



**DENVER ZOOLOGICAL FOUNDATION, INC.**

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December 12, 2012

Mr. Michael Harris  
Air Pollution Control Division – CDPHE  
APCD-SS-B1  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530

**Re:** Comments to Draft Construction Permit for Denver Zoo’s Waste to Energy System (WTES)

Dear Mr. Harris:

The Denver Zoological Foundation (DZF) is submitting for your review our comments on the draft construction permit (12DE2647) for the proposed Denver Zoo Waste to Energy System that will operate in Denver Zoo’s Waste Management facility located at the Denver Zoo at 2300 Steele Street, Denver, CO.

DZF appreciates the Division’s responsiveness in this process and look forward to working with you to address these comments. Please contact us with any questions.

Regards,

**Denver Zoological Foundation**

Jennifer Hale  
Sustainability Manager

Enclosures

cc  
George Pond – DZF Vice President for Design and Campus Management  
Paul Quick – DZF Special Projects Manager  
Mickey Myers, Myers - Environmental Services, Inc.

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DENVER ZOOLOGICAL FOUNDATION  
WASTE TO ENERGY SYSTEM  
DRAFT PERMIT COMMENTS



Date: December 12, 2012

To: Michael Harris, CDPHE

The following comments are being provided to CDPHE for review and consideration. Comments pertain to the draft Construction Permit received by Denver Zoo on November 14, 2012.

Standard  
format

1) Requirement 5 and requirement 15 appear to be duplicate requirements. Is this standard format for this permit, or can one be removed?

2) In requirement 7, "the manufacturer, model number and serial number of the subject equipment shall be provided to the Division within fifteen days (15) after commencement of operation."

Denver Zoo would like clarification on what they should provide for equipment that is manufactured by Denver Zoo.

Custom  
Equipment  
or Internal ID #

3) It appears in requirement 8 that the emission ranges have been totaled. We understand that this is not a typical requirement and request that subsequent requirement for reporting facility-wide emissions be removed.

This is the  
standard format

Done

4) Please edit spelling of "drier" to "dryer" in requirements 9 and requirement 10.

11+12

5) Please include in requirement 17 the following language "Regulation 1, Section II.A.5" citation for 30% opacity. In addition, should the condition referenced in requirement 17 be 11 or 12?

6) In requirement 17, Denver Zoo would like clarification on the requirement for the observation period to be 1 hour in duration. We would like to discuss this requirement and understand what is required of our staff on this task. I've copied the standard below for reference.

Controlled  
through smoke  
school

*II.A.5: Smokeless Flare or Flares for the Combustion of Waste Gases*

*No owner or operator of a smokeless flare or other flare for the combustion of waste gases shall allow or cause emissions into the atmosphere of any air pollutant which is in excess of 30% opacity for a period or periods aggregating more than six minutes in any sixty consecutive minutes.*

7) Requirement 18 requires and initial stack test of Particulate Matter, Sulfur Dioxide, and Hydrogen Chloride. We would like ask CDPHE to remove this requirement, because we are a true minor source for these pollutants (except for CO), these pollutants are not controlled and stack testing is expensive. Furthermore, we believe testing of only NO<sub>x</sub>, CO and VOC is justified because these are the only pollutants regulated in the applicable requirement of 40CFR60, Subpart JJJ.

8) Item 18 requires testing of the criteria pollutants and HCL from the flare. We would like to discuss with CDPHE the option to remove this requirement, because; we are a true minor source (except for CO), it is an intermittent source, there are no other applicable requirements, and stack testing is expensive.

9) We would like to discuss the applicability of Item 24 to these sources, because we are a true minor source of the ozone nonattainment precursor of NO<sub>x</sub> and CO. We believe that this

citation should be concerned with PSD for CO because we are a true synthetic minor based on the uncontrolled emissions of CO for the flare and engine. Please also see page 10, item 8, it is our understanding that that CO is not a non-attainment pollutant. Please change the status for NANSR line from CO to NOx and VOC. Please add a line for PSD, and the status should read True Synthetic Minor Source for CO.