

Note: The following proposed rule language is draft and has not yet been reviewed by department legal staff. The attached proposed rule and any future versions of the proposed rule resulting from workgroup discussions are subject to modification and/or removal entirely as a result of subsequent department legal review.

Rule Analysis and Checklist

DRAFT

Working title: Changes to Diesel Fuel Sulfur Content Requirements to remove inconsistencies between federal and state requirements

Code citation(s): S. 445.09 (2) Fuel Requirements and NR 445.09(3) Control Requirements

Other codes affected: N/A

Objective: Eliminate the conflict between state and federal requirements with regard to the allowed sulfur content in fuels for diesel (also known as compression ignition (CI)) engines.

Group lead: Kristin Hart, Permit Section Chief

Problem being solved or issue being resolved:

Federal requirements for certain types of engines allow use of higher sulfur content in diesel fuels (also known as fuel oils) which are not allowed by state regulations. Certain federal regulations *require* testing of engines with fuels containing sulfur contents not allowed by the state rules. This proposed rule eliminates the conflict between state and federal requirements on the allowed sulfur content in fuels for diesel engines (also known as compression ignition (CI) engines).

Discuss how the proposed rule solves the problem or resolves the issue laid out above:

The proposed rule eliminates the conflict between federal and state sulfur fuel requirements for diesel engines. If higher sulfur fuels are used, the Department will evaluate the emissions for the best available control technologies that will minimize the potential for increased emissions into the ambient air.

Describe facilities affected by the proposed rule (size, type, location, and approximate number):

Wisconsin is home to a thriving engine manufacturing industry. A search of the air program's facility reporting database on several SIC codes reveals 45 facilities that may be involved in engine testing.

Because of the limited availability of fuels containing higher sulfur contents the department believes that only a handful of these facilities will request use of higher sulfur fuels than allowed by NR 445.09 (2). Sources that request use of higher sulfur content fuels will be subject to Department evaluation and their emissions will be minimized using the best available control technology.

Will emissions be affected by the proposed rule (increased or decreased)? Yes No

Discussion (list pollutants affected. If no change, say why): Emissions from burning higher sulfur content diesel release sulfur dioxide and sulfite and sulfate compounds and increase emissions of diesel particulate matter, PM_{2.5}, and PM₁₀. Emissions from combusting higher sulfur content diesel fuels will increase but, as discussed above, the number of facilities using this provision will be small and emissions will be minimized by requiring use of best available control technology.

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Discuss how the proposed rule improves operational efficiency and/or simplifies the air permitting process:

This proposed rule improves operational efficiency by clarifying applicability of state and federal fuel requirements for engines. Permits will no longer have to be issued with conditions that conflict with federal requirements.

Discuss how the proposed rule assures the program remains consistent with the requirements of the Clean Air Act, 40 CFR Part 70, and the Wisconsin Statutes:

This proposal will eliminate conflicts that currently exist between state and federal fuel requirements relating to allowable sulfur content in fuels for diesel engines.

Discuss estimated resources needed for implementation for both DNR and affected facilities:

The department estimates that Wisconsin has between 45 and 55 facilities with engine testing lines. It is expected that only a small number of sources would use the proposed rule change and request use of fuels with greater than 15 ppm sulfur content in fuels. This is because federal regulations restrict the use of fuels with sulfur content higher than 15 ppm, availability of these fuels is limited, and the requirement to install the best available control technology may be expensive.

Facilities that need or want to test at higher sulfur fuel contents would need to submit a permit application with an analysis of Best Available Control Technology for the diesel particulate matter emissions. This would require extra work for both the facility and the Department. The air program believes current permit staffing levels are adequate to handle the potential increased workload.

General discussion of why the rule is crafted as proposed, including any sticking points and how they were resolved, any other decision points, and why the final decision was made:

The language is simple in that it allows a source to use fuels with a sulfur content greater than 15 ppm under certain circumstances and with technical review and approval by the Department. No sticking points are known at this time.

Legal review completed: Yes No

Discussion: Preliminary legal review completed.

Statutory changes required: Yes No

Discussion: No statutory changes are needed to implement this rule change

SIP revision required: Yes No

Discussion: ch. NR 445 is not in the state SIP. No revisions to the SIP are needed to implement a change to ch. NR 445.

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Attachment: Proposed Rule Language

The department proposes to repeal and recreate s. NR 445.09(2) to read as follows:

~~(2) FUEL REQUIREMENTS. Beginning no later than July 15, 2006, the owner or operator of a CI engine shall only combust fuel oil with a sulfur content no greater than the sulfur content that is allowed for on-road use at the time the fuel was purchased, when firing the engine with fuel oil.~~

~~Note: Federal Diesel Fuel Programs and Regulations can be found at: <http://www.epa.gov/otaq/regs/fuels/diesel/diesel.htm#regs>. As of July 1, 2004, federal requirements state that beginning July 15, 2006, the sulfur content of diesel fuel at the terminal level will be 15 ppm or less.~~

~~(2) FUEL REQUIREMENTS . The owner or operator of a CI engine shall not combust fuels with a sulfur content greater than 15 ppm unless particulate matter is controlled as required under sub. (3)(d).~~

The department proposes to create s. NR 445.09(3)(d) to read as follows:

~~(3)(d) Paragraph (a) notwithstanding, the owner or operator of a facility who combusts fuels with a sulfur content greater than 15 ppm shall control to a level that is best available control technology, as determined by the department. The owner or operator shall submit a construction permit application including information describing how the best available control technology requirements will be met. Compliance with the best available control technology shall be achieved and demonstrated in accordance with the permit.~~