

STATE OF MISSOURI

PERMIT BOOK



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 012014-001

Project Number: 2013-07-025
Installation ID: 095-2473

Parent Company: Ideker, Inc.

Parent Company Address: P.O. Box 7140, St. Joseph, MO 64507

Installation Name: Ideker, Inc.

Installation Address: 5600 E. 150 Highway, Kansas City, MO 64147

Location Information: Jackson County, S26, T47N, R33W

Application for Authority to Construct was made for:

The conversion of a portable asphalt plant (PORT-0562) to a stationary plant. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JAN 2 2014

EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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SITE SPECIFIC SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

1. **Best Management Practices Requirement**
Ideker, Inc. shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing Best Management Practices as defined in Attachment AA.
2. **Ambient Air Impact Limitation**
 - A. Ideker, Inc. shall ensure that the ambient impact of PM₁₀ at or beyond the nearest property boundary does not exceed the National Ambient Air Quality Standard (NAAQS) of 150 µg/m³ in any 24-hour period.
 - B. Ideker, Inc. shall demonstrate compliance with Special Condition 2.A. using Attachment A or other equivalent forms, including electronic forms. The equivalent forms must include the same information as required in Attachment A, The calculations and the ambient impact factors used shall be the same as in Attachment A.
3. **Annual Emission Limit**
 - A. Ideker, Inc. shall emit less than 15.0 tons of PM₁₀ in any 12-month period from the entire installation.
 - B. Ideker, Inc. shall demonstrate compliance with Special Condition 3.A. using Attachment B or equivalent forms, including electronic forms. The equivalent forms must include the same information as required in Attachment B. The calculation method and the composite emission factors used shall be the same as in Attachment B.
4. **Moisture Content Testing Requirement**
 - A. Ideker, Inc. shall verify that the moisture content of the processed rock is greater than or equal to 1.5 percent (%) by weight through testing.
 - B. Tests shall be conducted according to the method prescribed by the American Society for Testing Materials (ASTM) D-2216, C-566 or another method approved by the Director.
 - C. The initial test shall be conducted no later than 45 days after the start of operation. A second test shall be performed the calendar year following the initial test during the months of July or August.

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SITE SPECIFIC SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- D. New rounds of tests shall be performed whenever the installation changes the source (e.g. quarry) for the aggregates. The initial test shall be conducted no later than 45 days after switching to the new source and the second test shall be performed the calendar year following the initial test during the months of July or August.
 - E. Written analytical reports of the tests shall be filed on-site or at the Ideker, Inc. main office within 30 days of completion of the required tests. The report shall include the raw data and moisture content of each sample, the test date and the original signature of the individual performing the test.
 - F. If the moisture content of either of the two tests required in Special Conditions 4.C. and 4.D. is less than the moisture content required in Special Condition 4.A, another test must be performed within 15 days of the noncompliant test. If the results of that test also exceed the limit, Ideker, Inc. shall either:
 - 1) Apply for a new permit to account for the revised information, or
 - 2) Submit a plan for the installation of wet spray devices to the Compliance/Enforcement Section of the Air Pollution Control Program within ten days of the last noncompliant test. The wet spray devices shall be installed and operational within 40 days of the last noncompliant test.
 - G. In lieu of testing, Ideker, Inc. may obtain test results that demonstrate compliance with the moisture content in Special Condition 4.A from the supplier(s) of the aggregate. The results shall be filed on-site or at the Ideker, Inc. main office.
5. Control Device Requirement-Baghouse
- A. Ideker, Inc. shall control emissions from the drum dryer (EP-#) using a baghouse as specified in the permit application.
 - B. The baghouse shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources employees may easily observe them.
 - C. Replacement filters for the baghouse shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

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SITE SPECIFIC SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- D. Ideker, Inc. shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- E. Ideker, Inc. shall maintain a copy of the baghouse manufacturer's performance warranty on site.
- F. Ideker, Inc. shall maintain an operating and maintenance log for the baghouse which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
- 6. **Minimum Distance to Property Boundary Requirement**
The primary emission points, which are the drum dryer (EP-04) and the RAP crusher (EP-16), shall be located at least 285 feet from the nearest property boundary.
- 7. **Fuel Requirements**
 - A. Ideker, Inc. shall only combust pipeline-grade natural gas, as defined in 40 CFR §72.2, in its drum dryer (EP-04).
 - B. Ideker, Inc. shall only combust No. 2 fuel oil, No. 2 diesel fuel, No. 2 distillate fuel, all with sulfur content no more than 0.05% by weight, or pipeline natural gas, as defined in 40 CFR §72.2, in its asphalt heater (EP-07).
- 8. **Nonroad Engine Requirement**
The Prosizer RAP crushing plant cannot operate at this site longer than twelve (12) consecutive months in order to avoid recordkeeping showing the movement of the 250 horsepower diesel engine. To meet the definition of a nonroad engine as defined in 40 CFR §89.2, the 250 horsepower diesel engine cannot remain in one physical location for longer than twelve (12) months.
- 9. **Prohibition Against Concurrent Operations**
The Ideker, Inc. asphalt plant and Prosizer RAP crushing plant are considered part of the same installation and can operate at this site at the same time. However, these two plants are prohibited from operating whenever any other plants are located at this site.
- 10. **Record Keeping Requirement**
Ideker, Inc. shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources personnel upon request.

