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October 8, 2008

ENVIR. APPEALS BOARD

U.S. Environmental Protection Agency Clerk of the Board, Environmental Appeals Board (MC 1103B) Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460-0001

This letter shall serve as a request for your help please in the withdrawal of the Class II Air Quality Operating Permit AO2992-1473 from Bango Oil, LLC, and/or a hearing pursuant to NRS 445B Air Pollution and NAC 445B Air controls in regards to the application for a revision to Class II Air Quality Operating Permit AO2992-1473 from Bango Oil, LLC.

Neither Bango Oil, LLC, nor NDEP-BAPC have complied with NRS 445B and NAC 445B Air controls as follows:

"NAC 445B.22087 Odors. (NRS 445B.210)

1. No person may discharge or cause to be discharged, from any stationary source, any material or regulated air pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents the comfortable enjoyment of life or property."*

At Bango Oil's present permissible emission levels, they have made the surround area uninhabitable with their offensive odors, and have interfered with and prevented the comfortable enjoyment of life and property in the surrounding areas of the plant, stretching for over two miles from the facility. The homes and people in this area have been in the area for generations, long before Bango Oil started its operations. Now the residents have been saddled with the burden of proof that Bango Oil, LLC is the source of the odor. Establishing proof is a near impossible feat, as I am sure both Bango Oil, LLC and NDEP-BAPC are aware of.

 "The Director shall investigate an odor when 30 percent or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy. The sample must be at least 20 people or 75 percent of those exposed if fewer than 20 people are exposed."*

There has not been a sampling of the population surrounding the plant. Neither I, nor my neighbors have been sampled. In fact, we were instructed to contact NDEP at 775-687-9349 to report any "odors, smoke or unusual activities". I have personally reported, to date, 32 incidents of offensive odors, and we do not live in the direction of the prevailing winds.

Plus, the secondary (welfare-based) policy-relevant science and the National Ambient Air Quality Standards (NAAQS) for both oxides of nitrogen and sulfur oxides have not even been addressed in the permit. These types of emissions are known and regulated toxins.

Has NDEP-BAPC considered the federal Prevention of Significant Deterioration (PSD) regulations contained in 40 CFR 52.21, which have been adopted by NDEP-BAPC, which allows for the comparison of the emissions resulting from a change at a Major Stationary Source with the actual emissions prior to the change? Bango Oil, LLC may be under the threshold for a major source designation on an annual basis, put they need to be looked at on a 24-hour average, 8-hour average, 3-hour average, and a 1-hour average. Due to the fact that their emissions vary during their process, which is evidenced by the variability of the odors released, and the unbearable odor which travels for miles, I predict at times they are surpassing the legal emissions limits.

The revised permit would allow Bango Oil, LLC to release 32.3 tons per year of nitrogen oxides and 71.89 tons per year of sulfur dioxide. Nitrogen oxides and sulfur dioxide emissions cause severe respiratory problems and contribute to childhood asthma. I have an eight year old daughter that requires daily medication for respiratory problems. This medication was not necessary prior to Bango Oil's releasing of these pollutants into the area. These pollutants are also significant contributors to acid rain, smog, and haze which impair visibility. This type of air pollution can travel significant distances downwind, crossing state/county lines and creating region-wide health problems.

I live over two miles away. These toxic emissions permeate my home and they remain inside long after the external stench has move on down wind. When the odor is strong, I get an instant headache, which is a symptom of carbon dioxide poisoning, of which, the revised permit would allow 12.23 tons per year to be spewed into air.

In summary, there appears to be no legal justification for NDEP-BAPC present plan for a revision to Class II Air Quality Operating Permit AO2992-1473 for Bango Oil, LLC. I trust, therefore, that the application will be denied until the legality concerning the current complaints against Bango Oil, LLC be fully addressed according to the NRS 445B Air Pollution and NAC 445B NRS for the existing permit.

I look forward to your prompt attention, response, and action to this important matter.

Sincerely.

Sherry Wideman 13393 Cadet Road Fallon, NV 89406 775-842-7602

**[Environmental Comm'n, Air Quality Reg. §§ 10.1.1-10.1.3, eff. 11-7-75]—(NAC A 10-30-95)—(Substituted in revision for NAC 445B.393)

NOTICE OF PROPOSED ACTION

by the
State of Nevada
Division of Environmental Protection
Bureau of Air Pollution Control

PUBLIC NOTICE

Pursuant to Novada Revised Statutes (NRS) Chapter 445B, the Novada Administrative Code (NAC) Chapter 445B, and the Clean Air Act, the Division of Environmental Protection is issuing the following notice.

The Director received an application for a revision to Class II Air Quality Operating Permit AP2992-1473 from the following applicant:

Bango Oil, LLC 22211 Bango Road Fallon, Nevada 89406

The project is located on Bango Road west of Fallon, Churchill County, Nevada. The Director has prepared tentative determinations regarding the revised operating permit that, in brief, are the following:

- The revised permit is for new construction and revised operation of a used oil and recycled fuel oil re-refining facility that will process up to 2,400 gallons/hour of used oil and recycled fuel oil into value added products. The proposed revision will reconfigure the permit to reflect current operating conditions; double the volume of used oil that can be refined; modify the existing thermal combustor that will be used for treating oily waste water; modify emission limits and operating parameters for cooling tower #1; add two cooling towers; add a process heater and associated re-refining equipment that will allow for a doubling of the amount of used oil and recycled fuel oil that can be refined; add a hydrotreating filtration system that will be used to purify refined oil products; and add a 1.68 MMBtu/hr steam boiler as a non-permitted emission unit.
- Revised emissions from Bango Oil LLC will not exceed 5.24 tons/year of PM₁₀, 32.30 tons/year of NOx, 71.89 tons/year of SO₂, 5.17 tons/year of VOC, and 12.23 tons per year of CO.
- No adverse ambient air quality impacts are expected based on air dispersion modeling analyses.

On the basis of the preliminary review and the requirements of the NRS, the NAC and the Clean Air Act, the Director is hereby announcing his intent to issue a revised Class II air quality operating permit based on a review of the information, as proposed. A copy of the revised draft operating permit is available for public inspection at:

Churchill County Library 553 South Maine Street Fallon, NV 89406

Persons wishing to comment upon the proposed determinations by the Director regarding this proposed action or to request a hearing pursuant to NRS 445B Air Pollution and NAC 445B Air Controls should submit their comments or request in writing either in person or by mail or fax within thirty (30) days to:

Randy Phillips
Division of Environmental Protection
Nevada Bureau of Air Pollution Control
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701
(775) 687-9362
(775) 687-6396 FAX

The application, revised draft permit, any comments received, and other relevant information may be copied at the above address or copies may be obtained by requesting in writing at the above address. Written comments or objections, will be received at the Division of Environmental Protection, above address, until close of business on October 17, 2008, and will be retained and considered prior to final action on the revised Class II operating permit. Upon a valid written request received prior to the end of the comment period, the Director will schedule a public hearing on the application and proposed action.

Please bring the foregoing notice to the attention of all persons whom you know may be interested in this matter.

n

STATE OF NEVADA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION BUREAU OF AIR POLLUTION CONTROL

Director's Review and Preliminary Determination of Permit Issuance for Bango Oil, LLC September 12, 2008

Bango Oil, LLC has submitted a Class II application to the Nevada Division of Environmental Protection, Bureau of Air Pollution Control (NDEP-BAPC) requesting a revision to Class II Air Quality Operating Permit #AP2992-1473. The revised permit is for new construction and revised operation of a used oil and recycled fuel oil re-refining facility that will process up to 2,400 gallons/hour of used oil and recycled fuel oil into value added products. The proposed revision will reconfigure the permit to reflect current operating conditions; double the volume of used oil that can be refined; modify the existing thermal combustor that will be used for treating oily waste water; modify emission limits and operating parameters for cooling tower #1; add two cooling towers; add a process heater and associated re-refining equipment that will allow for a doubling of the amount of used oil and recycled fuel oil that can be refined; add a hydrotreating filtration system that will be used to purify refined oil products; and add a 1.68 MMBtu/hr steam boiler as a non-permitted emission unit.

Permitted units will include two primary re-refining circuits, which consists of process heaters, thermal dehydrators, fractionating towers, wiped film evaporators, tanks, valves, motors, heat exchangers, pumps, and compressors; one secondary re-refining circuit, which consists of a process heater, and re-generative clay filtration system; three cooling towers; and a hyrdrotreating filtration circuit, which consists of a process heater, catalytic reactors, high pressure separators, base oil stripper, valves, motors, heat exchangers, pumps, and compressors.

The application materials related to the revised Class II operating permit was received by NDEP-BAPC on July 30, 2008. The permit application was deemed administratively complete on August 13, 2008. Bango Oil, LLC is located at 22211 Bango Road, Fallon, Churchill County, Nevada. The Bango Oil, LLC Facility is located approximately at UTM 324.48 km East by 4,374.15 km North, Zone 11 (Section 23, Township 19 North, Range 26 East in Hydrographic Area 101). The Standard Industrial Classification (SIC) number for the facility is 2992 - "Establishments primarily engaged in blending, compounding, and re-refining lubricating oils and greases from purchased mineral, animal, and vegetable materials.

As proposed. Bango Oil, LLC will continue to be a Class II source under the revised permit. The potential-to-emit (PTE) of each regulated air pollutant is less than the 100 ton per year threshold for major source designation. The facility is not subject to any federal regulations.

