

DOCKETED

Docket Number:	99-AFC-08C
Project Title:	Blythe Energy Project Compliance & Blythe Transmission Line Modification
TN #:	204521-1
Document Title:	Blythe Energy Project - Final Determination for New Source Review Action & Title V Federal Operating Permit
Description:	N/A
Filer:	Mary Dyas
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	5/7/2015 10:21:42 AM
Docketed Date:	5/7/2015

Final Decision/Final Determination for
New Source Review Action & Title V Federal Operating Permit
Significant Modification

Facility Name: Blythe Energy, Inc.

Facility ID/Federal Operating Permit #: 130202262

Address: 385 N. Buck Blvd., Blythe, CA 92225

New Source Review (NSR) Action: Administrative in nature, not a modification pursuant to 1301(HH) as there is no net emissions increase

Title V Permit Action: Significant Modification

I. Introduction

A. The proposed action:

1. lowers the federally enforceable emission limits for oxides of nitrogen (NO_x), carbon monoxide (CO) and particulate matter less than 10 microns in size (PM₁₀) from all permitted equipment at Blythe Energy, Inc. to below the federal major source thresholds (Rule 1201(S))
2. adds the following new permit limits: NO_x annual average concentration, CO annual average mass emissions, and annual fuel use.

B. Facility Description

The plant uses two F-Class Siemens V84.3A combustion turbine generators (CTGs) with dedicated heat recovery steam generators (HRSGs) to produce electricity. Inlet air to the CTGs is filtered and, during seasonally warm conditions, conditioned with chilled air supported by a mechanical draft wet cooling tower (chiller). Compressed air and natural gas are mixed and combusted in the turbine combustion chamber. Lean pre-mixed air and low-NO_x combustors are used to minimize NO_x formation during combustion. Exhaust gas from the combustion chamber is expanded through a multi-stage power turbine, which drives both the air compressor and electric power generator. Heat from the exhaust gas is then recovered in the HRSG.

Each HRSG is equipped with a duct burner to provide supplementary firing during high ambient temperatures to maintain constant steam production to the condensing steam turbine generator (STG). A Selective Catalytic Reduction (SCR) system is used to reduce NO_x emissions. Steam is produced in

each HRSG and flows to the STG. The STG drives an electric generator to produce electricity. STG exhaust steam is condensed in a surface condenser with water from the main cooling tower.

The project site has a 303 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression. It also has a portable 250 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression. There is also a propane fueled 114 bhp internal combustion engine that drives an emergency electrical power generator.

Current facility emission limits for NOx, CO and PM10 are above the major source threshold. This action reduces the facility emissions limits for NOx, CO and PM10 to below the 100 ton per year thresholds and adds additional limits to ensure that the annual limits are enforceable as a practical matter.

II. NSR Analysis – Final Decision and Title V – Final Determination/Statement of Basis

This document constitutes the NSR review document and Final Determination on the application pursuant to Rule 1302(C) and 1205(C). The proposed changes do not meet the Rule 1301(HH) definition of a Regulation XIII - New Source Review “Modification” because there is no net emission increase. As required by Rule 1302, this document will review the proposed District permit changes. Because the action does not result in an emissions increase, neither BACT nor offsets and the associated requirements are triggered. The proposed changes constitute a significant modification (Rule 1201(BB)) of the Title V permit therefore the application will be processed pursuant to the procedures specified per Rule 1203(B)(1). The significant modification was publicly noticed and submitted to the California Air Resources Board (CARB) and the United States Environmental Protection Agency (USEPA) as required by Rule 1203(B)(1) on March 11, 2015.

Interested persons are invited to submit written comments and/or other documents regarding the terms and conditions of the proposed changes. To be considered, comments, documents and requests for public hearing must be submitted no later than 5:00 P.M. on Monday, April 13, 2015 to the Attention: Roseana Navarro-Brasington, Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, CA 92392, Phone: (760) 245-1661, extension 5706, Facsimile: (760) 245-2022 or at rnbrasington@mdaqmd.ca.gov. The required 45 day EPA comment period will close on Monday, April 27, 2015.