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SITE SPECIFIC SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

11. Reporting Requirement
Ideker, Inc. shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2013-07-025
Installation ID Number: 095-2473
Permit Number:

Ideker, Inc.
5600 E. 150 Highway
Kansas City, MO 64147

Complete: May 13, 2013

Parent Company:
Ideker, Inc.
P.O. Box 7140
St. Joseph, MO 64507

Jackson County, S26, T47N, R33W

PROJECT DESCRIPTION

Ideker, Inc. has requested to convert a portable asphalt plant (PORT-0562) to a stationary plant. The plant will also be adding a new cold feed bin and switching the fuel of the drum dryer to pipeline-grade natural gas. The asphalt plant has an MHDR of 400 tons per hour and is powered by municipal power. An asphalt heater rated at 1.0 MMBtu/hr is used by the asphalt plant. No. 2 diesel fuel with a low sulfur content of 0.05% by weight is currently used as fuel for the heater. However, this permit allows for the use of pipeline grade natural gas and No. 2 fuel oil and No. 2 distillate fuel with sulfur content no more than 0.05% in the asphalt heater as well (see Special Condition 7).

Ideker, Inc. will also be operating a Prosizer Recycled Asphalt Product (RAP) crushing plant at this site. The Prosizer is a portable plant, rated at 50 tons per hour, that will be moved from site to site to crush RAP. By itself, a construction permit is not required for the RAP crusher. However, when it is operating at a site concurrently with another asphalt plant, it shall be considered the same installation as the asphalt plant. Its ambient impact and emissions shall be included in any limits given to the asphalt plant. Requirements applicable to the Prosizer while operating at this site are included in this permit. A list of equipment at the installation is given in Appendix A.

The Prosizer is powered by a 250 horsepower diesel engine. However, the Prosizer is not expected to stay at one location for longer than 12 consecutive months. Therefore, this engine meets the definition nonroad engine in 40 CFR §89.2, and its emissions are not included in the ambient impact analysis and emissions evaluation. According to 40 CFR §89.2, an engine can be considered nonroad if it does not stay at one physical location for more than 12 consecutive months. However, an engine can be at one site for more than 12 consecutive months as long as it is not at one physical location and

that there is an operational reason for the change in location (i.e. moving a crusher and its engine along a rock face to process the rocks). If Ideker, Inc. ever decides to operate the Prosizer for more than 12 consecutive months at this site, it shall be required to document the movement of the diesel engine on this site and the purpose of the movement to show that the engine can be considered nonroad. If the diesel engine ever ceases to meet the definition of nonroad in 40 CFR §89.2, the installation shall submit a construction permit application to take into account the engine's emissions.

40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, of the New Source Performance Standards (NSPS) and 40 CFR 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, of the Maximum Achievable Control Technology (MACT) standards do not apply to the engine because it meets the definition of nonroad. If the diesel engine ever ceases to meet this definition, applicability will be determined at that time. Nonroad engines are regulated under 40 CFR 89, *Control of Emissions from New and In-use Nonroad Compression-Ignition Engines*. Ideker, Inc. shall maintain compliance with all applicable requirements in 40 CFR 89 for the nonroad engine.

The Prosizer is not subject to 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants*. The subpart includes an exemption for portable rock crushers with capacity less than 150 tons per hour and the Prosizer has a capacity of 50 tons per hour.

The applicant is using one of the methods described in Attachment AA, "Best Management Practices," to control emissions from haul roads and vehicular activity areas.

