

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## **AGENDA ITEM REQUEST**

for a Petition for Rulemaking

**AGENDA REQUESTED:** August 2, 2017

**DATE OF REQUEST:** July 14, 2017

**INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED:** Derek Baxter, (512) 239-2613

**CAPTION: Docket No. 2017-0820-PET.** Consideration of a petition for rulemaking under Section 20.15 of 30 Texas Administrative Code (TAC) Chapter 20, Rulemaking.

The petition was filed with the Texas Commission on Environmental Quality (commission) on June 5, 2017 by Ben Dickson, P.E. (petitioner). The petitioner requested that the commission amend 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, Subchapter B, Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas, Divisions 3 and 4, Houston-Galveston-Brazoria Ozone Nonattainment Area Major Sources and Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources. The petitioner is requesting to revise Sections 117.310(f) and 117.410(f) by deleting both rule subsections in their entirety thereby eliminating the operating restrictions for stationary diesel and dual-fuel engines started or operated for testing or maintenance between the hours of 6:00 a.m. and noon. The petitioner states that the operating restrictions do not protect the environment, are inadequately explained, are burdensome on personnel and contractors, and require burdensome and unnecessary recordkeeping. (Javier Galván, Sierra Redding) (Project No. 2017-029-PET-NR)

Steve Hagle, P.E.  

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**Deputy Director**

Kim Herndon for David Brymer  

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**Division Director**

Derek Baxter  

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**Agenda Coordinator**

# Texas Commission on Environmental Quality

## Interoffice Memorandum

**To:** Commissioners **Date:** July 14, 2017

**Thru:** Bridget C. Bohac, Chief Clerk  
Richard A. Hyde, P.E., Executive Director

**From:** Steve Hagle, P.E., Deputy Director  
Office of Air

**Subject:** Consideration of a Petition for Rulemaking

**Docket No.:** 2017-0820-PET

**Project No.:** 2017-029-PET-NR

### **Who Submitted the Petition:**

On June 5, 2017, the Texas Commission on Environmental Quality (TCEQ or commission) received a petition from Ben Dickson, P.E. (petitioner).

### **What the Petitioner Requests:**

The petitioner requests that the commission eliminate the rule provisions under 30 Texas Administrative Code (TAC) §117.310(f) and identical requirements under §117.410(f) that prohibit any person from starting or operating any stationary diesel or dual-fuel engine for testing or maintenance between the hours of 6:00 a.m. and noon in the Houston-Galveston-Brazoria (HGB) and Dallas-Fort Worth Eight-Hour (DFW) ozone nonattainment areas. The petitioner contends the specific provisions in §117.310(f) and §117.410(f) are not protective of the environment but are actively detrimental to human health.

The petitioner states that the Chapter 117 rule provisions are based on the idea that morning nitrogen oxides (NO<sub>x</sub>) emissions rise to produce low level ozone in the peak of the afternoon and that no explanation is provided as to why the effect of NO<sub>x</sub> emissions from afternoon testing and maintenance does not have similar effects on ozone production. The petitioner asserts that restricting testing and maintenance activities in the morning hours increases afternoon labor and thus the associated safety risks of sunburn, dehydration, and heat-related illnesses; imposes a needless training burden; and leads to rule compliance deviations. The petitioner further asserts the documentation demonstrating compliance is uniquely burdensome and not encountered in any other stationary diesel engine regulations.

The petitioner questioned the validity of the operating requirements for stationary engines when contrasted with the fact that neither mobile sources nor diesel locomotives have such time-of-day requirements regardless of size. The petitioner claims that the arbitrary and inconsistent nature of these rule requirements cause a decrease in the esteem of people required to demonstrate compliance with these rule provisions, further fostering opinions that the compliance demonstrations are unimportant and increasing the difficulty to obtain compliance for those regulations that actually reduce emissions.

