

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Velocity Services, LLC
Attn: Mike Sylvester
1450 Edwardsville Road
Granite City, Illinois 62040

Application No.: 12020004

I.D. No.: 119040AAO

Applicant's Designation:

Date Received: February 2, 2012

Subject: Petroleum Pitch Production

Date Issued: May 2, 2012

Location: 1450 Edwardsville Road, Granite City, Madison County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of the modification of:

- Four (4) Existing Distillation Stills (#5, #6, #7, and #8) each with a Natural Gas-Fired Burner (8.1 mmBtu/hour, each) to Produce Pitch from Petroleum Tar;
- One (1) Existing Uncontrolled 260,000 Gallon Storage Tank (T005) to Store Petroleum Tar or Coal Tar;
- Three (3) Existing Uncontrolled Storage Tanks (T009: 500,000 Gallons, T010: 500,000 Gallons, and T011: 500,000 Gallons) to Store Petroleum Tar or Coal Tar;
- Two (2) Existing Uncontrolled 470,000 Gallons Storage Tanks (T013-T014) to Store Petroleum Tar or Coal Tar;
- One (1) Existing Uncontrolled Storage Tank (T025: 260,000 Gallons) to Store Petroleum Tar or Coal Tar;
- Seven (7) Existing Uncontrolled Day Tanks (T015: 70,500 Gallons, T017: 70,500 Gallons, T020: 20,000 Gallons, T021: 20,000 Gallons, T022: 20,000 Gallons, T023: 20,000 Gallons, and T024: 20,000 Gallons) to Store Distillates;
- One (1) Existing 85,000 Gallon Holding Storage Tank (T003) to Store Pitch;
- One (1) Existing 75,000 Gallon Holding Storage Tank (T007) to Store Pitch;
- One (1) Existing 49,000 Gallon Holding Storage Tank (T008) to Store Pitch;
- One (1) Existing 190,000 Gallon Holding Storage Tank (T016) to Store Pitch;
- One (1) Existing 51,000 Gallon Holding Storage Tank (Tank T319) to Store Pitch; and
- One (1) Existing 30,000 Gallon Holding Storage Tank (T320) to Store Pitch
- Two (2) Air Condenser/Water Scrubbers SC-07A and SC-319A for Odor Control

as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit is issued based on the emission of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the above-listed equipment being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is

issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

- b. This permit is issued based on the modification of the storage tanks, distillation stills, day tanks, and holding tanks not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically the Illinois rules for Major Stationary Sources Construction and Modification, 35 Ill. Adm. Code Part 203. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.
 - c. Operation of the equipment listed above is allowed under this construction permit until final action is taken on the Federally Enforceable State Operating Permit (FESOP) application for this source.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
 - c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
 - d. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced on or after April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

- e. Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM₁₀ from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
- 3. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
- 4a. Pursuant to 35 Ill. Adm. Code 219.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having through-put of greater than 151 cubic meters per day (40,000 gallons/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 219.108.
- b. Pursuant to 35 Ill. Adm. Code 219.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 219.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 219.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 219.121(b) (2).
- c. Pursuant to 35 Ill. Adm. Code 219.141(a), no person shall use any single or multiple compartment effluent water separator which receives effluent water containing 757 liters/day (200 gallons/day) or more of organic material from any equipment processing, refining, treating, storing or handling organic material unless such effluent water separator is equipped with air pollution control equipment capable of reducing by 85 percent or more the uncontrolled organic material emitted to the atmosphere. Exception: If no odor nuisance exists the limitations of 35 Ill. Adm. Code 219.141 shall not apply if the vapor pressure of the organic material is below 17.24 kPa (2.5 psia) at 294.3°K (70°F).
- d. Pursuant to 35 Ill. Adm. Code 219.142, no person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of VOL with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.
- e. Pursuant to 35 Ill. Adm. Code 219.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35

Ill. Adm. Code 219.302, 219.303, 219.304 and the following exception:
If no odor nuisance exists the limitation of 35 Ill. Adm. Code 219
Subpart G shall only apply to photochemically reactive material.