Proposed Annual Emissions				
Pollutant(s)		tons/yr		
PM_{10}	Particulate matter <10 microns in diameter	5.24		
NO.	Nitrogen Oxides	32.30		
SO ₂	Sulfur Dioxide	71.89		
VOCs	Volatile Organic Compounds	5.17		
CO	Carbon Monoxide	12.23		

Two ambient air impact studies were completed to: 1) demonstrate compliance with the Nevada and National Ambient Air Quality Standards, 2) demonstrate compliance with the allowable PSD increment consumption for NOx in Hydrographic Area 101. The ambient air quality analyses demonstrated that the emissions from the proposed source will not cause or contribute to a violation of any applicable federal or state ambient air quality standards. The increment analyses for NOx demonstrated that the emissions from the proposed source will not cause an exceedance of the increment standards in Hydrographic Area 101. No adverse air quality impacts are expected. Therefore, NDEP-BAPC has made a preliminary determination to issue a revised Class II Operating Permit #AP2992-1473 with appropriate conditions.

The proposed source must comply with all State and Federal air quality requirements and all conditions established within the revised Class II Operating Permit #AP2992-1473.

BUREAU OF AIR POLLUTION CONTROL

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249 p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

Facility ID No. A0511

Draft Permit No. AP2992-1473 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Bango Oil, LLC (Bango Facility) (hereinafter referred to as Permittee)

Mailing Address: 16640 WEDGE PARKWAY, RENO, NEVADA 89511 Physical Address: 22211 Bango Road, Fallon, Nevada 89406

General Facility Location: 22211 BANGO ROAD, FALLON, NEVADA 89406

NW1/4 of Section 23, T19N, R26E MDB&M HA 101 - CARSON DESERT / CHURCHILL COUNTY

NORTH 4,374.15 KM, EAST 324.48 KM, UTM (NAD 83, ZONE 11)

Emission Unit List (12 Emission Units):

System 1 - Primary Recycled Fuel Oil Re-Refining System #1 S 2.001

8.9 MMBtu/hr Process Heater (Oil Heater #1, mfd by Phoenix, mdl# 8.9, s/n 90603) S

Unit #1 Oil Re-Refining Process - Thermal Dehydrators (12 Heated Tanks @ 25,000 Gallons each), Fractionating Tower (Flash 2.002 Vessel); two Wiped Film Evaporators, Liquid Knock Down Tank, Valves, Motors, Heat Exchangers, Pumps, Compressors

System 2 – Secondary Recycled Fuel Oil Re-Refining System В, S

4.7 MMBtu/hr Process Heater (Oil Heater #2, mfd by Phoenix, mdl# 4.7, s/n 80502) 2.003 2.004

Re-Generative Clay Filtration Process (Enervac System)

C. System 3 - Cooling Tower #1 S

Water Cooling Tower #1 with Drift Eliminators (mfd by Baltimore Air Coil, mdl# 3000) 2,005

D. System 4 - Water Treatment System S

5.796 MMBtu/hr Thermal Combustor (mfd by Boiler Control Supply, mdl# ME-28) 2.006

System 5 - Primary Recycled Fuel Oil Re-Refining System #2

6.67 MMBtu/hr Process Heater (Oil Heater #3)

Unit #2 Oil Re-Refining Process - Fractionating Tower (Flash Vessel); two Wiped Film Evaporators, Liquid Knock Down Tank, Valves, S 2,008 Motors, Heat Exchangers, Pumps, Compressors

F. System 6 - Cooling Tower #2

S Water Cooling Tower #2 with Drift Eliminators (mfd by Baltimore Air Coil, mdl# 3000) 2.009

System 7 - Hydrotreating Filtration System G, S

2.56 MMBtu/hr Process Heater (Oil Heater #4) 2.010

Hydrotreating Process - Guard Bed Reactor, Hydrotreating Reactors, Hot and Cold High Pressure Separators, Base Oil Stripper, S 2.011

H. System 8 - Cooling Tower #3

Water Cooling Tower #3 with Drift Eliminators (mfd by EVAPCO, mdl# AT-8-39-B)



BUREAU OF AIR POLLUTION CONTROL Facility ID No. A0511 Draft Permit No. AP2992-1473

CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section I. General Conditions

Severability (Nevada Administrative Code (NAC) 445B.315.3(c)) Each of the conditions and requirements of this Operating Permit is severable and, if any are held invalid, the remaining conditions and requirements continue in effect.

Prohibited Acts (Nevada Revised Statute (NRS) 445B.470)) В Permittee shall not knowingly:

Violate any applicable provision, the terms or conditions of any permit or any provision for the filing of information;

Fail to pay any fee;

- Falsify any material statement, representation or certification in any notice or report; or
- Render inaccurate any monitoring device or method, required pursuant to the provisions of NRS 445B.100 to 445B.450, inclusive, or 445B.470 to 445B.640, inclusive, or any regulation adopted pursuant to those provisions.
- Prohibited Conduct: Concealment of Emissions (NAC 445B.225) C. Permittee shall not install, construct, or use any device which conceals any emission without reducing the total release of regulated air pollutants to the atmosphere.
- Compliance/Noncompliance (NAC 445B.315.3(d)) D. Permittee shall comply with all conditions of this Operating Permit. Any noncompliance constitutes a violation and is grounds for:
 - An action for noncompliance;
 - Revising, revoking, reopening and revising, or terminating the Operating Permit; or
 - Denial of an application for a renewal of the Operating Permit.
- E. NAC 445B.315.3(e) The need to halt or reduce activity to maintain compliance with the conditions of this Operating Permit is not a defense to noncompliance with any conditions of this Operating Permit.
- F. The director may revise, revoke and reissue, reopen and revise, or terminate the operating permit for cause.
- NAC 445B.315.3(g) G. This Operating Permit does not convey any property rights or any exclusive privilege.
- Η. Permittee shall provide the Bureau of Air Pollution Control, within a reasonable time, with any information that the Bureau of Air Pollution Control requests in writing to determine whether cause exists for revising, revoking and reissuing, reopening and revising or terminating this Operating Permit or to determine compliance with the conditions of this Operating Permit.
- Fees (NAC 445B.315.3(i)) 1. Permittee shall pay fees to the Bureau of Air Pollution Control in accordance with the provisions set forth in NAC 445B.327 and 445B.331.
- Right to Entry (NAC 445B.315.3(j)) J. Permittee shall allow the Bureau of Air Pollution Control personnel, upon the presentation of credentials, to:
 - Enter upon the premises of Permittee where:
 - The stationary source is located; Activity related to emissions is conducted; or
 - Records are kept pursuant to the conditions of this Operating Permit;
 - Have access to and copy, during normal business hours, any records that are kept pursuant to the conditions of this Operating Permit;
 - Inspect, at reasonable times, any facilities, practices, operations, or equipment, including any equipment for monitoring or controlling air pollution, that are regulated or required pursuant to this Operating Permit; and
 - Sample or monitor, at reasonable times, substances or parameters to determine compliance with the conditions of this Operating Permit or applicable requirements.
 - Certification (NAC 445B.315.3(k)) K. A responsible official of Permittee shall certify that, based on information and belief formed after reasonable inquiry, the statements made in any document required to be submitted by any condition of this Operating Permit are true, accurate and complete.



BUREAU OF AIR POLLUTION CONTROL Facility ID No. A0511 Draft Permit No. AP2992-1473

CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section I. General Conditions (continued)

Testing and Sampling (NAC 445B.252)

- To determine compliance with NAC 445B.001 to 445B.3689, inclusive, before the approval or the continuance of an operating permit or similar class of permits, the director may either conduct or order the owner of any stationary source to conduct or have conducted such testing and sampling as the director determines necessary. Testing and sampling or either of them must be conducted and the results submitted to the director within 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial startup of the facility and at such times as may be required by the director. 2.
- Tests of performance must be conducted and data reduced in accordance with the methods and procedures of the test contained in each
 - Specifies or approves, in specific cases, the use of a method of reference with minor changes in methodology; b.

Approves the use of an equivalent method;

Approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific

Waives the requirement for tests of performance because the owner or operator of a stationary source has demonstrated by other means to the director's satisfaction that the affected facility is in compliance with the standard.

Tests of performance must be conducted under such conditions as the director specifies to the operator of the plant based on representative 3. performance of the affected facility. The owner or operator shall make available to the director such records as may be necessary to determine the conditions of the performance test. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a performance test unless otherwise specified in the applicable standard. (NAC 445B.252.3)

Permittee shall give notice to the director 30 days before the test of performance to allow the director to have an observer present. A written testing procedure for the test of performance must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures. (NAC 445B.252.4)

Each test of performance must consist of at least three separate runs using the applicable method for that test. Each run must be conducted 5. for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions or other circumstances with less than three valid samples being obtained, compliance may be determined using the arithmetic mean of the results of the other two runs upon the director's approval. (NAC 445B.252.5) 6

All testing and sampling will be performed in accordance with recognized methods and as specified by the director. (NAC 445B.252.6) 7.

- The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power and other pertinent allied facilities as may be required and specified in writing by the director must be provided and paid for by the owner of the stationary source. (NAC 445B.252.7)
- All information and analytical results of testing and sampling must be certified as to their truth and accuracy and as to their compliance with 8. all provisions of NAC 445B.001 to 445B.3689, inclusive, and copies of these results must be provided to the director no later than 60 days

M. Maximum Opacity of Emissions (NAC 445B.22017)

Except as otherwise provided in this section and NAC 445B.2202, Permittee may not cause or permit the discharge into the atmosphere from any emission unit opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:

If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A of 40

- If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as
- The provisions of this section and NAC 445B.2202 do not apply to that part of the opacity that consists of uncombined water. The burden of 2. proof to establish the application of this exemption is upon the person seeking to come within the exemption:
- N. Exceptions for Stationary Sources (NAC 445B.2202) The provisions of NAC 445B.22017 do not apply to:

Smoke from the open burning described in NAC 445B.22067;

Smoke discharged in the course of training air pollution control inspectors to observe visible emissions, if the facility has written approval of 2. 3.