A. Initial Application /Comprehensive Emissions Inventory Review

The District received an application to modify District permits B007953 and B007954 and to modify the facility’s Title V permit on February 16, 2015. The application package has been deemed complete. The most current emissions inventory data available is for emissions year 2012.

B. Emissions Calculations – The current permitting action lowers the facility emissions caps for NOx, CO and PM10 as follows:

	TPY		
	NOx	CO	PM10
Current Limit	202	621	103

Proposed New Limit	97	97	97
Net Change	-105	-524	-6

The permitting action also adds the following new limits to the facility's Title V permit:

- Limit annual average NOx emissions concentrations from each gas turbine and its associated duct burner to 2.0 ppmvd @ 15% O₂, except during periods of startup, shutdown and malfunction;
- Limits annual average CO mass emissions from each gas turbine and its associated duct burner to 10 lb/hr, except during periods of startup, shutdown and malfunction;
- Limits annual average CO emissions from the gas turbines and duct burners to 750 lb/event during startups and shutdowns; and
- Limits total annual heat input to the gas turbines and duct burners to 31,850,800 MMBtu per year.

All new annual limits, including the new emission caps, will apply on a rolling 12-month basis.

To demonstrate that the new facility emission caps are achievable as a practical matter, the applicant submitted example calculations showing that NOx and CO emissions from the gas turbines/duct burners under various operating scenarios, all of which can be considered typical but none of which impose enforceable limits on actual plant operation. Enforceable limits are specified in the Federal Operating Permit and District Permits for the facility. The example scenarios include base load, peaking and intermediate load operations and substantiate that typical operations reasonably would not exceed 96 tons per year. Sample calculations have also been provided that show that emissions from the emergency equipment would not exceed 1 ton per year. The applicant's calculations are included as Appendix B. BEP is required to track and control NOx and CO emissions to ensure continuous compliance.

C. Applicable Requirements

The following rules and regulations are applicable to the proposed permitting action:

Regulation XII contains requirements for sources which must have a federal operating permit. The identified changes constitute a significant modification of the Title V permit. Specific requirements of Regulation XII are stipulated as follows;

Rule 1202 – *Applications* designates that official applications will be used as necessary under Regulation XII and outlines the specified information which shall be included on the official application in order for

the APCO to determine completeness as well as provides a timeline for that determination. The application was submitted on official District forms. The District determines this permitting action to be a significant modification being processed as such according to the procedure specified in the rule.

Rule 1203 – *Federal Operating Permits (FOP)* defines the permit operating term, stipulates the process by which FOPs, Significant Modifications to FOPs and Renewals of FOPs shall be issued. This rule further identifies restrictions on issuance, permit contents, operational flexibility, compliance certification, permit shield, and violation of permit conditions. The proposed FOP action is considered a significant permit modification. The District will carry out USEPA, State, and public review and comment period in accordance with the procedure outlined in Rule 1203(B)(1).

Rule 1205 - *Modifications of Federal Operating Permits* specifies the process by which FOP are modified. The District has determined that the action constitutes a significant permit modification and will incorporate the changes as required by Regulation XII.

Rule 1300 – *General* ensures that Prevention of Significant Deterioration (PSD) requirements apply to all projects. The facility operates under a PSD permit. The current permitting action lowers the facility emissions caps for NOx, CO and PM10 to below the PSD major source thresholds however the District is not currently delegated authority for PSD permitting and defers any opinion with respect to PSD to USEPA.

Rule 1302 – *Procedure* requires certification of compliance with the Federal Clean Air Act, applicable implementation plans, and all applicable MDAQMD rules and regulations. The Authority to Construct (ATC) application package for the proposed project includes sufficient documentation to comply with Rule 1302(D)(5)(b)(iii). Permit conditions for the proposed project will require compliance with Rule 1302(D)(5)(b)(iv).

Rule 1303 – *Requirements* requires offsets for new or modified sources at new or existing major sources of nonattainment pollutants. The project has satisfied the offset requirements associated with the original permitting and facility limits. The current permitting action does not increase emissions and does not require any additional offsets.

