STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

IN THE MATTER OF:

MAGPRO, LLC,

RESPONDENT.

DIVISION OF AIR POLLUTION CONTROL CASE NO. APC21-0061

APC22-0009

SETTLEMENT AGREEMENT AND ORDER

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On January 27, 2022, the Department of Environment and Conservation ("Department") Division of Air Pollution Control ("Division") issued Technical Secretary's Order and Assessment of Civil Penalty APC21-0061 to MagPro, LLC ("Respondent"). Respondent filed a timely appeal of APC21-0061 on March 4, 2022. On April 4, 2022, while negotiating a settlement for APC21-0061, the Department issued Technical Secretary's Order and Assessment of Civil Penalty APC22-0009 to Respondent. The Respondent timely appealed APC22-0009 and proposed a joint settlement for both APC21-0061 and APC22-0009 (together, the "Appealed Orders"). Pursuant to sections 4-5-105 and 68-201-108 of the Tennessee Code Annotated, the Department and Respondent have reached a settlement. By executing this Settlement Agreement and Order: (1) the Department agrees to dismiss APC21-0061 and APC22-0009 and that this Settlement Agreement and Order fully resolves and supersedes the matters set forth in the Appealed Orders and fully addresses and resolves all matters identified by Division personnel with respect to the investigations and notices of violation described more particularly in Paragraphs IX, X, XI, and XII below, and (2) Respondent agrees that it waives its right to a contested case hearing before the Tennessee Air Pollution Control Board ("Board") and withdraws its appeals of the Appealed Orders as settled. The Department alleges as follows:

PARTIES

I.

Michelle Walker Owenby is the Technical Secretary of the Board and Director of the Division.

II.

Respondent is a domestic limited liability company authorized to do business in the State of Tennessee. Respondent's facility address is 245 Foundery Lane, Camden, Tennessee 38320-1884. Respondent's registered agent for service of process is John Haack at the same address.

AUTHORITY

III.

The Technical Secretary may assess a civil penalty of up to \$25,000.00 per day for each day of violation of the Tennessee Air Quality Act, Tenn. Code Ann. §§ 68-201-101 to -121 ("Act"), or Tennessee Air Pollution Control Regulations, Tenn. Comp. R. & Regs. 1200-03-01 to -36; 0400-30-01 to -39, ("Rules"). Tenn. Code Ann. § 68-201-116. The Technical Secretary may issue an order for correction to the responsible person when provisions of the Act or Rules are violated, and such person may be liable for resulting damages to the State. *Id*.

IV.

Respondent is a "person," Tenn. Code Ann. § 68-201-102(7), and has violated the Act and Rules.

V.

"Air contaminant" means particulate matter, dust, fumes, gas, mist, smoke, vapor, or any combinations thereof. Tenn. Code Ann. § 68-201-102(1).

VI.

"Air contaminant source" means any and all sources of emission of air contaminants, whether privately or publicly owned or operated. Tenn. Code Ann. § 68-201-102(2). Respondent operates an air contaminant source.

ALLEGED FACTS

VII.

On May 4, 2011, the Technical Secretary issued operating permit number 062800P, (facility 03-0055), to Respondent for a secondary magnesium smelting operation. On August 2, 2011, the Technical Secretary amended operating permit number 062800P ("Permit 062800P").

Condition 11 of Permit 062800P states:

Visible emissions from the scrubber exhaust stack shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1). Based on a letter of conditional approval of an alternative monitoring plan from EPA Region IV to TN APC dated September 14, 2009 and the mutual agreement letter from the permittee dated November 3, 2009.

IX.

On March 26, 2021, Division personnel conducted a complaint response investigation at Respondent's facility and conducted a Method 9 Visible Emission Evaluation (VEE) on the wet scrubber stack. Based on this VEE, the second-highest six-minute average was 17.50% which is an exceedance of the 10% permitted opacity limitation established by condition 11 of Permit 062800P. Respondent disputes the validity of this VEE result.

X.

On May 10, 2021, the Division issued a Notice of Violation (NOV) to Respondent for failing to comply with condition 11 of operating permit number 062800P. The NOV required Respondent to submit a Proposed Schedule of Corrective Action (APC 115) within 14 days to ensure that the wet scrubber would operate properly and that opacity limits would be kept at or below the 10% opacity limitation. On May 25, 2021, the Division received an APC 115 from Respondent.

XI.

On December 2, 2021, Division personnel conducted a complaint response investigation at Respondent's facility and conducted a Method 9 Visible Emission Evaluation (VEE) on the wet scrubber stack. Based on this VEE, the second-highest six-minute average was 22.71%, which is an exceedance of the 10% permitted opacity limitation established by condition 11 of Permit 062800P. Respondent disputes the validity of this VEE result.