Emissions from an incinerator as set forth in NAC 445B.2207;

Emissions of stationary diesel-powered engines during warm-up for not longer than 15 minutes to achieve operating temperatures.



BUREAU OF AIR POLLUTION CONTROL Facility ID No. A0511 Draft Permit No. AP2992-1473 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section I. General Conditions (continued)

Odors (NAC 445B.22087)
Permittee may not discharge or cause to be discharged, from any stationary source, any material or regulated air pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents comfortable enjoyment of life or property.

P. <u>Assertion of Emergency as Affirmative Defense to Action for Noncompliance</u> (NAC 445B.326.1)

Permittee may assert an affirmative defense to an action brought for noncompliance with a technology-based emission limitation contained in the Operating Permit if the holder of the Operating Permit demonstrates through signed, contemporaneous operating logs or other relevant evidence that:

1. An emergency (as defined in NAC 445B.056) occurred and the holder of the Operating Permit can identify the cause of the emergency;

The facility was being properly operated at the time of the emergency;

During the emergency, the holder of the Operating Permit took all reasonable steps to minimize excess emissions; and

4. Permittee submitted notice of the emergency to the director within 2 working days after the emergency. The notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken to restore the normal operation of the facility.

In any action for noncompliance, Permittee, by asserting the affirmative defense of any emergency, has the burden of proof.

Q. <u>Revocation and Reissuance</u> (NAC 445B.3265)

This Operating Permit may be revoked if the control equipment is not operating. (NAC 445B.3265.1)

2. This Operating Permit may be revoked by the director upon determination that there has been a violation of NAC 445B.001 to 445B.3689, inclusive, or the provisions of 40 CFR § 52.21 or 40 C.F.R. Part 60 or 61, Prevention of Significant Deterioration, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants adopted by reference in NAC 445B.221. (NAC 445B.3265.2)

3. The revocation is effective 10 days after the service of a written notice, unless a hearing is requested. (NAC 445B.3265.3)

***********End of General Conditions*******



BUREAU OF AIR POLLUTION CONTROL Facility ID No. A0511 Draft Permit No. AP2992-1473

CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section II. General Construction Conditions

NAC 445B.250 (State Only Requirement)

The Director will be notified in writing of the following for \$2.006 through \$2.012:

- The date construction (or reconstruction as defined under NAC 445B.247) of the affected facility is commenced, postmarked no later than
- The anticipated date of initial startup of an affected facility, postmarked no more than 60 days and no less than 30 days prior to such date.
- The actual date of initial startup of the affected facility, postmarked within 15 days after such date.

В. Notification (NAC 445B.250.4, NAC 445B.346.2)

The Bureau of Air Pollution Control will be notified in writing of any physical or operational change to an existing facility which may increase the emission rate of any regulated air pollutant to which a standard applies, unless that change is specifically exempted under an applicable section or in NAC 445B.239 or 445B.242 and the exemption is not denied under those sections. The notice must be postmarked 60 days or as soon as practicable before the change is commenced and must include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The director may request additional relevant information subsequent to this notice.

**********End of General Construction Conditions******



Bureau of Air Pollution Control Facility ID No. A0511 Draft Permit No. AP2992-1473

CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

b.

Section IIA. Specific Construction Requirements

D. Emission Unit S2.006 Location North 4,374.12 km, East 324.49 km, UTM (Zone 11, NAD 83)

System 4 - Water Treatment System

2.006 5.796 MMBtu/hr Thermal Combustor (mfd by Boiler Control Supply, mdl# ME-28)

1. Air Pollution Equipment (NAC 445B.308.7, NAC 445B.346.1)
Emissions from \$2.006 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from \$2.006 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC compounds in oily waste water. Oily waste water is collected form on-site operations and stored in a 10,000 gallon storage tank.

Stack Height: 27.0 ft Stack Diameter: 1.8 ft x 1.8 ft Stack Velocity: 16.4 ft/sec Stack Temperature: 1510 °F

Test Methods and Procedures (NAC 445B.252, NAC 445B.22017, NAC 445B.346.2) Within 60 days after achieving the maximum production rate at which \$2.006 will be operated, but no later than 180 days after initial startup of the facility, Permittee shall determine compliance with the emission limits established in Section V.D.2 of this operating permit by conducting performance tests on the exhaust stack of \$2.006 as follows:

Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of **S2.006** consisting of three (3) valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A.

Conduct and record a Method 7E performance test for nitrogen oxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of **S2.006** consisting of three (3) valid runs. The Method 7E emissions test must be conducted in

accordance with 40 CFR Part 60, Appendix A.

Conduct and record a Method 15 performance test for reduced sulfur species (or equivalent EPA reference method as approved by the director) on the exhaust stack of **S2.006** consisting of three (3) valid runs. The Method 15 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A.

d. Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.006 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as follows:

[TGOC mass emission rate] x [1.22] = VOC mass emission rate

- e. For the purposes of demonstrating compliance with the opacity standard established in Section V.D.2 of this operating permit, opacity observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15-second intervals).
- f. Performance tests required under this section that are conducted below the maximum allowable throughput, as established in Section V.D.3 of this operating permit, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing.

g. Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing.



BUREAU OF AIR POLLUTION CONTROL Facility ID No. A0511 Draft Permit No. AP2992-1473

CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section IIA. Specific Construction Requirements (continued)

Emission Units S2.007 and S2.008 Location North 4,374.15 km, East 324.49 km, UTM (Zone 11, NAD 83)

System 5 - Primary Recycled Fuel Oil Re-Refining System #2

6.67 MMBtu/hr Process Heater (Oil Heater #3)

Unit #2 Oil Re-Refining Process - Fractionating Tower (Flash Vessel); two Wiped Film Evaporators, Liquid Knock Down Tank, S 2.008

Air Pollution Equipment (NAC 445B.308.7, NAC 445B.346.1) 1.

Emissions from \$2.007 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from \$2.007 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC emissions from the waste gas recovery and energy conservation system.

VOC emissions from \$2.008 shall be controlled by a vacuum recovery system. VOC emissions from \$2.008 that are controlled by the vacuum recovery system discharge through a waste gas recovery and energy conservation system for thermal destruction as fuel in \$2.007. In emergency situations, such as an upset/shutdown of \$2.007, VOC emissions from \$2.008 that are controlled by the vacuum recovery system may bypass the waste gas recovery and energy conservation system and discharge into carbon canister #2.

\$2.007 Stack Height: 40.0 ft S2.007 Stack Diameter: 1.8 ft S2.007 Stack Velocity: 28.0 ft/sec S2.007 Stack Temperature: 1017 °F

2. Test Methods and Procedures (NAC 445B.252, NAC 445B.22017, NAC 445B.346.2)

Within 60 days after achieving the maximum production rate at which System 5 will be operated, but no later than 180 days after initial startup of the facility, Permittee shall determine compliance with the emission limits established in Section V.E.2 of this operating permit by conducting performance tests on the exhaust stack of \$2.007 as follows:

Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2,007 consisting of three (3) valid runs. The Method 6 emissions test must be conducted in

b. Conduct and record a Method 7E performance test for nitrogen oxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 7E emissions test must be conducted in C.

Conduct and record a Method 10 performance test for carbon monoxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 10 emissions test must be conducted in

Conduct and record a Method 15 performance test for reduced sulfur species (or equivalent EPA reference method as approved by d the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 15 emissions test must be conducted in

Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference method e. as approved by the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as follows:

[TGOC mass emission rate] x [1.22] = VOC mass emission rate

- For the purposes of demonstrating compliance with the opacity standard established in Section V.E.2 of this operating permit, opacity f. observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15-second g.
- Performance tests required under this section that are conducted below the maximum allowable throughput, as established in Section V.E.3 of this operating permit, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing. h.

Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing.



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section IIA. Specific Construction Requirements (continued)

G. Emission Units S2.010 and S2.011 Location North 4,374.15 km, East 324.55 km, UTM (Zone 11, NAD 83)

System 7 - Hydrotreating Filtration System

2.010 2.56 MMBtu/hr Process Heater (Oil Heater #4)

Hydrotreating Process - Guard Bed Reactor, Hydrotreating Reactors, Het and Cold High Pressure Separators, Base Oil Stripper,

Valves, Motors, Heat Exchangers, Pumps, Compressors

Air Pollution Equipment (NAC 445B.308.7, NAC 445B.346.1)
 Emissions from S2.010 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from S2.010 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC emissions from the waste gas recovery and energy conservation system.

VOC emissions from \$2.011 shall be controlled by a vacuum recovery system. VOC emissions from \$2.011 that are controlled by the vacuum recovery system discharge through a waste gas recovery and energy conservation system for thermal destruction as fuel in \$2.010. In emergency situations, such as an upset/shutdown of \$2.010, VOC emissions from \$2.011 that are controlled by the vacuum recovery system may bypass the waste gas recovery and energy conservation system and discharge into carbon canister #3.