- 5a. This permit is issued based on Storage tanks T003, T005, T007, T008, T009-T011, T013-T014, T015, T016, T017, T020-T024, T319, and T320 not being subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60 Subpart Kb. Pursuant to 40 CFR 60.110b(b), 40 CFR 60 Subpart Kb does not apply to storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa.
- b. This permit is based on the production of petroleum pitch at this source not being subject to the New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006, 40 CFR 60 Subpart VVa, because the source does not produce, as intermediate or final products, one or more of the chemicals listed in 40 CFR 60.489a or 40 CFR 60.489.
- c. This permit is issued based on the production of petroleum pitch at this source not being subject to the New Source Performance Standard (NSPS) for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes, 40 CFR 60 Subpart III, because the production of petroleum pitch at this source does not produce, as a product, co-product, by-product, or intermediate any of the chemicals listed in 40 CFR 60.617.
- d. This permit is issued based on Distillation Stills #5, #6, #7, and #8 not being subject to the New Source Performance Standards (NSPS) for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations, 40 CFR 60 Subpart NNN. Pursuant to 40 CFR 60.660(c), exemptions from the provisions of 40 CFR 60.660(a) are as follows:
 - i. Any distillation unit operating as part of a process unit which produces coal tar or beverage alcohols, or which uses, contains, and produces no VOC is not an affected facility.
 - ii. Any distillation unit that is designed and operated as a batch operation is not an affected facility.
6. This permit is issued based on the production of petroleum pitch at this source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Benzene Emissions from Coke By-Product Recovery Plants, 40 CFR 61 Subpart L, because the production of petroleum pitch at this source is not designed and operated for the

separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery.

- 7a. This permit is issued based on the production of petroleum pitch at this source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Chemical Manufacturing Area Sources, 40 CFR 63 Subpart VVVVVV because the production of petroleum pitch at this source does not meet the conditions specified in 40 CFR 63.11494(a)(1). Pursuant to 40 CFR 63.11494(a)(1), except as specified in 40 CFR 63.11494(c), you are subject to 40 CFR 63 Subpart VVVVVV if you own or operate a chemical manufacturing process unit (CMPU) that uses as feedstocks, generates as byproducts, or produces as products any of the hazardous air pollutants (HAP) listed in Table 1 to 40 CFR 63 Subpart VVVVVV (Table 1 HAP).
- b. This permit is issued based on the production of petroleum pitch at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Chemical Preparations Industry, 40 CFR 63 Subpart BBBBBBBB because the chemical preparations facility does not have any chemical preparations operation in target HAP service (as defined in 40 CFR 63.11588, "What definitions apply to this subpart?").
8. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).
- 9a. This permit is issued based on Storage tanks T003, T005, T007, T008, T009-T011, T013-T014, T015, T016, T017, T020-T024 T319, and T320 not being subject to 35 Ill. Adm. Code 219.120 (Control Requirements for Storage Containers of VOL). Pursuant to 35 Ill. Adm. Code 219.119, the limitations of 35 Ill. Adm. Code 219.120 shall apply to all storage containers of volatile organic liquid (VOL) with a maximum true vapor pressure of 0.5 psia or greater in any stationary tank, reservoir, or other container of 151 cubic meters (40,000 gallons) capacity or greater, except to vessels as provided below:
 - i. Vessels with a capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true pressure of less than 0.5 psia; and
 - ii. Vessels with storage capacity less than 40,000 gallons must comply with 35 Ill. Adm. Code 218.129(f).
- b. Pursuant to 35 Ill. Adm. Code 219.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 219.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

