Trinity Consultants
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August 16, 2022

Texas Commission on Environmental Quality (TCEQ)
via STEERS

RE: Standard Permit Application for Electric Generating Units
MP Magnetics LLC, Fort Worth Facility – Tarrant County, Texas
TCEQ Customer Reference Number: (CN) CN606000065
TCEQ Regulated Entity Reference Number: (RN) RN111465571

To Whom It May Concern:

MP Magnetics LLC (MP Magnetics) has proposed to construct and operate a greenfield metal, alloy, and neodymium-iron-boron (NdFeB) magnet manufacturing facility in Fort Worth, TX (Fort Worth Facility). MP Magnetics has been assigned Texas Commission on Environmental Quality (TCEQ) Customer Number (CN) CN606000065. The Fort Worth Facility has been assigned Regulated Entity Number (RN) RN111465571.

With this letter, MP Magnetics is submitting this Standard Permit Application for Electric Generating Units to authorize forty four (44) natural gas-fired electricity generating engines. This Standard Permit application contains TCEQ Form PI-1S and all required supporting documentation. Emission calculations are included in Appendix A. The $900 standard permit registration fee and $500 expedited fee were submitted to the TCEQ electronically via ePay.

Thank you for your assistance in this matter. Please feel free to call me or Ms. Kelly Trent at (725) 221-8227 should you have any questions or if you require additional information.

Sincerely,
Trinity Consultants

Latha Kambham, Ph.D.
Managing Consultant, Office Manager - Dallas

cc: Ms. Kimberli Fowler, Air Section Manager TCEQ Regional Office 4 (STEERS)
Ms. Kelly Trent, EHS Manager, MP Magnetics LLC

TCEQ STANDARD PERMIT
APPLICATION FOR ELECTRIC GENERATING UNITS

MP Magnetics LLC > Fort Worth, TX

Prepared By:

Latha Kambham- Managing Consultant
Christine Chambers- Principal Consultant
Philip Masini- Consultant

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(972) 661-8100

August 2022

Project 224401.0184

Trinity Consultants

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1. EXECUTIVE SUMMARY

MP Magnetics LLC (MP Magnetics) has proposed to construct and operate a greenfield metal, alloy, and neodymium-iron-boron (NdFeB) magnet manufacturing facility in Fort Worth, TX (Fort Worth Facility). This facility will also serve as the business and engineering headquarters for MP Magnetics. MP Magnetics authorized units under TCEQ Permit by Rule (PBR) registration number 168400 approved by TCEQ on April 4, 2022. MP Magnetics has been assigned Texas Commission on Environmental Quality (TCEQ) Customer Number (CN) CN606000065. The Fort Worth Facility has been assigned Regulated Entity Number (RN) RN111465571.

This facility will be located at 13840 Independence Pkwy., Fort Worth, TX 75901, Tarrant County. Tarrant County is currently designated as a serious nonattainment area for the 2008 8-hour ozone assessment, a marginal ozone nonattainment area under the 2015 8-hour ozone assessment, and an attainment or unclassified area for all other criteria pollutants.[1] The Fort Worth Facility is a minor source with respect to Prevention of Significant Deterioration (PSD), Nonattainment New Source Review (NNSR), and the federal operating permit (Title V) programs.

MP Magnetics is submitting this Non-Rule Standard Permit (NRSP) registration application to authorize the below at the Fort Worth Facility:

- Electric Generating Units (Natural Gas-Fired Electric Generating Units)

This Standard Permit application contains TCEQ Form PI-1S and all required supporting documentation. Emission calculations are included in Appendix A. The $900 standard permit registration fee and $500 expedited fee were submitted to the TCEQ electronically via ePay.

[1] The United States Environmental Protection Agency (U.S. EPA) Green Book. https://www3.epa.gov/airquality/greenbook/ancl.html#TX. Accessed August 2022.

2. TCEQ FORM

TCEQ Form PI-1S

Texas Commission on Environmental Quality
Form PI-1S
Registrations for Air Standard Permit
(Page 1)

I. Registrant Information		
A. Company or Other Legal Customer Name:		
MP Magnetics LLC		
B. Company Official Contact Information (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Other:)_____		
Name: **Kelly Trent**		
Title: **EHS Manager**		
Mailing Address: **6720 Via Austi Pkwy, Suite 450**		
City: **Las Vegas**	State: **NV**	ZIP Code: **89119**
Phone: **(725) 221-8227**	Fax:	
Email Address: ktrent@mpmaterials.com		
All permit correspondence will be sent via email.		
C. Technical Contact Information (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Other:)_____		
Name: **Kelly Trent**		
Title: **EHS Manager**		
Company Name: **MP Magnetics LLC**		
Mailing Address: **6720 Via Austi Pkwy, Suite 450**		
City: **Las Vegas**	State: **NV**	ZIP Code: **89119**
Phone: **(725) 221-8227**	Fax:	
Email Address: ktrent@mpmaterials.com		
II. Facility and Site Information		
A. Name and Type of Facility		
Facility Name: **MP Magnetics LLC**		
Type of Facility:	☒ Permanent ☐ Temporary	
For portable units, please provide the serial number of the equipment being authorized below.		
Serial No:	Serial No:	

Texas Commission on Environmental Quality
Form PI-1S
Registrations for Air Standard Permit
(Page 2)

II. Facility and Site Information *(continued)*		
B. Facility Location Information		
Street Address: **13840 Independence Parkway**		
If there is no street address, provide written driving directions to the site and provide the closest city or town, county, and ZIP code for the site (attach description if additional space is needed).		
City: **Fort Worth**	County: **Tarrant**	ZIP Code: **75901**
Latitude (nearest second): **32.983939**	Longitude (nearest second): **-97.248880**	
C. Core Data Form (**required** for Standard Permits 6006, 6007, and 6013).		
Is the Core Data Form (TCEQ Form 10400) attached?	☐ Yes ☒ No	
If "No," provide customer reference number (CN) and regulated entity number (RN) below.		
Customer Reference Number (CN): **CN606000065**		
Regulated Entity Number (RN): **RN111465571**		
D. TCEQ Account Identification Number (if known):		
E. Type of Action:		
☒ Initial Application ☐ Change to Registration ☐ Renewal ☐ Renewal Certification		
For Change to Registration, Renewal, or Renewal Certification actions provide the following:		
Registration Number:	Expiration Date:	
F. Standard Permit Claimed: **Electric Generating Units**		
G. Previous Standard Exemption or PBR Registration Number:		
Is this authorization for a change to an existing facility previously authorized under a standard exemption or PBR?	☐ Yes ☒ No	
If "Yes," enter previous standard exemption number(s) and PBR registration number(s) and associated effective date in the spaces provided below.		