S2.010 Stack Height: 40.0 ft S2.010 Stack Diameter: 1.2 ft S2.010 Stack Velocity: 6.9 ft/sec S2.010 Stack Temperature: 1510 °F

2. <u>Test Methods and Procedures</u> (NAC 445B.252, NAC 445B.22017, NAC 445B.346.2)

Within 60 days after achieving the maximum production rate at which **System 7** will be operated, but no later than 180 days after initial startup of the facility, Permittee shall determine compliance with the emission limits established in Section V.G.2 of this operating permit by conducting performance tests on the exhaust stack of **S2.010** as follows:

Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of **S2.010** consisting of three (3) valid runs. The Method 6 emissions test must be conducted in

accordance with 40 CFR Part 60, Appendix A.

b. Conduct and record a Method 15 performance test for reduced sulfur species (or equivalent EPA reference method as approved by the director) on the exhaust stack of **\$2.010** consisting of three (3) valid runs. The Method 15 emissions test must be conducted in

accordance with 40 CFR Part 60, Appendix A.

c. Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.010 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as follows:

[TGOC mass emission rate] x [1.22] = VOC mass emission rate

- d. For the purposes of demonstrating compliance with the opacity standard established in Section V.G.2 of this operating permit, opacity observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15-second intervals).
- e. Performance tests required under this section that are conducted below the maximum allowable throughput, as established in Section V.G.3 of this operating permit, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing.

f. Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing.

********End of Specific Construction Requirements******



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section III. General Operating Conditions

Facilities Operation (NAC 445B.227)

Permittee may not:

Operate a stationary source of air pollution unless the control equipment for air pollution which is required by applicable requirements or

Disconnect, alter, modify or remove any of the control equipment for air pollution or modify any procedure required by an applicable

B. Excess Emissions (NAC 445B.232; NAC 445B.346.2)

Scheduled maintenance or testing or scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.3689, inclusive, must be approved by the director and performed during a time designated by the director as being 2

The director must be notified in writing of the time and expected duration at least 24 hours in advance of any scheduled maintenance which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.3689, inclusive.

The director must be notified in writing or by telephone of the time and expected duration at least 24 hours in advance of any scheduled 3. repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.3689, inclusive. 4

The director must be notified of any excess emissions within 24 hours after any malfunction or upset of the process equipment or equipment

for controlling pollution or during startup or shutdown of such equipment. The telephone number for the notification is (775) 687-4670. Permittee, as the owner or operator of an affected facility, shall provide the director, within 15 days after any malfunction, upset, startup, 5. shutdown, or human error which results in excess emissions, sufficient information to enable the director to determine the seriousness of the excess emissions. The information must include at least the following:

The identity of the stack or other point of emission, or both, where the excess emissions occurred.

The estimated magnitude of the excess emissions expressed in opacity or in units of the applicable limitation on emission and the operating data and methods used in estimating the magnitude of the excess emissions. The time and duration of the excess emissions. C.

The identity of the equipment causing the excess emissions.

If the excess emissions were the result of a malfunction, the steps taken to remedy the malfunction and the steps taken or planned to f.

The steps taken to limit the excess emissions.

Documentation that the equipment for controlling air pollution, process equipment, or processes were at all times maintained and operated, to a maximum extent practicable, in a manner consistent with good practice for minimizing emissions,

C. Permit Revision (NAC 445B.287,1.b)

A revision of this operating permit is required pursuant to the requirements of NAC 445B.3465 before the stationary source may be modified.

**********End of General Operating Conditions*********



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section IV. General Monitoring and Recordkeeping

A. <u>Records Retention</u> (NAC 445B.315.3(b))

Permittee shall retain records of all required monitoring data and supporting information for 5 years from the date of the sample collection, measurement, report or analysis. Supporting information includes, but is not limited to, all records regarding calibration and maintenance of the

monitoring equipment and all original strip-chart recordings for continuous monitoring instrumentation.

B. <u>Heporting</u> (NAC 445B.346.3)

Permittee will promptly report to the director any deviations from the requirements of this Operating Permit. The report to the director will include the probable cause of all deviations and any action taken to correct the deviations. For this Operating Permit, prompt is defined as submittal of a report within 15 days of the deviation. This definition does not alter any reporting requirements as established for reporting of excess emissions as required under NAC 445B.232 and under condition III.B of this permit.

C. Yearly Reports (NAC 445B.315.3(h), NAC 445B.346.2)

Permittee will submit yearly reports including, but not limited to, throughput, production, fuel consumption, hours of operation, and emissions. These reports will be submitted on the form provided by the Bureau of Air Pollution Control for all emission units/systems specified on the form. The completed form must be submitted to the Bureau of Air Pollution Control no later than March 1 annually for the preceding calendar year.

******End of General Monitoring and Recordkeeping Conditions*****



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions

Emission Units S2.001 and S2.002 Location North 4,374.16 km, East 324.48 km, UTM (Zone 11, NAD 83) System 1 - Primary Recycled Fuel Oil Re-Refining System #1

8.9 MMBtu/hr Process Heater (Oil Heater #1, mfd by Phoenix, mdi# 8.9, s/n 90603)

Unit #1 Oil Re-Refining Process - Thermal Dehydrators (12 Heated Tanks @ 25,000 Gailons each), Fractionating Tower (Flash Vessel); two Wiped Film Evaporators, Liquid Knock Down Tank, Valves, Motors, Heat Exchangers, Pumps, Compressors

Air Pollution Equipment (NAC 445B.308.7, NAC 445B.346.1)

Emissions from \$2.001 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from \$2.001 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC emissions from the waste gas recovery and energy conservation system.

VOC emissions from \$2.002 shall be controlled by a vacuum recovery system. VOC emissions from \$2.002 that are controlled by the vacuum recovery system discharge through a waste gas recovery and energy conservation system for thermal destruction as fuel in \$2.001. In emergency situations, such as an upset/shutdown of S2.001, VOC emissions from S2.002 that are controlled by the vacuum recovery system may bypass the waste gas recovery and energy conservation system and discharge into carbon canister #1.

\$2.001 Stack Height: 40.0 ft S2.001 Stack Diameter: 1.8 ft S2.001 Stack Velocity: 27.98 ft/sec

S2.001 Stack Temperature: 1017 °F

Emission Limits (NAC 445B.308.7, NAC 445B.346.1) 2.

On and after the date of startup of System 1, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of \$2.001, the following pollutants in excess of the following specified limits:

The discharge of PM to the atmosphere will not exceed 0.39 pounds per hour, nor more than 1.71 tons per year. b.

The discharge of PM₁₀ to the atmosphere will not exceed 0.39 pounds per hour, nor more than 1.71 tons per year. C.

The discharge of sulfur dioxide to the atmosphere will not exceed 5.40 pounds per hour, nor more than 23.65 tons per year. ď.

The discharge of nitrogen oxides to the atmosphere will not exceed 2.26 pounds per hour, nor more than 9.92 tons per year. e.

The discharge of carbon monoxide to the atmosphere will not exceed 0.85 pounds per hour, nor more than 3.72 tons per year. The discharge of volatile organic compounds to the atmosphere will not exceed 0.037 pounds per hour, nor more than 0.16 tons per f. g.

The opacity from the stack discharge of \$2.001 will not equal or exceed 20 percent in accordance with NAC 445B.22017.

Operating Parameters (NAC 445B.308.7; NAC 445B.346.1) 3.

The maximum allowable heat input rate for \$2.001 will not exceed 8.9 MMBtu per any one-hour period, combusting a maximum of 67.4 gallons per hour of #2 distillate fuel (process oil and by-product light ends from re-refining process). The maximum allowable volume of recycled fuel oil for \$2.002 is 1,200 gallons per hour (28.6 barrels per hour). b.

The sulfur content of the #2 distillate fuel combusted in \$2.001 will not exceed 0.5% by weight. C.

\$2.002 is limited to the re-refining of recycled fuel oil that may be designated as hazardous waste in their state of origin, but are not The maximum thermal fluid temperature for \$2,001 shall be 580 °F.

\$2.001 and \$2.002 each, may operate 24 hours per day and 8,760 hours per calendar year.



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

Emission Units S2.001 and S2.002 (continued)

Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2)

Monitoring and Recordkeeping (NAC 445B.308.5; NAC 445B.346.2)

Permittee, upon the issuance date of this permit will:

Monitor and record the #2 distillate fuel consumption rate in gallons for \$2.001 on a daily basis.

Monitor and record the hours of operation for \$2.001 and \$2.002 each, on a daily basis.

(3) Monitor and record the sulfur content of the #2 distillate fuel combusted in \$2.001 on a quarterly basis. Monitor and record the volume of recycled fuel oil for each delivery that is received on site in gallons.

Monitor and record the volume of recycled fuel oil that is processed in \$2,002 on a daily basis in gallons.

Monitor and record the thermal fluid temperature for \$2.001 on a continuous, one-minute average, daily basis The required monitoring and recordkeeping established in (1) through (6) above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

The calendar date of any required monitoring.

The total daily #2 distillate fuel consumption in gallons for \$2.001, for the corresponding date.

The total daily hours of operation for \$2.001 and \$2.002, for the corresponding date.

The corresponding average hourly #2 distillate fuel consumption in gallons per hour for \$2.001. The average hourly #2 distillate fuel consumption rate will be determined from the total daily consumption rate and the total daily hours of operation recorded in (b) and (c) above. Sulfur analysis of the #2 distillate fuel that is combusted in \$2.001 to ensure compliance with the limits specified in 3.c

of this section.

The volume of recycled fuel oil for each delivery that is received on site.

The total daily volume of recycled fuel oil that is processed in \$2,002, for the corresponding date.

