Green Metals, Inc. (GMI) – OSP-1, Scrap Center MTMUS Campus, Huntsville, Limestone County, Alabama Facility Permit No. 7-08-P422-Z001 Initial Issuance

DESCRIPTION OF PERMITTING ACTION

In August 2022, the City of Huntsville Department of Natural Resources and Environmental Management (DNREM) received an application for initial issuance of a Title V Major Source Operating Permit (MSOP) for the Green Metals, Inc., (GMI) scrap center located at 9000 Greenbrier Parkway NW #65, Huntsville, Limestone County, AL 35756. The facility is an on-site support facility (On-Site Partner or OSP) located on the Mazda Toyota Manufacturing U.S.A., Inc., (MTMUS) automotive manufacturing campus ("MTMUS Campus" or "Campus") approximately four (4) miles west of the Huntsville, Alabama, airport. The Campus is generally bounded on the east by Powell Road and fields (near the intersection of the railroad tracks and Old US Hwy 20), the north by fields (near the intersection of Powell Road), the west by fields (near the intersection of Limestone Creek), and on the south by Old US Highway 20.

BACKGROUND

GMI constructed, owns, and operates the scrap center on the MTMUS Campus and manages and collects waste and recyclable materials from various facilities on the Campus. The facility operates under SIC 5093 (Scrap and Waste Materials) and NAICS Code 423930 (Recyclable Material Merchant Wholesalers). GMI does not have any process operations that generate emissions of regulated air pollutants; however, the building is equipped with natural gas-fired HVAC units, and the PTE regulated pollutants from the HVAC units is included in the Campus-wide PTE.

All activities conducted on the MTMUS Campus support the manufacturing of automobiles only on the MTMUS Campus and are located on property under the common control of MTMUS. Therefore, DNREM considers the MTMUS Campus as a whole a single source of air pollution for purposes of Prevention of Significant Deterioration (PSD) of Air Quality applicability determinations and any required Best Available Control Technology (BACT) analyses or Air Quality Impact Analyses (AQIAs) performed.

GMI PERMITTING HISTORY

The original permitting effort for the entire MTMUS Campus in 2018 resulted in one (1) PSD Permit being issued by DNREM to MTMUS for the Scrap Center in December of 2018. At the time of initial PSD permitting, the entity that would ultimately construct, own, and operate the Scrap Center had not yet been determined.

As previously stated, for regulatory applicability purposes, the main assembly plant and all on-site support facilities are under the common control of MTMUS and are considered one major stationary emission source for the purposes of PSD applicability and any required BACT analyses or AQIAs performed. In the initial permitting process, the MTMUS Campus was deemed a major

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source under PSD since the potential to emit (PTE) volatile organic compounds (VOCs) was greater than 250 tons per year (TPY). Particulate matter (PM), carbon monoxide (CO), and nitrogen oxides (NO_x) potential emissions were also estimated to exceed the 10 TPY (for PM_{2.5}), 100 TPY, and 40 TPY de minimis levels, respectively. BACT was required to be installed and/or implemented on all significant sources of VOC, PM, CO, NO_x, and greenhouse gases (GHGs) in accordance with the City of Huntsville Air Pollution Control Rules and Regulations (COH APC RAR) Section 3.5.4. Therefore, all significant sources of these pollutants underwent BACT analyses, and limitations and good work practices were incorporated into the permits issued to the various facilities on the MTMUS Campus as applicable.

In accordance with COH APC RAR Sections 3.5.5 through 3.5.9., an AQIA was performed and submitted with the initial application for construction of the Campus, and the impact of the Campus potential emissions on air quality, visibility, soils, and vegetation was assessed. The predicted ambient impacts of the source were projected to be in the immediate area of the source and were relatively minor, so no discernible impacts were expected. As the Campus was to be located less than 100 km (at 58.6 km) from the nearest Class I area (Sipsey Wilderness in northwest Alabama), the facility was also evaluated to determine if it would adversely affect visibility in this area in accordance with COH APC RAR Section 3.5.10. Reports from the Federal Land Manager (FLM) indicated there was no need for further evaluation.

Since the original permitting effort in December of 2018 and during initial construction of the Campus, the MTMUS Campus underwent two revision requests to update equipment and equipment specifications as the Campus design developed, an administrative amendment to implement a new permit numbering for the on-site support facilities (On-Site Partners or OSPs) and identification system, and permit reissuance to the entities chosen to operate the OSPs.

MTMUS Campus Revision Request #1 (MTMUS-RR-1, November 2019):

- HVAC burners at GMI underwent reevaluation of NO_x BACT limitations.
- The number of HVAC units and respective burner ratings were updated for the GMI facility.

MTMUS Campus Administrative Amendments (MTMUS-AA-1, March 2020):

The on-site support facilities on the MTMUS Campus were originally referred to as On-Site Suppliers (OSSs). MTMUS elected to change reference to these facilities to On-Site Partners (OSPs). In addition, DNREM elected to restructure the permit numbering system for the OSPs to better group together the permits associated with each individual entity. These changes were accomplished under MTMUS-AA-1 for the OSP permits that were not undergoing revisions associated with the Campus revision request that follows, and this was the case for the Scrap Center, which is also referred to as OSP-1.