Standard Exemption and PBR Registration Number(s)	**Effective Date**

Texas Commission on Environmental Quality
Form PI-1S
Registrations for Air Standard Permit
(Page 3)

II. Facility and Site Information *(continued)*		
H. Other Facilities at this Site Authorized by Standard Exemption, PBR, or Standard Permit		
Are there any other facilities at this site that are authorized by an Air Standard Exemption, PBR, or Standard Permit?	☒ Yes ☐ No	
If "Yes," enter standard exemption number(s), PBR registration number(s), and Standard Permit registration number(s), and associated effective date in the spaces provided below.		
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s)	**Effective Date**	
TCEQ Permit No. 168400: 106.122, 106.227, 106.261, 106.262, 106.266, 106.316	**04/04/2022**	
106.317, 106.321, 106.371, 106.372, 106.375		
I. Other Air Preconstruction Permits		
Are there any other air preconstruction permits at this site?	☐ Yes ☒ No	
If "Yes," enter permit number(s) in the spaces provided below.		
J. Affected Air Preconstruction Permits		
Does the standard permit directly affect any permitted facility?	☐ Yes ☒ No	
If "Yes," enter permit number(s) in the spaces provided below.		

II. Facility and Site Information *(continued)*		
K. Federal Operating Permit (FOP) Requirements		
Is this facility located at a site that is required to obtain a FOP pursuant to 30 TAC Chapter 122?	☐ Yes ☒ No ☐ To Be Determined	
If the site currently has an existing FOP, enter the permit number:		
Check the requirements of 30 TAC Chapter 122 that will be triggered if this standard permit is approved (*check all that apply).*		
☐ Initial Application for a FOP	☐ Significant Revision for a SOP	☐ Minor Revision for a SOP
☐ Operational Flexibility/Off Permit Notification for a SOP		☐ Revision for a GOP
☐ To be Determined		☒ None
Identify the type(s) of FOP issued and/or FOP application(s) submitted/pending for the site. *(check all that apply)*		
☐ SOP	☐ GOP	☐ GOP application/revision (submitted or under APD review)
☒ N/A	☐ SOP application/revision (submitted or under APD review)	
III. Fee Information *(go to www.tceq.texas.gov/epay to pay online)*		
A. Fee Amount: **$900**		
B. Voucher number from ePay: **STEERS Submittal**		
IV. Public Notice *(if applicable)*		
A. Responsible Person (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Other:)_____		
Name:		
Title:		
Company:		
Mailing Address:		
City:	State:	ZIP Code:
Phone:	Fax No.:	
Email Address:		

IV. Public Notice *(continued)* *(if applicable)*			
B. Technical Contact (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Other):_____			
Name:			
Title:			
Company:			
Mailing Address:			
City:	State:	ZIP Code:	
Phone No.:	Fax No.:		
Email Address:			
C. Bilingual Notice			
Is a bilingual program required by the Texas Education Code in the School District?			☐ Yes ☐ No
Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district?			☐ Yes ☐ No
If "Yes," list which language(s) are required by the bilingual program?			
D. Small Business Classification and Alternate Public Notice			
Does this company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts?			☐ Yes ☐ No
Is the site a major source under 30 TAC Chapter 122, Federal Operating Permit Program?			☐ Yes ☐ No
Are the site emissions of any individual regulated air contaminant equal to or greater than 50 tpy?			☐ Yes ☐ No
Are the site emissions of all regulated air contaminant combined equal to or greater than 75 tpy?			☐ Yes ☐ No
V. Renewal Certification Option			
A. Does the permitted facility emit an air contaminant on the Air Pollutant Watch List, and is the permitted facility located in an area on the watch list?			☐ Yes ☒ No
B. For facilities participating in the Houston/Galveston/Brazoria area (HGB) cap and trade program for highly reactive VOCs (HRVOCs), do the HRVOCs need to be speciated on the maximum allowable emission rates table (MAERT)?			☐ Yes ☒ No
C. Does the company and/or site have an unsatisfactory compliance history?			☐ Yes ☒ No
D. Are there any applications currently under review for this standard permit registration?			☐ Yes ☒ No

V.	**Renewal Certification Option *(continued)***	
E.	Are scheduled maintenance, startup, or shutdown emissions required to be included in the standard permit registration at this time?	☒ Yes ☐ No
F.	Are any of the following actions being requested at the time of renewal:	☐ Yes ☒ No
1.	Are there any facilities that have been permanently shutdown that are proposed to be removed from the standard permit registration?	☐ Yes ☒ No
2.	Do changes need to be made to the standard permit registration in order to remain in compliance?	☐ Yes ☒ No
3.	Are sources or facilities that have always been present and represented, but never identified in the standard permit registration, proposed to be included with this renewal?	☐ Yes ☒ No
4.	Are there any changes to the current emission rates table being proposed?	☐ Yes ☒ No
*Note: If answers to all of the questions in Section V. Renewal Certification Option are "No," use the certification option and skip to Section VII. of this form. If the answers to any of the questions in Section V. Renewal Certification Option are "Yes," the certification option **cannot** be used.*		
*If notice is applicable and comments are received in response to the public notice, the application does not qualify for the renewal certification option.		
VI.	**Technical Information Including State and Federal Regulatory Requirements** **Place a check next to the appropriate box to indicate what you have included in your submittal.** *Note: Any technical or essential information needed to confirm that facilities are meeting the requirements of the standard permit must be provided. Not providing key information could result in an automatic deficiency and voiding of the projec*t.	
A.	Standard Permit requirements (Checklists are optional; however, your review will go faster if you provide applicable checklists.)	
Did you demonstrate that the general requirements in 30 TAC Sections 116.610 and 116.615 are met?		☒ Yes ☐ No
Did you demonstrate that emission limitations in 30 TAC Sections 106.261 and 106.262 are met? **Not Applicable to EGUs**		☐ Yes ☒ No
Did you demonstrate that the individual requirements of the specific standard permit are met?		☒ Yes ☐ No
B.	Confidential Information (All pages properly marked "CONFIDENTIAL")	☒ Yes ☐ No
C.	Process Flow Diagram	☒ Yes ☐ No

VI. Technical Information Including State and Federal Regulatory Requirements *(continued)*	
Place a check next to the appropriate box to indicate what you have included in your submittal.	
Note: Any technical or essential information needed to confirm that facilities are meeting the requirements of the standard permit must be provided. Not providing key information could result in an automatic deficiency and voiding of the project.	
D. Process Description	☒ Yes ☐ No
E. Maximum Emissions Data and Calculations	☒ Yes ☐ No
F. Plot Plan	☒ Yes ☐ No
G. Projected Start Of Construction Date, Start Of Operation Date, and Length of Time at Site:	☒ Yes ☐ No
Projected Start of Construction (provide date):	October 1, 2022
Projected Start of Operation (provide date):	October 13, 2022
Length of Time at the Site:	NA

VII. Delinquent Fees and Penalties

This form **will not be processed** until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ website at: www.tceq.texas.gov/agency/financial/fees/delin/index.html.

