State Registration Number

N3391

Air Quality Division RENEWABLE OPERATING PERMIT STAFF REPORT

Michigan Department of Environment, Great Lakes, and Energy

ROP Number MI-ROP-N3391-2023

Washington 10 Storage Corporation

State Registration Number (SRN): N3391

Located at

12700 30 Mile Road, Washington Township, Macomb County, Michigan 48095

Permit Number: MI-ROP-N3391-2023

Staff Report Date: June 26, 2023

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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RENEWABLE OPERATING PERMIT

JUNE 26, 2023 - STAFF REPORT

ROP Number

MI-ROP-N3391-2023

<u>Purpose</u>

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan's Administrative Rules for Air Pollution Control promulgated under Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

Stationary Source Mailing Address:	Washington 10 Storage Corporation 12700 30 Mile Road Washington Township, Michigan 48095
Source Registration Number (SRN):	N3391
North American Industry Classification System (NAICS) Code:	221210
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	202200103
Responsible Official:	Benjamin Parrotta, Manager, Transmission and Storage Operations 586-540-8268
AQD Contact:	Kerry Kelly, Senior Environmental Quality Analyst 586-506-9817
Date Application Received:	May 6, 2022
Date Application Was Administratively Complete:	May 6, 2022
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 26, 2023
Deadline for Public Comment:	July 26, 2023

Source Description

DT Midstream operates a natural gas compressor station in western Macomb County one-tenth of a mile east of M-53 on 30 Mile Road. The area surrounding Washington 10 is rural, sparsely populated with commercial, residential, and industrial properties. The nearest residence is approximately two-tenths of a mile north of Washington 10.

The function of this compressor station is to maintain pressure in pipelines transporting sweet natural gas between gas storage fields in southern Michigan and to inject natural gas into geological formations for storage. Washington 10 Storage facility currently consists of six natural gas-fired reciprocating compressor engines, one natural gas-fired emergency generator, one direct heater, four indirect heaters, four organic liquid storage vessels, two cold cleaners, seven boilers, and various auxiliary fuel-burning equipment.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2022**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	71.0
Lead (Pb)	<0.10
Nitrogen Oxides (NO _x)	47.2
Particulate Matter (PM)	6.7
Sulfur Dioxide (SO ₂)	0.22
Volatile Organic Compounds (VOCs)	0.28

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2021 by MAERS:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Hexane	0.046
Formaldehyde	0.0019
Total Hazardous Air Pollutants (HAPs)	0.048

**As listed pursuant to Section 112(b) of the federal Clean Air Act.

See Parts C and D in the ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory nonapplicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

Macomb County is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the 8-hour ozone standard.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of carbon monoxide, nitrogen oxide, and volatile organic compounds exceeds 100 tons per year and the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

No emission units at the stationary source are currently subject to the Prevention of Significant Deterioration regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451, because at the time of New Source Review permitting the potential to emit of carbon monoxide, nitrogen oxide, and volatile organic compounds were less than 250 tons per year.

EUGENERATOR, EUENGINE1, EUENGINE2, EUENGINE3, EUENGINE4, EUENGINE5 and EUENGINE6 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ. At this time, EUGENERATOR and FGENGINES1 (EUENGINE1, EUENGINE2, and EUENGINE3) do not have to meet the requirements of 40 CFR Part 63, Subparts A and ZZZZ per 40 CFR 63.6590(b)(3)(iii) and 40 CFR 63.6590(b)(3)(i) respectively.

EU-DIRECTHEATER, EU-INDHEATER1, EU-INDHEATER2, EU-INDHEATER3, EU-INDHEATER4, EU-P1_BMBLR1, EU-P1_BMBLR2, EU-P1_BMBLR3, EU-P1_BMBLR4, EU-P2_BMBLR1, EU-P2_BMBLR2, and EU-P2_BMBLR3 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and DDDDD.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

No emission units have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because all emission units at the stationary source either do not have a control device, do not use a control device to achieve compliance with an emission limitation or standard, or the emission limits meet the CAM exemption for NSPS or MACT proposed after November 15, 1990.

The emission limitation or standard for CO at the stationary source with the underlying applicable requirement of 40 CFR 63.6600(b) and 40 CFR Part 63, Subpart ZZZZ from EU-ENGINE4, EU-ENGINE5, EU-ENGINE6 is exempt from the federal Compliance Assurance Monitoring (CAM) regulation pursuant to 40 CFR 64.2(b)(1)(i) because the 93% reduction or more in CO emissions and 25.4 tpy CO meet the CAM exemption for NSPS or MACT proposed after November 15, 1990.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-Wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-Wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-N3391-2017 are identified in Appendix 6 of the ROP.

PTI Number			
28-04B	132-13	28-04A	459-97A

Streamlined/Subsumed Requirements

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

Non-applicable Requirements

Part E of the ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the ROP Application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP Application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EU-FURNACE1	Natural gas fired forced air furnace to heat the office building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-FURNACE2	Natural gas fired forced air furnace to heat the office building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-FURNACE3	Natural gas fired forced air furnace to heat the office building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-WATERHTR	Natural gas fired water heater for office building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-RADIANT1	Natural gas fired radiant heater located in the garage/storage building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-RADIANT2	Natural gas fired radiant heater located in the garage/storage building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU- FUELSTORAGE	Storage of diesel fuel for vehicles	R 336.1212(4)(d)	R 336.1282(2)(g)(ii)

Draft ROP Terms/Conditions Not Agreed to by Applicant

This draft ROP does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action taken by EGLE, AQD

The AQD proposes to approve this ROP. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the USEPA is allowed up to 45 days to review the draft ROP and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Joyce Zhu, Warren District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP Application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

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RENEWABLE OPERATING PERMIT

ROP Number MI-ROP-N3391-2023

JULY 31, 2023 - STAFF REPORT ADDENDUM

<u>Purpose</u>

A Staff Report dated June 26, 2023, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Benjamin Parrotta, Manager, Transmission and Storage Operations 586-540-8268
AQD Contact:	Kerry Kelly, Senior Environmental Quality Analyst 586-506-9817

Summary of Pertinent Comments

No pertinent comments were received during the 30-day public comment period.