

TITLE 326 AIR POLLUTION CONTROL DIVISION

Rule Information Sheet

BP Whiting Refinery Temporary Alternative Opacity Limitations
LSA Document #19-576

Overview

This rulemaking amends 326 IAC 5 concerning opacity limitations for BP Products North America Inc. Whiting Refinery, source ID 089-00453. Indiana's opacity rules at 326 IAC 5-1-3 allow a source to request a temporary alternative opacity limitation (TAOL) for periods of startup or shutdown. BP Whiting Refinery operates two fluidized catalytic cracking units (FCUs) equipped with electrostatic precipitators (ESP) for control of particulate matter emissions. Under 326 IAC 5-1-3, the FCUs are subject to TAOLs that generally apply to boilers when building a new fire, or shutting down, as identified in the current Title V operating permit. It is difficult for the FCUs to meet these standards during startup, shutdown, and hot standby events due to the high risk for explosion when emissions from the FCUs are routed through an active ESP. Due to the safety concerns with operating the ESP during these nonroutine operating scenarios, BP Whiting Refinery requested that IDEM amend 326 IAC 5-1-8 for both FCUs to provide for an alternative compliance option. The opacity limits in 326 IAC 5-1-3 are specific to startup and shutdown as other opacity requirements in federal New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) are also applicable to these units. BP Whiting Refinery requested an alternative compliance option for the FCUs that rely on a minimum inlet velocity to the primary internal cyclone of 20 feet per second (fps), similar to requirements allowed by the United States Environmental Protection Agency (U.S. EPA) in the NESHAP at 40 CFR 63, Subpart UUU. Supporting documentation for the NESHAP indicates that commenters during the federal rulemaking expressed concern with fire and explosion unless ESPs are de-energized and bypassed during certain startup scenarios. IDEM has reviewed available information to establish a TAOL in 326 IAC 5-1-8 that will ensure that the TAOL will not impact maintenance of the National Ambient Air Quality Standards (NAAQS). To remain compliant during this rulemaking, BP Whiting Refinery requested a variance from 326 IAC 5-1-3 during startup, shutdown, and hot standby events.

Affected Persons

This rulemaking will only have an impact on the source, BP Whiting Refinery.

Reasons for the Rule

The purpose of this rulemaking is to prevent a fire or explosion at the facility. The revision of the opacity limitations during startup, shutdown, and hot standby events will benefit the source by reducing the risk of explosion from operation of the electrostatic precipitator (ESP) control device during this unique operating scenario. A fire or explosion could result in medical costs, lost productivity, clean-up costs, and the need to address environmental and health impacts on the surrounding community.

Economic Impact of the Rule

This rulemaking will have a positive fiscal impact on the source. It is site specific to one source and will not impact any other sources. The revision of the opacity limitations during startup, shutdown, and hot standby events will benefit the source by reducing the explosion risk from operation of the ESP control device during this unique operating scenario. A fire or explosion could result in injury to personnel, damage to equipment, or in shutdown of the facility resulting in a financial impact on the company due to medical costs, lost productivity, clean-up costs, and the need to address environmental and health impacts on the surrounding community.

Scheduled Board Action and Hearings

First Public Hearing: May 12, 2021, at 1:30 p.m., through Zoom

Second Public Hearing: August 11, 2021, at 1:30 p.m., at the Indiana Government Center North, 100 North Senate Avenue, Conference Room IGCN 1319, Indianapolis, Indiana. The public may attend the ERB meeting in person or join by using the following Zoom link, meeting ID, and passcode, or telephone numbers:

Join Zoom Meeting

<https://us06web.zoom.us/j/87921936763?pwd=RVJQVEITZ0VsdHE2NnVVREpUR0Nldz09&from=addon>

By phone:

301-715-8592

312- 626-6799

Meeting ID: 879 2193 6763

Passcode: 649397

IDEM Contact

Additional information regarding this rulemaking action can be obtained from Krystal Hackney, Rules Development Branch, Office of Legal Counsel, at khackney1@idem.in.gov, (317) 232-3158, (800) 451-6027 (in Indiana).