

State Registration Number
M4780

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-M4780-2023

Roush Industries

State Registration Number (SRN): M4780

Located at

36630 Commerce, Livonia, Wayne County, Michigan 48150

Permit Number: MI-ROP-M4780-2023

Staff Report Date: January 30, 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

January 30, 2023 - STAFF REPORT

ROP Number

MI-ROP-M4780-2023

Purpose

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:	Roush Industries 36630 Commerce Street Livonia, Michigan 48150
Source Registration Number (SRN):	M4780
North American Industry Classification System (NAICS) Code:	541330
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	202000107
Responsible Official:	Jeff Johnston, President 734-779-7601
AQD Contact:	Sam Liveson, Senior Environmental Engineer 313-405-1357
Date Application Received:	July 1, 2020
Date Application Was Administratively Complete:	July 1, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	January 30, 2023
Deadline for Public Comment:	March 1, 2023

Source Description

Roush Industries, located in Livonia, Michigan, specializes in engine testing and development services. Testing is accomplished using dynamometer test cell equipment. Engine test cells have the capability of firing gasoline, liquefied petroleum gas, methanol and compressed natural gas. The stationary source is comprised of seven buildings numbered 1, 2, 3, 4, 6, 15, and 16. Dynamometers are located in buildings 1, 4, 15, and 16.

Facility buildings are located along Levan Road, Commerce Street, and Market Street in Livonia. To the north is industry for a half mile before reaching residential area beyond east-west Interstate 96 (I-96); to the east is the Ford Livonia Transmission Plant across Levan Road; to the south is industry for a quarter mile before reaching residential areas south of Plymouth Road, as well as the Newburgh Lake tributary and Riverview Trailhead south of Edward N Hines Drive; to the west is industry for a quarter mile before reaching residential areas beyond Newburgh Road.

Nearby industry includes separate stationary source Roush Industries with SRN M3833 comprised of five buildings numbered 7, 12, 13, 28, and 87. Both sites M4780 and M3833 share common control and are contiguous, but they each have different Standard Industrial Code (SIC) major groups, which makes them separate stationary sources. M4780 is a major Title V source, and M3833 is a synthetic minor source. However for HAP opt-out considerations, Roush Industries M4780 and M3833 contiguous sites are one source of HAPs because the definition of a HAP major source doesn't differentiate sources based on their SIC major groups per 42 US Code 7412(a)(1). For this reason, Permit to Install (PTI) No. 5-22 limits the combined total of hazardous air pollutant (HAP) emissions from both Roush Industries M4780 and M3833 to below major source thresholds. HAP emission limits are included in the ROP under Source-Wide Conditions.

Building 1 houses twenty-two (22) uncontrolled test cells that were installed at various times during the 1980's. Test cells 14 and 15 are permitted under PTI No. 66-22, issued on June 1, 2022, under flexible group FG-B01TCell14&15. The 20 other test cells located in Building 1 appear to be exempt from obtaining a Permit to Install per Rule 336.1285(2)(g).

Building 15 houses twelve (12) test cells; five are single ended and seven are double-ended test cells. Engine test cells are permitted under PTI No. 188-06, issued on August 14, 2006. Nine out of the 12 cells were installed in the mid-1990's. In February 2000, Roush Industries Inc. was permitted to install three (3) additional test cells. Building 15 contains five (5) single ended test cells and seven (7) double-ended test cells. Some of the test cells may be controlled by a catalytic converter. Test cells in Building 15 are included in the flexible group identified as FG-Bld15TCells. There are gasoline tanks associated with engine testing facilities. These gasoline storage tanks are included in the flexible group identified as FG-MACT6C.

Building 16 houses six (6) test cells; one (1) of the test cells is double-ended. Five (5) of the test cells are controlled with catalytic converters. The test cells are covered under PTI No. 101-00A, issued on December 20, 2002. In the ROP, the test cells in Building 16 are included in the flexible group identified as FG-Bld16TCells.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2021**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	343.8
Nitrogen Oxides (NO _x)	12.1
Particulate Matter (PM10)*	0.8

Pollutant	Tons per Year
Sulfur Dioxide (SO ₂)	0.6
Volatile Organic Compounds (VOCs)	14.0

* Particulate matter (PM) that has an aerodynamic diameter less than or equal to a nominal 10 micrometers.