### **Recommended Action and Justification:**

The executive director recommends denial of the petition. The petitioner seeks authorization to emit NO<sub>x</sub> during early and late morning hours from stationary diesel (and dual-fuel) engines in ozone nonattainment areas. This rule requirement for the NO<sub>x</sub>

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major source industrial rules (renumbered to §117.310(f) from §117.206(i) in 2007) was adopted as part of the Houston-Galveston attainment demonstration state implementation plan (SIP) revision (26 TexReg 8110) and the DFW attainment demonstration SIP revision (32 TexReg 3206). The petitioner's proposed rule revision would constitute revisions to the HGB SIP and DFW SIP that would be subject to review and approval by the United States Environmental Protection Agency (EPA). Section 110(l) of the Federal Clean Air Act (FCAA) states that the EPA cannot approve a SIP revision if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress, or any other applicable requirement of the FCAA. Revising the Chapter 117 rules in accordance with the petitioner's request could lead to potential backsliding issues since NO<sub>x</sub> reductions resulting from controlling stationary engines at minor and major NO<sub>x</sub> industrial sources were relied upon to demonstrate attainment with the 1997 ozone National Ambient Air Quality Standard (NAAQS) in the HGB and DFW areas. The TCEQ would be required to demonstrate to the EPA how such rule revisions would not constitute backsliding under §110(l) of the FCAA.

Although the petitioner does not specifically address the same operational time restrictions for stationary diesel or dual-fuel engines located at minor stationary sources of NO<sub>x</sub> in the petition, identical provisions for stationary engines exist in the NO<sub>x</sub> minor source industrial rules under §117.2030(c) for the HGB area and under §117.2130(c) for the DFW area. The majority of stationary diesel and dual-fuel engines in the DFW and HGB areas that are subject to these operational restrictions are actually subject to the minor source rules. However, retaining these provisions in the NO<sub>x</sub> minor source industrial rules but deleting such requirements from the NO<sub>x</sub> major source industrial rules would impose more stringent requirements for owners and operators of minor sources.

It is true, as acknowledged by the petitioner, that the current operating restrictions delay the emissions resulting from operation for maintenance or testing of diesel and dual-fuel engines until after noon in the HGB and DFW areas. As discussed in the response to comments section of the rulemaking preamble published on October 12, 2001 (26 TexReg 8110), ozone forms through chemical reactions between natural and human-made volatile organic compounds (VOC) and NO<sub>x</sub> emissions in the presence of sunlight. The critical time for the mixing of NO<sub>x</sub> and VOC is early in the day, thus higher ozone levels occur most frequently on hot summer afternoons. By delaying the hours of operation of stationary diesel and dual-fuel engines for testing and maintenance, and therefore delaying the release of NO<sub>x</sub> emissions until after noon in ozone nonattainment areas, the NO<sub>x</sub> emissions are less likely to mix in the atmosphere with other ozone-forming compounds until after the critical mixing time has passed. Therefore, production of ozone is stalled until later in the day when optimum ozone formation conditions no longer exist, ultimately minimizing the peak level of ozone produced. This strategy creates reductions in the amount of NO<sub>x</sub> added to the atmosphere by stationary diesel and dual-fuel engines during the time of day when those emissions have been shown to contribute to exceedances of the ozone NAAQS. The use of "time-of-day" restrictions such as this for NAAQS compliance strategies is supported by the EPA in its non-road mobile source rules under 40 Code of Federal Regulations Part 89, Control of Emissions from New and In-Use NonRoad Compression-Ignition Engines, Subpart A, Appendix A, State

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Regulation of Nonroad Internal Combustion Engines. The Chapter 117 operating restrictions do not apply to the normal operation of these engines. Instead, these rules simply prohibit operation for maintenance or testing of the engine itself between 6:00 a.m. and noon.