Rule 1320 - *New Source Review for Toxic Air Contaminants* applies to new or modified sources on a permit unit basis requiring public notice and/or risk reduction at elevated levels of health risk. This

permitting action will not result in an emissions increase therefore the facility is not new or modified pursuant to Rule 1301 therefore Rule 1320 is not applicable.

Rule 1520 - *Control of Toxic Air Contaminants From Existing Sources* applies on a facilitywide basis requiring public notice and/or risk reduction at elevated levels of health risk. This action will not result in an increase risk at the facility as it reduces the emissions caps for three criteria pollutants, NO_x, CO and PM₁₀. A Health Risk Assessment (HRA) was performed for the original permitting analysis. The HRA calculated a peak 70-year cancer risk of 0.4 per million. The calculated peak 70-year residential cancer risk is less than 1.0 per million (for all receptors). The maximum non-cancer chronic and acute Hazard Indices are both less than the significance level of 1.0 (0.21 and 0.03, respectively). The HRA was based on the facility's PTE not the actual emissions as is required by Rule 1520 therefore the original HRA is a more conservative indicator of the risk that would result from a reassessment based on the actual facility emissions.

D. Toxics

1. Rule 1320 – *New Source Review for Toxic Air Contaminants*

As this permitting action does not result in an emissions increase, it is not a modification therefore New Source Review is not triggered.

2. Rule 1520 – *Control of Toxic Air Contaminants From Existing Sources*

The HRA performed to support the original permits was based on the PTE and resulted in scores less than 1. As the current permitting action does not result in any emissions increases, the resulting risk to receptors would remain the same or decrease as a result of this action.

E. Offsets/Modeling

Because this action does not result in an emissions increase, offsets are not required. Modeling is required for projects triggering offsets pursuant to Rule 1302(C)(2)(b). As offsets are not applicable to the proposed permit changes air dispersion modeling is not required.

The proposed action reduces the Potential to Emit for NO_x, CO and PM₁₀. The emissions reduction is not eligible for banking because the rulebook specifically disallows banking of credits resulting from reduction of a facility's PTE per Rule 1305(B)(2)(b). No simultaneous actions have been proposed at the time of this permitting action therefore the emissions reductions resulting from this action are not eligible for use.

APPENDIX A

CALCULATIONS

EXAMPLE CALCULATION: OPERATING SCENARIOS

Summary

Scenario	Based on Proposed Permit Limits						Based on Actual Historical 12-Month Emissions					
	# of su/sd events	baseload hrs	duct firing hrs	NOx, tpy	CO, tpy	Heat Input, MMBtu/yr	# of su/sd events	baseload hrs	duct firing hrs	NOx, tpy	CO, tpy	Heat Input, MMBtu/yr
Scenario 1: base load operation	2	7000	2500	95.9	71.5	25,464,000	2	7800	3000	95.8	78.6	28,425,600
Scenario 2: weekly startup/shutdown, no weekend operation	52	5616	2080	96.0	95.2		104	5616	2080	76.2	84.8	
Scenario 3: daily cycling on weekdays, no weekend operation	110	1320	880	59.7	95.7		175	2100	1400	38.7	69.1	
Maximum historical (2012-2014)									67.5	54.8	15,650,644	

Notes:

Number of startup/shutdown events and baseload/duct firing hours are per gas turbine/HRSG.

Annual emissions are total for two trains.

EXAMPLE CALCULATION: OPERATING SCENARIOS

BEP Operating Scenarios

Proposed Permit Limits

				su/sd (each unit)		base load (each)			annual (total)	
	# of su/sd events	baseload hrs	duct firing hrs	NOx, lb/event	CO, lb/event	GT NOx, lb/hr	DF NOx, lb/hr	CO, lb/hr	NOx, tpy	CO, tpy
Scenario 1: base load operation	2	7000	2500	376	750	13.28	0.90	10.0	95.9	71.5
Scenario 2: weekly startup/shutdown, no weekend operation	52	5616	2080	376	750	13.28	0.90	10.0	96.0	95.2
Scenario 3: daily cycling on weekdays, no weekend operation	110	1320	880	376	750	13.28	0.90	10.0	59.7	95.7

max hourly heat input: 1776 MMBtu/hr, each gas turbine (permit)
 120 MMBtu/hr, each duct burner (permit)
 max annual heat input: 25,464,000 MMBtu/yr total for two turbines (calculated based on Scenario 1 hours)