- c. This permit is issued based on the production of petroleum pitch at this source is not being subject to the requirements of 35 Ill. Adm. Code 219 Subpart Q (Leaks from Synthetic Organic Chemical and Polymer Manufacturing Plants). Pursuant to 35 Ill. Adm. Code 219.421, the owner or operator of a plant which processes more than 3660 mg/year (4033 tons/year) gaseous and light liquid VOM, and whose components are used to manufacture the synthetic organic chemicals or polymers listed in 35 Ill. Adm. Code Part 219, Appendix A, shall comply with 35 Ill. Adm. Code 219 Subpart Q.
- d. This permit is issued based on the production of petroleum pitch at this source not being subject to the requirements of 35 Ill. Adm. Code 219 Subpart V (Batch Operations). Pursuant to 35 Ill. Adm. Code 219.500(c), the following single unit operations and batch process trains are subject to 35 Ill. Adm. Code 219 Subpart V but are considered to be de minimis and are, therefore, exempt from the control requirements of 35 Ill. Adm. Code 219.501. However, the recordkeeping and reporting requirements in 35 Ill. Adm. Code 219.505 shall apply to such de minimis single unit operations and batch process trains:
 - i. Within a batch operation, any single unit operation with uncontrolled total annual mass emissions of less than or equal to 500 lbs/year of VOM. Such single unit operations are also excluded from the calculation of the total annual mass emissions for a batch process train. If the uncontrolled total annual mass emissions from such exempt single unit operation exceed 500 lbs/year of VOM in any subsequent year, the source shall calculate applicability in accordance with 35 Ill. Adm. Code 219.500(d) for both the individual single unit operation and the batch process train containing the single unit operation; and
 - ii. Any batch process train containing process vents that have, in the aggregate, uncontrolled total annual mass emissions, as determined in accordance with 35 Ill. Adm. Code 219.502(a), of less than 30,000 lbs/year of VOM for all products manufactured in such batch process train.
- e. Pursuant to 35 Ill. Adm. Code 219.500(d), the applicability equations in 35 Ill. Adm. Code 219.500(e), which require the calculation of uncontrolled total annual mass emissions and flow rate value, shall be used to determine whether a single unit operation or a batch process train is subject to the control requirements set forth in 35 Ill. Adm. Code 219.501. The applicability equation shall be applied to the following:
 - i. Any single unit operation with uncontrolled total annual mass emissions that exceed 500 lb/yr and with a VOM concentration greater than 500 ppmv. In this individual determination, no applicability analysis shall be performed for any single unit operation with a VOM concentration of less than or equal to 500 ppmv; and

- ii. Any batch process train containing process vents which, in the aggregate, have uncontrolled total annual mass emissions of 30,000 lbs/year or more of VOM from all products manufactured in the batch process train. Any single unit operation with uncontrolled total annual mass emissions exceeding 500 lbs/year, regardless of VOM concentration, shall be included in the aggregate applicability analysis.

- f. This permit is issued based on the production of petroleum pitch at this source not being subject to the requirements of 35 Ill. Adm. Code Part 219 Subpart RR (Miscellaneous Organic Chemical Manufacturing Processes). Pursuant to 35 Ill. Adm. Code 219.960(a)(1), the requirements of 35 Ill. Adm. Code 219 Subpart RR shall apply to a source's miscellaneous organic chemical manufacturing process emission units which are not included within any of the categories specified in 35 Ill. Adm. Code 219 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z or BB. A source is subject to 35 Ill. Adm. Code 219 Subpart RR if it contains process emission units, not regulated by 35 Ill. Adm. Code 219 Subparts B, E, F (excluding 35 Ill. Adm. Code 219.204(1)), H (excluding 35 Ill. Adm. Code 219.405), Q, R, S, T (excluding 35 Ill. Adm. Code 219.486) V, X, Y, Z or BB, which as a group have maximum theoretical emissions of 91 Mg (100 tons) or more per calendar year of VOM if no air pollution control equipment were used.

- g. This permit is issued based on the production of petroleum pitch at this source not being subject to the requirements of 35 Ill. Adm. Code Part 219 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 219.980(a)(1), the requirements of 35 Ill. Adm. Code 219 Subpart TT shall apply to a source's VOM emission units, which are not included within any of the categories specified in 35 Ill. Adm. Code 219 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR, or are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146, if the source is subject to 35 Ill. Adm. Code 219 Subpart TT. A source is subject to 35 Ill. Adm. Code 219 Subpart TT if it contains process emission units, not regulated by 35 Ill. Adm. Code 219 Subparts B, E, F (excluding 35 Ill. Adm. Code 219.204(1)), H (excluding 35 Ill. Adm. Code 219.405), Q, R, S, T, (excluding 35 Ill. Adm. Code 219.486), V, X, Y, Z or BB, which as a group have maximum theoretical emissions of 91 Mg (100 tons) or more per calendar year of VOM if no air pollution control equipment were used.