VIII. Signature Requirements

The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code, Chapter 382, the Texas Clean Air Act (TCAA) the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.

Name (printed): Kelly Trent

Signature (original signature required): Signed via STEERS

Date:

IX. Copies of the Registration

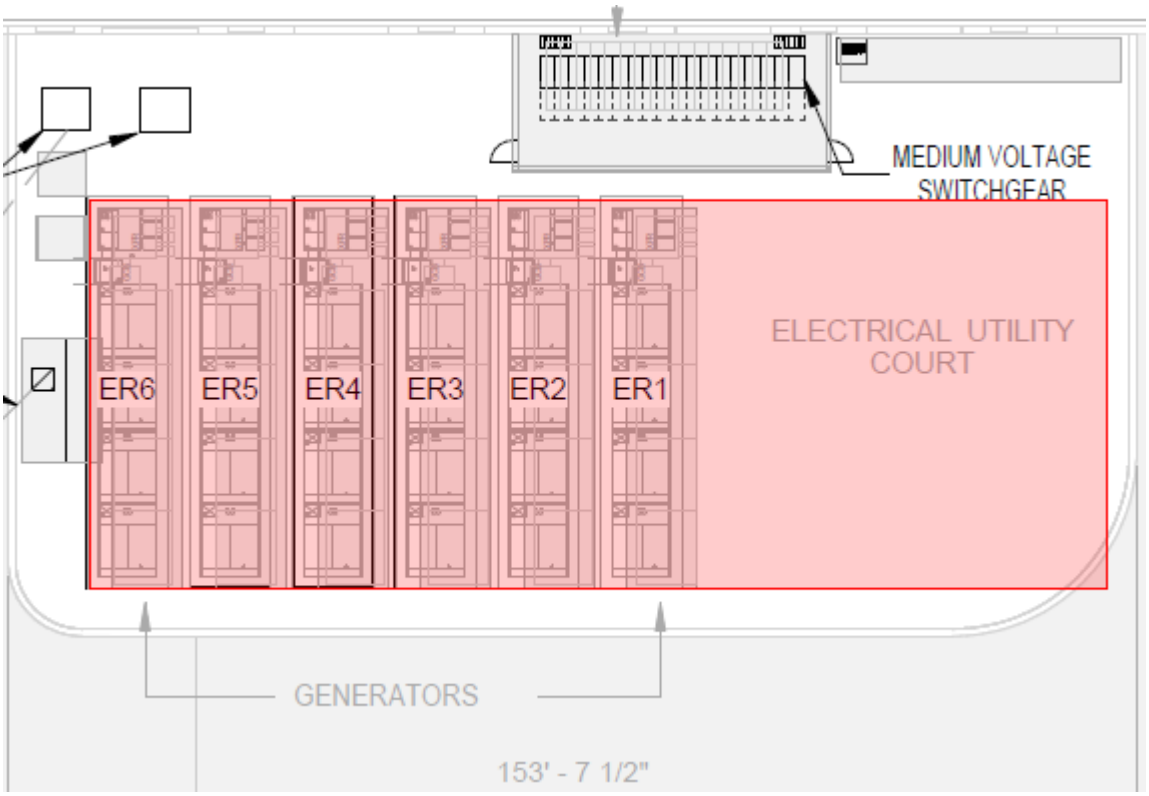
The PI-1S application must be submitted through ePermits. No additional copies need to be sent to the Regional Office or local Air Pollution Control Program(s). The link to ePermits can be found here: www3.tceq.texas.gov/steers/.

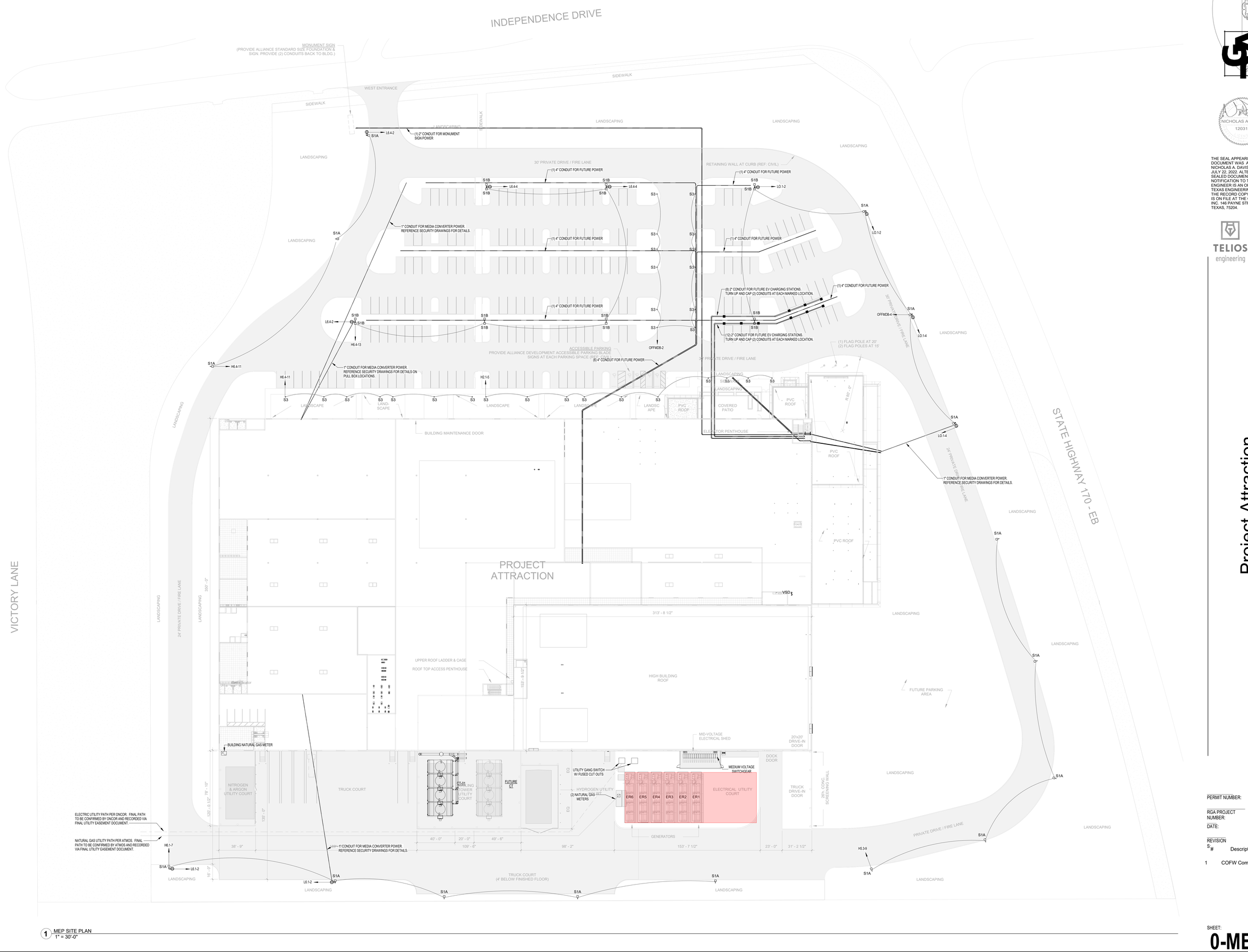
3. REGISTRATION FEE

In accordance with Title 30 of the Texas Administrative Code (30 TAC) Section (§) 116.614 and Air Quality Standard Permit for Electric Generating Units, a Standard Permit application fee of $900 has been submitted to the TCEQ electronically via ePay. In addition, MP Magnetics is requesting this registration be expedited. Per the TCEQ's Expedited Permitting Guidance, a non-refundable surcharge of $500 is required for a Standard Permit that does not require public notice. MP Magnetics submitted this expedited fee to the TCEQ electronically via ePay.