The corresponding average hourly recycled fuel oil that is processed in gallons per hour for \$2.002. The average hourly recycled fuel oil process rate will be determined from the total daily recycled fuel oil process rate and the total daily hours of operation recorded in (c) and (g) above.

The thermal fluid temperature for \$2.001 to ensure compliance with the limits specified in 3.e of this section.

Maintain records from the recycled fuel oil supplier(s) that certifies the recycled fuel oil feedstock complies with 40 CFR 279. (8)

Performance/Compliance Testing (NAC 445B.252.1) b.

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of \$2,001:

Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.001 consisting of three (3) valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s).

Conduct and record a Method 7E performance test for nitrogen oxide emissions (or equivalent EPA reference method as (2)approved by the director) on the exhaust stack of \$2.001 consisting of three (3) valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the

maximum production rate of the emission unit(s).

Conduct and record a Method 10 performance test for carbon monoxide emissions (or equivalent EPA reference method as (3)approved by the director) on the exhaust stack of \$2.001 consisting of three (3) valid runs. The Method 10 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s).

Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference (4)method as approved by the director) on the exhaust stack of \$2.001 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s). In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as follows:

[TGOC mass emission rate] x [1.22] = VOC mass emission rate

For the purposes of demonstrating compliance with the opacity standard established in 2.g of this section, opacity observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15-second intervals).

Performance tests required under this section that are conducted below the maximum allowable throughput, as established in 3 of this section, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing.

Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing (7)



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Section V. Specific Operating Conditions (continued)

Emission Units \$2,003 and \$2,004 Location North 4,374.16 km, East 324.47 km, UTM (Zone 11, NAD 83)

System 2 – Secondary Recycled Fuel Oil Re-Refining System

2.003 4.7 MMBtu/hr Process Heater (Oil Heater #2, mfd by Phoenix, mdl# 4.7, s/n 80502)

Re-Generative Clay Filtration Process (Enervac System)

Air Pallution Equipment (NAC 445B.308.7, NAC 445B.346.1)

Emissions from \$2.003 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from \$2.003 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC emissions from the waste gas recovery and energy conservation system.

VOC emissions from \$2.004 shall be controlled by a vacuum recovery system. VOC emissions from \$2.004 that are controlled by the vacuum recovery system discharge through a waste gas recovery and energy conservation system for thermal destruction as fuel in \$2,003.

\$2.003 Stack Height: 40.0 ft \$2.003 Stack Diameter: 1.8 ft \$2.003 Stack Velocity: 14.0 ft/sec S2.003 Stack Temperature: 796 °F

Emission Limits (NAC 445B.308.7, NAC 445B.346.1)

On and after the date of startup of System 2, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of S2.003, the following pollutants in excess of the following specified limits:

The discharge of PM to the atmosphere will not exceed 0.14 pounds per hour, nor more than 0.62 tons per year. b.

The discharge of PM₁₀ to the atmosphere will not exceed 0.14 pounds per hour, nor more than 0.62 tons per year.

The discharge of sulfur dioxide to the atmosphere will not exceed 0.62 pounds per hour, nor more than 2.72 tons per year. d.

The discharge of nitrogen oxides to the atmosphere will not exceed 0.65 pounds per hour, nor more than 2.85 tons per year. The discharge of carbon monoxide to the atmosphere will not exceed 0.85 pounds per hour, nor more than 3.72 tons per year. e.

The discharge of volatile organic compounds to the atmosphere will not exceed 0.37 pounds per hour, nor more than 1.62 tons per f. g.

The opacity from the stack discharge of \$2.003 will not equal or exceed 20 percent in accordance with NAC 445B.22017.

Operating Parameters (NAC 445B.308.7; NAC 445B.346.1) 3.

The maximum allowable heat input rate for \$2.003 will not exceed 4.7 MMBtu per any one-hour period, combusting a maximum of 35.6 gallons per hour of #2 distillate fuel (process oil and by-product light ends from re-refining process). b.

The maximum allowable volume of refined oil products for \$2.004 is 700 gallons per hour. C.

The sulfur content of the #2 distillate fuel combusted in \$2,003 will not exceed 0.5% by weight. ď

The maximum thermal fluid temperature for \$2,003 shall be 380 °F.

S2.003 and S2.004 each, may operate 24 hours per day and 8,760 hours per calendar year.



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

- B. Emission Units \$2.003 and \$2.004 (continued)
 - 4. Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2)
 - a. Monitoring and Recordkeeping (NAC 445B.308.5; NAC 445B.346.2)

Permittee, upon the issuance date of this permit will:

(1) Monitor and record the #2 distillate fuel consumption rate in gallons for \$2,003 on a daily basis.

(2) Monitor and record the hours of operation for \$2,003 on a daily basis.

- (3) Monitor and record the hours of operation for \$2,004 when refined oil products are being processed.
- (4) Monitor and record the hours of operation when the regenerative process is being conducted for \$2.004.
- (5) Monitor and record the volume of recycled fuel oil that is processed in \$2.004 on a daily basis in gallons.
- (6) Monitor and record the thermal fluid temperature for \$2.003 on a continuous, one-minute average, daily basis.
- (7) The required monitoring and recordkeeping established in (1) through (6) above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

(a) The calendar date of any required monitoring.

(b) The total daily #2 distillate fuel consumption in gallons for \$2.003, for the corresponding date.

(c) The total daily hours of operation for \$2,003 for the corresponding date.

(d) The corresponding average hourly #2 distillate fuel consumption in gallons per hour for \$2.003. The average hourly #2 distillate fuel consumption rate will be determined from the total daily consumption rate and the total daily hours of operation recorded in (b) and (c) above.

(e) The total daily volume of refined oil products that is processed in \$2.004, for the corresponding date.

- (f) The total daily hours of operation for \$2.004 when refined oil products are being processed, for the corresponding date.
- (g) The corresponding average hourly refined oil products that is processed in gallons per hour for **\$2.004**. The average hourly recycled fuel oil process rate will be determined from the total daily refined oil products process rate and the total daily hours of operation recorded in (e) and (f) above.

h) The total hours for each regenerative process that is conducted for \$2.004.

The thermal fluid temperature for \$2,003 to ensure compliance with the limits specified in 3.d of this section.

b. Performance/Compliance Testing (NAC 445B.252.1)

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of \$2.003:

- (1) Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.003 consisting of three (3) valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s).
- (2) Conduct and record a Method 7E performance test for nitrogen oxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.003 consisting of three (3) valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s).

(3) Conduct and record a Method 10 performance test for carbon monoxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.003 consisting of three (3) valid runs. The Method 10 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s).

(4) Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.003 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s). In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as follows:

[TGOC mass emission rate] x [1.22] = VOC mass emission rate

- (5) For the purposes of demonstrating compliance with the opacity standard established in 2.g of this section, opacity observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15-second intervals).
- (6) Performance tests required under this section that are conducted below the maximum allowable throughput, as established in 3 of this section, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing.
- (7) Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing.



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Section V. Specific Operating Conditions (continued)

Location North 4,374.15 km, East 324.46 km, UTM (Zone 11, NAD 83)

System 3 - Cooling Tower #1

2.005 Water Cooling Tower #1 with Drift Eliminators (mfd by Baltimore Air Coil, mdl# 3000)

Air Pallution Equipment (NAC 445B.308.7; NAC 445B.346.1) Emissions from \$2.005 shall be controlled by drift eliminators.

> Stack Height: 11.0 ft Stack Diameter: 9,0 ft Stack Velocity: 29.5 ft/sec Stack Temperature: Ambient

2. Emission Limits (NAC 445B.308.7; NAC 445B.346.1)

On and after the date of startup of \$2.005, Permittee will not discharge or cause the discharge into the atmosphere from the cooling tower stack of S2.005, the following pollutants in excess of the following specified limits:

The discharge of PM to the atmosphere will not exceed 0.10 pounds per hour, nor more than 0.45 tons per year.

The discharge of PM₁₀ to the atmosphere will not exceed 0.10 pounds per hour, nor more than 0.45 tons per year.

The opacity from the cooling tower stack discharge of \$2.005 will not equal or exceed 20 percent in accordance with NAC

3. Operating Parameters (NAC 445B.308.7; NAC 445B.346.1)

The maximum circulating water flow rate for \$2.005 will not exceed 800 gallons per minute.

The maximum total dissolved solids (TDS) content for \$2.005 will not exceed 1,260 milligrams per liter (1,260 ppm). C.

The use of chromium-based water treatment chemicals is prohibited.

\$2.005 may operate 24 hours per day and 8,760 hours per calendar year.

Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2)

Monitoring and Recordkeeping

Permittee, upon the issuance date of this permit will:

Monitor and record the circulation water flow rate in gallons for \$2.005 on a daily basis. (2)

Monitor and record the hours of operation for \$2,005 on a daily basis.

The required monitoring established in (1) and (2) above, will be maintained in a contemporaneous log containing, at a (3)

The calendar date of any required monitoring.

The total daily circulating water flow rate in gallons, for the corresponding date.

The total daily hours of operation for the corresponding date. (c)

The average volume flow rate, in gallons per minute, of the circulating water on a daily basis. (d) Performance/Compliance Testing (NAC 445B.252.1)

h

Sample and analyze the circulating water for Total Dissolved Solids (TDS) at six-month intervals.

Record the TDS value from the sampling in 4.b.(1).