The following table lists the potential to emit of Hazardous Air Pollutants as calculated by the company:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Formaldehyde	3.42
Total Hazardous Air Pollutants (HAPs)	21.02

**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 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 in Wayne County, which is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the 8-hour ozone standard. A portion of Wayne County is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the SO₂ standard. Roush is not located within this area. The county is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all other criteria pollutants.

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 and nitrogen oxides exceeds 100 tons per year.

The stationary source is a synthetic minor source of HAP emissions because the stationary source has accepted federally enforceable permit conditions limiting the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, to less than 10 tons per year and the potential to emit of all HAPs combined to less than 25 tons per year.

No emission units at the stationary source have been subject to the Prevention of Significant Deterioration (PSD) regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451 or 40 CFR Part 52.21 because at the time of New Source Review (NSR) permitting, the potential emissions from the projects did not exceed significant. Emission units at the facility have been subject to minor NSR.

Engine test cells/stands at the stationary source are not subject to the National Emission Standard for Hazardous Air Pollutants for engine test cells/stands promulgated in 40 CFR Part 63, Subparts A and P because there are federally enforceable permit conditions limiting the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, to less than 10 tons per year and the potential to emit of all HAPs combined to less than 25 tons per year.

Gasoline storage tanks in FG-MACT6C at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subparts A and CCCCCC. The monthly throughput is less than 100,000 gallons of gasoline. The AQD is not delegated the regulatory authority for this Generally Available Control Technology (GACT) standard which applies to area sources of HAPs.

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 pursuant to 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.

Several dynamometers in buildings 15 and 16 use catalytic converters to control emissions of CO and NOx. To calculate pre-control emissions, consider that a dynamometer without control would be able to burn all allowable fuels with emissions at the uncontrolled stack test emission factor. Using 2016 stack test results, the highest emission factor from uncontrolled dynamometers is 0.74 lbs CO/gallon of gasoline.

For building 15, the facility is limited to 166,000 gal/yr controlled. If one dynamometer burns all this fuel, its pre-control emissions are [166,000 gal/yr x 0.74 lb CO/gal gasoline x 1 ton/2000 lb =] 61.42 tons CO/year. For building 16, the facility is limited to 160,000 gallons/yr controlled. If one dynamometer burns all this fuel, its pre-control emissions are [160,000 gal/yr x 0.74 lb CO/gal gasoline x 1 ton/2000 lb =] 59.2 tons CO/year. Because the major source threshold for CO is 100 tons per year, these emission units do not appear to be subject to CAM. NOx pre-control emissions are lower than CO, and the major source threshold for NOx is also 100 tons per year.

Although CAM is not applicable, the ROP includes periodic monitoring for the catalytic converter control. The ROP requires a malfunction abatement plan (MAP) that includes a preventative maintenance program and periodic monitoring to be submitted within 180 days of issuance of the ROP for those dynamometers controlled by catalytic converters.

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-M4780-2016 are identified in Appendix 6 of the ROP.

PTI Number			
424-99A	101-00A	188-06	

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-B03Boiler	1.05 MMBTU/hr Natural Gas (NG) Boiler in building 3. Not subject to 40 CFR Part 63, Subpart JJJJJJ pursuant to 40 CFR 63.11195(e).	Rule 212(4)(c)	Rule 282(2)(b)(i)
EU-B01TCell3	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell6	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell7	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell8	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell10	Engine test cell in building 1 with an absorption capacity of 300 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell11	Engine test cell in building 1 with an absorption capacity of 800 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell12	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell13	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell16	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell17	Engine test cell in building 1.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell20	Engine test cell in building 1 with an absorption capacity of 800 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell21	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell22	Engine test cell in building 1.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell23	Engine test cell in building 1 with an absorption capacity of 800 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell24	Engine test cell in building 1 with an absorption capacity of 120 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell26	Engine test cell in building 1 with an absorption capacity of 300 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell27	Engine test cell in building 1.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell28	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EU-B01TCell30	Engine test cell in building 1 with an absorption capacity of 300 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B01TCell32	Engine test cell in building 1 with an absorption capacity of 600 HP.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B04TCellC	Engine test cell in building 4 with a capacity limiting engine heat input less than 10,000,000 BTU/hour input.	Rule 212(4)(e)	Rule 285(2)(g)
EU-B03UnitHeaters	1 ceiling mounted NG unit heater at Building 3- 0.4 MMBTU/hr	Rule 212(4)(c)	Rule 282(2)(b)(i)
EU-B06UnitHeaters	3 ceiling mounted NG unit heaters at Building 6- 0.4 MMBTU/hr	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUB06RadiantHeaters	1 NG radiant heater at Building 6 – 0.2 MMBTU/hr	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUB016RadiantHeaters	1 NG radiant heater at Building 16 – 0.2 MMBTU/hr	Rule 212(4)(c)	Rule 282(2)(b)(i)

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 Brad Myott, Field Operations Manager. 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.

