



Land Air Water Legal Solutions LLC

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October 18, 2013

Mr. Ray Kempa
Chief, New Source Review Section
Air Quality Program
Pennsylvania Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 18701-1915

**Re: Comments on Proposed Plan Approval #39-00099A
Delta Thermo Energy, A, LLC
112 W Union Street, Allentown, PA 18102-4912**

Dear Mr. Kempa:

I write to provide these additional comments to those filed by PWIA, pursuant to 25 Pa. Code §127.46, on proposed Plan Approval No. 39-00099A for the proposed Delta Thermo Energy, A, LLC (“Delta Thermo”) facility.

In the event that the Department determines that 40 CFR Part 60, Subpart AAAA is not applicable to the proposed facility, then 40 CFR Part 60, Subpart Dc is applicable to the facility. I have enclosed a copy of an NSPS applicability determination (Control Number 0800027) issued by US EPA that rebuts the exemption claimed by the applicant regarding applicability of this subpart¹.

In addition, disposition of volatile and semi-volatile materials contained in the municipal solid waste (MSW) entering the facility does not appear to be addressed in the application or any of the applicant’s various responses to the Department’s Technical Deficiency letter. Based on the projected MSW acceptance rates for the facility, as well as its intentions to saturate all of the waste with steam, it is likely that total VOC emissions from the facility will significantly exceed 50 tons per year and that this facility would therefore be subject to Title V Operating Permit and non-attainment new source review requirements. Relative to this issue, the Department should consider re-evaluating the applicant’s assertion that there are no regulated emissions from the dryer exhaust.

¹ Separate and aside from the claimed exemption by the applicant, please note that the so-called “boiler” included in the application does not combust any fuel and is therefore not classified as a boiler under Pennsylvania law (see 25 Pa. Code §145.2 “boiler”). The so-called boiler is simply a heat exchanger that operates as an integrated unit with the combustion chamber that is proposed for the waste incineration.

It is my understanding that effective October 16, 2013, the Department considers the comment period closed for this proposed Plan Approval. I request that these additional comments be considered under authority of 25 Pa. Code §127.47, which allows the Department to consider comments filed subsequent to the official comment period, but before issuance of a final Plan Approval.

Very truly yours,



Mark C. Hammond

Enclosure



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: 0800027

Category: NSPS
EPA Office: Region 7
Date: 10/26/2007
Title: Indirect-Fired Dryers used in the Ethanol Industry
Recipient: Smith, W. Clark, Nebraska Department of Environmental Quality
Author: Smith, Mark A.
Comments:

Part 60, Db	Indust.-Comm.-Inst. Steam Gen. Units	
	Dc	Small Indust.-Comm.-Inst. Steam Gen. Units

References: 60.41b
60.41c

Abstract:

Q1: Does EPA consider indirect-fired dryers used in the ethanol industry subject to 40 CFR part 60, subparts Db or Dc?

A1: EPA finds that both NSPS subparts Db and Dc apply to indirect-fired dryers as they use the process of drying in a closed steam loop system with an integrated thermal oxidizer to transfer heat across a physical barrier. In the indirect heating method being used, they meet the definition of a steam generating unit under 40 CFR 60.41b and 60.41c.

Letter:

W. Clark Smith
 Permitting Section Supervisor
 Air Quality Division
 Nebraska Department of Environmental Quality
 P.O. Box 98922
 Lincoln, NE 68509-8922

Re: Applicability Determination for NSPS Subparts Db and Dc for indirect-fired dryers used in the ethanol industry.

Dear Mr. Smith:

The Nebraska Department of Environmental Quality (NDEQ) has submitted a request for a determination and concurrence from the U.S. Environmental Protection Agency (EPA) that indirect-fired dryers are subject to new source performance standards (NSPS) Subparts Db and Dc. The NDEQ stated that questions have been raised recently concerning the applicability of the NSPS for certain types of dryers used in the ethanol industry to dry distiller grain solids (DGS). The NSPS in question are 40 CFR Part 60 Subparts Db and Dc. These dryer systems use the process of drying in a closed

steam loop which includes an integrated thermal oxidizer. Based on the indirect heating method being used, they meet the definition of a steam generating unit, and Subparts Db and Dc apply.

Under Subparts Db and Dc, a steam generating unit is defined as any device which combusts any fuel to produce steam, heat water, or heat any heat transfer medium. Part 60.41b and Part 60.41c define a heat transfer medium as any material used for transferring heat from one point to another point. The heat transfer in these systems occur by re-circulating dryer gases used for drying DGS that are heated in the heat exchanger that has a non-mixing gas-gas specific design. The dryer exhaust gases are re-circulated back to the combustion chamber as make-up air where VOCs and particulate emissions are controlled through combustion. This step serves as a process integrated thermal oxidation system.

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A process heater is defined in Parts 60.41b and 60.41c as a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst. A memorandum entitled Process Dryers Applicability from U.S. EPA dated November 17, 1992 describes the distinction between steam generating units and process dryers. That letter is available in the Applicability Determination Index on the Internet (<http://cfpub.epa.gov/adil/>) as Control Number PS36, and is enclosed.

The indirect-fired dryers described do not heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst. They, instead, transfer heat from one contained collection of gases through a physical barrier to another contained collection of gases. There is no intermixing of the combustion flue gases and the gases used to dry the DGS material. Therefore, these dryer systems do not fit the definition of a process heater.

As this determination is applied to steam generating units affected by Subpart Db (units with a design heat input capacity of greater than 100 MMBtu/hr, and not more than 250 MMBTU/hr) an affected facility subject to the sulfur dioxide standard sec. 60.42b and emission monitoring for sulfur dioxide sec. 60.47b, the particulate matter standard sec. 60.43b, the nitrogen oxides standard sec. 60.44b, and the emission monitoring for particulate matter and nitrogen oxides sec. 60.48b must, at a minimum, install, calibrate, maintain and operate continuous monitoring systems such as continuous emissions monitoring systems (CEMS) for measuring SO₂ and either O₂ or CO₂, particulate emissions with a continuous opacity monitor system (COMS) or a CEMS, and NO_x emissions with a CEMS, and shall record the output of the system as required by the applicable standards and report. The owner or operator of the affected unit must abide by all reporting and recordkeeping requirements as stated in sec. 60.49b. If SO₂ monitoring is required, the source may, as an alternate monitoring method, determine SO₂ emission and the percent reduction by analyzing fuel for sulfur and heat input content or measure SO₂ at inlet or outlet to the SO₂ control system.

As this determination is applied to steam generating units affected by Subpart Dc (units with a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr) an affected facility subject to the sulfur dioxide standard sec. 60.42c, the particulate matter standard sec. 60.43c must, at a minimum, monitor/track fuel type and usage for reporting as required by sec. 60.46c, sec. 60.47c and sec. 60.48c.

This response has been prepared in consultation with the Office of Enforcement and Compliance Assurance and the Office of Air Quality Planning and Standards.

Sincerely,

Mark Smith
Branch Chief
Air Permitting and Compliance Branch
Air and Waste Management Division

Enclosures: Process Dryers Applicability, Control Number PS36, dated 11/17/92