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

Emission Unit S2.006 Location North 4,374.12 km, East 324.49 km, UTM (Zone 11, NAD 83)

System 4 - Water Treatment System

S 2.006 5.796 MMBtu/hr Thermal Combustor (mfd by Boiler Control Supply, mdl# ME-28)

1. <u>Air Pollution Equipment</u> (NAC 445B.308.7, NAC 445B.346.1)

Emissions from \$2.006 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from \$2.006 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC compounds in oily waste water. Oily waste water is collected form on-site operations and stored in a 10,000 gallon storage tank.

Stack Height: 27.0 ft

Stack Diameter: 1.8 ft x 1.8 ft Stack Velocity: 16.4 ft/sec Stack Temperature: 1510 °F

Emission Limits (NAC 445B.308.7, NAC 445B.346.1)

On and after the date of startup of \$2.006, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of \$2.006, the following pollutants in excess of the following specified limits:

a. The discharge of PM to the atmosphere will not exceed 0.13 pounds per hour, nor more than 0.58 tons per year.

b. The discharge of PM₁₀ to the atmosphere will not exceed 0.13 pounds per hour, nor more than 0.58 tons per year.

- c. The discharge of sulfur dioxide to the atmosphere will not exceed 3.59 pounds per hour, nor more than 15.73 tons per year.
- d. The discharge of nitrogen oxides to the atmosphere will not exceed 1.32 pounds per hour, nor more than 5.77 tons per year.
- e. The discharge of carbon monoxide to the atmosphere will not exceed 0.33 pounds per hour, nor more than 1.44 tons per year.
- f. The discharge of volatile organic compounds to the atmosphere will not exceed 0.059 pounds per hour, nor more than 0.26 tons per year.
- g. The opacity from the stack discharge of \$2.006 will not equal or exceed 20 percent in accordance with NAC 445B.22017.

3. Operating Parameters (NAC 445B.308.7; NAC 445B.346.1)

a. The maximum allowable heat input rate for \$2,006 will not exceed 5.796 MMBtu per any one-hour period, combusting a maximum of 43.9 gallons per hour of #2 distillate fuel (process oil and by-product light ends from re-refining process).

b. The sulfur content of the #2 distillate fuel combusted in \$2.006 will not exceed 0.5% by weight.

- c. S2.006 shall be maintained and operated in accordance with the manufacturer's specifications.
- d. Waste water generated at Permittee facility may consist of water and oily water originating from vapors condensed from the thermal dehydrators tanks, vapors collected from the distillation process, sour water and condensed steam from the hydrotreating filtration process, storm waters collected from secondary containment structures on site, and waters from the cleaning of process equipment and storage tanks.

e. The maximum allowable volume of waste water that is combusted in \$2,006 is 284 gallons per hour.

f. S2.006 shall have a flow meter device installed and maintained to measure the waste water being injected into S2.006.

The minimum process temperature of the combustion chamber of **S2.006** shall be 1400 °F.

- h. Waste water will not be injected into \$2.006 if the process temperature falls below 1400 °F.
- i. A continuous temperature recording device shall be installed and used to measure and record the process temperature of \$2,006.
- A continous CO sensor shall be installed and used to measure and record the CO concentration (in ppm) of \$2.006.
- k. S2.006 will shut down if the CO concentration exceeds 60 ppm for a duration of more than 5 minutes.
- I. The CO sensor shall be maintained and operated in accordance with the manufacturer's specifications.
- m. An oxygen sensor and oxygen trim device shall be installed and used in accordance with the manufacturer's specifications.

n. <u>Hours</u>

\$2.006 may operate 24 hours per day and 8,760 hours per calendar year.



BUREAU OF AIR POLLUTION CONTROL Facility ID No. A0511 Draft Permit No. AP2992-1473

CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

Emission Unit S2.006 (continued)

Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2) 4.

Monitoring and Recordkeeping (NAC 445B.308.5; NAC 445B.346.2) Permittee, upon the issuance date of this permit will:

Monitor and record the #2 distillate fuel consumption rate in gallons for \$2.006 on a daily basis.

Monitor and record the hours of operation for \$2.006 on a daily basis.

- (3) (4) Monitor and record the volume of waste water that is processed in S2.006 on a daily basis in gallons.
- Monitor and record the process temperature of the combustion chamber for \$2,006 on a continuous basis. (5)
- Monitor and record the time and date when the process temperature falls below 1400 °F and requires \$2.006 to be shutdown.
- Monitor and record the CO concentration of the combustion chamber for \$2.006 on a continuous basis.
- Monitor and record the time and date when the CO concentration exceeds 60 ppm and requires \$2.006 to be shutdown. For any unplanned shutdown event, record any corrections to \$2.006 that corrected the unplanned shutdown event.
- The required monitoring and recordkeeping established in (1) through (8) above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:
 - The calendar date of any required monitoring.
 - The total daily #2 distillate fuel consumption in gallons for \$2.006, for the corresponding date.

The total daily hours of operation for \$2,006 for the corresponding date. (c)

The corresponding average hourly #2 distillate fuel consumption in gallons per hour for \$2.006. The average hourly #2 distillate fuel consumption rate will be determined from the total daily consumption rate and the total daily hours of operation recorded in (b) and (c) above.

The total daily volume of waste water processed in \$2.006 in gallons, for the corresponding date. (e)

The corresponding average hourly volume of waste water processed in \$2,006 in gallons per hour. The average hourly volume of waste water processed will be determined from the total daily volume processed and the total daily hours of operation recorded in (c) and (e) above.

The process temperature of the combustion chamber. (g)

The CO concentration of the combustion chamber. The times and dates when \$2.006 has an unplanned shutdown event as a result of a CO concentration exceedance, low process temperature, or some other event that initiates shutdown.

Any corrections made to \$2,006 that corrected an unplanned shutdown event. (10)

Maintain records of maintainence and operation in accordance with the manufacturer's specifications for \$2.006.

Maintain records of maintainence and operation in accordance with the manufacturer's specifications for the CO sensor. Records shall at a minimum contain calibration data for the CO sensor and any adjustments made to the CO sensor.

- Maintain records of maintainence and operation in accordance with the manufacturer's specifications for the oxygen sensor (12)and oxygen trim device. Records shall at a minimum contain calibration data for the oxygen sensor and any adjustments
- Performance/Compliance Testing (NAC 445B 252.1)

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of \$2,006:

Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.006 consisting of three (3) valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A.

Conduct and record a Method 7E performance test for nitrogen oxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.006 consisting of three (3) valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A.

Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.006 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s). In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as

[TGOC mass emission rate] x [1.22] = VOC mass emission rate

For the purposes of demonstrating compliance with the opacity standard established in 2.g of this operating permit, (4)opacity observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations

Performance tests required under this section that are conducted below the maximum allowable throughput, as established in 3 of this section, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing.

Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing. (6)



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

Emission Units S2.007 and S2.008 Location North 4,374.15 km, East 324.49 km, UTM (Zone 11, NAD 83)

System 5 – Primary Recycled Fuel Oil Re-Refining System #2

S 2.007 6.67 MMBtu/hr Process Heater (Oil Heater #3)

Unit #2 Oil Re-Refining Process - Fractionating Tower (Flash Vessel); two Wiped Film Evaporators, Liquid Knock Down Tank,

Valves, Motors, Heat Exchangers, Pumps, Compressors

1. Air Pollution Equipment (NAC 445B.308.7, NAC 445B.346.1)

Emissions from \$2.007 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from \$2.007 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC emissions from the waste gas recovery and energy conservation system.

VOC emissions from **S2.008** shall be controlled by a vacuum recovery system. VOC emissions from **S2.008** that are controlled by the vacuum recovery system discharge through a waste gas recovery and energy conservation system for thermal destruction as fuel in **S2.007**. In emergency situations, such as an upset/shutdown of **S2.007**, VOC emissions from **S2.008** that are controlled by the vacuum recovery system may bypass the waste gas recovery and energy conservation system and discharge into carbon canister #2.

S2.007 Stack Height: 40.0 ft S2.007 Stack Diameter: 1.8 ft S2.007 Stack Velocity: 28.0 ft/sec S2.007 Stack Temperature: 1017 °F

2. Emission Limits (NAC 445B.308.7, NAC 445B.346.1) + Page 124

On and after the date of startup of System 5, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of S2.007, the following pollutants in excess of the following specified limits:

a. The discharge of PM to the atmosphere will not exceed 0.15 pounds per hour, nor more than 0.67 tons per year.

b. The discharge of PM₁₀ to the atmosphere will not exceed 0.15 pounds per hour, nor more than 0.67 tons per year.

c. The discharge of sulfur dioxide to the atmosphere will not exceed 4.17 pounds per hour, nor more than 18.27 tons per year.

d. The discharge of nitrogen oxides to the atmosphere will not exceed 1.53 pounds per hour, nor more than 6.70 tons per year.

e. The discharge of carbon monoxide to the atmosphere will not exceed 0.38 pounds per hour, nor more than 1.68 tons per year.

The discharge of volatile organic compounds to the atmosphere will not exceed 0.069 pounds per hour, nor more than 0.30 tons per year.

The opacity from the stack discharge of \$2.007 will not equal or exceed 20 percent in accordance with NAC 445B.22017.

3. <u>Operating Parameters</u> (NAC 445B.308.7; NAC 445B.346.1)

- a. The maximum allowable heat input rate for \$2.007 will not exceed 6.67 MMBtu per any one-hour period, combusting a maximum of 50.5 gallons per hour of #2 distillate fuel (process oil and by-product light ends from re-refining process).
- b. The maximum allowable volume of recycled fuel oil for \$2.008 is 1,200 gallons per hour (28.6 barrels per hour).

