



STATE OF DELAWARE  
**DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL**  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

Office of the  
Secretary

Phone: (302) 739-9000  
Fax: (302) 739-6242

**Secretary's Order No.: 2018-A-0043**

**RE: Application of Luther Towers II for an Air Quality Permit to construct and operate one diesel generator, located at 1420 North Franklin Street, Wilmington, Delaware**

**Date of Issuance: July 31, 2018**

**Effective Date: July 31, 2018**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") pursuant to 7 *Del.C.* §§6003, 6004(b), 6006(4), and all other relevant statutory authority, the Department of Natural Resources and Environmental Control ("Department", "DNREC") issues this Order, approving a permit to allow Luther Towers II ("Applicant") to construct and operate a diesel generator located at 1420 North Franklin Street, Wilmington, Delaware. The Applicant's proposed project is subject to various state and federal regulatory requirements, including, but not limited to, 7 DE Admin. Code 1100, *Air Quality Management Section*, and 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines*.

## **BACKGROUND AND FINDINGS OF FACT**

Luther Towers II provides independent and assisted living apartments for seniors 62 years of age and older. The facility has operated a 750 kilowatt emergency generator since 2005. The generator was installed, and has operated since that time, for the purpose of testing, maintenance, and emergency usage without the Department's prior approval. The Department became aware of this operation only after Sgt. John Eby, DNREC Environmental Police Office, responded to an odor complaint and subsequently emailed Mark Prettyman, Environmental Scientist with the Department's Division of Air Quality ("DAQ"), on March 20, 2015 to inquire whether the generator at Luther Towers II was permitted.

On April 9, 2015, Mr. Prettyman contacted Ms. Linda Dugan of Luther Towers II to discuss the requirements for stationary generators, as specified by 7 DE Admin. Code 1144, *Control of Stationary Generator Emissions*. Shortly thereafter, responsible DAQ staff met with Ms. Dugan at Luther Towers II on April 29, 2015, to discuss all applicable federal and state requirements with regard to their existing generator. At that time, staff also provided Ms. Dugan with all forms needed to begin the DNREC permitting process. On January 14, 2016, the Department's Division of Air Quality received an application from Luther Towers II. Upon a preliminary review, however, that application was deemed administratively incomplete, and thus DAQ requested additional information from the Applicant, which was eventually received by the Department on April 12, 2016 and deemed complete at that time.

The Application was placed on public notice by the Department on April 17, 2016 to open the fifteen day public comment period, and was then subsequently re-noticed on May 1, 2016 to make a correction to the generator's location in the original notice. During the public notice periods, DAQ received several written comments against the proposed project, as well as several requests for the Department to hold a public hearing regarding this matter.

On May 16, 2016, DAQ staff visited Luther Towers II to witness the generator in operation during a scheduled weekly testing, specifically, to visually inspect the generator and investigate the odor and noise complaints that had been received from the community. The results of this visit, along with the technical review of the application, revealed that the operation of this generator may be injurious to human health and was a nuisance, due to (1) the location of the generator; (2) the height of the stack; (3) the proximity to the neighborhood; and (4) the odorous emissions from the generator during operation.

The Department held its public hearing concerning this matter on June 28, 2016, which was attended not only by Department staff and representatives of the Applicant, but also by numerous individuals from the public, who offered comment regarding this matter for inclusion into the formal hearing record. Proper notice of the hearing was provided as required by law.

Following the public hearing of June 28, 2016, the technical experts in the Department's Division of Air Quality prepared a Technical Response Memorandum ("TRM") to (1) specifically address the public concerns raised at the time of the hearing; (2) provide a formal regulatory review of the Applicant's proposed project; and (3) offer DAQ's conclusions and recommendations with regard to this pending Application for the benefit of the hearing record generated in this matter. This TRM, dated June 19, 2017, was received for inclusion into the hearing record by Hearing Officer Lisa A. Vest, on May 31, 2018.

Subsequently, Hearing Officer Vest prepared her Hearing Officer's Report ("Report"), dated July 2, 2018, which attached DAQ's TRM referenced above, and expressly incorporated the same therein. Ms. Vest's Report set forth the procedural history, summarized and established the record of information ("Record") relied on in the Report, and provided findings of fact, reasons, and conclusions that recommend the Department approve this Application, subject to the conditions set forth in the draft Permit APC-2016/0119-Construction/Operation document. The Report also addressed the public comments received in this matter, and concluded that the same did not warrant the Department's denying this Application, or delaying the permit decision to receive additional information.

## REASONS AND CONCLUSIONS

This application is for the construction and operation of one diesel generator, to be utilized by Luther Towers II at 1420 North Franklin Street in Wilmington, Delaware. I find that the operation and use of said generator will require the Applicant to obtain a Construction/Operation Permit from the Department's Division of Air Quality. I further find that the Applicant's proposed project is subject to various state and federal regulatory requirements, including, but not limited to, 7 DE Admin. Code 1100, *Air Quality Management Section*, and 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines*.

In reviewing the applicable statutes and regulations, as well as weighing public benefits of this project against potential detriments, the Department's experts in the Division of Air Quality have concluded that the operation of the aforementioned diesel generator at Luther Towers II (with the Applicant's agreement to modify the generator's exhaust system and reduce the frequency of testing), complies with all applicable zoning requirements and federal and state air pollution control laws and regulations. In addressing the concerns of noise and odor voiced by members of the public in this matter, a special condition has been included in the draft permit prepared by DAQ in this matter, specifically, to limit the hours of operation to 100 hours per year for maintenance checks or testing, or by maintaining records indicating that federal, state, or local government, insurance standards, or the manufacturer recommendations require maintenance and testing beyond 100 hours per year. The Applicant's compliance with this requirement can be demonstrated by the Department's inspection and record review.

The Department recognizes that the public has voiced concerns associated with the Applicant's operation of this diesel generator, but has balanced those concerns with the need for an assisted living facility such as Luther Towers II to be able to operate such an emergency generator. The Department further recognizes that the Applicant has displayed a willingness to mitigate the noise and odor issues associated with the operation of this generator by submitting its modification proposal regarding same to DAQ subsequent to the public hearing held in this matter. The record developed in this matter indicates that the Department's experts have considered all statutes and regulations that govern projects such as the Applicant's operation of its emergency generator, and have recommended issuance of all permits necessary for the same to the Applicant in this matter.

I find and conclude that the Applicant has adequately demonstrated its compliance with all requirements of the statutes and regulations, as noted herein, and that the record supports approval of the Application submitted by Luther Towers II. Accordingly, this Order approves and directs all permits required for the operation of the Applicant's emergency generator, consistent with the record developed in this matter, be issued by the Department in the customary form, and with appropriate conditions.

Further, the Department concludes and directs the following:

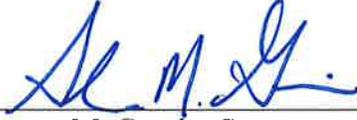
1. The Department has jurisdiction under 7 *Del. C.* §§6003, 6004, 6006(4), 7 *Del. C.* Ch. 72, and all other relevant statutory authority, to make a final determination on the Application, after holding a public hearing and considering the public comments and all information contained in the Record generated in this matter;
2. The Department provided proper public notices of the Application submitted by Luther Towers II, and of the public hearing held on June 28, 2016, and held said hearing in a manner required by the law and regulations;
3. The Department considered all timely and relevant public comments in the Record, as established in the Report, prior to issuing this Order as its final decision;
4. The Department has carefully considered the factors required to be weighed in issuing all permits required by the Applicant's proposed emergency generator operation, and

finds that the Record supports approval of the Application, and the issuance of all required permits associated with same;

5. The Department shall issue a Construction/Operation permit to the Applicant for the operation of one diesel emergency generator at Luther Towers II, located at 1420 North Franklin Street, Wilmington, Delaware. Furthermore, said permit shall include all special conditions as set forth in the Department's draft permit, to ensure that Delaware's environment and public health will be protected from harm;
6. The Department adopts the Report and its attachments as further support for this decision;
7. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and
8. The Department shall serve and publish its Order on its internet site, and shall provide legal notice of the Order in the same manner that the Department provided legal notice of the Application.

