

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

March 22, 2010

LaDonna Castañuela, Chief Clerk  
Texas Commission on Environmental Quality  
P.O. Box 13087, MC 105  
Austin, Texas 78711-3087

Re: TPCO America Corporation; State Air Quality Permit No. 86860 and Prevention of  
Significant Deterioration Air Quality Permit No. PSDTX1188  
TCEQ Docket No. 2010-0280-AIR

Dear Ms. Castañuela:

Enclosed please find a copy of the following documents for inclusion in the background material for this permit application:

- Final Draft Permit, including any special provisions or conditions
- The summary of the technical review of the permit application
- The compliance summary of the applicant

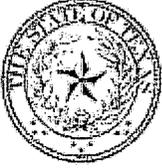
If you have any questions, please do not hesitate to call me at extension 0946.

Sincerely,

A handwritten signature in black ink, appearing to read "Tommy Tucker Henson II".

Tommy Tucker Henson II  
Staff Attorney  
Environmental Law Division

Enclosure



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AIR QUALITY PERMIT



*A PERMIT IS HEREBY ISSUED TO*  
**TPCO America Corporation**  
*AUTHORIZING THE CONSTRUCTION AND OPERATION OF*  
**Pipe Manufacturing Steel Minimill**  
*LOCATED AT* Gregory, San Patricio County, Texas  
*LATITUDE 27° 55' 04" LONGITUDE 097° 16' 08"*

1. Facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting 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). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement 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 permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must 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 permit. Alternative methods shall 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 permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall 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. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. This permit may be appealed pursuant to 30 TAC § 50.139.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
14. Emissions from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMITS 866860 and PSDTX1188

Date: \_\_\_\_\_

\_\_\_\_\_  
For the Commission

## SPECIAL CONDITIONS

Permit Numbers 86860 and PSDTX1188

### EMISSION LIMITATIONS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table.

### FEDERAL APPLICABILITY

2. The electric arc furnace (EAF) and melt shop building shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources (NSPS) in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), promulgated for Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels constructed after August 17, 1983, Subparts A and AAa.
3. These facilities shall comply with all applicable requirements of the U.S. EPA Regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63 promulgated for Electric Arc Furnace Steelmaking Facilities, Subparts A and YYYYY and Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Subparts A and HHHHHH.

### FUEL STANDARDS

4. Fuel for the ladle preheater, mandrel preheat furnace, quench furnace, reheating furnace, rotary hearth furnace, tempering furnace, tundish preheater, and VD boiler shall be pipeline quality sweet natural gas. Use of any other fuel will require prior approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ).

Upon request of the TCEQ Executive Director or the TCEQ Regional Director or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuels used in these facilities or shall allow air pollution control program representatives to obtain a sample for analysis.

### OPACITY/VISIBLE EMISSIONS LIMITATIONS

5. In accordance with the EPA Test Method (TM) 9 or equivalent, opacity of emissions from the Rotary Hearth Furnace Emission Point No. (EPN) RHFS and Reheat Furnace EPN RFS and, in accordance with NSPS Subpart AAa § 60.272a(2), opacity of emissions from the EAF baghouse stack EPN EBS shall not exceed 3 percent averaged over a six-minute period, except for those periods described in Title 30 Texas Administrative Code §§ 101.201 and 101.211 (30 TAC §§ 101.201 and 101.211).

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6. In accordance with the U.S. EPA TM 9 or equivalent, opacity of emissions from EPNs AABS, LWS, LSTBS, MPFS, QFS, TFS, VDBS, and HRLDS shall not exceed 5 percent averaged over a six-minute period, except for those periods described in 30 TAC §§ 101.201 and 101.211.
7. In accordance with the U.S. EPA TM 9 or equivalent, opacity of fugitive emissions due solely to EAF operations from the melt shop building, in accordance with NSPS Subpart AAa § 60.272a(3), shall not exceed 6 percent averaged over a 6-minute period except for those periods described in 30 TAC §§ 101.201 and 101.211.
8. Except for emission points identified in Special Condition Nos. 5, 6, and 7, no visible emissions from the melt/continuous casting building, pipe mill building, roads, or travel areas shall leave the plant property. Visible emissions shall be determined by a standard of no visible emissions at the property line exceeding 30 seconds in duration in any six-minute period as determined using the EPA TM 22 or equivalent. If this condition is violated, additional controls or process changes may be required to limit visible particulate matter emissions.