The installation is a minor source for construction permits and is required to apply for a Basic Operating Permit within 30 days of permit issuance. Although only the PM conditioned potential emissions are above the de minimis level and PM emissions do not trigger operating permit requirements, a Basic Operating Permit is still needed for this facility because it is subject to NSPS Subpart I. This installation is located in Jackson County, a maintenance area for ozone and an attainment area for all other criteria pollutants. This installation is on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2, Category 27, and fugitive emissions are counted toward major source applicability. However, Category 27 does not apply to the 100 tons per year major source level thresholds. Therefore, the installation's major source level is 250 tons per year.

TABLES

The table below summarizes the emissions of this project. The existing actual emissions were taken from the 2012 EIQ. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emissions are based on the PM₁₀ limit

of 15.0 tons per year. The installation accepted this limit to avoid increment modeling requirements. With this limit in place, emissions of all other pollutants, except PM, are below their respective de minimis levels. PM does not have NAAQS or increment standards so it does not trigger modeling requirements when its potential emissions are above the de minimis level.

Table 1: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	^a Existing Potential Emissions	Existing Actual Emissions (2012 EIQ)	^b Potential Emissions of the Application	Conditioned Potential Emissions
PM	25.0	N/D	N/D	200.11	34.95
PM ₁₀	15.0	<15.0	1.65	84.08	<15.0
PM _{2.5}	10.0	13.06	0.18	49.58	9.46
SO _x	40.0	26.76	0.43	0.23	0.04
NO _x	40.0	22.71	2.93	119.93	23.59
VOC	40.0	19.25	1.08	84.29	16.58
CO	100.0	53.19	1.27	40.58	7.98
GHG (CO ₂ e)	100,000	N/D	N/D	52,065.36	10,240.24
GHG (mass)	100.0 / 250.0	N/D	N/D	51,917.45	10,211.15
Formaldehyde	10.0/2.0	1.04	N/D	5.59	1.10
2-methylnaphthalene ^c	10.0/0.01	N/D	N/D	0.13	0.03
Lead Compounds	10.0/0.01	0.005	N/D	0.0011	0.0002
Total HAPs	25.0	3.89	N/D	9.77	1.92

N/D - Not Determined

^a**Error! Unknown document property name.**

^bPotential emissions of the application include both the asphalt and the Prosizer RAP crushing plant.

^c2-methylnaphthalene is a member of the Polycyclic Organic Matter (POM) HAP group. All other POMs are included in the Total HAPs.

Table 2: Ambient Air Quality Impact Analysis

Pollutant	^a NAAQS/RAL (µg/m ³)	Averaging Time	^b Maximum Modeled Impact (µg/m ³)	Limited Impact (µg/m ³)	Background (µg/m ³)	^c Daily Limit (tons/day)
^d PM ₁₀	150.0	24-hour	272.02	130.130	20.0	N/D
2-methylnaphthalene	23	24-hour	0.53	0.29	N/A	N/D
2-methylnaphthalene	2.3	Annual	0.09	0.02	N/A	N/D

N/D - Not Determined, N/A – Not Applicable

^aNational Ambient Air Quality Standards (NAAQS) or Risk Assessment Level (RAL), depending on the pollutant.

^bModeled impact at maximum capacity with controls. Includes the impact from both the asphalt plant and the RAP plant.

^cDaily limit listed as N/D because the facility can balance production between the asphalt plant and the RAP crushing plant to maintain compliance with PM₁₀ NAAQS and the ambient impact for 2-methylnaphthalene is less than the RAL.

^dSolitary operation only.

The plant's drum dryer stack (EP-04) and asphalt heater stack (EP-07) were modeled using the AERSCREEN screen modeling software. The stack characteristics entered into the modeled are listed in Table 3.

Table 3: AERSCREEN Input Parameters

Equipment Description	Stack Height (m)	Stack Inside Diameter (m)	Stack Gas Exit Velocity (m/s)	Stack Gas Exit Temperature (K)	Dispersion Coefficient
Drum Dryer	2.5969	1.22	7.9261	394.26	Rural
Asphalt Heater	3.04	0.300	55.8657	587.5967	Rural

EMISSIONS CALCULATIONS

Emissions for the project were calculated using emission factors found in the United States Environmental Protection Agency (EPA) document AP-42 *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42).

PM_{2.5}, PM₁₀, PM, VOC and HAPs emissions from the drum mix dryer were calculated using emission factors from AP-42, Section 11.1, "Hot Mix Asphalt Plants," April 2004. NO_x, SO_x and CO emissions from the drum dryer were calculated using emission factors from AP-42, Section 1.4, "Natural Gas Combustion," July 1998. For the SO_x emissions calculation, it was also assumed that half of the sulfur up to 0.1 pound per ton of product is absorbed into the product. This assumption was taken from AP-42, Section 11.1. The asphalt plant is controlled by a baghouse, so the controlled emission factor was used to calculate particulate emissions. Emissions from plant load-out were calculated using predictive equations found in AP-42 Table 11.1-14. Default values were used for asphalt volatility and mix temperature.