Date

7/31/18

  
Shawn M. Garvin, Secretary  
Department of Natural Resources and  
Environmental Control



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF AIR QUALITY  
STATE STREET COMMONS  
100 W. Water Street, Suite 6A  
DOVER, DELAWARE 19904

[Date]

Telephone: (302) 739 - 9402  
Fax No.: (302) 739 - 3106

**Permit: APC-2016/0119-CONSTRUCTION/OPERATION**

One Emergency Generator

Luther Towers II  
1201 Harrison Street  
Wilmington, DE 19806

ATTENTION: John Teoli  
Site Manager

Dear Mr. Teoli:

Pursuant to 7 DE Admin. Code 1102, Section 2, approval of the Department of Natural Resources and Environmental Control (the Department) is hereby granted for construction and operation of one diesel generator located at 1420 North Franklin Street, in Wilmington, Delaware, in accordance with the application submitted on Form Nos. AQM-1, AQM-2, AQM-3.3, and AQM-5, dated March 16, 2016, and the additional information submitted on June 19, 2017.

This permit is issued subject to the following conditions:

**1. General Provisions**

- 1.1 This permit authorizes construction until [Date]. If the equipment covered by this permit will not be constructed by [Date], a request to extend the construction authorization must be submitted 45 days prior to expiration.
- 1.2 The project shall be constructed in accordance with the application described above. If any changes are necessary, revised plans must be submitted and supplemental approval issued prior to actual construction.
- 1.3 Representatives of the Department may, at any reasonable time, inspect this facility.
- 1.4 This permit may not be transferred to another location or to another piece of equipment or process.
- 1.5 The emergency generator shall not be transferred off-site without first notifying the Department. Whoever becomes the new owner or operator of the generator within the State of Delaware shall apply for a construction permit.

*Delaware's good nature depends on you!*

- 1.6 This permit may not be transferred to another person, owner, or operator unless the transfer has been approved in advance by the Department. Approval (or disapproval) of the permit transfer will be provided by the Department in writing. A request for a permit transfer shall be received by the Department at least 30 days before the date of the requested permit transfer. This request shall include:
  - 1.6.1 Signed letters from each person stating the permit transfer is agreeable to each person; and
  - 1.6.2 An Applicant Background Information Questionnaire pursuant to 7 Del C, Chapter 79 if the person receiving the permit has not been issued any permits by the Department in the previous five years.
- 1.7 The applicant shall, upon completion of the construction, installation, or alteration, notify the Department to demonstrate that the equipment complies with all of the terms and conditions of this permit.
- 1.8 The owner or operator shall not construct, install, or alter any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department pursuant to 7 **DE Admin. Code** 1102, and, when applicable 7 **DE Admin. Code** 1125, and receiving approval of such application from the Department; except as exempted in 7 **DE Admin. Code** 1102 Section 2.2.

## **2. Emission Limitations**

- 2.1 Air contaminant emission levels shall not exceed those specified in 7 DE Admin. Code 1100 and the following:
  - 2.1.1 Nitrogen Oxide (NO<sub>x</sub>) Emissions  
NO<sub>x</sub> emissions shall not exceed 20.88 pounds per hour and 5.22 tons per 12 month rolling period.
  - 2.1.2 Sulfur Oxide (SO<sub>x</sub>) Emissions  
SO<sub>x</sub> emissions shall not exceed 0.01 pounds per hour and 0.025 tons per 12 month rolling period.
  - 2.1.3 Total Hydrocarbon (THC) Emissions  
THC emissions shall not exceed 0.61 pound per hour and 0.15 ton per twelve (12) month rolling period.
  - 2.1.4 Carbon monoxide (CO) Emissions  
CO emissions shall not exceed 4.78 pounds per hour and 1.2 tons per twelve (12) month rolling period.
  - 2.1.5 Particulate Matter (PM) Emissions  
PM emissions shall not exceed 0.61 pounds per hour, 0.3 lb/MMBtu and 0.15 tons per twelve (12) month rolling period
- 2.2 No person shall cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than 20%

percent opacity for an aggregate of more than three minutes in any one hour or more than 15 minutes in any 24 hour period.

- 2.3 Odors from these sources shall not be detectable beyond the plant property line in sufficient quantities such as to cause a condition of air pollution.

**3. Operational Limitations**

- 3.1 The emergency generator may only operate for an unlimited number of hours during an emergency as described in Condition 3.4.
- 3.2 The owner or operator shall operate the generator for the purpose of maintenance checks and readiness testing except as restricted by Condition 3.5, and provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of each unit is limited to 100 hours per year. The owner or operator may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, local, and manufacturer standards and recommendations require maintenance and testing of the emergency generators beyond 100 hours per year.
- 3.3 Diesel fuel or biodiesel blend for use in the emergency generator shall have a sulfur content equal to or less than 0.0015% by weight.
- 3.4 An emergency generator may operate only during an emergency as defined below:
- 3.4.1 An electrical power outage due to: a failure of the electrical grid; on-site disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions (e.g. hurricane, tornado, blizzard, etc.); or
- 3.4.2 When there is a deviation of voltage or frequency from the electrical provider to the premises of 3% or greater above or 5% or greater below, standard voltage or frequency.
- 3.5 The emergency generator shall not be operated for testing or maintenance purposes before 5 p.m. on any day which has a Ground Level Ozone Pollution Forecast or Particulate Forecast of "Code Purple," "Code Red," or "Code Orange" as announced by the Department.

The owner or operator may receive "Code Purple," "Code Red," or "Code Orange" announcements a day in advance by subscribing to the DNREC Ozone Alert List:

<http://www.dnrec.delaware.gov/Pages/DNRECLists.aspx>

- 3.6 The emergency generator shall not be operated in conjunction with a voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant, or system operator (e.g. Delmarva Power, Delaware Electric Cooperative, PJM, etc.).
- 3.7 The emergency generator shall be equipped with a properly functioning non-resettable hour metering device.

- 3.8 The emergency generator shall be serviced annually by a manufacturer's representative or by personnel trained to perform maintenance according to the manufacturer's recommendations.
- 3.9 Periodic testing of the generator shall be limited to once per month unless the facility maintains records indicating that Federal, State, local, or manufacturer standards and recommendations require testing at a more frequent schedule.
- 3.10 The owner or operator shall operate the emergency generator in conformance with the generator manufacturer's instructions, such as following maintenance and operating requirements to help minimize emissions.
- 3.11 At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 3.12 All structural and mechanical components of the equipment or process covered by this Permit shall be maintained in proper operating condition.
- 3.13 Despite Condition 3.5, the emergency generator may be tested on any day that such testing is required to meet National Fire Protection Association (NFPA) or Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards.