The sulfur content of the #2 distillate fuel combusted in \$2.007 will not exceed 0.5% by weight.

d. S2.008 is limited to the re-refining of recycled fuel oil that may be designated as hazardous waste in their state of origin, but are not regulated as hazardous waste as defined in 40 CFR 261.

e. The maximum thermal fluid temperature for \$2,007 shall be 580 °F.

. Hours

S2.007 and S2.008 each, may operate 24 hours per day and 8,760 hours per calendar year.



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

- Emission Units \$2.007 and \$2.008 (continued)
 - 4. Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2)

Monitoring and Recordkeeping (NAC 445B.308.5; NAC 445B.346.2)

Permittee, upon the issuance date of this permit will:

Monitor and record the #2 distillate fuel consumption rate in gallons for \$2,007 on a daily basis.

Monitor and record the hours of operation for \$2.007 and \$2.008 each, on a daily basis.

Monitor and record the sulfur content of the #2 distillate fuel combusted in \$2.007 on a quarterly basis. Monitor and record the volume of recycled fuel oil for each delivery that is received on site in gallons.

Monitor and record the volume of recycled fuel oil that is processed in \$2,008 on a daily basis in gallons. Monitor and record the thermal fluid temperature for \$2.007 on a continuous, one-minute average, daily basis.

The required monitoring and recordkeeping established in (1) through (6) above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

The calendar date of any required monitoring.

The total daily #2 distillate fuel consumption in gallons for \$2.007, for the corresponding date.

The total daily hours of operation for \$2,007 and \$2,008, for the corresponding date.

The corresponding average hourly #2 distillate fuel consumption in gallons per hour for \$2,007. The average hourly #2 distillate fuel consumption rate will be determined from the total daily consumption rate and the total daily hours of operation recorded in (b) and (c) above. (e)

Sulfur analysis of the #2 distillate fuel that is combusted in \$2.007 to ensure compliance with the limits specified in 3.c

The volume of recycled fuel oil for each delivery that is received on site.

The total daily volume of recycled fuel oil that is processed in \$2,008, for the corresponding date. (g)

The corresponding average hourly recycled fuel oil that is processed in gallons per hour for \$2.008. The average hourly recycled fuel oil process rate will be determined from the total daily recycled fuel oil process rate and the total daily hours of operation recorded in (c) and (g) above.

The thermal fluid temperature for \$2.007 to ensure compliance with the limits specified in 3.e of this section.

- Maintain records from the recycled fuel oil supplier(s) that certifies the recycled fuel oil feedstock complies with 40 CFR 279.
- Performance/Compliance Testing (NAC 445B.252.1)

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of \$2.007:

Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum

Conduct and record a Method 7E performance test for nitrogen oxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the

maximum production rate of the emission unit(s).

(3)Conduct and record a Method 10 performance test-for carbon monoxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 10 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s).

Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.007 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s). In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as

[TGOC mass emission rate] x [1.22] \simeq VOC mass emission rate

For the purposes of demonstrating compliance with the opacity standard established in 2.g of this section, opacity observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations

Performance tests required under this section that are conducted below the maximum allowable throughput, as established in (6)3 of this section, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing. (7)

Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing.



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Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

Emission Unit S2.009

Location North 4,374.15 km, East 324.50 km, UTM (Zone 11, NAD 83)

System 6 - Cooling Tower #2

2.009 Water Cooling Tower #2 with Drift Eliminators (mfd by Baltimore Air Coil, mdl# 3000)

 Air Pollution Equipment (NAC 445B.308.7; NAC 445B.346.1) Emissions from S2.009 shall be controlled by drift eliminators.

> Stack Height: 11.0 ft Stack Diameter: 9.0 ft Stack Velocity: 29.5 ft/sec Stack Temperature: Ambient

2. <u>Emission Limits</u> (NAC 445B.308.7; NAC 445B.346.1)

On and after the date of startup of **S2.009**, Permittee will not discharge or cause the discharge into the atmosphere from the cooling tower stack of **S2.009**, the following pollutants in excess of the following specified limits:

- a. The discharge of PM to the atmosphere will not exceed 0.10 pounds per hour, nor more than 0.45 tons per year.
- b. The discharge of PM₁₀ to the atmosphere will not exceed 0.10 pounds per hour, nor more than 0.45 tons per year.
- c. The opacity from the cooling tower stack discharge of \$2.009 will not equal or exceed 20 percent in accordance with NAC 445B.22017.
- 3. Operating Parameters (NAC 445B.308.7; NAC 445B.346.1)
 - a. The maximum circulating water flow rate for \$2,009 will not exceed 800 gallons per minute.
 - b. The maximum total dissolved solids (TDS) content for \$2.009 will not exceed 1,260 milligrams per liter (1,260 ppm).
 - c. The use of chromium-based water treatment chemicals is prohibited.
 - d. Hours
 - \$2.009 may operate 24 hours per day and 8,760 hours per calendar year.
- 4. Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2)
 - Monitoring and Recordkeeping

Permittee, upon the issuance date of this permit will:

- Monitor and record the circulation water flow rate in gallons for \$2.009 on a daily basis.
- (2) Monitor and record the hours of operation for \$2.009 on a daily basis.
- (3) The required monitoring established in (1) and (2) above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:
 - (a) The calendar date of any required monitoring.
 - (b) The total daily circulating water flow rate in gallons, for the corresponding date.
 - (c) The total daily hours of operation for the corresponding date.
 - (d) The average volume flow rate, in gallons per minute, of the circulating water on a daily basis.
- b. Performance/Compliance Testing (NAC 445B:252.1)

Permittee will:

- (1) Sample and analyze the circulating water for Total Dissolved Solids (TDS) at six-month intervals.
- (2) Record the TDS value from the sampling in 4.b.(1).



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

Emission Units S2.010 and S2.011 Location North 4,374.15 km, East 324.55 km, UTM (Zone 11, NAD 83)

System 7 – Hydrotreating Filtration System

2.56 MMBtu/hr Process Heater (Oil Heater #4)

Hydrotreating Process - Guard Bed Reactor, Hydrotreating Reactors, Hot and Cold High Pressure Separators, Base Oil Stripper, Valves, Motors, Heat Exchangers, Pumps, Compressors

Air Pollution Equipment (NAC 445B.308.7, NAC 445B.346.1)

Emissions from \$2.010 shall be uncontrolled, discharging through the exhaust stack to the outside atmosphere. Emissions from \$2.010 shall consist of the combustion products related to fuel combustion of process oil and by-product light ends from the re-refining process and combustion products from the thermal destruction of VOC emissions from the waste gas recovery and energy conservation system.

VOC emissions from \$2.011 shall be controlled by a vacuum recovery system. VOC emissions from \$2.011 that are controlled by the vacuum recovery system discharge through a waste gas recovery and energy conservation system for thermal destruction as fuel in \$2.010. In emergency situations, such as an upset/shutdown of \$2.010, VOC emissions from \$2.011 that are controlled by the vacuum recovery system may bypass the waste gas recovery and energy conservation system and discharge into carbon canister #3.

S2.010 Stack Height: 40.0 ft \$2.010 Stack Diameter: 1.2 ft S2.010 Stack Velocity: 6.9 ft/sec S2.010 Stack Temperature: 1510 °F

Emission Limits (NAC 445B.308.7, NAC 445B.346.1)

On and after the date of startup of System 7, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of \$2.010, the following pollutants in excess of the following specified limits:

The discharge of PM to the atmosphere will not exceed 0.057 pounds per hour, nor more than 0.25 tons per year.

The discharge of PM₁₀ to the atmosphere will not exceed 0.057 pounds per hour, nor more than 0.25 tons per year. C.

The discharge of sulfur dioxide to the atmosphere will not exceed 1.55 pounds per hour, nor more than 6.81 tons per year.

The discharge of nitrogen oxides to the atmosphere will not exceed 0.57 pounds per hour, nor more than 2.50 tons per year.

The discharge of carbon monoxide to the atmosphere will not exceed 0.14 pounds per hour, nor more than 0.63 tons per year. The discharge of volatile organic compounds to the atmosphere will not exceed 0.025 pounds per hour, nor more than 0.11 tons per f.

The opacity from the stack discharge of \$2.010 will not equal or exceed 20 percent in accordance with NAC 445B.22017. g.

Э. Operating Parameters (NAC 445B.308.7; NAC 445B.346.1)

- The maximum allowable heat input rate for \$2.010 will not exceed 2.56 MMBtu per any one-hour period, combusting a maximum of 19.4 gallons per hour of #2 distillate fuel (process oil and by-product light ends from re-refining process). The maximum allowable volume of refined oil products for \$2.011 is 1,200 gallons per hour. b.
- The sulfur content of the #2 distillate fuel combusted in \$2.010 will not exceed 0.5% by weight.

The maximum temperature for the oil-gas feed mixture being processed inside coils in the radiant and convective zones of \$2.010

Hours

S2.010 and S2.011 each, may operate 24 hours per day and 8,760 hours per calendar year.



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Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

G. Emission Units S2.010 and S2.011 (continued)

Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2)

a. Monitoring and Recordkeeping (NAC 445B.308.5; NAC 445B.346.2)

Permittee, upon the issuance date of this permit will;

(1) Monitor and record the #2 distillate fuel consumption rate in gallons for \$2.010 on a daily basis.

(2) Monitor and record the hours of operation for \$2.010 on a daily basis.

- (3) Monitor and record the hours of operation for \$2.011 when refined oil products are being processed.
- (4) Monitor and record the hours of operation when the hydrotreating process is being conducted for \$2.011.