The facility currently uses No. 2 diesel fuel in the asphalt heater, but would like to retain the ability to use pipeline-grade natural gas. This permit also allows the use of No. 2 fuel oil and No. 2 distillate fuel. Emissions from the asphalt heater were calculated using either emission factors from AP-42, Section 1.3, "Fuel Oil Combustion," September 1999, or from AP-42, Section 1.4. Emission factors that led to the higher emissions were used.

Emissions from aggregate handling were calculated using emission factors from AP-42, Section 11.19.2, "Crushed Stone Processing and Pulverized Mineral Processing," August 2004. The controlled emission factors were used because the inherent moisture content of the crushed rock is required to be at least 1.5% by weight (Special Condition 4).

For the RAP crusher, the PM_{2.5}, PM₁₀ and PM emissions were calculated using emission factors from AP-42, Section 11.19.2. The controlled emission factors were used because processing RAP is different than aggregates. The RAP contain asphalt binders that will help to limit the particulate emissions during crushing, screening, and conveying.

Emissions from unpaved haul roads were calculated using the predictive equation from AP-42, Section 13.2.2, "Unpaved Roads," November 2006. A 90% control efficiency for PM and PM₁₀ and a 40% control efficiency for PM_{2.5} are applied to the emissions calculations for the use of documented watering or chemical dust suppressant application (Special Condition 1). Emissions from paved haul roads and vehicular activity areas were calculated using the predictive equation from AP-42, Section 13.2.1, "Paved Roads," January 2011.

Emissions from load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4. The moisture content of the aggregate is required to be at least 1.5% by weight (Special Condition 4). Emissions from wind erosion of storage piles were calculated using an equation developed by the EPA in 1989, as an alternative method to AP-42.

AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 3. The Air Pollution Control Program requires an AAQIA of PM₁₀ for all asphalt, concrete and rock-crushing plants regardless of the level of PM₁₀ emissions if a permit is required. An AAQIA is required for other pollutants if their emissions exceed their respective de minimis or screening model action level (SMAL). The AAQIA was performed using the Air Pollution Control Program's generic nomographs and when appropriate the EPA modeling software. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the National Ambient Air Quality Standard (NAAQS) or Risk Assessment Level (RAL) for the pollutant. If during continuous operation the modeled concentration of a pollutant is greater than the applicable NAAQS or RAL, the plant's production is limited to ensure compliance with the standard.

Because this installation uses BMPs to control emissions from haul roads and vehicular activity areas (Special Condition 1), emissions from these sources were not included in the AAQIA. Instead they were addressed as a background concentration of 20 µg/m³ of PM₁₀ in accordance with the Air Pollution Control Program's BMPs interim policy.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM are above de minimis levels.

APPLICABLE REQUIREMENTS

Ideker, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards,

based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- A Basic Operating Permit is required for this installation.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
This rule does not apply to any combustion equipment using exclusively pipeline grade natural gas as defined in 40 CFR 72.2. However, the asphalt heater is permitted to use either pipeline grade natural gas, No. 2 fuel oil, No. 2 diesel fuel, or No. 2 distillate fuel. This rule would apply when the installation uses other fuels for its asphalt heater.

SPECIFIC REQUIREMENTS

- 40 CFR 60 Subpart I, "Standards of Performance for Hot Mix Asphalt Facilities" applies to the asphalt plant.
This rule applies to the asphalt plant, but the installation has already conducted the performance tests required to show compliance with this subpart.
- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" does not apply to the RAP crusher because it has capacity less than 150 tons per hour.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Chia-Wei Young
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Kansas City Missouri Air Quality Program Permit to Construct Form, received May 13, 2013, designating Ideker, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- *Western Region Air Partnership (WRAP) Fugitive Dust Handbook*, September 7, 2006.