The petitioner is correct that the TCEQ does not apply the time-of-day use restrictions to mobile diesel sources such as locomotives. However, diesel non-road mobile sources are generally used to perform the equipment's normal function throughout the day. Applying time-of-day use restrictions to such non-road mobile sources would significantly impact the business operations of the owners or operators of such sources and, if only applied to maintenance and testing operation between 6:00 a.m. and noon, would not significantly affect the emissions of these sources as a category. In contrast, the primary purpose of most stationary diesel and dual-fuel engines is backup power, firewater, or similar emergency uses. The most common operation during the year of such backup engines is not for the engine's primary operational purpose but actually operation for testing and maintenance purposes. Applying the time-of-day use restriction to the testing and maintenance operation of engines that are predominantly backup engines has significantly less impact on business operations.

Currently, owners and operators of affected units are required to maintain records of the date(s) of operation; start and end times of operation; identification of the engine; and the total hours of operation for each month and for the most recent 12 consecutive months each time the engine is operated for testing and maintenance. The associated recordkeeping requirements are necessary to ensure compliance with the restriction on operating hours for testing and maintenance. However, the rules provide broad flexibility with documenting the start and end times of engine operation for demonstrating compliance with the operating restrictions.

Exceptions to the operational time restrictions are provided in §117.310(f) and §117.410(f), including: a specific manufacturer's recommended testing requiring a run of over 18 consecutive hours; to verify reliability of emergency equipment (e.g., emergency generators or pumps) immediately after unforeseen repairs; and firewater pumps for emergency response training conducted in the months of April through October.

**Applicable Law:**

- Texas Government Code, §2001.021, which establishes the procedures by which an interested person may petition a state agency for the adoption of a rule; and
- 30 TAC §20.15, which provides such procedures specific to the commission.

**Agency Contacts:**

Javier Galván, Project Manager, Air Quality Division, (512) 239-1492

Sierra Redding, Staff Attorney, (512) 239-2496

Derek Baxter, Agenda Coordinator, (512) 239-2613

Commissioners

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**Attachment:**

Petition

cc: Chief Clerk, 2 copies  
Executive Director's Office  
Erin Chancellor  
Stephen Tatum  
Jim Rizk  
Office of General Counsel  
Javier Galván  
Derek Baxter

EXEC#44687

May 27, 2017

Executive Director  
Texas Commission on Environmental Quality  
PO Box 13087  
Austin, TX. 78711-3087



TCEQ Executive Director,

In the spirit of the EPA's call for regulatory reductions, I would like to submit a petition to change a section of the regulations. While I am employed as an environmental engineer, I am making this petition solely on my own behalf as a resident of Texas.

The enclosed petition requests a modification to the NO<sub>x</sub> regulations in Title 30 of the Texas Administrative code Section 117. This requests the removal of a particularly onerous regulation, 30 TAC 117.310(f) and the identical 117.410(f). These two subsections prohibit operating a stationary diesel engine for testing or maintenance between 6:00 AM and noon. These regulations are routinely cited in environmental circles whenever an example of nonsensical and arbitrary requirements is needed as even brief consideration reveals that they do not protect the environment but have severe negative consequences.

Thank you for consideration of this petition. If any further information is required, you may contact me at Benjamin@ArborOaks.com.

A handwritten signature in blue ink, appearing to read "Ben Dickson".

Ben Dickson P.E.  
License 123542  
Address: 3406 Silver Crown Ct. Richmond, TX. 77406

## Petition for Rulemaking

### Petitioner is an interested person

As a lifelong resident of Texas, I qualify as an interested person according to 30 TAC 20.15(a)(1). Furthermore, I live in Fort Bend county, part of the Harris-Galveston-Brazoria Nonattainment area directly affected by 30 TAC 117.310(f). Therefore, I am personally affected by this regulation.