NOx emission limit: 2.0 ppmc, normal operation (new annual average permit limit)
 0.0075 lb/MMBtu, normal operation (calculated from ppm limit)
 376 lb/start (existing permit limit)

CO emission limits: 10 lb/hr per gas turbine/duct burner (new annual average permit limit)
 750 lb/start (new annual average permit limit)

Scenario 1: base load operation

turbine: 7000 hrs/yr
 DB: 2500 hrs/yr

Scenario 2: weekly startup/shutdown, no weekend operation

turbine: 108 hrs/wk (startup 8 am Monday; shut down 8 pm Friday)
 52 wks/yr
 DB: 8 hrs/day
 5 days/wk
 52 wks/yr

Scenario 3: daily cycling on weekdays, no weekend operation

turbine: 12 hrs/day
 5 days/wk
 22 wks/yr
 DB: 8 hrs/day
 5 days/wk
 22 wks/yr

EXAMPLE CALCULATION: OPERATING SCENARIOS

BEP Operating Scenarios

Actual 12-Month Average Startup Emissions

	su/sd (each unit)			base load (each)			annual (total)			
	# of su/sd events	baseload hrs	duct firing hrs	NOx, lb/event	CO, lb/event	GT NOx, lb/hr	DF NOx, lb/hr	CO, lb/hr	NOx, tpy	CO, tpy
Scenario 1: base load operation	2	7800	3000	71.4	275	11.95	0.81	10.0	95.8	78.6
Scenario 2: 2 x weekly startup/shutdown, no weekend operation	104	5616	2080	71.4	275	11.95	0.81	10.0	76.2	84.8
Scenario 3: daily cycling on weekdays, no weekend operation	175	2100	1400	71.4	275	11.95	0.81	10.0	38.7	69.1

max hourly heat input: 1776 MMBtu/hr, each gas turbine (permit)
 120 MMBtu/hr, each duct burner (permit)
 max annual heat input: 28,425,600 MMBtu/yr total for two turbines (calculated based on Scenario 1 hours)

NOx emission limit: 1.8 ppmc, normal operation (new annual average permit limit with typical compliance margin)
 0.0067 lb/MMBtu, normal operation (calculated from ppm limit)
 71.4 lb/start (max 12-month avg 2012-14)

CO emission limits: 10 lb/hr per gas turbine/duct burner (new annual average permit limit)
 275 lb/start (max 12-month avg 2012-14)

Scenario 1: base load operation

turbine: 7800 hrs/yr
 DB: 3000 hrs/yr

Scenario 2: 2 x weekly startup/shutdown, no weekend operation

turbine: 108 hrs/wk (startup 8 am Monday; shut down 8 pm Friday)
 52 wks/yr
 DB: 8 hrs/day
 5 days/wk
 52 wks/yr

Scenario 3: daily cycling on weekdays, no weekend operation

turbine: 12 hrs/day
 5 days/wk
 35 wks/yr
 DB: 8 hrs/day
 5 days/wk
 35 wks/yr

Blythe Energy Project
Calculation of PTE from Emergency Engines

Permit Unit	Description	Emission Rate, lb/hr					PTE, tpy (based on 200 hrs/yr)				
		NOx	CO	VOC	SO2	PM	NOx	CO	VOC	SO2	PM
Diesel fire water pump	MY2002, John Deere, 303 bhp; 14 gal/hr	4.6	5.7	0.6	0.1	0.05	0.46	0.57	0.06	0.01	0.005
Propane emergency engine generator	Ford Model WSG1068, 114 bhp, 12 gal/hr	1.67	1.55	1.0	0.004	0.06	0.17	0.15	0.10	0.0004	0.006
Total Annual PTE							0.63	0.72	0.16	0.01	0.01

APPENDIX B

PUBLIC NOTICE – PROOF OF PUBLICATION

PROOF OF PUBLICATION

(2015.5 C.C.P.)