(5) Monitor and record the volume of refined oil products that is processed in \$2.011 on a daily basis in gallons.

- (6) Monitor and record the temperature of the oil-gas feed mixture inside the coils of \$2.010 on a continuous, one-minute average, daily basis.
- (7) The required monitoring and recordkeeping established in (1) through (6) above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

The calendar date of any required monitoring.

(b) The total daily #2 distillate fuel consumption in gallons for S2.010, for the corresponding date.

(c) The total daily hours of operation for \$2.010 for the corresponding date.

(d) The corresponding average hourly #2 distillate fuel consumption in gallons per hour for \$2.010. The average hourly #2 distillate fuel consumption rate will be determined from the total daily consumption rate and the total daily hours of operation recorded in (b) and (c) above.

e) The total daily volume of refined oil products that is processed in S2.011, for the corresponding date.

- (f) The total daily hours of operation for S2.011 when refined oil products are being processed, for the corresponding date.
- (g) The corresponding average hourly refined oil products that is processed in gallons per hour for \$2.011. The average hourly refined oil products process rate will be determined from the total daily refined oil products process rate and the total daily hours of operation recorded in (e) and (f) above.

h) The total hours for each hydrotreating process that is conducted for \$2.011.

(i) The temperature of the oil-gas feed mixture inside the coils of **S2.010** to ensure compliance with the limits specified in 3.d of this section.

b. <u>Performance/Compliance Testing</u> (NAC 445B.252.1)

At least 90 days prior to the date of expiration of this permit, but no earlier than 365 days from the date of expiration of this permit, Permittee will conduct and record the following performance tests on the exhaust stack of **S2.010**:

- (1) Conduct and record a Method 6 performance test for sulfur dioxide emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.010 consisting of three (3) valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s).
- Conduct and record a Method 25A performance test for volatile organic compound emissions (or equivalent EPA reference method as approved by the director) on the exhaust stack of \$2.010 consisting of three (3) valid runs. The Method 25A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. All performance tests must be conducted at the maximum production rate of the emission unit(s). In the absence of molecular speciation data, the VOC mass emission rate shall be calculated from the carbon (total gaseous organic carbon, or TGOC) mass emission rate on a propane basis as follows:

[TGOC mass emission rate] x [1.22] = VOC mass emission rate

- (3) For the purposes of demonstrating compliance with the opacity standard established in 2.g of this section, opacity observations shall be conducted concurrently with the performance test and in accordance with Reference Method 9 in Appendix A of 40 CFR Part 60. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15-second intervals).
- (4) Performance tests required under this section that are conducted below the maximum allowable throughput, as established in 3 of this section, shall be subject to the director's review to determine if the throughputs during the performance tests were sufficient to provide adequate compliance demonstration. Should the director determine that the performance tests do not provide adequate compliance demonstration, the director may require additional performance testing.
- (5) Permittee shall comply with the requirements of Section I.L.3 through I.L.8 for all performance testing.



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CLASS II AIR QUALITY OPERATING PERMIT

Issued to: BANGO OIL, LLC

Section V. Specific Operating Conditions (continued)

Location North 4,374.13 km, East 324.56 km, UTM (Zone 11, NAD 83)

System 8 - Cooling Tower #3 2.012 Water Cooling Tower #3 with Drift Eliminators (mfd by EVAPCO, mdl# AT-8-39-B)

Air Pollution Equipment (NAC 445B.308.7; NAC 445B.346.1) Emissions from \$2.012 shall be controlled by drift eliminators.

Stack Height: 11.0 ft Stack Diameter: 4.0 ft Stack Velocity: 29.5 ft/sec Stack Temperature: Ambient

Emission Limits (NAC 445B.308.7; NAC 445B.346.1)

On and after the date of startup of \$2.012, Permittee will not discharge or cause the discharge into the atmosphere from the cooling tower stack of S2.012, the following pollutants in excess of the following specified limits:

The discharge of PM to the atmosphere will not exceed 0.034 pounds per hour, nor more than 0.15 tons per year. b.

The discharge of PM₁₀ to the atmosphere will not exceed 0.034 pounds per hour, nor more than 0.15 tons per year.

The opacity from the cooling tower stack discharge of \$2.012 will not equal or exceed 20 percent in accordance with NAC

Operating Parameters (NAC 445B.308.7; NAC 445B.346.1) 3.

The maximum circulating water flow rate for \$2.012 will not exceed 264 gallons per minute.

The maximum total dissolved solids (TDS) content for \$2.012 will not exceed 1,260 milligrams per liter (1,260 ppm).

The use of chromium-based water treatment chemicals is prohibited.

S2.012 may operate 24 hours per day and 8,760 hours per calendar year.

Monitoring, Testing and Reporting (NAC 445B.308.7; NAC 445B.346.2)

Monitoring and Recordkeeping

Permittee, upon the issuance date of this permit will:

Monitor and record the circulation water flow rate in gallons for \$2.012 on a daily basis.

Monitor and record the hours of operation for \$2.012 on a daily basis. (2)

The required monitoring established in (1) and (2) above, will be maintained in a contemporaneous log containing, at a The calendar date of any required monitoring.

The total daily circulating water flow rate in gallons, for the corresponding date.

The total dally hours of operation for the corresponding date.

The average volume flow rate, in gallons per minute, of the circulating water on a daily basis. Performance/Compliance Testing (NAC 445B.252.1)

Sample and analyze the circulating water for Total Dissolved Solids (TDS) at six-month intervals. (1)

Record the TDS value from the sampling in 4.b.(1).

************End of Specific Operating Conditions**********



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Section VI. Emission Caps

No Emission Caps Defined.

**********End of Emission Caps**********



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Section VII. Surface Area Disturbance Conditions

Surface area disturbance less than 5 acres

Fugitive Dust (NAC 445B.22037)

- Permittee may not cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable 2.
- Except as otherwise provided in subsection 4, Permittee may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization,
- Except as provided in subsection 4, Permittee may not disturb or cover 5 acres or more of land or its topsoil until Permittee has obtained an Operating Permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.

The provisions of subsections 2 and 3 do not apply to:

- Agricultural activities occurring on agricultural land; or
- Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or

**********End of Surface Area Disturbance Conditions*********



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Section VIII. Schedules of Compliance

A. N/A

********End of Schedule of Compliance Conditions*******



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CLASS II AIR QUALITY OPERATING PERMIT

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Section IX. Amendments

February 12, 2007

Change company name and mailing address. Update UTM coordinates to NAD83. Slight increase to emissions for \$2.001. Add performance test requirements to S2.001 in Section IIA. Add process heater #2 (S2.008). Reduce VOC annual emissions cap for System 2 from 48.18 tons to 44.0 tons. Plant has been reconfigured so that the VOC emissions from S2.006 (System 2) may be ducted to S2.001 process heater #1 burner or to a carbon canister. Remove insignificant activity thermal oxidizer from non-permitted equipment list.

January 25, 2008

Reconfigure permit to reflect current operating conditions. Revise emission limits for process heaters #1 and #2. Emission limits for process heaters #1 and #2 based on source tests. Add thermal combustor. Remove VOC emissions cap. Add 235 kW emergency generator to non-permit equipment list.

XXXX, 2008 - Application Log # 09AP0046 for Revision

Reconfigure emission unit descriptions

System 1 (S2.002) - Increase recycled fuel oil process rate from 925 gallons/hr to 1,200 gallons/hr.

System 3 (S2.005) - Decrease emission limits for Cooling Tower #1 based on TDS analysis of cooling water.

System 4 (S2.006) - Increase heat input rate for thermal combustor from 1.988 MMBtu/hr to 5.796 MMBtu/hr. Increase oily waste water that is treated by thermal combustor from 142 gallons/hr to 284 gallons/hr. Increase emission limits for thermal combustor.

System 5 (S2.007-S2.008), System 6 (S2.009), System 7 (S2.010-S2.011), System 8 (S2.012) - New systems added.

Add 1.68 MMBtu/hr steam boiler to non-permitted equipment list.

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- Is non-transferable. (NAC 445B.287.3) 1.
- Will be posted conspicuously at or near the stationary source. (NAC 445B.318.5) 2.
- Will expire and be subject to renewal five (5) years from: 3. January 25, 2005
- A completed application for renewal of an operating permit must be submitted to the director on the form provided by him with the appropriate fee at least 70 calendar days before the expiration date of this operation permit. (NAC 445B.3473.2)
- Any party aggrieved by the Department's decision to issue this permit may appeal to the State Environmental 5. Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340)

Т	HIS P	ERMI	T EXPIRES ON:	January 25, 2010			
				Signature Issued by:	Draft Copy Francisco Vega Supervisor, Permitting F Nevada Bureau of Air P	Branch Follution Control	
p)1/05	rp 02/07	rp 01/08	rp Ogna	Phone:	(775) 687-9343	Date:	

CLASS II NON-PERMIT EQUIPMENT LIST

Appended to Permit #AP2992-1473

Emission Unit #	Emission Unit Description
IA1.001 - IA1.023	23 Storage Tanks for Petroleum Liquids, 25,000 gallons each, NAC 445B.288.2(d)
IA1.024	10,000 Gallon Oily Waste Water Storage Tank
IA1.025	60 HP Fire Pump Engine, NAC 445B.288.2(g)(1)
IA1.026	235 kW (315 HP) Emergency Diesel Generator, NAC 445B.288.2(h)
IA1.027	1.68 MMBtu/hr Steam Boiler (fueled with process oil/light ends)