**4. Testing and Monitoring Requirements**

- 4.1 The Department reserves the right to require that the owner or operator perform emission tests using methods approved in advance by the Department.
- 4.2 If the emergency generator is not certified by the manufacturer to meet the applicable emissions standards set by the US EPA for non-road engines (Title 40 CFR Part 89, Section 89.112(a), dated July 1, 2007), the owner or operator shall demonstrate compliance with 7 **DE Admin. Code** 1144 through testing using the applicable EPA Reference Methods, California Air Resources Board methods, or equivalent test methods approved in advance by the Department.
- 4.3 The owner or operator shall perform the following visible emission testing:
  - 4.3.1 Once a month the emergency generator shall be observed for the presence or absence of visible emissions for at least five minutes while the equipment is operating. The five minute observation window must start as soon as generator power is stabilized. Compliance with this condition shall be demonstrated by the maintenance of a bound log of visible emissions. If visible emissions are observed during the five minute observation period, the owner or operator shall take actions per the manufacturer's recommendations to correct the problem as soon as possible. After corrective actions are taken, the owner or operator shall observe visible emissions while the equipment is next operated or tested. If visible

emissions still persist, these steps (observe, correct, document) shall be repeated until visible emissions are not observed.

- 4.3.2 The procedure outlined in Condition 4.3.1 does not require that the opacity of the emissions be determined. Since the procedure requires only the determination of whether visible emissions occur and does not require the determination of opacity levels, observer certification according to the procedures of EPA Reference Method 9 (40 CFR 60, Appendix A) is not required. However, it is necessary that the observer is educated on the general procedures for determining the presence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).
- 4.4 The sulfur content of each shipment of diesel fuel or biodiesel blend shall be determined using the following sampling and testing methods as described in 40 CFR Section 80.580 (July 1, 2007):
  - 4.4.1 Manual Sampling: American Society for Testing and Materials (ASTM) method D4057-95 or D5842-95 if there is no contamination present that could affect the sulfur testing requirements;
  - 4.4.2 Automatic Sampling: ASTM method D4177-95;
  - 4.4.3 Sulfur Testing Method: ASTM method D2622-03;
  - 4.4.4 Alternative Sulfur Testing Method: ASTM methods D4294-03, D5453-03a, or D6920-03, provided that the refiner or importer test result is correlated with the appropriate method specified in Condition 4.4.3; or
  - 4.4.5 Alternative Sulfur Testing Method: Sulfur content may be determined using any test method approved under 40 CFR Part 80, Subpart I, Section 80.585.
- 4.5 As an alternative to 4.4, the owner or operator may have the fuel in the emergency generator's associated storage tank certified by a third party laboratory after each shipment of fuel. This certification shall identify the percentage of sulfur (by weight dry basis) and the method used to determine the sulfur content.
- 4.6 The owner or operator shall monitor the following information:
  - 4.6.1 The date, time, duration, and reason for the emergency generator startup; and
  - 4.6.2 The monthly fuel usage for the emergency generator.

**5. Record Keeping Requirements**

- 5.1 The owner or operator shall maintain all records necessary for determining compliance with this permit in a readily accessible location for five years and shall make these records available to the Department upon written or verbal request.
- 5.2 The following information shall be recorded, initialed and maintained in a log as follows:

- 5.2.1 The date, time, duration, and reason for each start-up of the emergency generator. The log shall include the dates and descriptions of inspections, testing, operator training, and maintenance performed;
- 5.2.2 The total hours of operation for each month and the cumulative 12 month rolling period shall be calculated and recorded within 15 days of the end of each calendar month;
- 5.2.3 The total hours during which testing or maintenance occurred shall be calculated for each month and the cumulative 12 month rolling period and recorded within 15 days of the end of each calendar month. A brief description of each testing or maintenance performed shall be included;
- 5.2.4 The total fuel usage for each month and the cumulative 12 month rolling period shall be calculated and recorded within 15 days of the end of each calendar month;
- 5.2.5 Visible emission records in accordance with Condition 4.3.
- 5.2.6 The monthly and 12 month rolling total emissions for each of the following pollutants:
  - 5.2.6.1 Non Methane Hydrocarbons (NMHCs)
  - 5.2.6.2 Nitrogen Oxide (NO<sub>x</sub>)
  - 5.2.6.3 Carbon Monoxide (CO)
  - 5.2.6.4 Sulfur Dioxide (SO<sub>2</sub>)
  - 5.2.6.5 Particulate Matter (PM)
- 5.3 The owner or operator (transferee) shall maintain an electronic or paper record provided by the deliverer (transferor) of fuel oil for each shipment. This record shall contain the following information:
  - 5.3.1 Name, address and telephone number of the transferor.
  - 5.3.2 Name, address and telephone number of the transferee, and the address where the fuel oil is delivered.
  - 5.3.3 The volume of fuel being sold or delivered, and the date of sale or delivery.
  - 5.3.4 The type of fuel and the sulfur content of the fuel as a delivered product, determined pursuant to Condition 4.4 or 4.5 of this permit, as applicable, and expressed as one of the following:
    - 5.3.4.1 The actual sulfur content in ppm or percent (%) by weight, or

5.3.4.2 A statement that certifies the sulfur content of the shipment is equal to or below the applicable limit specified in Condition 3.3 of this Permit, or

5.3.4.3 Except for a sale or delivery to an ultimate consumer, a product code or product description that identifies the sulfur content of the shipment as equal to or below the applicable limit specified in Condition 3.3 of this Permit, provided such code or description is standardized throughout the distribution system in which it is used, and each downstream party is given sufficient information to know its full meaning.

5.4 The owner or operator shall maintain a record of proper initial notification as required by 7 DE Admin. Code 1144.

5.5 The owner or operator shall maintain a copy of the manufacturer's maintenance and operating recommendations at the facility.

5.6 The owner or operator shall maintain a copy of the emergency generator's annual maintenance service at the facility.

## 6. Reporting Requirements

6.1 Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery by calling the Environmental Emergency Notification and Complaint number, (800) 662-8802.

6.2 In addition to complying with Condition 6.1 of this permit, any reporting required by 7 DE Admin. Code 1203 "Reporting of a Discharge of a Pollutant or an Air Contaminant", and any other reporting requirements mandated by the State of Delaware, the owner or operator shall, for each occurrence of excess emissions, within 30 calendar days of becoming aware of such occurrence, supply the Department in writing with the following information:

6.2.1 The name and location of the facility;

6.2.2 The subject source(s) that caused the excess emissions;

6.2.3 The time and date of the first observation of the excess emissions;

6.2.4 The cause and expected duration of the excess emissions;

6.2.5 For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and

6.2.6 The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

6.3 If an emergency generator is to be reclassified from emergency generator to a distributed generator, the owner or operator shall submit to the Department a letter stating that the

generator is to be reclassified. Reclassification shall not occur without written permission from the Department.

6.4 One original and one copy of all required reports shall be sent to the address below:

Division of Air Quality  
State Street Commons  
100 West Water Street  
Suite 6A  
Dover, DE 19904

**7. Administrative Conditions**

7.1 This permit shall be made available on the premises.

7.2 Failure to comply with the provisions of this permit may be grounds for suspension or revocation.

Sincerely,

Angela D. Marconi, P.E., BCEE  
Program Manager  
Engineering & Compliance Branch

ADM:MM  
F:\EngAndCompliance\MM\2018\ mm18006 Luther Towers C.O Permit.docx.  
pc: Dover File

**MEMORANDUM**

To: Angela D. Marconi, P.E., BCEE *ADM*

From: Mohamed Mellaouch *MM*

Subject: **Permit: APC-2016/0119-Construction/Operation  
Luther Towers II  
One Diesel Emergency Generator**

Date: February 1, 2018

**I. Facility Information**

Facility name: Luther Towers II		NAICS/SIC (primary code):	
Mailing Address: 1201 North Harrison Street			
P.O. box:	City: Wilmington	State: DE	ZIP Code: 19806
Contact Person: John Teoli		Telephone Number: 302 893 0045	
E-mail Address: JohnTeoli@Luthertowers.com			
Facility Status: <input checked="" type="checkbox"/> Natural Minor <input type="checkbox"/> Synthetic Minor <input type="checkbox"/> Major Source			
Comments	Luther Towers II provides independent and assisted living apartments for seniors 62 years of age and older. The facility installed the emergency generator in 2005. Since its installation, the generator has been operating for the purposes of testing, maintenance, and during emergencies without the Department's approval. The Department became aware of this operation when Sgt. John Eby, DNREC EPO, responded to an odor complaint. After the Department contacted the facility, a permit application was received on January 14, 2016. The application was advertised on April 17, 2016 for 15 days. During the public review period, the Department received several requests for a public hearing. The Department held a public hearing on June 28, 2016. In response to the comments during the public hearing, Luther Towers proposed to extend the engine's stack to 175 feet (10 feet taller than the roofline) and install a muffler to reduce noise. Luther Towers II also agreed to reduce the frequency of testing from weekly to monthly until construction is complete. The Department has accepted the facility's proposal and is issuing the attached permit to allow for the operation of the engine and authorize the extension of the stack.		