State Registration Number
M4780

RENEWABLE OPERATING PERMIT
May 23, 2023 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-M4780-2023

Purpose

A Staff Report dated January 30, 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:	Jeff Johnston, President 734-779-7601
AQD Contact:	Sam Liveson, Senior Environmental Engineer 313-405-1357

Summary of Pertinent Comments

EPA Comment:

On Page 24 & 29 - **FG-Bld15TCells**, SC I.4 and **FG-Bld16TCells**, SC I.4 incorporate an emission limit on 1,3 Butadiene pursuant to Michigan Rule 336.1225(3)(b). As currently written, the draft ROP designates this limitation as federally enforceable with a "2" superscript footnote. However, Michigan Rule 1225(3)(b) does not appear to be approved into Michigan's SIP and be therefore federally enforceable. Without further reference or clarification, it is unclear as to how this emission limitation is supposed to be federally enforceable. EPA suggests that you verify if this 1,3 Butadiene emission limitation is intended to be federally enforceable or not, and apply the appropriate footnote in the permit.

AQD Response:

The "2" superscript footnotes on the 1,3 Butadiene emission limits (Special Conditions FG-Bld15TCells I.4 and FG-Bld16TCells I.4) are in error, because the 1,3 Butadiene emission limits are not federally enforceable. AQD will update the 1,3 Butadiene emission limits so that they have a "1" superscript footnote indicating that the 1,3 Butadiene emission limits are state-only enforceable.

EPA Comment:

On Page 27 & 31 - **FG-Bld15TCells**, SC VI.4 and **FG-Bld16TCells**, SC VI.4 include a monitoring/recordkeeping requirement of prorating CO emissions to an 8-hour rate. There seems to be insufficient information regarding the actual calculation method used for these prorated 8-hour CO emissions. EPA suggests that this prorated 8-hour CO emission rate calculation be clarified and appropriately included in the permit.

AQD Response:

AQD worked with Roush to provide an 8-hour CO prorated emission rate calculation formula in Appendix 7 of the ROP to clarify the 8-hour CO prorated emission rate calculation.

EPA Comment:

On Page 36 - **FG-COLDCLEANERS**, SC II.1, restricts the use of cleaning solvents containing more than five percent by weight of certain halogenated compounds. No applicable monitoring or recordkeeping requirement is included for ensuring compliance with this permit condition. EPA suggests that you incorporate, as necessary, into the permit the monitoring and related recordkeeping and reporting requirements under 40 CFR 70.6(a)(3).

AQD Response:

AQD agrees that monitoring and related recordkeeping and reporting requirements should be added. AQD added condition FG-COLDCLEANERS, SC VI.3 for this purpose. The condition is in the Monitoring/Recordkeeping section of FG-COLDCLEANERS.

Roush Comment:

Page 27, double check the footnote for FG-Bld15TCells in Section VI(6). Should be 1 instead of 2?

AQD Response:

The "2" superscript footnote on this 1,3 Butadiene monitoring/recordkeeping Special Condition FG-Bld15TCells VI.6 is in error, because the 1,3 Butadiene monitoring/recordkeeping condition is not federally enforceable. AQD will update this 1,3 Butadiene monitoring/recordkeeping condition so that it has a "1" superscript footnote indicating that the 1,3 Butadiene monitoring/recordkeeping condition is state-only enforceable.