## OPERATIONAL LIMITATIONS, WORK PRACTICES, AND PLANT DESIGN

9. Plant operations and production are limited to the following:
  - A. As represented, the molten steel throughput of the EAF, the Ladle Furnace (LF), and the continuous caster shall not exceed 149 tons per hour and 914,909 tons per year (tpy) of steel in any rolling 12-month period. Tons of steel shall be measured by operating hours and tons of steel produced as measured by the tap weight and averaged over a 24-hour day.
  - B. Finished Rolled Pipe production shall not exceed 242.5 tons per hour and 752,650 tpy in any rolling 12-month period.
  - C. Natural gas usage shall not exceed 3,400 million standard cubic feet (MMscf) per year in any rolling 12-month period.
  - D. The combined oil usage for the Steelmaking Workshop, Premium Connecting Line Workshop, and Hot Rolling Workshop shall not exceed 23,260 gallons per year.
  - E. Welding electrode usage shall not exceed 10.0 tpy.
  - F. Pipe Body Paint usage to include pipe label spraying and UV coating shall not exceed 1,712 tpy.

## SPECIAL CONDITIONS

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- G. Miscellaneous paint usage in the Hot Rolling and Pipe Processing Workshop and the Premium Connecting Line Workshop shall not exceed 10.5 tpy.
10. The fabric filter employed to control melt shop and EAF emissions and exhausting at EPN EBS shall achieve a maximum air flow of 980,870 dry standard cubic foot per minute (dscf/m) and an outlet grain loading  $\leq 0.0018$  grain per dry standard cubic foot (gr/dscf) front half and  $\leq 0.0024$  gr/dscf front and back half.
  11. Dust collected by the EAF fabric filter shall be conveyed directly to a truck by an enclosed system for transport off property.
  12. Replaced or used EAF fabric filter bags shall be placed in sealed containers and disposed of in a manner that will prevent any dust from becoming airborne.
  13. Emissions from the lime silo, EAF elevated bunker, ladle furnace elevated lime bunker, and flux unloading/storage bin operation and exhausting at EPNs LWS and AABS respectively shall be exhausted to fabric filters having a design outlet grain loading not greater than 0.01 gr/dscf.
  14. Slag processing shall be performed in an enclosed building.
  15. Gas and particulate matter (PM) exhausted from the vacuum degassing tank shall be routed through an air cooling and dust collector system.
  16. The EAF and LF refractory repair shall be performed within the melt shop.
  17. Canopy hoods shall be employed above the cone type piercing mill, the borax spraying and collection system, the entrance and exit to the PQF pipe mill, and the extracting mill to collect and route emissions to the sinter plate filter exhausting at EPN HRLDS.
  18. A canopy hood shall be employed in the sizing mill to capture emission from pipe cutting. The emissions shall be exhausted thru the sinter plate filter exhausting at EPN HRLDS.
  19. A dust absorbing unit that exhausts through a fabric filter and is then routed to EPN HRPPWV shall be employed between the pipe straightening process and the non-destructive testing (NDT) process to collect scale removed from the pipe.
  20. Pipe finishing operations will include the application of lubricants to pipe threads, marking/printing pipes, coating pipe with waterborne anti-rust paint, and/or the application of UV coatings.

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The coating systems used to apply anti-rust paint shall employ a water washing system and carbon absorption to control overspray and volatile organic compound (VOC) emissions.

21. The first sedimentation tank of the water treatment process shall employ an oil skimmer for collecting and removal of oil. The collected oil shall be transported off site to a reclamation facility.
22. All hood, duct, and collection systems shall be effective in capturing emissions from process equipment and in minimizing fugitive emissions from the buildings. The hood and duct systems shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the emission capture system as represented in the application.
23. All air pollution abatement equipment shall be properly maintained and operated during the operation of these facilities. Cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency can be adequately maintained.
24. Main plant roads, high traffic areas, and parking lots shall be paved. Low traffic areas and slag storage and processing areas shall be sprinkled with water or dust suppressant chemicals as necessary to control dust emissions.
25. This permit allows the use of VOC and non-VOC-containing compounds or products which meet the following conditions:
  - A. The new or replacement compound/product shall serve the same basic function and the emissions shall be emitted from the same location as the replaced compound/product emissions.
  - B. The hourly Effects Screening Level (ESL) for any new or replacement compound/product shall not be less than the hourly ESL value for the current compound/product and the emission rate (ER) for the replacement compound/product, except if the following condition is met:

where: there is a direct substitution of one chemical for another

$$(ER2)/(ESL2) \leq (ER1)/(ESL1)$$

OR

where: the replacement has different constituents

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$$\frac{(\text{ER2a}) + (\text{ER2b}) + (\text{ER2n..})}{(\text{ESL2a}) (\text{ESL2b}) (\text{ESL2n..})} \leq \frac{(\text{ER1a}) + (\text{ER1b}) + (\text{ER1n..})}{(\text{ESL1a}) (\text{ESL1b}) (\text{ESL1n..})}$$

where:

ER1 is the ER of current compound/product (chemical).