**II. Engine Information**

Engine Address ( <i>if Different than above</i> ): 1420 North Franklin Street		
City: Wilmington	State: DE	Zip Code: 19806
Date of Construction: 2005	Date of Manufacture: Before 2005	



**MEMORANDUM**

Permit: APC-2016/0119-Construction/Operation

Luther Towers II – Wilmington

One Diesel Emergency Generator

February 1, 2018

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<sup>[2]</sup> PTE calculations assume 500 hrs operation per year based on EPA guidance for EGENs.<sup>[3]</sup> Assumes a sulfur content in fuel of 15 ppm and that all sulfur in the fuel is converted to SO<sub>2</sub>**IV. Aerscreen Modelling**

Stack parameters		
Stack Height Above Grade	175	ft
Stack Exit Diameter	0.83	ft
Stack Exit Temperature	528	°C
Exhaust Gas Velocity	21.6	m <sup>3</sup> /s

Pollutant	MDC (1 hr)		2.11 (µg/m <sup>3</sup> )		TLV (mg/m <sup>3</sup> )	TLV:MDC Ratio
	Emission Rate (lb/hr)	<sup>[2]</sup> Adj. for Intermittent Operations (lb/hr)	MDC (µg/m <sup>3</sup> )	MDC <sup>[5]</sup> 8-hr (mg/m <sup>3</sup> )		
PM <sub>10</sub>	0.61	0.00122	0.002574	2.31 E-06	3 <sup>[4]</sup>	1294900
SO <sub>x</sub>	0.01	0.00002	4.22E-05	3.8 E-08	0.49 <sup>[3]</sup>	12901527
NO <sub>x</sub> <sup>[2]</sup>	20.88	0.04176	0.088114	7.93E-05	0.38	4791
CO	4.78	0.00956	0.020172	1.81E-05	29	1597405
NMHC <sup>[1]</sup>	0.61	0.00122	0.002574	2.31E-06	1.6 <sup>[1]</sup>	690613

<sup>[1]</sup>TLV of 1.6 mg/m<sup>3</sup> conservatively assumes all NMHCs are Benzene.

<sup>[2]</sup> Per page 11 of EPA guidance memorandum dated March 1, 2011 from Tyler Fox, Leader Air Quality Modeling Group, regarding modeling and the 1-hour NO<sub>2</sub> NAAQS standard, the intermittent emissions of an emergency generator can be represented by multiplying the maximum hourly emission rate times 500 hrs/8760 hrs.

<sup>[3]</sup> TLV = ACGIH (STEL) x (0.737) = (0.25 ppm) x (0.737) = 0.18 ppm = 0.49 mg/m<sup>3</sup>

<sup>[4]</sup> Use TLV of 3 mg/m<sup>3</sup> to conservatively assume all PM is PM<sub>2.5</sub>.

<sup>[5]</sup> Aerscreen conversion of 1-hr concentration to 8 hr concentration uses factor of 0.0009.

**V. Regulatory Review**

- 7 DE Admin. Code 1102: Permits
- 7 DE Admin. Code 1104: Fuel Burning Equipment
- 7 DE Admin. Code 1108: Sulfur Dioxide Emissions from Fuel Burning Equipment
- 7 DE Admin. Code 1114: Visible Emissions
- 7 DE Admin. Code 1119: Control of Odorous Air Contaminants
- 7 DE Admin. Code 1120: New Source Performance Standards  
Not Applicable

## MEMORANDUM

Permit: **APC-2016/0119-Construction/Operation**

**Luther Towers II – Wilmington**

**One Diesel Emergency Generator**

February 1, 2018

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- 7 DE Admin. Code 1124: Control of Volatile Organic Compound Emissions:  
Not Applicable
- 7 DE Admin. Code 1125: Requirements for Preconstruction Review:  
Section 2 and 3  
The Facility is not a major source and the proposed addition itself is not a new major stationary source. These sections of the regulation are not applicable.  
Section 4  
The generator was installed in 2005 and therefore is exempt from MNSR.
- 7 DE Admin. Code 1130: Title V State Operating Permit Program:  
Not Applicable
- 7 DE Admin. Code 1138: Emission Standards for Hazardous Air Pollutants for Source Categories  
Not Applicable
- 7 DE Admin. Code 1144: Control of Stationary Generator Emissions
- 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines  
Emergency generators operating at commercial institutions are exempt from this subpart. However, in order for the facility to qualify for this exemption the generator has to meet the definition of an emergency generator contained in §63.6675, which includes operating according to the provisions specified in §63.6640(f). The generator can meet this requirement by either limiting the hours of operation to 100 hours a year for maintenance checks or testing, or by maintaining records indicating that federal, state, or local government, insurance standards, or the manufacturer recommendations require maintenance and testing beyond 100 hours per year. By including this requirement in the permit, the generators qualify for an exemption. This requirement is covered by Condition 3.2 and compliance can be demonstrated by inspection and record review.
- 40 CFR Part 60, Subpart IIII – New Source Performance Standards (NSPS) for Stationary Internal Combustion Engines  
Not Applicable
- 40 CFR 60.4230, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.  
Not Applicable

## RECOMMENDATION

The proposed project and attached permits comply with all applicable zoning requirements and federal and state air pollution control laws and regulations. It is recommended that the attached **Permits: APC-2016/0119-Construction/Operation** be issued.

ADM:MM

F:\EngAnd Compliance\MM\ mm18007 Luther Towers C.O Memo.docx

## HEARING OFFICER'S REPORT

**TO:** The Honorable Shawn M. Garvin  
Cabinet Secretary, Department of Natural Resources and Environmental Control

**FROM:** Lisa A. Vest  
Public Hearing Officer, Office of the Secretary  
Department of Natural Resources and Environmental Control

**RE:** Application of Luther Towers II for an Air Quality Permit to construct and operate one diesel generator, located at 1420 North Franklin Street, Wilmington, Delaware

**DATE:** July 2, 2018

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### **I. BACKGROUND AND PROCEDURAL HISTORY:**

A public hearing was held on Tuesday, June 28, 2016, at 6:00 p.m. by the Department of Natural Resources and Environmental Control (“DNREC”, “Department”) at the Carvel State Office Building, The Mezzanine Auditorium, 2<sup>nd</sup> Floor, 820 N. French Street, Wilmington, Delaware, to receive comment on the application of Luther Towers II (“Applicant”) for an Air Quality permit to construct and operate a diesel generator located at 1420 North Franklin Street, Wilmington, Delaware. The Applicant’s proposed project is subject to various state and federal regulatory requirements, including, but not limited to, 7 DE Admin. Code 1100, *Air Quality Management Section*, and 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines*.

