

Michigan Department of Environmental Quality
Air Quality Division

State Registration Number
B7198

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B7198-2014a

ANR Storage Company

SRN: B7198

Located at

10000 Pflum Road, Mancelona, Kalkaska County, Michigan 49659

Permit Number: MI-ROP-B7198-2014a

Staff Report Date: May 5, 2014

Amended Date: October 6, 2014

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) requires that the Michigan Department of Environmental Quality (MDEQ), 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

MAY 5, 2014 - STAFF REPORT

ROP Number

MI-ROP-B7198-2014

Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for air pollution control pursuant to 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 report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit 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:	ANR Storage Company 717 Texas Street, 14th Floor Houston, Texas 77002
Source Registration Number (SRN):	B7198
North American Industry Classification System (NAICS) Code:	486210
Number of Stationary Source Sections:	3
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201200156
Responsible Official:	Vern Meier, Vice President U.S. Pipeline Operations 832-320-5505
AQD Contact:	Gloria Torello, Environmental Quality Analyst 989-705-3410
Date Permit Application Received:	September 18, 2012
Date Application Was Administratively Complete:	October 8, 2012
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	May 5, 2014
Deadline for Public Comment:	June 4, 2014

Source Description

ANR Storage Company (ANR) owns and operates Cold Springs 12, Blue Lake, and Cold Springs 1 stations that are used in both natural gas storage (compression) and transmission. Each station functions to maintain pressure in pipelines to transport natural gas to other ANR facilities and end users. Cold Springs 12, Blue Lake, and Cold Springs 1 consist of three separate natural gas compression and transmission stations operating separate natural gas storage fields. Each station injects to and withdraws natural gas from an underground storage reservoir. During the spring and summer seasons, the compressor engines are used to compress and inject the natural gas into the underground reservoir. During the winter season, natural gas is withdrawn from the underground reservoir. During withdrawal, natural gas free flows out of the reservoirs into the pipeline. Cooling and glycol dehydration are used to condition the field gas into pipeline quality. Natural gas heaters are used to heat the gas as necessary.

Cold Springs 12 operates three compressor engines, two generator engines, a glycol dehydration system, one boiler, and two withdrawal gas heaters. Blue Lake operates three compressor engines, three generator engines, a glycol dehydration system, one boiler, two withdrawal gas heaters, and a cold cleaner. Cold Springs 1 operates one electric motor compressor, a liquid stabilization plant, a glycol dehydration system, one boiler, and one withdrawal gas heater. The three stations are located near Mancelona in Kalkaska County, Michigan.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2013** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	167.3
Nitrogen Oxides (NO _x)	189.2
Particulate Matter (PM)	5.7
Sulfur Dioxide (SO ₂)	0.4
Volatile Organic Compounds (VOCs)	26.3
Individual Hazardous Air Pollutants (HAPs) **	-
Total Hazardous Air Pollutants (HAPs)	-

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

In addition to the pollutants listed above that have been reported in MAERS, the potential to emit of Greenhouse Gases in tons per year of CO₂e is less than 100,000. CO₂e is a calculation of the combined global warming potentials of six Greenhouse Gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

See Parts C and D in the draft 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 non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Kalkaska County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

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

EU CS12CMPR-A, EU CS12CMPR-B, and EU CS12CMPR-C at Cold Springs 12 were subject to review under the Prevention of Significant Deterioration regulations of 40 CFR, Part 52.21 because at the time of New Source Review permitting the potential to emit of nitrogen oxide was greater than 250 tons per year.

EU BLCMPR-A, EU BLCMPR-B, EU BLCMPR-C, EU BLGEN-A, EU BLGEN-B, and EU BLGEN-C at Blue Lake were subject to review under the Prevention of Significant Deterioration regulations of 40 CFR, Part 52.21 because at the time of New Source Review permitting the potential to emit of carbon monoxide and nitrogen oxide were greater than 250 tons per year.

EU CS12GLYDHY, EU BLGLYDHY, and EU CS1GLYDHY at Cold Springs 12, Blue Lake, and Cold Springs 1 respectively are subject to the National Emission Standards for Hazardous Air Pollutants for Natural Gas Transmission and Storage Facilities promulgated in 40 CFR, Part 63, Subparts A and HHH.

EU CS12EMRGEN-A and EU CS12EMRGEN-B at Cold Springs 12 are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR, Part 63, Subparts A and ZZZZ.

EU CS12CMPR-A, EU CS12CMPR-B, and EU CS12CMPR-C at Cold Springs 12 are not subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR, Part 63, Subparts A and ZZZZ because the engines are existing 4-stroke lean burn engines.

