exempted from being required to have a permit or permit modification does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
 2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" or 2Q .0711 "Emission Rates Requiring a Permit."
 3. Sample permit conditions showing the regulatory requirements for exempt sources subject to NESHAP, NSPS, and NCAC rules may be found here: <http://www.ncair.org/permits/insig/>