Luther Towers II provides independent and assisted living apartments for seniors 62 years of age and older. The facility has operated a 750 kilowatt emergency generator since 2005. The generator was installed, and has operated since that time, for the purpose of testing, maintenance, and emergency usage without the Department’s prior approval. The Department became aware of this operation only after Sgt. John Eby, DNREC Environmental Police Office,

responded to an odor complaint and subsequently emailed Mark Prettyman, Environmental Scientist with the Department's Division of Air Quality ("DAQ"), on March 20, 2015 to inquire whether the generator at Luther Towers II was permitted. On April 9, 2015, Mr. Prettyman contacted Ms. Linda Dugan of Luther Towers II to discuss the requirements for stationary generators, as specified by 7 DE Admin. Code 1144, *Control of Stationary Generator Emissions*.

Shortly thereafter, responsible DAQ staff met with Ms. Dugan at Luther Towers II on April 29, 2015, to discuss all applicable federal and state requirements with regard to their existing generator. At that time, staff also provided Ms. Dugan with all forms needed to begin the DNREC permitting process. Over the next several months, Ms. Dugan was unresponsive to numerous emails and phone calls made by DAQ staff to inquire about the status of this permit application. On October 22, 2015, Luther Towers II was advised that the Department may take enforcement action against them if this issue was not immediately resolved. As a result, John Teoli, Executive Director, and Phil Samulewicz, Principle Consultant (both of Luther Towers), contacted the Department to advise that the facility had contracted with Ambient Air Quality Services ("AAQS") to prepare Luther Towers II's application for the operation of its generator. On January 14, 2016, the Department's Division of Air Quality received an application from Luther Towers II. Upon a preliminary review, however, that application was deemed administratively incomplete, and thus DAQ requested additional information from the Applicant, which was eventually received by the Department on April 12, 2016.

The Application was placed on public notice by the Department on April 17, 2016 to open the fifteen day public comment period, and was then subsequently re-noticed on May 1, 2016 to make a correction to the generator's location in the original notice. During the public notice periods, DAQ received several written comments against the proposed project, as well as

several requests for the Department to hold a public hearing regarding this matter. On May 16, 2016, DAQ staff visited Luther Towers II to witness the generator in operation during a scheduled weekly testing, specifically, to visually inspect the generator and investigate the odor and noise complaints that had been received from the community. The results of this visit, along with the technical review of the application, revealed that the operation of this generator may be injurious to human health and was a nuisance, due to (1) the location of the generator; (2) the height of the stack; (3) the proximity to the neighborhood; and (4) the odorous emissions from the generator during operation.

The Department held its public hearing concerning this matter on June 28, 2016, which was attended not only by Department staff and representatives of the Applicant, but also by numerous individuals from the public. Comment was received from the public at that hearing, and will be discussed in further detail below. Proper notice of the hearing was provided as required by law.

## **II. SUMMARY OF THE PUBLIC HEARING RECORD:**

The public hearing record consists of the following documents: (1) a verbatim transcript; (2) numerous documents introduced by presiding Hearing Officer Robert P. Haynes, Esq., at the public hearing held on June 28, 2016, and marked accordingly as “DNREC Exhibit 1”; and (3) Technical Response Memorandum from Mohammed Mellaouch, Engineer I, through Angela D. Marconi, P.E., BCEE, Program Manager, Engineering and Compliance Section, DNREC Division of Air Quality, dated June 19, 2017. The Department’s persons primarily responsible for reviewing this application, Mr. Mellaouch and Ms. Marconi, as referenced above, developed the record with the relevant documents in the Department’s files.

The hearing record generated in this matter indicates that the comments made during the public hearing were made by citizens who live in buildings adjacent to the generator at issue in this matter. Those comments reiterated the concerns and complaints received by the Department prior to and during the public notice period for the application. While the public understood the need for such an emergency generator at a facility that provides assisted living, they also requested that the Applicant and the Department take action to mitigate the noise and odor issues. In response, the Applicant acknowledged the commenters' concerns, and expressed a willingness to work with both their consultant and DAQ to address the concerns raised with regard to the operation of the generator.

At that time, DAQ made the decision to not permit the generator at its original design. Following the public hearing of June 28, 2016 (and in response to the concerns voiced by the public in this matter), Luther Towers II submitted a timely proposal to the Department to implement several changes to its original generator design. First, Applicant agreed to extend the generator's engine stack to 175 feet (ten feet taller than the roofline), and to install a muffler to reduce the noise associated with its operation. Additionally, Luther Towers II agreed to reduce the frequency of testing from weekly to monthly, until construction is complete.

The technical experts in the Department's Division of Air Quality prepared a Technical Response Memorandum ("TRM") to (1) specifically address the public concerns raised at the time of the hearing; and (2) offer conclusions and recommendations with regard to this pending Application for the benefit of the hearing record generated in this matter. This TRM, dated June 19, 2017, was received for inclusion into the hearing record by this Hearing Officer on May 31, 2018.

I find that the Division of Air Quality's TRM offers a detailed review of all aspects of the Applicant's proposed project, identifies all of the concerns raised at the public hearing of June 28, 2016, and responds to them in a balanced manner, accurately reflecting the information contained in the formal hearing record. Thus, the aforementioned TRM is attached hereto as Appendix "A" and expressly incorporated herein as such.

### **III. RECOMMENDED FINDINGS AND CONCLUSIONS:**

This application is for the construction and operation of one diesel generator located at Luther Towers II, 1420 North Franklin Street, Wilmington, Delaware. Preliminarily, I find that the operation and use of said generator will require the Applicant to obtain a DAQ Construction/Operation Permit. I further find that the Applicant's proposed project is subject to various state and federal regulatory requirements, including, but not limited to, 7 DE Admin. Code 1100, *Air Quality Management Section*, and 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines*.

In reviewing the applicable statutes and regulations, as well as weighing public benefits of this project against potential detriments, the Department's experts in the Division of Air Quality have concluded that the operation of the aforementioned diesel generator at Luther Towers II (with the Applicant's agreement to modify the generator's exhaust system and reduce the frequency of testing), complies with all applicable zoning requirements and federal and state air pollution control laws and regulations. In addressing the concerns of noise and odor voiced by members of the public in this matter, a special condition has been included in the draft permit prepared in this matter, specifically, to limit the hours of operation to 100 hours per year for maintenance checks or testing, or by maintaining records indicating that federal, state, or local

government, insurance standards, or the manufacturer recommendations require maintenance and testing beyond 100 hours per year. The Applicant's compliance with this requirement can be demonstrated by inspection and record review.

The Department recognizes that the public has voiced concerns associated with the Applicant's operation of this diesel generator, but has balanced those concerns with the need for an assisted living facility such as Luther Towers II to be able to operate such an emergency generator. The Department further recognizes that the Applicant has displayed a willingness to mitigate the noise and odor issues associated with the operation of this generator by submitting its modification proposal regarding same to DAQ subsequent to the public hearing held in this matter. The record developed in this matter indicates that the Department's experts have considered all statutes and regulations that govern projects such as the Applicant's operation of its emergency generator, and have recommended issuance of all permits necessary for the same to the Applicant in this matter.

