

**Louisville Metro Air Pollution Control Board
Board Order - Amendment 2**

This amended Board Order is issued by the Louisville Metro Air Pollution Control Board pursuant to the authority granted in Kentucky Revised Statutes Chapter 77 Air Pollution Control.

Company: Recast Energy Louisville, LLC (Recast)
4014 Bells Lane
Louisville, Kentucky 40211

Background and Discussion

Regulation 6.42 Reasonably Available Control Technology Requirements for Major Volatile Organic Compound- and Nitrogen Oxides-Emitting Facilities requires the establishment and implementation of reasonably available control technology (RACT) for certain affected facilities that emit oxides of nitrogen (NO_x) and that are located at a major stationary source for NO_x. Section 4.4 requires that each determination of RACT approved by the Louisville Metro Air Pollution Control Board (District) be submitted to the U.S. Environmental Protection Agency (EPA) as a site-specific revision of the Kentucky State Implementation Plan (SIP).

An initial Board Order was approved by the Board on November 8, 1999, and submitted to the EPA by the Kentucky Energy and Environment Cabinet, Division for Air Quality (KY DAQ) on November 12, 1999, as a site-specific revision of the Kentucky SIP. An amended Board Order Number 1 resolving issues identified by the EPA in the initial Board Order was approved by the Board on December 20, 2000 and approved by the EPA into the Jefferson County portion of the Kentucky SIP on October 23, 2001.

Recast has now requested an amendment to Board Order Amendment Number 1. Recast was authorized by the District to construct three natural gas-fired boilers, each not to exceed 99 MMBtu/hour, modify Boiler #4 to combust wood biomass fuel instead of coal, and remove Boiler #5 from emergency service and authorize its use for combustion of natural gas only. The baghouse for Boiler #4 was replaced with an electrostatic precipitator. Recast applied for a permit to operate in accordance with Regulation 2.16 on November 1, 2013.

A Public Hearing on this amended Board Order was held before the Board on May 21, 2014.

Now therefore be it ordered that:

1. The attached NO_x RACT Plan - Amendment Number 2, applicable to Recast, is approved by the District. Recast shall comply with this plan.
2. Compliance with the attached NO_x RACT Plan - Amendment Number 2 shall be deemed compliance with the requirements of Regulation 6.42 section 1.2, section 1.3, section 2 to the extent that this section applies to section 4.3, and section 5 to the extent that this

section applies to verification of compliance with the requirements pursuant to section 4.3.

3. This amended Board Order shall not be deemed or construed to be the result of any violation of any federal, state, or local statute, regulation, or ordinance for any purpose whatsoever.
4. Recast has reviewed this amended Board Order and consents to all its requirements and terms.
5. The initial Board Order was approved on November 8, 1999. Amendment Number 1 was approved on December 20, 2000.
6. The effective date of this amended Board Order and the attached NO_x RACT Plan Amendment Number 2 is May 21, 2014. The Board Order Amendment Number 1 shall remain in effect until May 21, 2014.

Dated this 21st day of May, 2014.