**STATE OF CALIFORNIA,
County of San Bernardino**

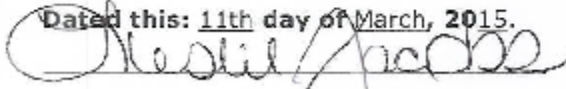
I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the publisher of the DAILY PRESS, a newspaper of general circulation, published in the City of Victorville, County of San Bernardino, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of San Bernardino, State of California, under the date of November 21, 1938, Case number 43096, that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

March 11

All in the year 2015.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated this: 11th day of March, 2015.



Signature

Leslie Jacobs

This space is the County Clerk's Filing Stamp

**FILED
MOJAVE DESERT AQMD
CLERK OF THE BOARD**

MAR 18 2015



**Proof of Publication of
NOTICE OF TITLE V
PERMIT SIGNIFICANT
MODIFICATION**

NOTICE OF TITLE V PERMIT SIGNIFICANT MODIFICATION

MOJAVE DESERT AQMD (MDAQMD) has applied for a Permit Significant Modification to their Federal Operating Permit (FOP) pursuant to the provisions of PERMITS Regulation XI. The applicant is a facility engaged in electric power generation and is also requiring a Title V Permit. The applicant is required to submit the change to the FOP to the County of San Bernardino. The applicant is seeking a Permit Significant Modification to the FOP for the following reasons:

RIGHT TO PETITION: PERMITS Regulation XI, Section 9, Operating Permits Section 47. The applicant is required to submit the change to the FOP to the County of San Bernardino. The applicant is seeking a Permit Significant Modification to the FOP for the following reasons:

AVAILABILITY OF INFORMATION: Copies of the Regulation XI, Section 9, Operating Permits Section 47, and other supporting documentation are available from the MDAQMD by mail request, on the following link on the MDAQMD website: <http://www.mdaqmd.ca.gov/index.cfm?page=54> or by contacting Roseanne Knapik-Brinkley, Title V Permit Section, Quality Management Division, 1400 West Avenue, Victorville, CA 92392, Phone (760) 244-1607, extension 4006, Fax: (760) 244-2022 or at rknapik@mdaqmd.com.

Published in the Daily Press, March 11, 2015 (PWS2)

THE PRESS-ENTERPRISE

1825 Chicago Ave, Suite 100
Riverside, CA 92507
951-684-1200
951-330-9010 FAX

PROOF OF PUBLICATION
(2010, 2015.5 C.C.P)

Publication(s): The Press-Enterprise

PROOF OF PUBLICATION OF

Ad Desc: /

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper in general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54448, under date of March 29, 1957, Case Number 85873, under date of August 25, 1995, Case Number 257864, under date of February 4, 2013, Case Number RIC 1215735, under date of July 25, 2013, Case Number RIC 1305730, and under date of September 16, 2013, Case Number RIC 1309013. That the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

03/11/2016

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: March 11, 2015
At: Riverside, California



MOJAVE DESERT AQML
14306 PARK AVE
ATTN: MICHELE BAIRD
VICTORVILLE, CA 92382

Ad Number: 0010026288-01

P.O. Number:

FILED
MOJAVE DESERT AQML
CLERK OF THE BOARD

MAR 16 2015

BY 

Ad Copy:

NOTICE OF TITLE V PERMIT SIGNIFICANT MODIFICATION

NOTICE IS HEREBY GIVEN THAT Bayco Energy, Inc., operating their facility at 208 N. 80th Blvd. in Riverview, Florida, located within the Mojave Desert Air Quality Management District (MDAQMD) has applied for a Significant Modification to their Federal Operating Permit (FOP) pursuant to the provisions of MDAQMD Regulation 91. The applicant is a facility engaged in electric power generation and is of a type requiring a Title V Permit. The applicant is required to submit this change to their FOP because the facility will be adding a new annual average emission concentration for NOx for two existing gas turbines and will reduce the facility's annual mass emissions limits for SOx, CO, and H2S. The proposed changes constitute a major modification pursuant to Rule 100 (MDC) in that they change a case-by-case determination of an emissions limitation imposed pursuant to District Regulation 911 - New Source Permit.