I find and conclude that the Applicant has adequately demonstrated its compliance with all requirements of the statutes and regulations, as noted herein, and that the record supports approval of the Application submitted by Luther Towers II. In conclusion, I recommend that all permits required for the operation of the Applicant's emergency generator, consistent with the record developed in this matter, be issued by the Department in the customary form, and with appropriate conditions.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has jurisdiction under 7 *Del. C.* §§6003, 6004, 6006(4), and all other relevant statutory authority, to make a final determination on the Application after holding a public hearing, considering the public comments, and all information contained in the Record generated in this matter;
2. The Department provided proper public notices of the Application submitted by Luther Towers II, and of the public hearing held on June 28, 2016, and held said hearing to consider any public comment that may be offered on the Application, in a manner required by the law and regulations;
3. The Department considered all timely and relevant public comments in the Record, as established in the TRM provided by the Division of Air Quality;
4. The Department has carefully considered the factors required to be weighed in issuing all permits required by the Applicant's proposed emergency generator operation, and finds that the Record supports approval of the Application and the issuance of all required permits associated with same;
5. The Department shall issue a Construction/Operation permit to the Applicant for the operation of one diesel emergency generator at Luther Towers II, located at 1420 North Franklin Street, Wilmington, Delaware. Furthermore, said permit shall include all special conditions as set forth in the Department's draft permit, to ensure that Delaware's environment and public health will be protected from harm;
6. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and

7. The Department shall serve and publish its Order on its internet site, and shall provide legal notice of the Order in the same manner that the Department provided legal notice of the Application.



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LISA A. VEST  
Public Hearing Officer

## **APPENDIX “A”**



MEMORANDUM



SEP 26 2017  
# 12726

TO: Robert Haynes  
Hearing Officer

THROUGH: Ali Mirzakhali, P.E.  
Division Director

Joanna L. French, P.E.  
Acting Program Manager

Angela D. Marconi, P.E., BCEE  
Managing Engineer

FROM: Mohamed Mellaouch MM



**SUBJECT: Luther Towers**  
**Division of Air Quality's Response Document for the Public Hearing Held on June 28, 2016 for Luther Towers' Request to Permit an Existing Emergency Generator**

DATE: June 19, 2017

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**Background**

Luther Towers II, located on 1420 North Franklin Street, in Wilmington, provides independent and assisted living apartments for seniors 62 years of age and older. The facility has operated a 750 kW emergency generator since 2005. The generator was installed and has operated for the purpose of testing, maintenance, and during emergencies without the Department's approval. The Department became aware of this operation when Sgt. John Eby, DNREC EPO, responded to an odor complaint.

Please see below for a chronology of correspondence and events that lead to this public hearing:

March 20, 2015- Mark Prettyman, Environmental Scientist, received an e-mail from Sgt. John Eby, DNREC EPO, inquiring whether the generator at Luther Towers II is permitted. Sgt. Eby was originally called to the site to investigate a diesel odor complaint.

April 9, 2015- Mark contacted Linda Dugan of Luther Towers II by phone to discuss the requirements for stationary generators, as specified by 7 DE Admin Code 1144. He followed up by sending her an email with a summary of the permitting requirements for the 725 kW generator at the site.

April 23, 2015- Mark received a call from Ms. Dugan, asking to meet in person regarding the generator and the permitting requirements.

April 29, 2015- I met with Ms. Dugan at Luther Towers II and discussed all applicable Federal and State requirements. I informed Luther Towers II during this meeting that the 750 kW generator is considered a significant emission source under 7 DE Admin Code 1102 and it must be permitted. I also provided Luther Towers II with all the forms needed to start the permitting process. However, in the following months, Linda Dugan was unresponsive to several e-mails and phone calls from the Department inquiring about the status of the application. On October 22, 2015, I contacted Luther Towers II and informed them that

## **MEMORANDUM**

### **Luther Towers II**

#### **DAQ's Response Document for the Public Hearing on June 28, 2016**

June 19, 2017

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operating a generator without a permit is a violation of environmental laws and regulations, and the Department may take enforcement action against Luther Towers II if this issue is not resolved immediately. As a result, John Teoli, Executive Director, and Phil Samulewicz, Principle Consultant, contacted the Department and informed us that the facility has contracted with Ambient Air Quality Services (AAQS) to prepare the application for the generator.

October 21, 2015- Mark received a call from Fabian Palmer, the building manager of Dorset Condominiums located next to Luther Towers II. Mr. Palmer called to inquire if the generator at Luther Towers II was permitted and to discuss the issues they experience from the use of the generator.

January 14, 2016- The Department received an application from Luther Towers II. DAQ indicated that the application was administratively incomplete based on its preliminary review and requested additional information from the applicant. DAQ proceeded to its more extensive technical review of the application once it received the information requested.

March 15, 2016- The Department received a call from Inspector Van Blue with the City of Wilmington. Mr. Palmer of Dorset Condominium had contacted the Department of Licenses and Inspections with the City of Wilmington. Inspector Blue informed the Department that Mr. Palmer had concerns regarding emissions from the generator. I contacted Mr. Palmer to follow up on his conversation with Inspector Blue. Mr. Palmer expressed his concerns regarding the proximity of the generator's emission point to the residents in the Dorset Condominiums. He asserted that the noise and odor generated by the generator unreasonably interfere with the comfortable enjoyment of life and/or propriety of the residents of the Dorset condominiums.

April 17, 2016- The Department published a public notice in the Sunday News Journal and the Delaware State News to open the fifteen day public comment period to provide the public with the opportunity to comment on the application and/or request a public hearing. The Department published a revised public notice on May 1, 2016, to make a correction to the generator's location in the original notice. The public comment period closed on May 16, 2016. The Department received several comments/complaints about the operation of the generator and/or requests for a public hearing.

May 16, 2016- Angela Marconi, Managing Engineer, and I visited Luther Towers II to witness the generator in operation during a scheduled weekly testing. The purpose of the visit was to visually inspect the generator and to investigate the odor and noise complaints. During this visit, Angela and I met with John Teoli, Executive Director of Luther Towers; Phil Samulewicz, Principle consultant; and Mr. Palmer. The results of this visit and the technical review of the application showed that due to the location of the generator, the height of the stack, and the proximity to the neighbor, the odorous emissions from the generator may be injurious to human health and is a nuisance.

June 28, 2016- The Department held a public hearing on the application in order to provide the public the opportunity to comment and to express their concerns regarding the operation of the emergency generator. DAQ provided for the public hearing's record all the written comments timely received during the fifteen day public comments period that included letters and e-mails from residents of the Dorset Condominiums and other concerned citizens.

The comments made during the public hearing were made by citizens who live in buildings adjacent to the generator. The comments reiterated the concerns and complaints received prior to and during the

**MEMORANDUM**

**Luther Towers II**

**DAQ's Response Document for the Public Hearing on June 28, 2016**

June 19, 2017

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public notice period for the application. While the concerned citizens expressed their understanding for the need for an emergency generator at a facility that provides assisted living, they requested that Luther Towers II and the Department take actions to mitigate the noise and odor issues. In response, Luther Towers II acknowledged the commenters' concerns and expressed willingness to work with their consultant and DAQ to address the concerns raised regarding the operation of the generator.

DAQ has made the decision not to permit the generator at its current design, and immediately after the public hearing, gave Luther Towers II a deadline to propose a solution. Luther Towers II submitted a timely proposal and are currently working with AAQS to secure funding and begin the implementation phase. More information about Luther Towers II's proposal, the comments received during the public hearing on June 28, 2016, and DAQ's response is included in the table below.

I hope this information will assist you in reviewing the issues and making your recommendation to the Secretary. Your patience in awaiting receipt of these responses is appreciated. If you have any questions, please call me at (302) 323-4542.