EU BLCMPR-A, EU BLCMPR-B, EU BLCMPR-C, EU BLGEN-A, EU BLGEN-B, and EU BLGEN-C at Blue Lake are not subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR, Part 63, Subparts A and ZZZZ because the engines are existing spark ignition, 2-stroke lean burn engines greater than 500 hp.

EU CS12HEATER-A, EU CS12HEATER-B, EU CS12BOILER, EU BLHEATER-A, EU BLHEATER-B, EU BLBOILER, EU CS1SHEATER, EU CS1BOILER, and EU CS1WDHEATER at Cold Springs 12, Blue Lake, and Cold Springs 1 respectively are subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters 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 are subject to the federal Compliance Assurance Monitoring rule under 40 CFR, Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

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-B7198-2008 are identified in Appendix 6 of the ROP.

PTI Number			
60-80	79-97A	4-01	17-07
105-07A			

Streamlined/Subsumed Requirements

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

Non-applicable Requirements

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

Exempt Emission Unit ID	Description of Exempt Emission Unit	Rule 212(4) Exemption	Rule 201 Exemption
DVCS41-1018	Glycol tank (Ambitol), T-1, 5,500 gallon	R336.1212(4)(c)	R336.1284(i)
DVCSGT-2000A	Glycol tank, T-8, 2,300 gallon	R336.1212(4)(c)	R336.1284(i)
DVCSGT-2000B	Glycol tank, T-9, 2,900 gallon	R336.1212(4)(c)	R336.1284(i)
DVCS42-1001A	Brine tank, T-2, 10,000 gallon	R336.1212(4)(c)	R336.1284(e)
DVCS42-1001B	Brine tank, T-3, 10,000 gallon	R336.1212(4)(c)	R336.1284(e)
DVCS-T21	Condensate/Brine tank, T-21, 16,800 gallon	R336.1212(4)(c)	R336.1284(e)
DVCS42-1002	Methanol tank, T-10, 16,800 gallon	R336.1212(4)(c)	R336.1284(i)
DVCS41-1019	Lube oil tank, T-5, 5,500 gallon	R336.1212(3)(e)	R336.1284(c)
DVCS41-1020	Lube oil tank (MiniLube oil), T-6, 1,100 gallon	R336.1212(3)(e)	R336.1284(c)
DVCS41-1021	Lube oil tank (Maintenance oil), T-7, 1,400 gallon	R336.1212(3)(e)	R336.1284(c)
DVCS42-1003	Waste oil tank, T-4, 10,000 gallon	R336.1212(3)(e)	R336.1284(c)
DVBLT-3401	Glycol tank, T-3401, 16,800 gallon	R 336.1212(4)(c)	R 336.1284(e)
DVBLT-3402	Condensate/brine tank, T-3402, 16,800 gallon	R 336.1212(4)(c)	R 336.1284(e)

Exempt Emission Unit ID	Description of Exempt Emission Unit	Rule 212(4) Exemption	Rule 201 Exemption
DVBLT-3403	Condensate/brine tank, T-3403, 16,800 gallon	R 336.1212(4)(c)	R 336.1284(e)
DVBLT-3404	Glycol tank, T-3404, 16,800 gallon	R 336.1212(4)(c)	R 336.1284(e)
DVBLT-3302	Glycol tank, T-3302, 16,800 gallon	R 336.1212(4)(c)	R 336.1284(i)
DVBLT-3303	Glycol tank, T-3303, 16,800 gallon	R 336.1212(4)(c)	R 336.1284(i)
DVBLT-3306	Waste oil tank, T-3306, 16,800 gallon	R 336.1212(3)(e)	R 336.1284(c)
DVBLV-3701	Glycol tank, T-3701, 5,080 gallon	R 336.1212(4)(c)	R 336.1284(i)
DVBLV-3702	Glycol tank, T-3702, 2,540 gallon	R 336.1212(4)(c)	R 336.1284(i)
DVBLV-3703	Lube oil recycle tank, T-3703, 5,080 gallon	R 336.1212(3)(e)	R 336.1284(c)
DVBLV-3705	Engine lube oil tank, T-3705, 5,080 gallon	R 336.1212(3)(e)	R 336.1284(c)
DVBLV-3707	H.P cylinder lube oil tank, T-3707, 2,540 gallon	R 336.1212(3)(e)	R 336.1284(c)
DVBLV-3709	Generator lube oil tank, T-3709, 2,540 gallon	R 336.1212(3)(e)	R 336.1284(c)
DVBLV-3307	Propane receiver tank, P-1, 4,610 gallon	R 336.1212(4)(c)	R 336.1284(b)
DVBLV-4307	Propane receiver tank, P-2, 4,610 gallon	R 336.1212(4)(c)	R 336.1284(b)
EUCS1V6009A	LSP NGL tank, T-6009A, 30,000 gallons		
EUCS1V6009B	LSP NGL tank, T-6009B, 30,000 gallons		
EUCS1TL	LSP NGL Truck Loading	R336.1212(4)(c)	R336.1284(i)
EUCS1BRINETK1	Brine/Condensate tank, T-5401, 16,800 gallons	R336.1212(4)	R336.1284(e)
EUCS1BRINETK2	Brine/Condensate tank, T-5402, 16,800 gallons	R336.1212(4)	R336.1284(i)
EUCS1GLYTANK1	Ethylene Glycol tank, T-5302, 16,800 gallons	R336.1212(4)(c)	R336.1284(i)
EUCS1GLYTANK2	Ethylene Glycol tank, T-5303, 16,800 gallons	R336.1212(4)(c)	R336.1284(i)
EUCS1LUBEOILTK1	Compressor Frame Lube Oil tank, V-5705, 3,000 gallons	R336.1212(3)(e)	R336.1284(c)
EUCS1LUBEOILTK2	Compressor Cylinder Lube Oil tank, V-5707, 3,000	R336.1212(3)(e)	R336.1284(c)
EUCS1USEDLUBEOI LTK	Used oil tank, T-5406, 16,800 gallons	R336.1212(3)(e)	R336.1284(c)
EUCS1LUBET5124	Compressor Cylinder Lube Oil tank, T-5124, 300 gallons	R336.1212(3)(e)	R336.1284(c)
EUCS1COOLANTTK	Ambitrol tank, V-5701, 3,000 gallons	R336.1212(4)(c)	R336.1284(i)
EUCS1PROPANE	Propane tank, V-5307, 1500 gallons	R 336.1212(4)(c)	R 336.1284(b)
EUCS1HTRH5804	Hot water heater rated < 0.1 MMBtu/hr (H-5804)		
EUCS1BRINET6008	Brine tank, T-6008, 8,460 gallons		