ER2 is the ER of the replacement compound/product (chemical).

ESL1 is the hourly ESL for the current compound/product (chemical shown on the Material Safety Data Sheets [MSDS]).

ESL2 is the hourly ESL for the replacement compound/product (chemical shown on the MSDS).

The hourly ESL values to be used in the formula above shall be taken from the values identified and used as the basis of analysis submitted as part of the permit application, the most current TCEQ ESL list, or TCEQ approved ESL. Special Condition No. 41 lists the compounds evaluated.

The 30-minute ESL value for any new chemical emitted that is not represented in the permit application is limited to the use of the TCEQ-approved ESL for the individual chemicals contained in the most current TCEQ ESL list. The use of new chemicals, not listed in the most current TCEQ ESL list, will require an amendment to this permit.

If the ESL is less than 15  $\mu\text{g}/\text{m}^3$  for any VOC and less than 50  $\mu\text{g}/\text{m}^3$  for non-VOC emissions, this condition does not apply. An amendment to this permit shall be required before any chemicals that are more toxic than this specified limit are introduced.

- C. This condition allows for changes in compounds and/or compound formulations but does not allow for any increase in total emissions from any emission point.

## DETERMINATION OF COMPLIANCE

26. Upon being informed by the TCEQ Executive Director that the staff has documented visible emissions from this facility exceeding opacity limits stated in this permit, the holder of this permit may be required to conduct stack sampling analyses as appropriate or take immediate corrective action to demonstrate compliance.

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27. Upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction, the holder of this permit shall perform net ground level concentration sampling and/or stack sampling as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere. Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual or in accordance with applicable EPA Code of Federal Regulations procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

### INITIAL DETERMINATION OF COMPLIANCE

28. The holder of this permit shall perform initial stack sampling and other testing to establish the actual quantities of air contaminants being emitted into the atmosphere. Unless otherwise specified by this condition, the sampling and testing shall be conducted in accordance with the methods and procedures specified in Sampling Requirements below. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.
- A. Demonstrate compliance with the maximum allowable emission rates for the EAF Baghouse Stack (EPN EBS).
- (1) Air contaminants to be tested for include PM, particulate matter equal to or less than 10 microns in diameter ( $PM_{10}$ ), nitrogen oxide ( $NO_x$ ), carbon monoxide (CO), sulfur dioxide ( $SO_2$ ), VOC, chromium, lead, and manganese.
  - (2) Sampling to demonstrate maximum emissions for PM and  $PM_{10}$  shall occur during the charging and melting processes. Sampling to demonstrate maximum emissions of CO shall occur during normal EAF operations.
- B. Demonstrate compliance with the stack flow rate for the EAF Baghouse Stack (EPN EBS) as represented in the permit Special Condition No. 10.
- C. Demonstrate compliance with the outlet grain loading limitation as specified in Special Condition No. 10.
- D. Demonstrate compliance with requirements of the Federal Regulations identified in Special Condition Nos. 2 and 3.

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CONTINUOUS MONITORING

29. The following monitoring actions shall be accomplished:
- A. The holder of this permit shall equip the fabric filter exhausting at EPN EBS with a Bag Leak Detection monitor. The monitoring device shall be installed, operated, calibrated, and maintained in a manner consistent with EPA Office of Air Quality Planning and Standards, Fabric Filter Bag Leak Detection Guidance (EPA-454/R-98-015).
  - B. The holder of this permit shall perform daily visible emission observations at EPN LSTBS for the purpose of compliance assurance monitoring.
30. The holder of this permit shall install, calibrate, and maintain a device to monitor pressure drop in baghouses AABS, LWS, LSTBS, and EBS.
- A. The monitoring device shall be calibrated in accordance with the manufacturer's specifications and shall be calibrated at least annually and shall be accurate to within a range of  $\pm 0.5$  inches water gauge pressure ( $\pm 125$  Pascal's); or a span of  $\pm 0.5$  percent.
  - B. The actual pressure drop for each baghouse shall be read and recorded at least one time per day. The minimum and maximum pressure drops for each baghouse will be determined following initial performance testing as required by this permit. The testing derived differential pressure values shall be provided in writing to the TCEQ Regional Office for inclusion in the files and shall be submitted as an alteration request for inclusion in the permit.
  - C. Upon demonstration that operating conditions upon which the minimum or maximum differential pressure would ever need to be changed, the TCEQ Executive Director may grant a request to re-establish the differential pressure limit.
  - D. The permittee shall continuously operate the differential pressure monitoring system(s) when the fabric filter baghouse(s) are operating.
31. For EPN HRLDS the permit holder shall perform visible emission observations at least once per calendar quarter using EPA TM 9 with remaining monthly periods during each calendar quarter being monitored and recorded using EPA TM 22. If visible emissions are observed, the permit holder shall conduct an opacity test using EPA TM 9.
32. The TCEQ Regional Office shall be notified as soon as possible after the discovery of any monitor malfunction which is expected to result in more than 24 hours of lost data. Supplemental visible emission monitoring may be required at the discretion of the