Comment Reference	Comment Summary	Responses/Actions Taken by DAQ
1	<p><u>Sean Duffy</u></p> <p>I understand the need for having an emergency generator at a facility like Luther Towers II because of the large percentage of seniors living at this particular facility, but I do have real concerns about the emergency generator. I have particular issues with the performance of that particular operation. The first thing I would like to focus on is the history of the operation of that emergency generator. It has operated with, in my mind, a complete disregard for the neighbors. When it is operated, the time I have seen it operate, is when it is actually exercised. It is not because of a power outage, but it is really part of the exercising that operators do for the generator when they run it under full load for short periods of time. When I have seen it operate, it emits large volume of toxic fumes. The fumes are very visible. I live on the 14<sup>th</sup> floor and if I have my window open, I can actually smell those fumes inside my living area. I have never seen anybody outside at the emergency generator when it's actually operated. And what my observation is that it is not monitored at all. Nobody is out there. It comes on either because of a timer, or it is operated remotely, but there is nobody ever out there when I have seen it operate. And judging by the performance of the generator, it looks to me like to me this generator receives none, if any, maintenance. It just emits a lot of fumes. The fumes fill the entire street, and they stay there for a period of time afterwards.</p>	<p>The comments received during the public hearing were similar to the comments received during the public notice period. All comments expressed concerns about noise, odor, and exposure to the excessive smoke emitted by the generator.</p> <p>In Comment #1, Mr. Duffy, alluded to an emergency generator owned and operated by City of Wilmington. Mr. Duffy claimed that the generator had a sound insulation for noise abatement. Subsequent to the public hearing, the Department visited the generator located at a pumping station on 10<sup>th</sup> and Van Buren Street, in Wilmington when it was operating during routine testing. The Department believes that the enclosure might have damped the noise but not significantly enough to notice a difference in noise level between the two generators.</p> <p>Although 7 <b>Admin.Code</b> 1149 does address noise, noise disturbance issues are typically handled by local law enforcement. The testing schedule for this generator, including the duration and frequency, is in compliance with 7 <b>Admin.Code</b> 1149; However, sound pressure levels have not</p>

**MEMORANDUM**

**Luther Towers II**

**DAQ's Response Document for the Public Hearing on June 28, 2016**

June 19, 2017

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Comment Reference	Comment Summary	Responses/Actions Taken by DAQ
	<p>The other thing I would like to mention is I have looked at a part of the permit that was posted on the public notice. The permit talks about limits that are put on particulate pollutants that are allowed. All the limits are referenced in terms of tons per year, whether it nitrogen oxides, carbon monoxide, sulfur oxides, and particulate matter. This type of generator is an emergency generator. Most of the running of the generator is only for a short period of time. I believe that if this is permitted, it should be permitted in terms of limits for shorter periods of time, maybe for half-hour or one hour periods. But that is where the limit should be. I did not see anything for opacity. I did not see anything mentioned in the public notice about that. The last issue I have is noise and this generator is located in a residential area. As a matter of fact, the building I live in is less than 50 feet from the generator. There should be a requirement for this generator of some kind of acoustic housing to muffle the noise and deafen the sound. As a matter of fact, there is a generator, an emergency generator that's located about five blocks away from this particular facility at the corner of Tenth and VanBuren Streets. It's owned by the City of Wilmington. And it's actually located adjacent to a pumping station, similar-type residential setting. And they have acoustic housing on their particular generator. So there is no reason why this generator shouldn't have the same thing.</p>	<p>been measured to determine compliance with 7 <b>Admin.Code</b> 1149 sound pressure limits.</p> <p>Prior to the public hearing, and in response to the complaints about odors and emissions from the generator, DAQ visited the facility to witness the generator in operation and to assess whether the odor and emissions from the generator unreasonably interfere with the enjoyment of life and propriety. The site visit and the modelling performed during the technical review of the application confirmed that the quantity and duration of emissions to the ambient atmosphere (beyond the propriety boundary) may be injurious to human health and would unreasonably interfere with the enjoyment of life and/or propriety for the citizens who live nearby. Therefore, DAQ agrees with the comments made during the public hearing regarding the odor and health issues, and believes that actions must be taken by Luther Towers II to address the citizens and the Department's concerns. As a result, two days after the public hearing, the Department issued Luther Towers II a letter requesting information about how the facility plans to address the concerns raised by their neighbors and the Department. Luther Towers II was given two weeks to respond to the Department's request.</p>
2	<p><u>Mariam Saleh</u></p> <p>I own a unit at the Dorset Condominium since March 2000, so I have been living there for a long time. I own a unit at the second floor. The generator is only a few feet away from my window. It runs every Monday for several hours. And even if I keep the windows closed from ahead of time, it doesn't matter. If I walk in even after the generator has stopped, if I walk in from outside, if I walk into my unit, I can smell the fumes. And literally this makes me -- it has made me sick. I do have allergy situation since I was a teenager. I see allergy doctor at least couple times a year. There are things that they give you allergy. This is not one of them. But there are things that they are allergens; there are things that they are irritants. This fume is irritant to my situation. Sometimes I can go on being sick with symptoms of eye watering and nose and headaches and being miserable for month after month after month after</p>	<p>Since Luther Towers II is an assisted living facility that needs emergency back-up power to ensure that critical equipment runs continuously, the Department allowed the facility to continue testing the generator at a reduced frequency. The generator is now being tested monthly instead of weekly. Luther Towers II failed to provide the Department with the</p>

**MEMORANDUM**

**Luther Towers II**

**DAQ's Response Document for the Public Hearing on June 28, 2016**

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Comment Reference	Comment Summary	Responses/Actions Taken by DAQ
	<p>month. And I do keep the windows closed. But after a day, like maybe the next day, I open the windows even on freezing days. I just open the windows. Other than the fact that actually this is giving me health issues, makes me very, very sick, coughing, get sneezing. Sometimes I will cough for a few months.</p> <p>Now, other than that, the noise is amazing. And also everything in my unit smells like -- my bedroom is right there. My sheets, I have to wash my sheets definitely several times a week. Everything in my walk-in closet -- I have a walk-in closet in my master bedroom. My clothes smell. Everything smells.</p> <p>I do have two little, small grandchildren. They spend time with me a couple of times a week. The little one is only a few months old, and she is in that kind of environment. I saw her coughing, this past Monday, and that was breaking my heart. Basically, this generator has a great effect on my life and my health.</p> <p>I am not going to take so much of your time, but I can go on and on and on how sick I get and how long I stay sick. And sometimes to escape, I just leave home, especially on Mondays. So, anyway, this is a nuisance. And I'm very concerned about my health years after years after years of living with this toxic fume that I am inhaling it. It's getting into my lungs. It's getting into my system. And it's just not acceptable anymore for me to live like that. I'm just too close, physically too close to this generator. And there is no escape for me. So basically -- and I sent a letter. You can read that letter. I'm sure you did. So if you have any other questions you can contact me. You are more than welcome to contact me. But this generator has affected my life greatly. I just cannot emphasize how greatly it has affected my life and the life of my two little grandkids that I have them a couple of times a week. Two or three times a week they come to me.</p>	<p>manufacturer recommended testing schedule.</p> <p>The Department believes that the monthly testing schedule is reasonable and is consistent with what we have seen in similar permitted operations. This reduction in monitoring has significantly reduced emissions from the generator and has been welcomed by the residents of the Dorset Condominiums.</p> <p>On July 25, 2016, the Department received a letter from Luther Towers II requesting a 30-day extension to provide a proposed path forward to address the permitting issues related to noise and odor. The Department granted Luther Towers II an extension that ended on August 22, 2016. A proposal was received on August 22, 2016 (see attached), in which Luther Towers II proposed the following:</p> <ul style="list-style-type: none"><li>• Install an exhaust system which will include installing two 26" diameter stacks (one from each muffler) up the side of the building to a point 10 feet above the building height.</li></ul> <p>Luther Towers has informed the Department that Apex Engineering has defined and set the project scope and cost. However, detailed engineering information including engineering drawings has not been produced yet. The Department requested that Luther Towers submit this information as it becomes available to complement the revised application submitted on December 24, 2016.</p> <ul style="list-style-type: none"><li>• Luther Towers II will continue with the reduced testing schedule until</li></ul>
	<p><u>Stephen Ansul</u></p> <p>The majority of the comments made by Mr. Ansul were irrelevant to the hearing. However, the Department believes that his concerns were similar to the concerns raised by the previous commenters.</p>	