Roush Comment:

Roush had the following comments for the staff report:

1. Page 4, paragraph 1, we would think the list of fuels should match the ROP. So "gasoline/ethanol/ethanol blends, diesel, natural gas/propane, and methanol."
2. Page 4, paragraph 4, we recommend "are exempt" instead of "appear to be exempt."
3. Page 4, paragraph 5, the first sentence describes the cells in B15. The fifth sentence restates the same. Seems redundant.
4. Page 4, paragraph 5, should the references to "gasoline tanks" be "fuel tanks" (last 2 sentences)? Also referenced on Page 6, paragraph 1, first sentence.
5. Page 5, first notation, add "Filterable" before "Particulate Matter."
6. Page 5, last paragraph, change "of all HAPs" to "aggregate HAPs."
7. Page 6, paragraph 1, first sentence, hyphenate "FG-MACT6C."
8. Page 6, paragraph 5, third sentence should change "160,000 gallons/yr controlled" to "160,000 gallons/yr total".
9. Page 6, PTI Number table, did 188-06 void 424-99A? If so, why list 424-99A?
10. Page 7, Exempt EU table, first entry description. Change "1.05 MMBTU/hr" to mirror Rule 282(2)(b)(i) verbiage and make it "<50 MMBTU/hr?"
11. Page 8, Emission unit table, for the last entry delete the zero and hyphenate "EU-B16RadiantHeaters." Hyphenate the second to last one for consistency if character count allows.

AQD Response:

AQD is not allowed to modify the actual staff report language once it has completed public comment. However, the comments from the company are helpful and would be incorporated during the next renewal, if they are applicable at that time. Regarding comment 1, AQD agrees that Roush's list of fuels that engine test cells have the capability of firing is appropriate. Regarding comment 2, AQD believes "appear to be exempt" is more appropriate. Regarding comment 3, AQD agrees the language is redundant. Regarding comment 4, AQD agrees that "gasoline tanks" are more correctly identified as "fuel tanks." Regarding comment 5, particulate matter (PM10) language is already defined below the table and is standard language. Regarding comment 6, this is standard template language in the staff report. AQD may update this language later on. Regarding comment 7, "FG-MACT6C" is hyphenated. Regarding comment 8, AQD agrees that "160,000 gallons/yr controlled" should read "160,000 gallons/yr total." AQD could correct this

during the next renewal. Regarding comment 9, 424-99A was rolled into the facility ROP and voided on September 30, 2002, while 188-06A was issued August 10, 2006, so it is correct to list 424-99A. Regarding comment 10, 1.05 MMBTU/hr is a description of the process from the ROP application. The facility may want to correct the application during the next renewal. Regarding comment 11, the emission unit name is from the facility's ROP application. The facility may want to correct the application during the next renewal.

Changes to the January 30, 2023 Draft ROP

The following changes were made to the January 30, 2023 Draft ROP:

FG-Bld15TCells

1. Emission Limits
 - a. SC I.1 – Corrected the reference SC V.2 to V.1 in the Monitoring/Testing Method list of special conditions because the reference was pointing to the wrong condition.
 - b. SC I.4 – Updated 1,3 Butadiene superscript footnote from “2” to “1” to indicate the condition is state only enforceable.
2. Monitoring/Recordkeeping
 - a. SC VI.6 - Updated 1,3 Butadiene superscript footnote from “2” to “1” to indicate the condition is state only enforceable.
 - b. Added note “See Appendix 7”

FG-Bld16TCells

1. Emission Limits
 - a. SC I.1, I.2, I.3 – Removed SC IV.2 from the Monitoring/Testing Method list of special conditions because it was an incorrect reference.
 - b. SC I.4 – Updated 1,3 Butadiene superscript footnote from “2” to “1” to indicate the condition is state only enforceable.
2. Monitoring/Recordkeeping
 - a. Added note “See Appendix 7”

FG-COLDCLEANERS

1. Monitoring/Recordkeeping
 - a. SC VI.3 – Added the condition which reads “The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, used in each cold cleaner. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**”
 - b. Renumbered SC VI.3 to VI.4, and VI.4 to VI.5.

Appendix 7

1. Replaced the Appendix so that it includes the formula to calculate the 8-hour emission rate based upon daily records.
 - a. The original Appendix read, “Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.”
 - b. The updated Appendix reads:

“The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG-Bld15TCells and FG-Bld16TCells.

Compliance Calculation Method for 8-hour CO Emission Limit

The following contains the formula that should be used to calculate the 8-hour CO emission rate based upon daily records, prorated to an 8-hour rate:

$$CO_{lbs/8hr} = \frac{\sum_i (gal_i * EF_i)}{(hours\ worked / 8)}$$

Where:

CO _{lbs/8hr} =	CO emission rate based upon daily records, prorated to an 8-hour rate
gal _i =	Gallons of fuel used daily for each fuel type <i>i</i>
EF _i =	Emission Factor for each fuel type <i>i</i> in units of pounds per gallon
Hours worked =	Hours worked daily or 8; whichever is greater”