4. PLOT PLAN

The natural gas-fired electricity generating engines will be installed within the Electrical Utility Court as shown below. A more detailed plot plan is provided at the end of this section.





1 MEP SITE PLAN
1" = 30'-0"

7/22/2022 7:52:05 AM

RGA ARCHITECTS

NICHOLAS A. DAVIS 120311 07.22.22

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY NICHOLAS A. DAVIS, P.E. # 120311 ON JULY 22, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT. THE RECORD COPY OF THIS DRAWING IS ON FILE AT THE OFFICES OF TELIOS, INC. 146 PAYNE STREET, DALLAS, TEXAS, 75204.

TELIOS engineering
Telios Corporation
144 Payne Street
Dallas, TX 75207
214.744.6199
Texas Registration #F-6494

Project Attraction

13840 Independence Pkwy
Fort Worth, TX 76177

PERMIT NUMBER:

RGA PROJECT NUMBER: 21113

DATE: 07.22.22

REVISION

S. #	Description	Date
1	COFW Comments	06.14.22

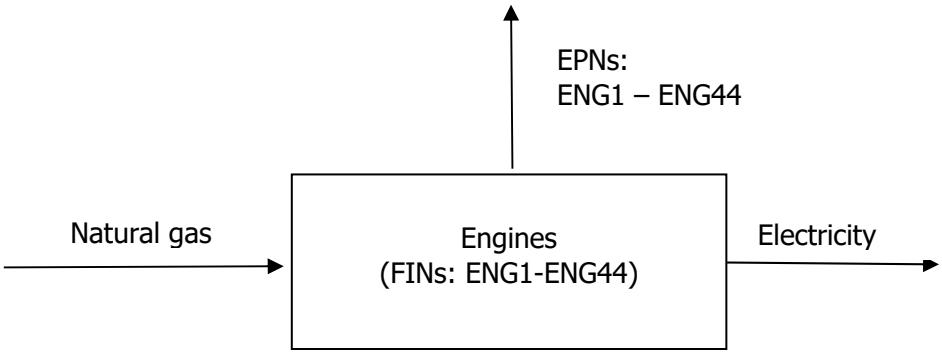
BIDDING AND COORDINATION - REV #2

SHEET:
0-MEP-01

5. PROCESS DESCRIPTION AND PROCESS FLOW DIAGRAM

MP Magnetics is proposing to install forty natural gas-fired electricity generating engines to produce back-up power for the site with a maximum normal operation time of 500 hours/year. In addition, four generators will be installed to be used for main power supply for six months until the electric supply line is available. These four engines will then be switched back to serve as back-up power for the site with an additional 500 hours of operation for the remaining six months of the year. All of the engines installed will be Power Solutions International (PSI) NGE 21.9L engines and will be fired on natural gas. Non-selective catalytic reduction (NSCR) will be employed to control NO_X emissions.

A process flow diagram is included below.



7. GENERAL STANDARD PERMIT REQUIREMENTS

This section provides a summary demonstration that the electric generating project at the Fort Worth Facility will meet all applicable requirements of 30 TAC §116.610 and §116.615.

7.1. 30 TAC §116.610. Applicability Effective April 17, 2014

(a) Under the Texas Clean Air Act, §382.051, a project that meets the requirements for a Standard Permit listed in this subchapter or issued by the commission is hereby entitled to the Standard Permit, provided the following conditions listed in this section are met. For the purposes of this subchapter, project means the construction or modification of a facility or a group of facilities submitted under the same registration.

(1) Any project which results in a net increase in emissions of air contaminants from the project other than carbon dioxide, water, nitrogen, ethane, hydrogen, oxygen, or greenhouse gases (GHGs) as defined in §101.1 of this title (relating to Definitions), or those for which a national ambient air quality standard has been established must meet the emission limitations of §106.261 of this title (relating to Facilities (Emission Limitations)), unless otherwise specified by a particular Standard Permit.

Per Air Quality Standard Permit for Electric Generating Units (Effective Date May 16, 2007) (3)(A), units that meet the conditions of the EGU Standard Permit do not have to meet 30 TAC § 116.610(a)(1), Applicability. Therefore, this requirement does not apply to the proposed project.

(2) Construction or operation of the project must be commenced prior to the effective date of a revision to this subchapter under which the project would no longer meet the requirements for a Standard Permit.

Construction and operation of the proposed engines will commence prior to the effective date of a revision to this subchapter so that the requirements for the Standard Permit are met.

(3) The proposed project must comply with the applicable provisions of the Federal Clean Air Act (FCAA), §111 (concerning New Source Performance Standards) as listed under Title 40 of the Code of Federal Regulations (40 CFR) Part 60, promulgated by the United States Environmental Protection Agency (U.S. EPA).

The MP Magnetics Fort Worth Facility Units are subject to NSPS Subpart JJJJ. MP Magnetics will comply with applicable requirements under New Source Performance Standard (NSPS) as promulgated under Title 40 of the Code of Federal Regulations (40 CFR) Part 60.

(4) The proposed project must comply with the applicable provisions of FCAA, §112 (concerning Hazardous Air Pollutants) as listed under 40 CFR Part 61, promulgated by the U.S. EPA.

The engines are not subject to any National Emission Standards for Hazardous Air Pollutants (NESHAP) codified in 40 CFR Part 61.

(5) The proposed project must comply with the applicable maximum achievable control technology standards as listed under 40 CFR Part 63, promulgated by the U.S. EPA under FCAA, §112 or as listed under Chapter 113, Subchapter C of this title (relating to National Emissions Standards for Hazardous Air Pollutants for Source Categories (FCAA §112, 40 CFR 63)).

The Fort Worth Facility engines are subject to Subpart ZZZZ and will comply with applicable requirements under Maximum Achievable Control Technology (MACT) Standards under 40 CFR Part 63.

(6) If subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program) the proposed facility, group of facilities, or account must obtain allocations to operate.