REQUEST FOR COMMENTS: Interested persons are invited to submit written comments and/or other documents regarding the terms and conditions of the proposed changes. If you submit written comments, you may also request a public hearing on the proposed modification of the FOP. To be considered, comments, concerns and requests for public hearing must be submitted no later than 5:00 P.M. on Monday, April 13, 2015 to the MDAQMD Attention: Roseanne Navarro-Stratton at the address listed below.

RIGHT TO HEAR: UNDER FEDERAL REGULATIONS, Title V Permits are also subject to review and approval by USEPA. If USEPA has not objected to a proposed permit modification and District has not received a public comment in a satisfactory manner, the public may also petition USEPA, Region 9, Operating Permits Section at 75 Washington Street, San Francisco, CA 94106, within 30 days after the end of the 45-day USEPA review period, to consider the decision to not object to the permit modification.

AVAILABILITY OF DOCUMENTS: Copies of the Application, the Statement of Legal and Factual Basis, New Source Review Preliminary Decision / FOP Modification Preliminary Determination, the Proposed Draft FOP, and other supporting documents are available from the MDAQMD website.

<http://www.mdaqmd.net/qa/1400000001/0010026288-01>

or by contacting Roseanne Navarro-Stratton, Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, CA 92382. Phone: (760) 345-1001, extension 5308. Facsimile: (760) 345-2022 or at roseannec@mdaqmd.com.

APPENDIX C

*COMMENTS RECEIVED ON PRELIMINARY
DECISION/DETERMINATION*

Comment 1:

Limits on PTE – Enforceable as a Practical Matter

As described in more detail below, EPA is concerned the draft permit conditions do not ensure Blythe Energy, Inc. (Blythe) would no longer be considered a major stationary source under 40 CFR 52.21(b). The stated intent in Blythe's application is to ensure "the facility will no longer be a major stationary source under the definition in 40 CFR 52.21(b)." However, we do not consider the revised permit conditions to be enforceable as a practical matter and, as a result, Blythe cannot rely on those limits for demonstrating the facility is not a major stationary source for the purposes of the PSD program.

Specifically, the limits in the draft permit do not appear to limit Blythe's potential to emit (PTE), as follows:

1. Blanket ton per year (tpy) emission limits are not enforceable for limiting PTE. See the excerpt from EPA's memo on limiting PTE below on page 3. The draft permit conditions appear to rely solely on tpy emission limits in limiting the PTE of Blythe. Mojave Desert AQMD must ensure that the other emission and operational limitations in the permit limit Blythe's PTE below the major stationary source threshold. If these limits are not sufficient for ensuring Blythe's PTE is below these limits, then additional operational or emission limits are necessary to ensure Blythe's limits on PTE are enforceable as a practical matter.

For example, each of the two combustion turbines at Blythe is currently subject to a CO limit of 17.5 lb/hr during periods of normal operation. Based upon continuous operation (8,760 hrs/yr), this results in a PTE of approximately 77 tpy per turbine and a combined PTE of 154 tpy. Therefore, the PTE of the turbines themselves is sufficient to exceed the proposed synthetic minor limit of 97 tpy. The current draft permit does include additional emission or operational limitations that will ensure that the facility's PTE remains below major source thresholds. We recommend that the District include a rolling 12-month limit on an operating parameter such as hours of operation, fuel usage, or heat input.

In addition, PSD Permit SE 03-01 and the current title V operating permit establish a facility-wide CO PTE of 621 tons/year. Given that PTE of CO from the combustion turbines during normal operations is approximately 154 tpy, this would suggest that the facility wide PTE estimate provides for a substantial number of startup/shutdown CO emissions, which are permitted at 3600 lb/event. The current draft permit does not include limitations on startup/shutdown emissions that will ensure that the facility's PTE remains below major source thresholds. We recommend that the District include a limit on the number of startup/shutdown events or a limit on the 12 month rolling total of startup/shutdown emissions.