Appendix A: Equipment/Activities List

Equipment Description	Quantity	Manufacturer	Model/ Serial #	MFG Date	Capacity
Hot Mix Drum	1	Almix	886	2007	400 TPH
Dryer Burner	1	Genco	UF II - 100	2007	100 MMBTU/Hr
Baghouse	1	Almix	886	2007	N/A
Cold Feed Bins	5	Almix	886	2007	30 tons ea
Cold Feed Belts	5	Almix	886	2007	30" x 8' ea
Collecting Belt	1	Almix	886	2007	30" x 60'
Screen	1	Astec	NA	2013	5' x 10'
Virgin Weigh Belt	1	Almix	1006	2006	30" x 40'
RAP Bin	1	Almix	1006	2006	20 tons ea
RAP Screen	1	AStec	NA	2013	3' x 5'
Rap Weigh Belt	1	Almix	1006	2006	30" x 20'
Drag Slat Conveyor	1	Dillman	NA	2011	400 TPH
Hot Mix Silo	3	Dillman	NA	2011	200 tons ea
Asphalt Cement Silo	2	Almix	1006	2007/2009	30,000 Gal ea
Asphalt Cement Heater	1	Heatech	NA	2007	1MM BTU/Hr
Liquid Additive Tank	1	Tarmac	NA	2011	2000 Gal
Astec ProSizer	1	Astec	2612V	2008	50 TPH
Shingle Feeder	1	Astec	NA	2013	30TPH
Shingle Belt	1	Astec	NA	2013	30" x 40'
Burner Fuel Tank	1	Almix	1006	2006	7500 Gal
Mineral Filler Silo	1	Astec	NA	2012	50 ton
Paved Haul Road	N/A	N/A N/A N/A			1710 Feet Total
Unpaved Haul Road	N/A	N/A N/A N/A			275 Feet Total
Storage Pile	N/A	N/A N/A N/A			5 Acres Maximum
Vehicular Activity Around Storage Pile	N/A	N/A N/A N/A			150 Feet Traveled

APPENDIX B

Abbreviations and Acronym

%percent	m/s meters per second
°Fdegrees Fahrenheit	Mgal 1,000 gallons
acfmactual cubic feet per minute	MW megawatt
BACT Best Available Control Technology	MHDR maximum hourly design rate
BMPs Best Management Practices	MMBtu Million British thermal units
Btu British thermal unit	MMCF million cubic feet
CAM Compliance Assurance Monitoring	MSDS Material Safety Data Sheet
CASChemical Abstracts Service	NAAQS ... National Ambient Air Quality Standards
CEMS Continuous Emission Monitor System	NESHAPs National Emissions Standards for Hazardous Air Pollutants
CFR Code of Federal Regulations	NO_x nitrogen oxides
COcarbon monoxide	NSPS New Source Performance Standards
CO₂ carbon dioxide	NSR New Source Review
CO_{2e} carbon dioxide equivalent	PM particulate matter
COMS Continuous Opacity Monitoring System	PM_{2.5} particulate matter less than 2.5 microns in aerodynamic diameter
CSR Code of State Regulations	PM₁₀ particulate matter less than 10 microns in aerodynamic diameter
dscfdry standard cubic feet	ppm parts per million
EIQ Emission Inventory Questionnaire	PSD Prevention of Significant Deterioration
EP Emission Point	PTE potential to emit
EPA Environmental Protection Agency	RACT Reasonable Available Control Technology
EU Emission Unit	RAL Risk Assessment Level
fpsfeet per second	SCC Source Classification Code
ftfeet	scfm standard cubic feet per minute
GACT Generally Available Control Technology	SIC Standard Industrial Classification
GHG Greenhouse Gas	SIP State Implementation Plan
gpmgallons per minute	SMAL Screening Model Action Levels
grgrains	SO_x sulfur oxides
GWP Global Warming Potential	SO₂ sulfur dioxide
HAP Hazardous Air Pollutant	tph tons per hour
hr hour	tpy tons per year
hphorsepower	VMT vehicle miles traveled
lb pound	VOC Volatile Organic Compound
lbs/hr pounds per hour	
MACT Maximum Achievable Control Technology	
µg/m³ micrograms per cubic meter	

Attachment AA: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the portable plant is operating.

1. Pavement
 - A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions¹ while the plant is operating.
 - B. Maintenance and repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Application of Chemical Dust Suppressants
 - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
 - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources personnel upon request.

3. Application of Water-Documented Daily
 - A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
 - B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
 - C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
 - D. The operator shall record the date, volume of water application and total surface area of active haul roads or the amount of precipitation that day. The operators shall also record the rationale for not watering (e.g. freezing conditions or not operating).
 - E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources personnel upon request.

¹For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)

Mr. Jack Neel
Manager
Ideker, Inc.
P.O. Box 7140
St. Joseph, MO 64507

RE: New Source Review Permit - Project Number: 2013-07-025

Dear Mr. Neel:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Chia-Wei Young at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:cyk

Enclosures

c: Kansas City Regional Office
PAMS File: 2013-07-025

Permit Number: