ENVIRONMENTAL PROTECTION

AIR QUALITY, ENERGY, AND SUSTAINABILITY

DIVISION OF AIR QUALITY

Air Pollution Control

Control and Prohibition of Carbon Dioxide Emissions

Proposed Amendments: N.J.A.C. 7:27-1.4, 1.36, 8.14, 8.18, 22.16, and 22.28; and 7:27A-3.2,

3.5, and 3.10

Proposed New Rules: N.J.A.C. 7:27F

Notice of Correction and Additional Public Comment Period (PRN 2021-117)

Control and Prohibition of Carbon Dioxide Emissions

an error in the above-referenced notice of proposal, published in the December 6, 2021, New Jersey Register, 53 NJR 1945(a). The error appears in the Economic Impact statement at 53 N.J.R. 1945, 1962, wherein the Department referred to the increase in operational costs for an electric boiler in terms of a "percentage" increase. The Department's analysis indicated that operational costs for an electric boiler would result in a 4.2 to 4.9 times increase (rather than 4.2 to 4.9 percent increase), given the price differential between electricity and natural gas. To correct the

Take notice that the Department of Environmental Protection (Department) discovered

error, the text of the Economic Impact statement beginning with the heading N.J.A.C. 7:27F-4,

Carbon Dioxide Emission Reductions from Fossil Fuel-Fired Boilers, which appeared in the

NOTICE, THE OFFICIAL VERSION WILL GOVERN.

December 6, 2021, notice of proposal in the New Jersey Register, 53 N.J.R. at 1962, is published

below with the correction.

Take further notice that the Department will accept public comments on the notice of proposal,

53 N.J.R. 1945(a), and this notice of correction until March 6, 2022. The Department will continue

to accept public comments limited to this notice of correction until April 8, 2022. Each comment

should be identified by the applicable N.J.A.C. citation, with the commenter's name and

affiliation following the comment.

The Department encourages electronic submittal of comments. In the alternative,

comments may be submitted on paper to:

Alice A. Previte, Esq.

Attention: DEP Docket No. 07-21-11

Office of Legal Affairs

New Jersey Department of Environmental Protection

401 East State Street, 7th Floor

Mail Code 401-04L

PO Box 402

Trenton, NJ 08625-0402

Take further notice that, in light of this error in the Economic Impact statement, corrected by

this notice, the Department will hold a supplemental public hearing on March 29, 2022, at 9:00

NOTICE, THE OFFICIAL VERSION WILL GOVERN.

A.M., for the sole purpose of receiving comments on the correction. The supplemental hearing

will be conducted virtually through the Department's video conferencing software, Microsoft

Teams. Interested persons may join the supplemental hearing from a computer, tablet, or

https://teams.microsoft.com/l/meetupsmartphone using this link:

join/19%3ameeting MTYwMWE1NGYtMGM5Ni00MjFhLWlxNDctM2RkZmU1MTk2MjNk%40thr

ead.v2/0?context=%7b%22Tid%22%3a%225076c3d1-3802-4b9f-b36a-

e0a41bd642a7%22%2c%22Oid%22%3a%220d3def85-9f77-463f-963f-62b28f26eb49%22%7d

Interested persons may also dial in using a phone.

1 (856) 338-7074

Phone Conference ID: 691 322 528#

If you are interested in providing oral testimony or submitting written comments at the

virtual, supplemental public hearing, please email the Department at heidi.jones@dep.nj.gov, no

later than 5:00 P.M. on March 25, 2022, with your contact information (name, organization,

telephone number, and email address). You must provide a valid email address, so the

Department can send you an email confirming receipt of your interest to testify orally at the

supplemental hearing. Please note that the supplemental hearing will be recorded. It is

requested (but not required) that anyone providing oral testimony at the supplemental public

hearing provide a copy of any prepared remarks to the Department through email.

A copy of this notice is available at www.nj.gov/dep/rules.

Full text of the corrected passage within the Economic Impact statement follows:

N.J.A.C. 7:27F-4, Carbon Dioxide Emission Reductions from Fossil Fuel-Fired Boilers

As explained in the Summary, proposed N.J.A.C. 7:27F-4 places an additional requirement on a facility that is seeking a permit for a new fossil fuel-fired boiler with a maximum gross heat input rating equal to or greater than one MMBTU/hr and less than five MMBTU/hr. As noted in the Summary, electric boiler models capable of functioning in the same capacity as fossil fuel-fired boilers with a maximum gross heat input rating of less than five MMBTU/hr, are currently available for purchase and installation from vendors in New Jersey. For a facility installing a new boiler (not replacing an existing boiler that has experienced mechanical failure) pursuant to proposed N.J.A.C. 7:27F-4.4, the Department estimates that the costs to install an electric boiler may be significantly less expensive than a commensurate fossil fuel-fired boiler. Specifically, the infrastructure costs are generally lower for an electric boiler because an electric boiler can be installed at the point of use. Thus, unlike a fossil fuel-fired boiler, an electric boiler will not necessarily require a designated boiler room, flue, fuel lines, ventilation, or long steam lines.

For boilers between one and five MMBtu/hr, the Department estimates a range for installation costs, only, of between \$5,000 and \$12,000 for an electric boiler and between \$8,000 and \$30,000 for a natural gas-fired boiler, which means a potential savings of between \$3,000 and \$18,000 for an electric boiler. The Department based this estimate on the price ranges set forth in the EIA data from their "Updated Buildings Sector Appliance and Equipment Costs and Efficiencies" report (https://www.eia.gov/analysis/studies/buildings/equipcosts/pdf/full.pdf), as well as information gathered from New Jersey-based vendors. In this case, the installation costs include all the costs for the installation, such as shipping and labor. Using the same resources

(EIA and vendor data), the Department has also estimated a range for the cost of the new boiler unit itself. Depending on the size of the unit, the cost of a new electric boiler may be between \$5,000 and \$20,000; whereas, the cost of a new natural gas-fired boiler may be between \$5,000 and \$25,000. In other words, the equipment costs are on par, but the costs associated with a new electric boiler, including the installation, may be significantly lower than a fossil fuel-fired boiler. Thus, the Department anticipates that proposed N.J.A.C. 7:27F-4.4, as it applies to the installation of a new boiler, will result in a cost savings on installation and equipment.

The Department acknowledges that a facility that is replacing an existing fossil fuel-fired boiler with an electric boiler pursuant to proposed N.J.A.C. 7:27F-4.4 will not realize the savings associated with the installation of a new electric boiler, because that facility would likely have the infrastructure necessary for a replacement fossil fuel-fired boiler (designated boiler room, flue, fuel lines, ventilation, or long steam lines) in place already. The Department estimates the replacement cost of a fossil fuel-fired boiler with an electric boiler to be between \$10,000 and \$32,000 per boiler.

Based on a comparison of the 2018 average retail electricity costs versus the 2018 commercial rate for natural gas, the Department estimates that the operational costs for an electric boiler may be between 4.2 and 4.9 times higher. However, the Department does not forecast future energy costs and cannot predict that the costs of electricity and natural gas will continue along a similar cost differential, as electricity and natural gas prices are determined by many factors, including but not limited to, supply and demand, the state of global energy

markets, investor preferences, meteorological conditions, and government policies, including decarbonization goals and related laws and regulations.

While operational costs are presently estimated to be higher based upon a comparison of electric and natural gas prices, there are other cost variables that may benefit a facility subject to N.J.A.C. 7:27F-4.4. As noted in the Summary, the Department anticipates that in 2025, the increased demand for electric boilers will lead to greater competition and lower prices. Similarly, given the 2025 compliance date, an owner or operator of a single boiler that may be on the verge of replacement and subject to N.J.A.C. 7:27F-4.4, will have time to plan ahead. The Department expects that for some facilities, this rulemaking will provide the impetus to closely examine their energy usage and their equipment through a formal or informal energy audit. For instance, a facility may determine that current fossil fuel-fired equipment is too large and inefficient for the job; thus, replacement with a correctly sized boiler could offset the costs of replacement. Alternatively, a facility may determine that the increased costs for an electric boiler can be offset by other energy saving measures, such as replacement of fluorescent lights with LED technology. As noted in the Summary, State agencies, like the Board of Public Utilities, have programs available to assist with energy audits and to determine whether the entity qualifies for incentives to implement energy efficiency measures, which may offset the costs of replacement. In addition to the costs necessary to comply with N.J.A.C. 7:27F-4.4, owners and operators of boiler fleets will bear an additional cost to comply with the monitoring, recordkeeping, and reporting requirements. As described in detail in the Regulatory Flexibility Analysis, the Department acknowledges that facilities that include a boiler fleet will need to allocate time for personnel to

compile and submit the information required by the proposed boiler fleet reporting requirements. The Department estimates that businesses are likely to complete the initial boiler fleet report within 15 to 20 hours, whereas subsequent annual reports should require only a few hours of personnel time. Finally, the Department anticipates that the proposed rules will impact State agencies, given the staff hours that will be needed for administration and compliance with the new rules. The Department will need to review the boiler fleet reports annually, as well as a greater number of case specific permit applications. Moreover, the Department anticipates that incentive programs administered by other State agencies, such as the clean energy program administered by the BPU, will see an increase in inquiries and applications.