**MEMORANDUM**

**Luther Towers II**

**DAQ's Response Document for the Public Hearing on June 28, 2016**

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Comment Reference	Comment Summary	Responses/Actions Taken by DAQ
	<p><u>Fabian Palmer</u></p> <p>One thing I can echo and confirm is what my residents have shared with you this evening. Every Monday the generator is tested for approximately 30 to 40 minutes, roughly. I understand it's a State code, and that's because it's assisted living. I can confirm to you, as the residents have shared with you, that as a result of them testing the generator, it emits a fume, okay, a very strong diesel smell that permeates the lobby, our basement area. And as time goes through the course of the day, the smell is waved into the elevator, and it works its way up to the residential floors, as well. I do have some pictures, as Mr. Duffy shared some pictures with you. I actually have a video from the test of it yesterday. I will show that when we conclude. I will show that to you and see how I can enter that in. But I do have a video of it actually coming out. When it comes out, it definitely emits a large bile of black smoke type of thing is the best I can describe it. But, again, when we conclude, I will show it to Mohamed and Angela, and they can see it that way. My comments center on several things:</p> <p>One, the testing of the generator, itself. As Mr. Duffy alluded to in his comments, when it's being tested, there is nobody actually out there to do a physical observation of the generator, which concerns me. When I look at the generator, there's two sets of doors on both sides of the generator, which would tell me that inside of those doors with that type of generator, there is probably some gauges and things of this nature that can be monitored and I think should be monitored. In our building we have several systems that we have to monitor, fire suppression systems, life safety systems, and things of this nature. We test them on a regular basis and the amount of those types of things and readings and so forth. Also, too, the exterior of the generator is a concern for me. Because when I look at the exterior of it, again, as Mr. Duffy said, and I do agree very much so, the appearance of it, which would indicate there is definitely some maintenance needed as far as the exterior of it, the shell of it, and things of this nature, which, obviously, that also goes into the operation and running of the generator over the long term, to say the least. Now, also to something else that concerns me: I understand why the generator is being tested and things of</p>	<p>such time as the exhaust system has been installed.</p> <ul style="list-style-type: none"><li>• Luther Towers II will complete the exhaust system project by no later than April 1, 2017.</li></ul> <p>Luther Towers II has not met the proposed April 1, 2017 deadline due to a delay in budget approval. John Teoli, Property Manager, told the Department in a phone conversation on July 12, 2017, that he expects construction to begin in September 2017.</p> <p>DAQ believes that the significant increase in stack height and the installation of the mufflers will reduce odor and noise significantly. The Department has kept Mr. Palmer, Manager of The Dorset Condominiums, apprised on the progress of all corrective actions, and it will continue working with Luther Towers II to ensure that the generator remain on a reduced schedule for testing until the modifications are complete.</p> <p>In Comment #4, Mr. Palmer, raised concerns about the monitoring of the generator during routine testing. He stated that the generator was programmed to start every week and that no one from Luther Towers II was there to witness the operation and to check if the generator is operating within the parameter ranges recommended by the manufacturer. Mr. Palmer's concerns are usually addressed in the form of an operating permit that contains monitoring and recordkeeping requirements to ensure proper operation of the equipment. This generator has not been permitted and, therefore, has not been compliant with the monitoring and recordkeeping requirement that the Department requires for this type of operation. However, upon implementation of the proposed project the Department</p>

**MEMORANDUM**

**Luther Towers II**

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Comment Reference	Comment Summary	Responses/Actions Taken by DAQ
	<p>this nature. But, if I'm not mistaken, somewhere in the last two years or year and a half, there was a situation where there was a power failure at Luther Towers. The generator, the emergency generator, the one that is being tested, failed to come on during that power failure, which then forced Luther Towers to have a portable generator brought in. And I understand they began an evacuation. But, thankfully, it stopped, and they were able to get power resumed and things of this nature. But, again, that, to me, is sort of indicative of perhaps a testing system that's not really a test system, more of just running it type of thing as opposed to a real test and getting the things that testing should get out of what you are trying to get to. Now, my understanding from Luther Towers is that the generator is tested by a private contractor on a semiannual basis, and I appreciate that. And my understanding is that they give levels. Obviously, they take emission readings to see where the levels are and things of this nature.</p> <p>It's my suggestion, to say the least, if this permit is granted, that it be considered that the testing, instead of being semiannual, be a quarterly test, again with testing the emissions and things of this nature, as well.</p> <p>At the very least, I would say, in addition to the fumes and the smells and things of this nature, it's almost -- not almost. To me, it's a nuisance. In our building we have rules and regs that cover nuisance practices and uses by residents and things of this nature. I feel that the generator, at the very least, is a nuisance. It stops the peaceful enjoyment of our condominium by our residents. In other words, if I'm a retired person at home, every Monday it's a given that if I'm on that side of the building at approximately 10:00 a.m., 10 to 10, roughly in that neighborhood, I'm going to hear a lot of noise. I'm going hear the jangle and jingle of the top of the smokestacks, okay, where there is -- you know, it helps to subdue the amount of emissions that come out, but there is a jingling and a wrangling and things of this nature. And, again, between the fumes and the noise, it's truly, in my opinion, a nuisance to the folks that are home during that time. And I also think it's important to point out, as Mrs. Saleh had shared about the young children in her unit, we have several other units on that part of the building that face the generator that do have young children. And I have had, on several occasions, I have had other people that have young children come to me and voice their concerns about</p>	<p>will reevaluate the operation of the generator and, if permitted, the facility will be required to monitor and record information that will provide assurances to the Department that the generator is operated and maintained in a matter consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, tune-up and maintenance records, review of operating and maintenance procedures, and inspection of the source.</p>

**MEMORANDUM**

**Luther Towers II**

**DAQ's Response Document for the Public Hearing on June 28, 2016**

June 19, 2017

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	<p>the emissions and things of this nature, as well. Based on that, there are a couple of recommendations I would like to make regarding the generator. One, as Mr. Duffy had stated, to enclose it somehow. This would do two things, in my opinion: One, it would muffle the sound that the generator could be potentially giving off. And also, two, I think it would be something else that would help the exterior of the generator and help its maintenance overall in general. Another option I would like them to consider pursuing and, of course, with getting this permit if it's granted, is a different ventilation system, perhaps a ventilation system that would raise the smokestacks up higher to vent it out at a higher level, which would, in turn, potentially stop the fumes from permeating our building and things of this nature, as well. So, again, I thank you for your time. I thank you for holding this hearing. And, hopefully, we can come to a resolution. Thank you very much.</p>	

**Recommendations**

It is recommended that:

- DAQ accept Luther Towers' proposal to modify the exhaust system and reduce the frequency of testing until construction is completed.
- As a part of the new application review, DAQ consider a permanent reduction for routine testing from weekly to bi-weekly or monthly, unless Luther Towers shows that a weekly testing schedule is recommended by the manufacturer.
- Upon completion of the modification, DAQ conduct a Construction to Operation inspection to ensure that the equipment has been constructed in accordance with the application and construction permit. DAQ will also evaluate the operation of the generator to ensure that it will operate in compliance with all applicable State and Federal regulations.

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pc: Dover File