- 10. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:
 - a. Visual inspections of air pollution control equipment;
 - b. Maintenance of an adequate inventory of spare parts; and

- c. Expeditious repairs, unless the emission unit is shutdown.
- 11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the condensers and wet scrubber such that the condensers and wet scrubber are kept in proper working condition and not causes a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- 12a. Emissions and operation from the petroleum tar storage, coal tar storage, distillates and petroleum pitch storage and process shall not exceed the following limits:

<u>Product & Tanks</u>	<u>Throughput</u>		<u>VOM</u>		<u>Combined HAPs</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Petroleum Tar Storage	2,402,743	24,027,429	0.08	0.85	0.05	0.52
Coal Tar Storage	599,987	5,999,870	0.30	3.00	0.17	1.72
Petroleum Distillates Storage	1,081,234	10,812,343	0.31	3.06	0.24	2.36
Petroleum Pitch Storage	1,321,509	13,215,086	0.63	<u>6.26</u>	0.51	<u>5.06</u>
			Total:	13.17		9.66

These limits are based on the maximum throughput of the tanks and standard emission factors and formulas (Section 7.1, AP-42, Fifth Edition, Volume I, November 2006 or TANKS Emissions Estimation Software, Version 4.09D, October 5, 2006). Note that the emission of the single HAP Acenaphthene is 3.86 tons/year, Naphthalene is 1.2 tons/year, and Benzene is 0.74 tons/year of the combined HAPs.

- b. Emissions and operation from the four distillation units and loading loss from distillates and pitch shall not exceed the following limits:

<u>Process</u>	<u>Throughput</u>		<u>VOM</u>		<u>Combined HAPs</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Four Stills Units #5-#8	2,402,743	24,027,429	0.44	4.35	0.05	3.20
Loading Loss	2,402,743	24,027,429	0.60	<u>6.00</u>	0.17	<u>5.20</u>
			Total:	10.35		8.40

These limits are based on the maximum petroleum tar throughput, standard emission factors and formulas for transportation and marketing

of petroleum (Section 5.2, AP-42) for loading loss, and the ideal gas law equation assuming the entire headspace is displaced and saturated with volatiles for stills emissions. Note that the emission of the single HAP Acenaphthene is 1.7 tons/year, Naphthalene is 2.1 tons/year, and Benzene is 2.5 tons/year of the combined HAPs.

Loading loss equation from AP-42 Section 5.2.2.1:

$$L_L = 12.46 \text{ SPM/T}$$

Where:

L_L = Loading loss, pounds per 1000 gallons (lbs/10³ gal) of liquid loaded;

S = Saturation factor (see Table 5.2.1);

P = True vapor pressure of liquid loaded, pounds per square inch absolute (psia);

M = Molecular weigh of vapors, pounds per pound-mole (lbs/lb-mole); and

T = Temperature of bulk liquid loaded, °R (°F + 460).

Ideal gas law equation:

$$E = VRT \times \sum (P_i) (MW_i)$$

Where:

E = Mass of constituent emitted;

V = Volume of gas displaced from the vessel;

R = Ideal gas law constant (10.731 psi-cf/lb-mol-R);

T = Temperature of the vessel vapor space (absolute);

P_i = Partial pressure of the individual constituent, and

MW_i = Molecular weigh of the individual constituent

c. Emissions and operation of the four stills burners, and the three tank heaters burning natural gas shall not exceed the following limits:

i. Natural Gas Usage:

(mmscf/Month)

33.46

(mmscf/Year)

334.63

- ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor (lbs/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84.0	1.40	14.05
Nitrogen Oxides (NO _x)	100.0	1.67	16.73
Particulate Matter (PM and PM ₁₀)	7.6	0.13	1.27
Sulfur Dioxide (SO ₂)	0.6	0.01	0.10
Volatile Organic Material (VOM)	5.5	0.09	0.92

These limits are based on the combined maximum firing rate of the units (38.2 mmBtu/hour), a heat content of 1,000 Btu/scf for natural gas, 8,760 hours/year of operation, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- d. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the production of petroleum pitch at this source shall not exceed 0.79 tons/month and 7.90 tons/year of any single HAP and 1.99 tons/month and 19.90 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from the production of petroleum pitch at this source this source not triggering the requirements of Section 112(g) of the Clean Air Act.
 - e. Compliance with annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

- ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
 - b. Testing required by Conditions 14 and 15 shall be performed by a qualified independent testing service.
14. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 15a. Pursuant to 35 Ill. Adm. Code 219.503(a), upon the Illinois EPA's request, the owner or operator of a batch operation shall conduct testing to demonstrate compliance with 35 Ill. Adm. Code 219.501. The owner or operator shall, at its own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 219.503(d), (e), and (f).
- b. Pursuant to 35 Ill. Adm. Code 219.503(d), the owner or operator of a batch operation that is exempt from the control requirements of 35 Ill. Adm. Code 219.501 shall demonstrate, upon the Illinois EPA's request, the absence of oversized gas moving equipment in any manifold. Gas moving equipment shall be considered oversized if it exceeds the maximum requirements of the exhaust flow rate by more than 30 percent.
 - c. Pursuant to 35 Ill. Adm. Code 219.503(i), in the absence of a request by the Illinois EPA to conduct performance testing in accordance with the provisions of 35 Ill. Adm. Code 219.503, a source may demonstrate compliance by the use of engineering estimates or process stoichiometry.
16. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5

years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- 17a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- b. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
- c. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.
- d. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.
- e. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- 18a. Pursuant to 35 Ill. Adm. Code 219.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 219.119 shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel

with a design capacity less than 40,000 gallons is subject to no provisions of 35 Ill. Adm. Code Part 219 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.

- b. Pursuant to 35 Ill. Adm. Code 219.505(a), every owner or operator of a de minimis single unit operation or batch process train exempt under 35 Ill. Adm. Code 219.500(c)(1) or (c)(2) shall keep records of the uncontrolled total annual mass emissions for any de minimis single unit operation or batch process train, as applicable, and documentation verifying these values or measurements. The documentation shall include the engineering calculations, any measurements made in accordance with 35 Ill. Adm. Code 219.503, and the potential or permitted number of batch cycles per year, or, in the alternative, total production as represented in the source's operating permit.
 - c. Pursuant to 35 Ill. Adm. Code 219.505(b), every owner or operator of a single unit operation exempt under 35 Ill. Adm. Code 219.500(b)(3) or (d) shall keep the following records:
 - i. The uncontrolled total annual mass emissions and documentation verifying these values or measurements. The documentation shall include any engineering calculations, any measurements made in accordance with 35 Ill. Adm. Code 219.503, and the potential or permitted number of batch cycles per year or, in the alternative, total production as represented in the source's operating permit.
 - ii. The average flow rate in scfm and documentation verifying this value.
 - d. Pursuant to 35 Ill. Adm. Code 219.505(d), every owner or operator of a single unit operation claiming a vent stream concentration exemption level, as set forth in 35 Ill. Adm. Code 219.500(d)(1), shall maintain records to indicate the vent stream concentration is less than or equal to 500 ppmv.
 - e. Pursuant to 35 Ill. Adm. Code 219.505(h), every owner or operator of a batch operation required to keep records under 35 Ill. Adm. Code 219.505 shall maintain such records at the source for a minimum period of three years and shall make all such records available to the Illinois EPA upon request.
- 19a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the condensers and wet scrubber:
 - A. Records for periodic inspection of the condensers and wet scrubber with date, individual performing the inspection, and nature of inspection; and

- B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Liquid petroleum tar throughput (gallons/month and gallons/year);
 - iii. Material stored in the tanks and tanks through for all storage and process tanks (gallons/month and gallons/year);
 - iv. Natural gas usage in the boilers, stills and tank burners (mmscf/month and mmscf/year);
 - v. Name and identification of VOM and HAP containing materials used;
 - vii. VOM and HAP content of liquids in each vessel (% by weight); and
 - viii. Monthly and annual emissions of CO, NO_x, PM, PM₁₀, SO₂, VOM, and HAPs from the source with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 20a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- b. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), copies of all records required by 35 Ill. Adm. Code 212.324 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.
- 21a. Pursuant to 35 Ill. Adm. Code 219.505(d), every owner or operator of a single unit operation claiming a vent stream concentration exemption level, as set forth in 35 Ill. Adm. Code 219.500(d)(1), shall notify the Illinois EPA in writing if the vent stream concentration at any time equals or exceeds 500 ppmv, within 60 days after such event. Such notification shall include a copy of all records of such event.
- b. Pursuant to 35 Ill. Adm. Code 219.505(g), the owner or operator of a de minimis single unit operation or batch process train exempt from the control requirements of 35 Ill. Adm. Code 219.500(c) shall notify the

Illinois EPA in writing if the uncontrolled total annual mass emissions from such de minimis single unit operation or batch process train exceed the threshold in 35 Ill. Adm. Code 219.500(c)(1) or (c)(2), respectively, within 60 days after the event occurs. Such notification shall include a copy of all records of such event.

22a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation, and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

If you have any questions on this permit, please call German Barria at 217/785-1705.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:GB:psj

cc: Illinois EPA, FOS Region 3