XII.

On December 28, 2021, the Division issued a Notice of Violation (NOV) to Respondent for failing to comply with condition 11 of Permit 062800P. The NOV required Respondent to submit a new APC 115 within 14 days to ensure that the wet scrubber would operate properly and that opacity limits would be kept at or below the 10% opacity limitation.

XIII.

On January 12, 2022, Respondent requested via e-mail an extension for submitting the APC 115. The Division granted the request and gave Respondent until January 27, 2022. On January 27, 2022, the Division received Respondent's APC 115.

ALLEGED VIOLATIONS

XIV.

By failing to comply with condition 11 of Permit 062800P, the Department alleges Respondent violated Division Rule 1200-03-09-.02(6), which states, in pertinent part:

Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in the operating permit, all provisions of these regulations, and all provisions of the Tennessee Air Quality Act.

SETTLEMENT AGREEMENT AND ORDER

XV.

Pursuant to section 68-201-116 of the Tennessee Code Annotated, the Technical Secretary orders and Respondent agrees to the following:

- Respondent has submitted a new APC 115 to the Division (attached) to address Respondent's compliance with the 10% opacity limitation established by condition 11 of Permit 062800P, and the Division finds it acceptable.
- Respondent is assessed a civil penalty of \$32,000.00 for the alleged violation of Division Rules. This amount shall be paid as follows:
 - a. Respondent shall pay \$10,000.00 in civil penalties on or before the thirty-first day after the execution of this settlement.
 - b. If there are no additional violations of Condition 11 of Permit 062800P for one year after the execution of this Settlement Agreement and Order, then the remaining

\$22,000.00 of the assessed civil penalty shall be waived, and Respondent shall have no further obligations under this Settlement Agreement and Order. If Respondent has a new violation of Condition 11 of Permit 062800P during the one-year period after the execution of this Settlement Agreement and Order, Respondent shall pay the remaining \$22,000.00 of the civil penalty in full to the Department within 31 days after Respondent's receipt of written notice from the Division of the noncompliance; provided that the Respondent and Division first arrange and conduct an in-person or virtual meeting regarding the violation of Condition 11 of Permit 062800P. During this meeting, the Division will explain to Respondent the nature of the violation, as well as the specific methodology taken by the Division to determine the presence of a violation. If Respondent disputes the Division's findings, the Division will secure the services of a licensed mediator to hear the dispute and facilitate a settlement. If the Respondent and Division are unable to reach an agreement via mediation, the Respondent may file a Petition for Declaratory Order with the Board to resolve the dispute.

All payments shall be made to the following address:

Division of Fiscal Services - Consolidated Fees Section Tennessee Department of Environment and Conservation William R. Snodgrass Tennessee Tower, 10th Floor 312 Rosa L. Parks Avenue Nashville, Tennessee 37243

DEPARTMENT'S RESERVATION OF RIGHTS

In agreeing to this Settlement Agreement and Order, the Department does not implicitly or expressly waive any provision of the Act or the regulations promulgated thereunder or the authority to assess costs, civil penalties, and/or damages incurred by the State against the Respondent. The Department expressly reserves all rights it has at law and in equity to order further corrective action, assess civil penalties and/or damages, and to pursue further enforcement action including, but not limited to, monetary and injunctive relief.

RESPONDENT'S RESERVATION OF RIGHTS

The Respondent does not admit or deny the factual allegations or the alleged violations of law contained in this Settlement Agreement and Order. This Settlement Agreement and Order shall not be deemed an admission of any fault or waiver of rights by the Respondent. The Respondent reserves its rights to contest the factual allegations and alleged violations contained in this Settlement Agreement and Order in any proceeding other than a proceeding brought by the Department to enforce the terms of this Settlement Agreement and Order.

Executed by the Technical Secretary of the Board on this <u>23rd</u> day of September

2022. Respondent MagPro, LLC

Michelle Walker Owenby Technical Secretary Tennessee Air Pollution Control Board

Reviewed by:

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John W. Dawson IV Bass, Berry & Sims, PLC 150 3rd Avenue South, Suite 2800 Nashville, Tennessee 37201 (615) 742-7796 jdawson@bassberry.com

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Grant LeMaster Ruhl Department of Environment and Conservation 312 Rosa L. Parks Avenue, 2nd Floor Nashville, Tennessee 37243 (615) 313-5682 Grant.Ruhl@tn.gov

