

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Seneca Petroleum Company, Inc.  
Attn: Daryl Brown  
13301 South Cicero Avenue  
Crestwood, Illinois 60445

Application No.: 02120011                      I. D. No.: 197803AAB  
Applicant's Designation: FESOPMODIF              Date Received: June 25, 2007  
Subject: Asphalt Storage and Processing Facility  
Date Issued: September 18, 2007              Expiration Date: January 31, 2010  
Location: 12460 South New Avenue, Lemont, Will County

Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of fifty-five raw asphalt and asphalt product storage tanks, nine asphalt additives storage tanks, one hydrogen chloride storage tank, eleven truck and railcar loading stations and four asphalt heaters pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the combined emissions of volatile organic material (VOM) and hazardous air pollutants (HAP) from the Seneca Petroleum Company and Korall Corporation (I.D. 197803ABD), which constitutes a support facility for the Seneca Petroleum Company, to less than major source thresholds (i.e., 100 tons/year for VOM, 10 tons/year for a single HAP and 25 tons/year for totaled HAP). As a result, both sources are excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - ii. To limit the combined potential emissions of VOM from the both sources to less than 25 tons/year. As a result, the both sources are excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of these sources, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to the initial issuance of a FESOP to this source, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.

- 2a. This permit is issued based on asphalt storage tanks not being subject to 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 m<sup>3</sup> 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 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa.
  - b. Pursuant to 40 CFR 60.116b(a), the owner or operator shall keep copies of all records required by 40 CFR 60.116b, except for the record required by 40 CFR 60.116b(b), for at least 2 years.
  - c. Pursuant to 40 CFR 60.116b (b), the owner or operator of each storage vessel as specified in 40 CFR 60.110b (a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record required by 40 CFR 60.116b (b) will be kept for the life of the source.
- 3a. Pursuant to 35 Ill. Adm. Code 218.122(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 218.108.
  - b. Pursuant to 35 Ill. Adm. Code 218.122(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 l (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 or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b)(2).
  - c. Pursuant to 35 Ill. Adm. Code 218.122(c), if no odor nuisance exists the limitations of this 35 Ill. Adm. Code 218.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- 4a. Pursuant to 35 Ill. Adm. Code 218.119, the limitations of 35 Ill. Adm. Code 218.120 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; or

- ii. Vessels storing petroleum liquids.
- b. Pursuant to 35 Ill. Adm. Code 218.123(a) (6), the requirements of 35 Ill. Adm. Code 218.123(b) shall not apply to any stationary storage tank in which volatile petroleum liquid is not stored.
- 5. 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.
- 6a. Operation and emissions of the source shall not exceed the following limits:

Process	Throughput		Operating Temperature	VOM Emissions	
	(mmgal/mo)	(mmgal/yr)		Tons/mo	Tons/yr
<u>Asphalt Operations:</u>					
Storage Tanks	26.67	160	360°F	1.77	10.6
Truck and Railcar Unloading	23.33	140	300°F	0.08	0.5
<u>Cutback/Emulsion Asphalt Operations</u>					
Storage Tanks	1.83	11.0	200°F	0.87	5.2
Truck and railcar Unloading	1.00	6.0	180°F	0.02	<u>0.1</u>
				Total	16.4

These limits are based on VOM emissions from the storage tanks being calculated using equations given by Section 7.1, AP-42 (Fifth Edition, Volume I, November 2006) and utilized in the USEPA distributed computer program TANKS and the maximum storage and loading temperatures. The VOM emissions from the truck and railcar unloading operations being calculated using equations given by Section 5.2, AP-42 (Fifth Edition, Volume I, December 1995) and based on the material maximum temperature during the loading.

- b. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.9 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 this source not triggering the requirements of Section 112(g) of the Clean Air Act
- c. Compliance with the 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).
- 7. This permit is issued based on negligible emissions of volatile organic materials from the asphalt additives storage tanks. For this purpose,

emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.

8. This permit is issued based on negligible emissions of hydrogen chloride (HCl) from the hydrochloric acid storage and handling operations. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year. These limits are based on the annual hydrochloric acid usage being less than 5,000 gallons/year.
9. Operation and emissions of the four asphalt heaters (combined) shall not exceed the following limits:

Natural Gas Usage: 25 mmscf/month, 270 mmscf/year

<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
	<u>Factor</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	1.30	13.5
Carbon Monoxide (CO)	84	1.10	11.3
Particulate Matter (PM)	7.6	0.10	1.0
Volatile Organic Materials (VOM)	5.5	0.07	0.7

These limits are based on the maximum heaters operations and standard emission factors given by Section 1.4, AP-42 (Fifth Edition, Volume I, July 1998). Compliance with annual limits shall be determined on a monthly basis from a running total of 12 months of data.

- 10a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. For each storage tank:
    - A. Names and identification number of materials transferred and/or stored;
    - B. Material throughput (gallons/month, gallons/year);
    - C. Daily material temperature.
  - ii. For each tank truck/railcar unloading transfer:
    - A. Names and identification number of materials transferred;
    - B. Material throughput (gallons/month, gallons/year);
    - C. Material temperature during transfer;
  - iii. Natural gas usage (mmscf/month, mmscf/year);
  - iv. Monthly and annual VOM, HAP, NO<sub>x</sub>, CO and PM emissions with supporting calculations (tons/month, 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 years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to Illinois EPA request for records during the course of a source inspection.
- 11. If there is an exceedance of or 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 Compliance Section in Springfield, Illinois within 30 days after the exceedance/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.
- 12. 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, IL 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 - Regional Office  
9511 West Harrison  
Des Plaines, Illinois 60016

It should be noted that this permit has been revised to include operations of five new asphalt storage tanks and process modification described in Construction Permit 06020053 and no longer include operations of one asphalt storage tank.

If you have any questions on this permit, please call Valeriy Brodsky at (217)782-2113.

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

Date Signed: \_\_\_\_\_

ECB:VJB:jws

cc: Region 1  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the two asphalt storage and processing plants, Seneca Petroleum and Korall Corporation, operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons/year for VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP, at which this source would be considered a major source for purposes of Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

<u>Emission Units</u>	<u>VOM</u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>PM</u>	<u>HCl</u>	<u>Single HAP</u>	<u>Total HAP</u>
Asphalt Operations							
Loading/Storage	10.6						
Unloading	0.5						
Cutback/Emulsion Asphalt Operations							
Loading/Storage	5.2						
Unloading	0.1						
Additives Storage	0.44						
HCl Handling	--				0.44		
Asphalt Heaters	0.7	13.5	11.3	1.0			
Seneca Petroleum Total	17.5	13.5	11.3	1.0	0.44	<10	<25
Korall Corporation	6.8						
Both Plants	24.3					<10	<25

ECB:VJB:jws