### Explanation of the proposed rule

My request is to remove two identical subsections from the Texas Administrative Code. These are 30 TAC 117.310(f) and the identical 30 TAC 117.410(f). These rules are identical except that 117.310(f) applies to Harris-Galveston-Brazoria non-attainment area, while 117.410(f) applies to the Dallas-Fort Worth non-attainment area. These rules state that stationary diesel engines cannot be run for testing or maintenance between 6:00 AM and noon. This is not protective to the environment, but instead is actively detrimental to human health. No minor alteration would transform this into a desirable effect. Therefore, I request that these subparts be entirely deleted.

### Proposed Rule Language

I propose to delete the two subparts of the rule entirely, including their three subsections. As these requirements are the final subpart of their respective sections, no renumbering of the remaining text is required.

~~30 TAC 117.310(f) Operating restrictions. No person shall start or operate any stationary diesel or dual-fuel engine for testing or maintenance between the hours of 6:00 a.m. and noon, except:~~

- ~~–(1) for specific manufacturer's recommended testing requiring a run of over 18 consecutive hours;~~
- ~~–(2) to verify reliability of emergency equipment (e.g., emergency generators or pumps) immediately after unforeseen repairs. Routine maintenance such as an oil change is not considered to be an unforeseen repair; or~~
- ~~–(3) firewater pumps for emergency response training conducted in the months of April through October.~~

~~30 TAC 117.410(f) Operating restrictions. No person may start or operate any stationary diesel or dual-fuel engine for testing or maintenance of the engine between the hours of 6:00 a.m. and noon, except:~~

- ~~–(1) for specific manufacturer's recommended testing requiring a run of over 18 consecutive hours;~~
- ~~–(2) to verify reliability of emergency equipment (e.g., emergency generators or pumps) immediately after unforeseen repairs. Routine maintenance such as an oil change is not considered to be an unforeseen repair; or~~
- ~~–(3) firewater pumps for emergency response training conducted from April 1 through October 31.~~

### Statutory Authority

The Texas Commission on Environmental Quality has authority to adopt the proposed rule under the Texas Clean Air Act (5 THSC 382). Section 382.017 allows the commission to adopt rules to comply with the Texas Clean Air Act, and section 382.011, under the general powers and duties to administer the Clean Air Act.

In fact, the rule as it currently stands is questionably in compliance with 5 THSC 382.017(f), which prohibits the agency from specifying a particular method of control. The exceptions, listed between 382.0171 and 382.021, do not refer to time of day operating restrictions as an allowed required. These requirements also fall afoul of 382.001(b), which requires the agency to accomplish its mission "by all practical and economically feasible methods". As I detail in the following section, these requirements are not practical, and the economic damage they cause is not justifiable by the miniscule environmental damage they questionably avert. Therefore, the agency is required to remove these impractical requirements from the code of regulations.

#### Injury from Failure to Adopt Proposed Changes

This requirement does not protect the environment. It is based on the concept that emissions in the morning rise to produce low level ozone in the peak of afternoon. Why later NOx emissions do not have similar effects is not explained and is questionable at best. Also, testing and maintenance are not eliminated, merely shifted. This ironically concentrates all testing into a smaller span of time, increasing the peak concentration of emissions from stationary diesel engines and exacerbating the effects of the emissions that are produced from testing and maintenance. While the total increase in emissions concentration caused by such actions is small, it is directly contrary to the express purpose of the agency's actions.

To contrast with its minimal benefits, this requirement causes much consternation and burden. Routine maintenance on stationary engines, which are typically installed either out of doors or non-air-conditioned buildings, is best done in the cool of early morning, especially during summer months. This regulation increases the amount of labor that must be performed in the afternoon sun with all associated safety risks of sunburn, dehydration, and heat-related illnesses. Environmental regulations are designed to improve human health and safety, not endanger it.