ATTACHMENT



PROPOSED SCHEDULE OF CORRECTIVE ACTION

Type or print.					
DIRECTIONS					
Return one copy of completed form for each source named in the Transmittal Letter to the address above. Complete all pages of this form. Sign and date.					
The following statement of corrective action is submitted to describe action which will be taken to resolve non- compliance with the Tennessee Air Pollution Control Regulations and/or a permit(s) issued by the Tennessee Air Pollution Control Board. This includes actions taken to control emissions that are not in compliance with the regulations or to comply with other applicable requirements of the Tennessee Air Pollution Control Regulations. The Technical Secretary of the Tennessee Air Pollution Control Board will examine this schedule in determining what enforcement action may be necessary in regard to such non-compliance.					
SITE	AND CONTA	CT INFORMA	ΓΙΟΝ		
1. Organization's legal name and SOS control number [as registered with the TN Secretary of State (SOS)] MagPro, LLC 000475937					
2. Site name (if different from legal name)					
3. Site address (St./Rd./Hwy.) 245 Foundry Lane					
City or distance to nearest town Camden			Zip code 38320		
4. Responsible person/Authorized contact John Haack			Phone number with area code (731) 584-3121		
Mailing address (St./Rd./Hwy.) 245 Foundry Lane			Fax number with area code		
City	State	Zip code	Email address		
Camden	TN	38320	john@magprollc.com		
EMISSION SOURCE INFORMATION					
5. Emission Source Reference Number	(if applicable)				
6. Nature of business Secondary Magnesium Smelting					
7. Brief description and details of operation and emissions: Plant operates one natural gas fired rotary furnace and one magnesium holding pot. Both emission units are vented to a Wet Scrubber for emission control.					

APC 115

CORRECTIVE ACTION

8. Methods: For emission violations, describe the emissions and proposed method of control. Include the efficiency of each piece of control equipment to be used. For other violations propose the method by which you will return to compliance. The description should be sufficient to enable the Division to evaluate the situation.

The emissions generated by the furnace operations primarily consist of particulate matter and acid gasses (HCl). The scrubber is operated within certain parametric conditions, which include a minimum flow rate and a minimum pH of the scrubber fluid. The scrubber contains a venturi and a finishing scrubber (Calwir). Moisture in the stack exhaust gases can condense creating a water vapor plume, depending on ambient conditions. Exhaust gases may also contain very fine hygroscopic particles which combine with condensed water droplets, which can result in enhanced opacity.

In addition, MagPro has determined that opacity is directly related to ammonia content of the scrubber process water. The ammonia is volatilized from the scrubber water during the scrubbing process, combines with HCl in the process gasses, and can create very small ammonium chloride particulate. This particulate acts as seed material for vapor condensation, and can create a steam plume that is significantly exaggerated and discolored. Ammonia can be generated when lime or feed materials contain precursor compounds (specifically, magnesium nitride).

9. Status: Describe what action you have already taken, if any, to correct this situation.

In 2021, an afterburner was installed in the stack. When the burner is operating, the water vapor evaporates prior to the stack exit, resulting in more accurate VEE method 9 readings of particulates not combined with condensed water droplets. MagPro operates the afterburner as needed.

In addition, the magnesium nitride on feed materials can be removed by brushing the feed materials prior to charging into the furnace, and MagPro has implemented such a procedure.

MagPro now also monitors the scrubber water for the presence of ammonia and has found that brushing process has brought the ammonia to barely detectable levels. MagPro also continues to monitor ammonia levels in incoming lime material, and in the scrubber water, to ensure that ammonia does not impact plume opacity.

The measures have resolved the opacity issues.

COMPLIANCE SCHEDULE

10. Note: This schedule will only be considered for approval if the information requested in this section is supplied.

Scheduled events	Final Date (Month and Year)
Letting of Contracts	N/A
Initiation of Construction	N/A
Completion and Start-up	N/A
Performance Tests	N/A
Submittal of Test Analysis and results	N/A

11. Comments The measures described above to resolve opacity issues further demonstrate that the majority of the observed opacity in the past was water vapor condensed on very fine particulate matter. MagPro will continue to work with the Division to explore the best manner for determining compliance with particulate emission requirements.

SIGNATURE				
Based upon information and belief formed after a reasonable inquiry, I, as the responsible person of the above mentioned facility, certify that the information contained in this application is accurate and true to the best of my knowledge. As specified in TCA Section 39-16-702(a)(4), this declaration is made under penalty of perjury.				
12. Signature (application must be signed before it will be processed)		Date 9/6/22		
Signer's name (type or print) John Haack	Title President	Phone number with area code (731) 584-3121		
FOR APC USE ONLY				
Reviewer:				
Emission Source Reference Number:				
Proposed Method, Equipment and Compliance Schedule Acceptable				
Date:				
Proposed Compliance Schedule NOT ACCEPTABLE				
Recommended Schedule:				
Proposed Method and Equipment NOT ACCEPTABLE				