The Fort Worth Facility is in Tarrant County, which is not subject to 30 TAC Chapter 101, Subchapter H, Division 3. Therefore, this requirement does not apply.

(b) Any project that constitutes a new major stationary source or major modification as defined in §116.12 of this title (relating to Nonattainment and Prevention of Significant Deterioration Review Definitions) because of emissions of air contaminants other than greenhouse gases is subject to the requirements of §116.110 of this title (relating to Applicability) rather than this subchapter. Notwithstanding any provision in any specific Standard Permit to the contrary, any project that constitutes a new major stationary source or major modification which is subject to Subchapter B, Division 6 of this chapter (relating to Prevention of Significant Deterioration Review) due solely to emissions of greenhouse gases may use a Standard Permit under this chapter for air contaminants that are not greenhouse gases.

The engines do not constitute a new major stationary source or major modification as defined in §116.12. Therefore, this project is not subject to the requirements of 30 TAC §116.110.

(c) Persons may not circumvent by artificial limitations the requirements of §116.110 of this title.

Artificial limitations have not been used to circumvent the requirements of §116.110.

(d) Any project involving a proposed affected source (as defined in §116.15(1) of this title (relating to Section 112(g) Definitions)) shall comply with all applicable requirements under Subchapter E of this chapter (relating to Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources (FCAA, §112(g), 40 CFR Part 63)). Affected sources subject to Subchapter E of this chapter may use a Standard Permit under this subchapter only if the terms and conditions of the specific Standard Permit meet the requirements of Subchapter E of this chapter.

The Fort Worth Facility is not considered an affected source per Section 112(g). Therefore, the requirements of Subchapter E of 30 TAC 116 are not applicable to this project.

7.2. 30 TAC §116.615. General Conditions
Effective November 22, 2018

The following general conditions are applicable to holders of Standard Permits, but will not necessarily be specifically stated within the Standard Permit document.

(1) Protection of public health and welfare. The emissions from the facility, including dockside vessel emissions, must comply with all applicable rules and regulations of the commission adopted under Texas Health and Safety Code, Chapter 382, and with the intent of the Texas Clean Air Act (TCAA), including protection of health and property of the public.

This Standard Permit application documents that the proposed project will comply with the rules and regulations of the TCEQ and the intent of the TCAA, including protection of health and property of the public.

(2) Standard permit representations. All representations with regard to construction plans, operating procedures, pollution control methods, and maximum emission rates in any registration for a standard permit become conditions upon which the facility or changes thereto, must be constructed and operated. It is unlawful for any person to vary from such representations if the change will affect that person's right to claim a standard permit under this section. Any change in condition such that a person is no longer eligible to claim a standard permit under this section requires proper authorization under §116.110 of this title (relating to Applicability). Any changes in representations are subject to the following requirements:

(A) For the addition of a new facility, the owner or operator shall submit a new registration incorporating existing facilities with a fee, in accordance with §116.611 and §116.614 of this title, (relating to Registration to use a Standard Permit and Standard Permit Fees) prior to commencing construction. If the applicable standard permit requires public notice, construction of the new facility or facilities may not commence until the new registration has been issued by the executive director.

(B) For any change in the method of control of emissions, a change in the character of the emissions, or an increase in the discharge of the various emissions, the owner or operator shall submit written notification to the executive director describing the change(s), along with the designated fee, no later than 30 days after the change.

(C) For any other change to the representations, the owner or operator shall submit written notification to the executive director describing the change(s) no later than 30 days after the change.

(D) Any facility registered under a standard permit which contains conditions or procedures for addressing changes to the registered facility which differ from subparagraphs (A) - (C) of this paragraph shall comply with the applicable requirements of the standard permit in place of subparagraphs (A) - (C) of this paragraph.

MP Magnetics understands that Standard Permit representations become conditions upon which the facility must be operated. In the event of any changes to the representations in this application, MP Magnetics will submit a written notification and any associated fees to the TCEQ Executive Director within 30 days of the change as required by 30 TAC § 116.615(2).

(3) Standard permit in lieu of permit amendment. All changes authorized by standard permit to a facility previously permitted under §116.110 of this title shall be administratively incorporated into that facility's permit at such time as the permit is amended or renewed.

There is no previous permit under §116.110 with the MP Magnetics Facility at the time of the application; therefore, this requirement does not apply.

(4) Construction progress. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office not later than 15 working days after occurrence of the event, except where a different time period is specified for a particular standard permit.

MP Magnetics will notify TCEQ Region 4 of construction interruptions and completion within 15 days of the occurrence of the event as required by 30 TAC § 116.615(4).

(5) Start-up notification.

(A) The appropriate air program regional office of the commission and any other air pollution control agency having jurisdiction shall be notified prior to the commencement of operations of the facilities authorized by a standard permit in such a manner that a representative of the executive director may be present.

(B) For phased construction, which may involve a series of units commencing operations at different times, the owner or operator of the facility shall provide separate notification for the commencement of operations for each unit.

(C) Prior to beginning operations of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting, Remediation, and Registration, the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).

(D) A particular standard permit may modify start-up notification requirements.

MP Magnetics will provide start-up notification(s) to the TCEQ Region 4 Air Office and any other relevant air pollution control agency as required by 30 TAC § 116.615(5). MP Magnetics will identify the Office of Permitting, Remediation, and Registration prior to beginning operations at the facility.

(6) Sampling requirements. If sampling of stacks or process vents is required, the standard permit holder shall contact the commission's appropriate regional office and any other air pollution control agency having jurisdiction prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The standard permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant.

If stack sampling is required by the Executive Director, MP Magnetics will comply with these stack sampling requirements.

(7) Equivalency of methods. The standard permit holder shall demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the standard permit. Alternative methods must be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the standard permit.

MP Magnetics is not requesting any alternatives to emissions control methods, sampling or other emission testing methods, and monitoring methods indicated in the conditions of the Standard Permit. MP Magnetics understands that if changes are proposed, equivalency of methods will be required.

(8) Recordkeeping. A copy of the standard permit along with information and data sufficient to demonstrate applicability of and compliance with the standard permit shall be maintained in a file at the plant site and made available at the request of representatives of the executive director, the United States Environmental Protection Agency, or any air pollution control agency having jurisdiction. For facilities that normally operate unattended, this information shall be maintained at the nearest staffed location within Texas specified by the standard permit holder in the standard permit registration. This information must include, but is not limited to, production records and operating hours. Additional recordkeeping requirements may be specified in the conditions of the standard permit. Information and data sufficient to demonstrate applicability of and compliance with the standard permit must be retained for at least two years following the date that the information or data is obtained. The copy of the standard permit must be maintained as a permanent record.

MP Magnetics will maintain records as required by the Standard Permit and make them available to representatives of the executive director, the U.S. EPA, or any local pollution control program with jurisdiction.

(9) Maintenance of emission control. The facilities covered by the standard permit may not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. Notification for emissions events and scheduled maintenance shall be made in accordance with §101.201 and §101.211 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; and Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements).

MP Magnetics will maintain the air pollution capture and abatement equipment covered by this Standard Permit in good working order and will operate the air pollution capture and abatement equipment properly during normal facility operations. Notifications under 30 TAC §101.201 and §101.211 will be made, as appropriate.

(10) Compliance with rules. Registration of a standard permit by a standard permit applicant constitutes an acknowledgment and agreement that the holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the claiming of the standard permit. If more than one state or federal rule or regulation or permit condition are applicable, the most stringent limit or condition shall govern. Acceptance includes consent to the entrance of commission employees and designated representatives of any air pollution control agency having jurisdiction into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the standard permit.

MP Magnetics will comply will all rules, regulations, and orders of the commission.

(11) Distance limitations, setbacks, and buffer zones. Notwithstanding any requirement in any standard permit, if a standard permit for a facility requires a distance, setback, or buffer from other property or structures as a condition of the permit, the determination of whether the distance, setback, or buffer is satisfied shall be made on the basis of conditions existing at the earlier of:

(A) the date new construction, expansion, or modification of a facility begins; or

(B) the date any application or notice of intent is first filed with the commission to obtain approval for the construction or operation of the facility.

The Air Quality Standard Permit for Electric Generating Units does not require distance limits, setbacks, or buffer zones. Therefore, this condition does not apply.

8. SPECIFIC STANDARD PERMIT REQUIREMENTS

This section demonstrates that the engines at the Fort Worth Facility meet all requirements of the Air Quality Standard Permit for Electric Generating Units, effective May 16, 2007.

8.1 Air Quality Standard Permit for Electric Generating Units, Effective May 16, 2017

This standard permit authorizes electric generating units that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid, and that meet all of the conditions listed below.

(1) Applicability.

(A) This standard permit may be used to authorize electric generating units installed or modified after the effective date of this standard permit and that meet the requirements of this standard permit.

(B) This standard permit may not be used to authorize boilers. Boilers may be authorized under the Air Quality Standard Permit for Boilers; 30 TAC §106.183, Boilers, Heaters, and Other Combustion Devices; or a permit issued under the requirements of 30 TAC Chapter 116.

MP Magnetics proposes to install electric generating units in the Fort Worth Facility and the units meet the requirements of this standard permit.

(2) Definitions.

(A) East Texas Region - All counties traversed by or east of Interstate Highway 35 or Interstate Highway 37, including Bosque, Coryell, Hood, Parker, Somervell and Wise Counties.

(B) Installed - a generating unit is installed on the site when it begins generating electricity.

(C) West Texas Region - Includes all of the state not contained in the East Texas Region.

(D) Renewable fuel - fuel produced or derived from animal or plant products, byproducts or wastes, or other renewable biomass sources, excluding fossil fuels. Renewable fuels may include, but are not limited to, ethanol, biodiesel, and biogas fuels.

The Fort Worth Facility is in Tarrant County, which belongs to the East Texas Region.

(3) Administrative Requirements.

(A) Electric generating units shall be registered in accordance with 30 TAC § 116.611, Registration to Use a Standard Permit, using a current Form PI-1S. Units that meet the conditions of this standard permit do not have to meet 30 TAC § 116.610(a)(1), Applicability.

MP Magnetics is submitting a current Form PI-1S with this standard permit application.

(B) Registration applications shall comply with 30 TAC § 116.614, Standard Permit Fees, for any single unit or multiple units at a site with a total generating capacity of 1 megawatt (MW) or greater. The fee for units or multiple units with a total generating capacity of less than 1 MW at a site shall be $100.00. The fee shall be waived for units or multiple units with a total generating capacity of less than 1 MW at a site that have certified nitrogen oxides (NO_x) emissions that are less than 10 percent of the standards required by this standard permit.

The $900 standard permit registration fee was submitted to the TCEQ electronically via ePay.

(C) No owner or operator of an electric generating unit shall begin construction and/or operation without first obtaining written approval from the executive director.

MP Magnetics will not begin construction and/or operation without first obtaining written approval from the executive director.

(D) Records shall be maintained and provided upon request to the Texas Commission on Environmental Quality (TCEQ) for the following:

(i) Hours of operation of the unit;

(ii) Maintenance records, maintenance schedules, and/or testing reports for the unit to document re-certification of emission rates as required by subsection (4)(G) below; and

(iii) Records to document compliance with the fuel sulfur limits in subsection (4)(C).

MP Magnetics will maintain records to demonstrate compliance with representations associated with this Standard Permit registration. This includes keeping records of hours of operation of each unit, maintenance activities, and fuel sulfur limits.

(E) Electric generators powered by gas turbines must meet the applicable conditions, including testing and performance standards, of Title 40 Code of Federal Regulations (CFR) Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, and applicable requirements of 40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines.

The proposed project will not authorize gas turbines. Therefore, this citation does not apply.

(F) Compliance with this standard permit does not exempt the owner or operator from complying with any applicable requirements of 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, or 30 TAC Chapter 114, Control of Air Pollution from Motor Vehicles.

MP Magnetics will comply with all applicable conditions of 30 TAC Chapter 117. 30 TAC Chapter 114 does not apply to the proposed project.

(4) Administrative Requirements.

(A) Emissions of NO_x from the electric generating unit shall be certified by the manufacturer or by the owner or operator in pounds of pollutant per megawatt hour (lb/MWh). This certification must be displayed on the name plate of the unit or on a label attached to the unit. Test results from U.S. Environmental Protection Agency (EPA) reference methods, California Air Resources Board methods, or equivalent alternative testing methods approved by the executive director used to verify this certification shall be provided upon request to the TCEQ. The unit must operate on the same fuel(s) for which the unit was certified.

Emissions of NO_x will be certified by the manufacturer as stated in this provision. The certification will be displayed as instructed in this provision.

(B) Electric generating units that use combined heat and power (CHP) may take credit for the heat recovered from the exhaust of the combustion unit to meet the emission standards in subsections (4)(D), (4)(E), and (4)(F). Credit shall be at the rate of one MWh for each 3.4 million British Thermal Units of heat recovered. The following requirements must be met to take credit for CHP for units not sold and certified as an integrated package by the manufacturer:

(i) The owner or operator must provide as part of the application documentation of the heat recovered, electric output, efficiency of the generator alone, efficiency of the generator including CHP, and the use for the non-electric output, and

(ii) The heat recovered must equal at least 20 percent of the total energy output of the CHP unit.

The purposed engines will not use combined heat and power capabilities. Therefore, this requirement does not apply.

(C) Fuels combusted in these electric generating units are limited to:

(i) Natural gas containing no more than ten grains total sulfur per 100 dry standard cubic feet;

(ii) Landfill gas, digester gas, stranded oilfield gas, or gaseous renewable fuel containing no more than 30 grains total sulfur per 100 dry standard cubic feet; or

(iii) Liquid fuels (including liquid renewable fuel) not containing waste oils or solvents and containing less than 0.05 percent by weight sulfur.