Furthermore, as these regulations only apply to the Houston and DFW areas, personnel and contractors that originate from outside the affected areas quite often do not know about this relatively obscure regulation. This causes a needless training burden on all personnel and causes a frustrating number of deviations from the requirements. These deviations stem from well-meaning maintenance personnel wishing to get ahead of schedule, engineers testing firewater systems, manufacturer's default settings for automatic tests, and endless other similar situations. While people are trained to not operate the engines between these hours, the requirement is counterintuitive, making it difficult to remember.

In addition, the documentation to demonstrate compliance with this requirement is uniquely burdensome. All other regulations on stationary diesel engines requires engine runtime to be determined via a non-resettable runtime meter. However, complying with this regulation requires a detailed log of runtime. As these engines often start automatically, it requires a retroactive determination of the reasons for runtime for any the discrepancy between the log and the runtime meter. This places a significant, undue burden on stationary diesel engines, including emergency generators, firewater pumps, and other engines that are lightly regulated in almost all other aspects.

The combination of minimal to nonexistent benefits to the environment and a heavy compliance burden has caused these specific subparts to be widely mocked by those even casually familiar with industry as the single most concise example of nonsensical regulatory requirements. The requirement

becomes almost comical when it is contrasted with the fact that neither mobile sources nor diesel locomotives have such time-of-day requirements, no matter their size. A 30 ton bulldozer can run any time day or night for any reason, while a half-horsepower generator cannot be run for five minutes between 6:00 AM and noon to determine its functionality. Worst of all, the transparently arbitrary and inconsistent nature of this requirement causes a general decrease of the esteem people hold of compliance, fostering opinions that compliance with regulations is unimportant for actually protecting the environment. This disillusionment makes it harder to obtain compliance with all other requirements, including those that do reduce emissions.

### Conclusion

In the spirit of increasing the utility and effectiveness of regulations, I request that the TCEQ review and eliminate these two subparts from the Texas Administrative Code. *They are not protective of human health or the environment.* Instead, they negatively affect both environmental quality and human safety, apply cumbersome regulatory requirements, and cause general disillusionment with regulatory compliance.

# Texas Commission on Environmental Quality



## **DECISION OF THE COMMISSION REGARDING THE PETITION FOR RULEMAKING FILED BY BEN DICKSON, P.E.**

Docket No. 2017-0820-PET  
Rule Project No. 2017-029-PET-NR

On August 2, 2017, the Texas Commission on Environmental Quality (Commission) considered the petition for rulemaking filed by Ben Dickson, P.E. (petitioner). The petitioner filed the request on June 5, 2017, and requested that the commission eliminate the rule provisions under 30 TAC § 117.310(f), Emissions Specifications for Eight-Hour Attainment Demonstrations, and identical requirements under § 117.410(f), that prohibit any person from starting or operating any stationary diesel or dual-fuel engine for testing or maintenance between the hours of 6:00 a.m. and noon in the Houston-Galveston-Brazoria (HGB) and Dallas-Fort Worth (DFW) Eight-Hour ozone nonattainment areas.

IT IS THEREFORE ORDERED BY THE COMMISSION, pursuant to the Administrative Procedure Act, Texas Government Code, § 2001.021 and Texas Water Code, § 5.102 and § 5.103, to deny the petition. The decision to deny the petition is based on our conclusion that the requested revision could lead to potential backsliding issues for the HGB and DFW state implementation plans since nitrogen oxides (NO<sub>x</sub>) reductions resulting from controlling stationary engines at minor and major NO<sub>x</sub> industrial sources were relied upon to demonstrate attainment with the 1997 National Ambient Air Quality Standards (NAAQS) in the HGB and DFW areas. Additionally, the use of "time-of-day" restrictions creates reductions in the amount of NO<sub>x</sub> added to the atmosphere by stationary diesel and dual-fuel engines during the time of day when those emissions have been shown to contribute to exceedances of the ozone NAAQS.

This Decision constitutes the decision of the Commission required by the Texas Government Code, § 2001.021(c).

TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

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Bryan W. Shaw, Ph.D., P.E., Chairman

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Date Signed