2. It is not clear from the draft permit conditions that the limits on PTE apply at all times, to all actual emission from all emission units - including during startup, shutdown, malfunction or upset conditions. It is also unclear to which emission units in the permit that "all Blythe Energy Project I permits" is referring. See Part III, A and B, 7. The equipment subject to this limit must be clearly identified in the permit.

Further, it is unclear that the permit provides how compliance with the tons per year emission limits will be determined for all emissions units at the facility. Given that the proposed synthetic minor limits for NOx and CO are established on a facility-wide basis, we recommend that the District work with the

Blythe Energy, Inc.
April 9, 2015
Permit#: 130202262
EPA Region 9 Comments

permit applicant to develop a more detailed PTE estimate. This PTE estimate should more clearly describe how the emissions or operations from each emission unit will be limited to ensure that facility-wide PTE remains below major source thresholds. In addition, we suggest that the District and permit applicant examine historical malfunction/upset condition emissions in order to determine if a 3 tpy "buffer" between the synthetic minor limit of 97 tpy and major source threshold is sufficient.

For additional information please also see:

- EPA's Order for the Hu Honua Bioenergy Facility in Hawaii, Claim 2, pages 7-14:
http://www.epa.gov/region7/air/title5/petitiondb/petitions/hu_honua_decision2011.pdf.
- EPA's Title V Program Evaluation for San Joaquin Valley, Findings 5.2 and 5.4:
<http://www.epa.gov/region9/air/permit/pdf/siv/2013-11-12-siv-title-v-operating-permit-eval-final-report.pdf>

EPA's Memo on Limiting Potential to Emit in New Source Review Permitting:
<http://www.epa.gov/reg3airtd/permitting/limitPTEmmo.htm>

The Louisiana-Pacific Case: Blanket Emission Limits are Not Enforceable

In United States v. Louisiana-Pacific Corporation, 682 F. Supp. 1122 (D. Colo. Oct. 30, 1987) and 682 F. Supp. 1141 (D. Colo. March 22, 1988), Judge Alfred Arraj discussed the type of permit restrictions which can be used to limit a source's potential to emit. The Judge concluded that:

... not all federally enforceable restrictions are properly considered in the calculation of a source's potential to emit. While restrictions on hours of operation and on the amount of materials combusted or produced are properly included, blanket restrictions on actual emissions are not. (emphasis added)

682 F. Supp. at 1133.

The Court held that Louisiana-Pacific's permit conditions which limited carbon monoxide emissions to 78 tons per year and volatile organic compounds to 101.5 tons per year should not be considered in determining "potential to emit" because these blanket emission limits did not reflect the type of permit conditions which restricted operations or production such as limits on hours of operation, fuel consumption, or final product.

The Louisiana-Pacific court was guided in its reasoning by the D.C. Circuit's holding in Alabama Power v. Costle, 636 F. 2d 323 (D.C. Circuit 1979). Before Alabama Power, EPA regulations required potential to emit to be calculated according to a source's maximum uncontrolled emissions. In Alabama Power, the D.C. Circuit remanded those regulations to EPA with instructions that the Agency include the effect of in-place control equipment in defining potential to emit. EPA went beyond the minimum dictates of the D.C. Circuit in promulgating revised regulations in 1980 to include, in addition to control equipment, any federally enforceable physical or operational limitation. The Louisiana-Pacific court found that blanket limits on emissions did not fit within the concept of proper restrictions on potential to emit as set forth by Alabama Power.

Moreover, Judge Arraj found that:

...a fundamental distinction can be drawn between the federally enforceable limitations which are expressly included in the definition of potential to emit and (emission) limitations.... Restrictions on hours of operation or on the amount of material which may be combusted or produced ... are, relatively speaking, much easier to "federally enforce." Compliance with such conditions could be easily verified through the testimony of officers, all manner of internal correspondence and accounting, purchasing and production records. In contrast, compliance with blanket restrictions on actual emissions would be virtually impossible to verify or enforce.

Id. Thus, Judge Arraj found that blanket emission limits were not enforceable as a practical matter.