The engines are fueled by pipeline quality natural gas. MP Magnetics will comply with fuel requirements of the Standard Permit.

(D) Except as provided in subsections (4)(F) and (4)(H), NO_x emissions for units 10 MW or less shall meet the following limitations based upon the date the unit is installed and the region in which it operates:

East Texas Region:

(i) Units installed prior to January 1, 2005 and

(a) operating more than 300 hours per year - 0.47 lb/MWh;

(b) operating 300 hours or less per year - 1.65 lb/MWh;

(ii) Units installed on or after January 1, 2005 and

(a) operating more than 300 hours per year, with a capacity greater than 250 kilowatts (kW) - 0.14 lb/MWh;

(b) operating 300 hours or less per year - 0.47 lb/MWh; or

(c) any unit with a capacity of 250 kW or less - 0.47 lb/MWh.

West Texas Region:

(i) Units operating more than 300 hours per year - 3.11 lb/MWh;

(ii) Units operating 300 hours or less per year - 21 lb/MWh. Units certified to comply with applicable Tier 1, 2, or 3 emission standards in 40 CFR Part 89, Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines, are deemed to satisfy this emission limit.

The Fort Worth Facility is in Tarrant County, which belongs to the East Texas Region. The units being authorized in the project will be installed after January 1, 2005 and will operate more than 300 hours per year with a capacity greater than 250 kW. The units in this application meet the requirements of NO_x *Emission limits.*

(E) Except as provided in subsections (4)(F) and (4)(H), NO_x emissions for units greater than 10 MW shall meet the following limitations:

(i) Units operating more than 300 hours per year - 0.14 lb/MWh;

(ii) Units operating 300 hours or less per year - 0.38 lb/MWh.

The proposed engines are less than 10 MW; therefore, this requirement does not apply.

(F) Electric generating units firing any gaseous or liquid fuel that is at least 75 percent landfill gas, digester gas, stranded oil field gas, or renewable fuel content by volume, shall meet a NO_x emission limit of 1.90 lb/MWh. Units in West Texas with a capacity of 10 MW or less that fire at least 75 percent landfill gas, digester gas, stranded oilfield gases, or gaseous or liquid renewable fuel by volume, must comply with the applicable West Texas NO_x limit in subsection (4)(D).

The proposed engines do not fire any gaseous or liquid fuel that is at least 75 percent landfill gas, digester gas, stranded oil field gas, or renewable fuel content by volume; therefore, this requirement does not apply.

(G) To ensure continuing compliance with the emissions limitations, the owner or operator shall re-certify a unit every 16,000 hours of operation, but no less frequently than every three years. Re-certification may be accomplished by following a maintenance schedule that the manufacturer certifies will ensure continued compliance with the required NOx standard or by third party testing of the unit using appropriate EPA reference methods, California Air Resources Board methods, or equivalent alternative testing methods approved by the executive director to demonstrate that the unit still meets the required emission standards. After re-certification, the unit must operate on the same fuel(s) for which the unit was re-certified.

MP Magnetics will comply with continuing compliance requirements.

(H) The NO_x emission limits in subsections (4)(D)-(4)(F) are subject to the following exceptions:

(i) The hourly NOx emission limits do not apply at times when the ambient air temperature at the location of the unit is less than 0 degrees Fahrenheit.

(ii) At times when a unit is operating at less than 80% of rated load, an alternative NO_x emission standard for that unit may be determined by multiplying the applicable emission standard in subsections (4)(D)-(4)(F) by the rated load of the EGU (in MW), to produce an allowable hourly mass NO_x emission rate. In order to use this alternative standard, an owner or operator must maintain records that demonstrate compliance with the alternative emission standard, and make such records available to the TCEQ or any local air pollution control agency with jurisdiction upon request.

MP Magnetics understands the NO_x emission limits (4)(D)-(4)(F) are subject to the above exceptions.

9. NNSR AND TITLE V NON-APPLICABILITY DOCUMENTATION

Tarrant County is currently designated as a serious nonattainment area for the 2008 8-hour ozone assessment, a marginal ozone nonattainment area under the 2015 8-hour ozone assessment, and an attainment or unclassified area for all other criteria pollutants.[2] The Fort Worth Facility is a minor source with respect to Prevention of Significant Deterioration (PSD), Nonattainment New Source Review (NNSR), and the federal operating permits (Title V) programs.

[2] The United States Environmental Protection Agency (U.S. EPA) Green Book. https://www3.epa.gov/airquality/greenbook/ancl.html#TX. Accessed July 2022.

APPENDIX A. EMISSION CALCULATIONS

Sitewide Emissions Summary

Proposed Hourly and Annual Emissions

FIN	EPN	Emission Source	VOC	NO_X	CO	PM	PM_{10}	$PM_{2.5}$	SO_2
			tpy	tpy	tpy	tpy	tpy	tpy	tpy
Permit By Rule Emissions									
EWIN	EWIN	Electrowinning	--	0.21	1.39	<0.01	<0.01	<0.01	0.69
CT-1	CT-1	Cooling Tower 1	--	--	--	0.87	0.43	<0.01	--
CT-2	CT-2	Cooling Tower 2	--	--	--	0.87	0.43	<0.01	--
TOTAL PBR EMISSIONS:			**--**	**0.21**	**1.39**	**1.74**	**0.87**	**<0.01**	**0.69**
Annual Emission Limits per 106.4 (a)(4) (tpy)			**25**	**250**	**250**	**25**	**15**	**10**	**25**
Annual Emissions < PBR Limits			**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Standard Permit Emissions									
ENG1-44	ENG1-44	Emergency Engines	20.56	1.81	59.65	1.92	1.92	1.92	1.52
Sitewide Emissions									
Sitewide Totals			20.56	2.02	61.03	3.66	2.79	1.92	2.21
NNSR Major Source Thresholds *			50	50	--	--	--	--	--
Is the site an existing NNSR Major Site? (Y/N)			NO	NO	--	--	--	--	--
PSD Major Source Thresholds			--	250	250	250	250	250	250
Is the site an existing major PSD Site? (Y/N)				NO	NO	NO	NO		NO

* Since the MP Materials Facility is located in the Dallas-Fort Worth Serious Ozone Nonattainment area, the Nonattainment New Source Review (NNSR) threshold is 50 tpy for NOx and VOC.