Draft ROP Terms/Conditions Not Agreed to by Applicant

This permit 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 the DEQ

The AQD proposes to approve this permit. 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 U.S. Environmental Protection Agency (USEPA) is allowed up to 45 days to review the draft permit 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 Janis Denman, Cadillac District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the permit 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.

Michigan Department of Environmental Quality
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JUNE 5, 2014 - STAFF REPORT ADDENDUM

MI-ROP-B7198-2014

Purpose

A Staff Report dated May 5, 2014, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). 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 R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Vern Meier, Vice President U.S. Pipeline Operations 832-320-5505
AQD Contact:	Gloria Torello, Environmental Quality Analyst 989-705-3410

Summary of Pertinent Comments

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

Changes to the May 5, 2014 Draft ROP

No changes were made to the draft ROP.

Michigan Department of Environmental Quality
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RENEWABLE OPERATING PERMIT

ROP Number

B7198

**OCTOBER 6, 2014 - STAFF REPORT FOR RULE
216(2) MINOR MODIFICATION**

MI-ROP-B7198-2014a

Purpose

On June 5, 2014, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B7198-2014 to ANR Storage Company pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(2).

General Information

Responsible Official:	Anthony M. Kornaga, Director, USPO Great Lakes Region
AQD Contact:	Kirsten S. Clemens, P.E., Environmental Engineer 269-567-3548
Application Number:	201400093
Date Application For Minor Modification Was Submitted:	June 12, 2014

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to R 336.1216(2).

Description of Changes to the ROP

Incorporate Permit to Install (PTI) No. 138-13A. PTI No. 138-13A increases the glycol recirculation rate from 720 gallons per hour to 960 gallons per hour.

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

Action Taken by the DEQ

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B7198-2014, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the U.S. Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.

State Registration Number

RENEWABLE OPERATING PERMIT

ROP Number

B7198

**NOVEMBER 21, 2014 - STAFF REPORT ADDENDUM
FOR RULE 216(2) MINOR MODIFICATION**

MI-ROP-B7198-2014a

Purpose

A Staff Report dated October 6, 2014, was developed in order to set forth the applicable requirements and factual basis for the proposed Minor Modification to the Renewable Operating Permit's (ROP) terms and conditions as required by R 336.1216(2)(c). The purpose of this Staff Report Addendum is to summarize any significant comments received on the proposed ROP modification during the U.S. Environmental Protection Agency's (USEPA) 45-day comment period as described in R 336.1216(2)(c). In addition, this addendum describes any changes to the proposed ROP Minor Modification resulting from these pertinent comments.

General Information

Responsible Official:	Anthony M. Kornaga, Director, USPO Great Lakes Region
AQD Contact:	Kirsten S. Clemens, P.E., Environmental Engineer 269-567-3548

Summary of Pertinent Comments

No pertinent comments were received during the USEPA's 45-day comment period.

Changes to the October 6, 2014 Proposed ROP Minor Modification

No changes were made to the proposed ROP Minor Modification.