Louisville Metro Air Pollution Control Board

Recast Energy Louisville, LLC

By: Robert W. Powell, M.D.
Robert W. Powell, M.D.
Chairman

By: Matthew Markee
Matthew Markee
President

Louisville Metro Air Pollution Control District

Approved as to form and legality:
Jefferson County Attorney's Office

By: Paul Aud 5-15-14
Paul Aud
Air Pollution Control Officer

By: Stacy Fritze Dott
Stacy Fritze Dott
Assistant County Attorney

NO_x RACT Plan - Amendment Number 2

1. Recast Energy Louisville, LLC (Recast) has achieved a significant NO_x emissions reduction without the installation of additional controls through the use of alternate fuels that result in lower NO_x emissions. No. 4 Boiler has been converted from combusting coal to combusting wood residue/biomass, and No. 5, No. 8, No. 9 and No.10 Boilers will each only combust natural gas. (No. 5 Boiler previously was permitted to burn fuel oil as a back-up fuel.)
2. The oxides of nitrogen (NO_x, expressed as NO₂) emissions from No. 4 Boiler shall not exceed 0.50 pound per million Btu of heat input.
3. The oxides of nitrogen (NO_x, expressed as NO₂) emissions from No. 5, No. 8, No. 9 and No. 10 Boilers shall not exceed 0.20 pound per million Btu of heat input per each Boiler.
4. Recast shall conduct a biennial performance test for NO_x on each Boiler; No. 4, No. 5, No. 8, No. 9 and No. 10. If any of Boilers No. 8, No. 9 and/or No. 10 are identical, Recast may conduct a biennial performance test for NO_x on only one of these identical boilers as long as the make, model and heat input are the same. The requirements of Section 5.1 of APCD Regulation 6.42, *Reasonably Available Control Technology Requirements for Major Volatile Organic Compound- and Nitrogen Oxides- Emitting Facilities*, have been met by Recast, and subject to the annual performance test schedule reinstatement provision, performance testing may be done on a biennial schedule. Performance testing shall meet the following requirements:
 - A. Emissions concentrations and the mass determinations shall be obtained using Reference Method of Appendix A to 40 CFR Part 60. The following methods shall be used:
 - 1) Method 1 or 1A, which furnishes guidance in site and traverse selection for sampling velocity at traverse points in stationary sources;
 - 2) Method 2, 2A, 2B, 2C, 2D, 2E, 2F, 2G or 2H, which applies to measurements of gas volumetric flow rates;
 - 3) Method 3, 3A, 3B or 3C, which is applicable for determining the concentrations of one or more of the following gases: carbon dioxide, O₂, CO, nitrogen and methane;
 - 4) Method 4, which determines the moisture content in stack gases; and
 - 5) Method 7, 7A, 7B, 7C, 7D or 7E, which provides the analytical method for determining the concentration of NO_x emissions from stationary sources.
 - B. The use of other Reference Methods that are added to 40 CFR Part 60 Appendix A, alternative tests or modifications to the Reference Methods listed in NO_x RACT Plan Element (Element) No. 4.A. may be proposed by Recast as part of the testing plan required by Element No. 4.D. Such methods may be used if approved in writing by the District.

- C. Performance testing shall meet the requirements of APCD Regulation 1.04, *Performance Tests*, that are not addressed in this Element.
 - D. A notification of intent to conduct a performance test shall be submitted to the District at least 25 working days in advance of the projected starting date for the performance test. The notification shall include the proposed test methods to be used.
 - E. If a pre-test conference to discuss the proposed test methods is deemed necessary by the District, a pre-test conference shall be arranged by District personnel.
 - F. At least 10 working days' prior notice of the scheduled starting date for the performance test shall be provided to the District.
 - G. A performance test report shall be submitted to the District within 60 days of the actual date of completion of performance testing. The report shall include the calculations used to determine emissions. The NO_x emission rate shall be expressed in both pounds per hour and pounds per million Btu formats. The raw data shall be retained by Recast for a minimum of 5 years and made available to the District upon request. Selected portions of the raw data used to calculate the emissions shall be included in the report in a format provided by the District.
5. Recast shall comply with the tune-up requirements for No. 4 Boiler in 40 CFR Part 63 Subpart JJJJJ (Area Sources) beginning with the first compliance date of March 21, 2014. (Note, No. 5, No. 8, No. 9 and No. 10 Boilers are not subject to 40 CFR Part 63 Subpart JJJJJ.)
6. Recast shall keep a record identifying all deviations from the requirements of this NO_x RACT Plan and shall submit to the District a written report of all deviations that occurred during the preceding semiannual period. Semiannual periods shall run from January 1 to June 30, and from July 1 to December 31. The report shall contain the following information:
- A. The boiler number;
 - B. The beginning and ending date of the reporting period;
 - C. Identification of all periods during which a deviation occurred;
 - D. A description, including the magnitude, of the deviation;
 - E. If known, the cause of the deviation; and
 - F. A description of all corrective actions taken to abate the deviation.

If no deviation occurred during the semiannual period, the report shall contain a negative declaration. Each report shall be submitted within 60 days following the end of the semiannual period.

7. In lieu of the requirements in the NO_x RACT Plan, Recast may comply with alternative requirements regarding emission limitations, equipment operation, test methods, monitoring and record keeping, or reporting, provided the following conditions are met.
 - A. The alternative requirements are established and incorporated into an operating permit pursuant to a Title V Operating Permit issuance, renewal, or significant permit revision process as established in Regulation 2.16, *Title V Operating Permits*;
 - B. The alternative requirements are consistent with the streamlining procedures and guidelines set forth in Section II.A. of *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, March 5, 1996, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. The overall effect of compliance with alternative requirements shall consider the effect on an intrinsic basis, such as pounds per million Btu;
 - C. The U.S. Environmental Protection Agency (EPA) has not objected to the issuance, renewal or revision of the Title V Operation Permit; and either
 - D. If the public comment period preceded the EPA review period, then the District had transmitted any public comments concerning the alternative requirements to EPA with the proposed permit; or
 - E. If the EPA and public comment periods ran concurrently, then the District had transmitted any public comments concerning the alternative requirements to EPA no later than 5 working days after the end of the public comment period.

The District's determination of approval of any alternative requirements is not binding on EPA. Non-compliance with any alternative requirement established pursuant to the Title V Operating Permit process constitutes a violation of this NO_x RACT Plan.