Emission Factors - Controlled per Engine

Reference	Fuel	Units	NOx	CO	SO_2	VOC	$PM/PM_{10}/PM_{2.5}$	Formaldehyde	HAPs
PSI 21.9L ER LTP	Natural Gas	g/bhp-hr [1]	0.043	2.00	--	0.70	--	--	--
		lb/MMBtu [2]	--	--	--	--	0.0194	0.0205	0.0290
Fuel Specifications		gr/scf	--	--	0.05	--	--	--	--

[1] Controlled emissions factors for NGE 21.9L Model Engine with NSCR Catalyst.
[2] AP-42 Section 3.2, Natural Gas-fired Reciprocating Engines, Table 3.2-3 (7/00)

Emission Factors - Uncontrolled per Engine [3]

Reference	Fuel	Units	NOx	CO	SO_2	VOC	$PM/PM_{10}/PM_{2.5}$	Formaldehyde	HAPs
AP-42	Natural Gas	lb/MMBTU	2.21	3.72	--	2.96E-02	--	--	--

[3] Startup emissions factors for CO, NO_X, and VOC are based on AP-42 Section 3.2, *Natural Gas-fired Reciprocating Engines*, Table 3.2-3 (7/00). All other emissions are the same as normal operation.

Startup Events per Engine

Parameter	Interval	Event Duration (mins) [4]	Emissions Factor per Event (lb/event) [5]		
			CO	NO_X	VOC
Startup Event, T-5	T0 - T5	5	1.65	0.98	0.01
Normal Operation (Stable SNCR to Shutdown)	T5 - T60	55	2.64	0.06	0.92
Maximum Hourly MSS Emissions	**T0-T60**	60	4.29	1.04	0.93

[4] The duration of startup provided by Ms. Kelly Trent (MP Materials) to Ms. Christine Chambers (Trinity Consultants) July 26, 2022. The time for the startup event represents the maximum time to reach full temperature.
[5] The emissions factor per event is calculated based on the sum of the emissions factor for startup and normal operations during the hour:

Maximum CO Emissions During Startup = 1.65 lb/event
Duration from T0 - T5 = 5 min
CO Emissions During T0 - T5 = $\frac{3.72 \text{ lb}}{\text{MMBtu}} \mid \frac{5.31 \text{ MMBtu}}{\text{hr}} \mid \frac{5 \text{ min}}{60 \text{ min}}$ = 1.65 lb/event

Maximum CO Emissions During Normal Operation = 2.64 lb/event
Duration from T0 - T5 = 55 min
CO Emissions During T0 - T5 = $\frac{2.00 \text{ g}}{\text{hp-hr}} \mid \frac{652 \text{ hp}}{} \mid \frac{0.0022 \text{ lb}}{\text{g}} \mid \frac{55 \text{ min}}{60 \text{ min}}$ = 2.64 lb/event

Potential Emissions

Engine	Number of Units	Power (hp)	Fuel Usage (scfh)	Operation Mode [6]	Operating Hours (hr/yr)	Hourly Emissions per Unit (lb/hr) [7]							Annual Emissions per Unit (tpy) [8]						
						NO_x	CO	SO_2	VOC	$PM/PM_{10}/PM_{2.5}$	Formaldehyde	HAPs	NO_x	CO	SO_2	VOC	$PM/PM_{10}/PM_{2.5}$	Formaldehyde	HAPs
PSI 21.9L ER LTP	40	652	5,204	Normal	500	0.06	2.87	0.074	1.01	0.09	0.099	0.140	0.02	0.72	0.02	0.25	0.02	0.03	0.04
				Startup	25	1.04	4.29		0.93				0.01	0.05		0.01			
PSI 21.9L ER LTP	4	652	5,204	Normal	4,964	0.06	2.87	0.074	1.01	0.09	0.099	0.140	0.15	7.14	0.19	2.50	0.23	0.25	0.35
				Startup	25	1.04	4.29		0.93				0.01	0.05		0.01			
				Total Emissions		**48.48**	**315.25**	**3.27**	**85.19**	**4.12**	**4.35**	**6.16**	**1.81**	**59.65**	**1.52**	**20.56**	**1.92**	**2.03**	**2.86**

[6] MP Materials is proposing to operate 4 units 24-hrs per day for 6 months with an additional 500 hours of operation for the remaining 6-months. In additon, another 40 units are proposed to operate at 500 hours per year. The emissions represent the maximum possible emissions for all units in a year.
MP Materials estimates a maximum of 300 start ups per year.
[7] Hourly Emissions Examples:

NOx, CO, and VOC
Hourly Emissions Normal Operations (lb/hr) = (Engine Rating [hp]) * (Emission Factor [g/bhp-hr]) * (0.00220 lb/gram)

Hourly CO Normal Operation Emissions (lb/hr) = $\frac{652 \text{ hp}}{} \mid \frac{2.00 \text{ g}}{\text{bhp-hr}} \mid \frac{0.0022 \text{ lb}}{\text{gram}}$ = 2.87 lb/hr

Hourly Emissions Startup Operation (lb/hr) = Maximum Hourly MSS Emissions From T0 - T60
Hourly CO Startup Operation Emissions (lb/hr) = 4.29 lb/hr

$PM/PM_{10}/PM_{2.5}$, Formaldehyde, and HAPs
Hourly Emissions (lb/hr) = (Fuel Usage [scfh]) * (Emission Factor [lb/MMBtu]) * (Heating Value of Fuel [Btu/scf]) * 1 MMBtu/10^6 Btu
Heating value of fuel is 927 Btu /scf per engine specifications

Hourly PM Emission Rate (lb/hr) = $\frac{5,204 \text{ scfh}}{} \mid \frac{0.0194 \text{ lb}}{\text{MMBtu}} \mid \frac{927 \text{ Btu}}{\text{scf}} \mid \frac{1 \text{ MMBtu}}{10^6 \text{ Btu}}$ = 0.09 lb/hr

SO_2
Hourly Emissions (lb/hr) = (Fuel Usage [scfh]) * (Fuel Specification [gr/scf]) * (Molar Conversion [MW SO_2/MW S]) * (1 lb/7,000 gr)

Hourly SO_2 Emission Rate (lb/hr) = $\frac{5,204 \text{ scfh}}{} \mid \frac{0.05 \text{ gr}}{\text{scf}} \mid \frac{64.066}{32.065} \mid \frac{1 \text{ lb}}{7000 \text{ gr}}$ = 0.074 lb/hr

[8] Annual Emissions (tpy) = (Hourly Emissions per Unit [lb/hr]) * (Operating Hours [hr]) * (ton/2,000 lbs)

Compliance with NOx Limit in Air Quality Standard Permit for Electric Generating Units, Section (4)(D)(ii)(a)

Generator Output (kW)	NOx Emission Factor (g/bhp-hr)	Calculated NOx Emission Factor (lb/MWh)[9]	Limit from Referenced Air Quality Standard Permit (lb/MWh)	Less than Required Limit?
448	0.043	0.138	0.14	Yes

[9]Calculated NOx Emission Factor (lb/MWh)=(Engine Rating [hp]) * (Emission Factor [g/bhp-hr]) * (0.00220 lb/gram) / (Generator Output [kW]) * (1000 kW/MW)

APPENDIX B. ENGINE DATA (CONFIDENTIAL)

TCEQ Table 29
Engine Specification Sheet