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Name Change from MTMUS to Each OSP (August & September 2020)

Once the owner of the OSP facilities were selected to construct and operate the support facilities on the Campus, applications by these entities were made for a change in ownership, and the permits were reissued in the entities' names. Application was made by GMI, and the PSD permit was reissued to "Green Metals, Inc. (GMI) – OSP-1."

As-Built Permitting Effort (MTMUS-CC-AB, August 2024):

GMI did not submit any permit applications for as-built facility conditions, or any modifications to equipment or operations. However, while DNREM was compiling information from various other facilities on the MTMUS Campus to complete the MTMUS-CC-AB permitting effort, a review was conducted of the GMI HVAC equipment to ensure the as-built HVAC burner ratings and number of units were accurately being accounted for in the PTE estimates.

DNREM also initiated review of the PSD permit associated with GMI's HVAC units (7-08-P391-Z101) and proposed removal of provisions that did not apply to the GMI facility as constructed. This consisted of removing language related to applicability of PSD-BACT limitations and National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Industrial, Commercial, and Institutional Boilers and Process Heaters (Subpart DDDDD). No modifications to the facility's permitted operations or production capacity were proposed.

FEDERAL APPLICABLE REGULATIONS

<u>Title V</u>: All activities conducted on the MTMUS Campus support the manufacturing of automobiles only on the MTMUS Campus and are located on property under the common control of MTMUS. The MTMUS Campus as a whole is considered to be a single source of air pollution for the purposes of Title V. However, GMI independently does not have PTEs that would classify the facility as major for Title V and would on its own be considered a true minor source.

<u>Prevention of Significant Deterioration (PSD) of Air Quality</u>: All activities conducted on the MTMUS Campus support the manufacturing of automobiles only on the MTMUS Campus and are located on property under the common control of MTMUS. The MTMUS Campus as a whole is considered to be a single source of air pollution for purposes of Prevention of Significant Deterioration (PSD) of Air Quality applicability determinations and any required Best Available Control Technology (BACT) analyses or Air Quality Impact Analyses (AQIAs) performed. GMI independently does not have a PTE which would classify the facility as major for PSD and would on its own be considered a true minor source.

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<u>Best Available Control Technology</u>: A heat input threshold of 1.5 MMBtu/hr per unit has been set for the Campus HVAC units, establishing that HVAC units with burner ratings less than or equal to 1.5 MMBtu/hr are considered "residential-sized." Based on related references regarding AP-42 emission factors in Table 1.4-1, it has been established that BACT does not apply to small, residential-sized HVAC units. Therefore, the HVAC units at the GMI facility are considered residential-sized units. As the HVAC units are the only stationary sources of air pollution at GMI, the facility has no applicable BACT limitations.

New Source Performance Standards (NSPS): The facility is not subject to any NSPSs.

<u>National Emissions Standards for Hazardous Air Pollutants (NESHAP)</u>: The facility is not subject to any NESHAPs.

DNREM APPLICABLE REGULATIONS

Visible Emissions (COH APC RAR, Chapter 6.1): The HVAC burners are subject to visible emission (VE) limitations.

Particulate Emissions (COH APC RAR, Chapter 6.4): The HVAC burners are subject to the fuel burning equipment particulate matter (PM) emission limitations in Section 6.3.1.

WORK PRACTICES

GMI is limited to the use of natural gas as a fuel in the HVAC equipment and is required to utilize good work practices to reasonably minimize emissions of NOx and other pollutants from the HVAC equipment. Periodic maintenance of each HVAC burner is required as recommended by the manufacturer, at a minimum.

MONITORING REQUIREMENTS

GMI is required to observe each HVAC burner during operation at least once monthly for greater than normal visible emissions as determined from previous observations. Corrective actions are required upon observation of any visible emissions that are greater than normal.

REPORTING

As a source applicable to Title V, GMI has been required since starting operations to prepare and submit annual compliance certifications to both DNREM and EPA Region 4 and semi-annual

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monitoring reports to DNREM detailing actual emissions, fuel usage, and compliance status with all permit requirements. GMI is in compliance with this requirement, and this requirement is present in the proposed initial MSOP for GMI.

RECORDKEEPING

Under the proposed MSOP, GMI will be required to keep all records required by the MSOP for no less than five (5) years.

GMI is required to keep records of fuel usage, emission calculations, and a logbook of monthly visible emissions observations. GMI is in compliance with these requirements.

PUBLIC NOTICE

The issuance of GMI's Title V MSOP requires a thirty-(30)-day public comment period and a forty-five-(45)-day EPA review period (tandem comment period and EPA review period requested).

RECOMMENDATION

This Statement of Basis indicates that GMI will meet the requirements of all federal and City of Huntsville Rules and Regulations, as described. Therefore, I recommend that the Title V MSOP be issued to GMI pending resolution of any comments received during the public comment and EPA review periods described above.

Darlene Elliott, P.E., Director Department of Natural Resources and Environmental Management City of Huntsville