## SPECIAL CONDITIONS

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appropriate TCEQ Regional Director in case of extended monitor downtime. Necessary corrective action shall be taken if downtime exceeds 5 percent of the (emission sources) operating hours in a quarter. Failure to complete any corrective action as directed by the TCEQ Regional Office may be deemed a violation of the permit.

33. After the initial demonstration of compliance, on-going stack sampling for PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, and lead (Pb) and the exhaust flow rate from of EAF Baghouse Stack (EPN EBS) shall be used to demonstrate continuous compliance. The holder of this permit may request the TCEQ Executive Director to approve alternate sampling techniques or other means to determine the opacity, rates, composition, and/or concentration of emissions in accordance with 30 TAC § 101.8. Sampling shall occur within 60 days of the anniversary date of the latest compliance sampling. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office.
  - A. Stack sampling shall be performed once annually during periods of normal operation, except as follows:
    - (1) If, after two years of stack sampling, the average of the two annual stack sampling results for a pollutant is less than 70 percent of the maximum allowable emission rate, then compliance stack sampling for such pollutant may be conducted once every three years.
    - (2) After initial testing, periodic Total PM/back half testing will not be required until a replacement EPA approved test for condensable PM testing has been adopted.
  - B. Sampling required by this Special Condition shall demonstrate compliance with the lb/hr emission limits of the maximum allowable emission rates table (MAERT) and the exhaust flow rate limitation from of EAF Baghouse Stack (EPN EBS).
  - C. Sampling required by this Special Condition shall be conducted in accordance with the methods, procedures, and notification protocol specified in Sampling Requirements below.
34. The holder of this permit shall perform monthly inspections to verify proper operation of capture systems to verify there are no holes, cracks and/or other conditions that would reduce the collection efficiency of the emission capture system as represented. If the results of the inspections indicate that the capture system is not operating properly, the permit holder shall take necessary corrective actions within five (5) days.

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35. The holder of this permit may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging times specified, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in Title 40 Code of Federal Regulations § 64.7(c) [40 CFR § 64.7(c)].
36. If, as a result of stack sampling, compliance with the MAERT cannot be demonstrated, the holder of this permit shall adjust any operating parameters (including reduction of molten steel production rate) so as to comply with Special Condition No. 1 and the MAERT.
37. If the holder of this permit is required to adjust any operating parameters for compliance, then beginning no later than 60 days after the date of the test conducted, the holder of this permit shall submit to the TCEQ on a monthly basis, a record of adjusted operating parameters and daily records of molten steel production sufficient to demonstrate compliance with the MAERT. Daily records of molten steel production and operating parameters shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to the TCEQ Office of Permitting and Registration, Air Permits Division  
in Austin.

## SAMPLING REQUIREMENTS

38. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual, or applicable EPA Methods in 40 CFR Part 60, Appendix A.
  - A. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling ports and platform(s) shall be installed on the exhaust stack according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the Executive Director of the TCEQ.
  - B. Test methods to be used are as follows:
    - (1) Appendix A, Method 5, modified to include back-half condensibles, per TCEQ Lab Method for the concentration of PM;

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- (2) Appendix A, Method 5 or 17, for the filterable concentration of PM (front-half catch);
  - (3) Appendix A, Method 6, 6a, 6c, or 8, for the concentration of SO<sub>2</sub>;
  - (4) Appendix A, Method 7E for the concentrations of NO<sub>x</sub> and O<sub>2</sub>, or equivalent methods;
  - (5) Appendix A, Method 9 for opacity;
  - (6) Appendix A, Method 10 for the concentration of CO;
  - (7) Appendix A, Method 22, for visual determination of fugitive emissions from material sources;
  - (8) Appendix A, Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane);
  - (9) Appendix A, Method 29 for the concentration of chromium, lead, and manganese;
  - (10) Appendix M, Methods 201A and 202, or Appendix A, Reference Method 5, modified to include back-half condensibles, for the concentration of PM<sub>10</sub>;
  - (11) Appendix M, Methods 201A or Appendix A, Reference Method 5, for the filterable concentration of PM<sub>10</sub> (front-half catch);
  - (12) Any variations from these procedures must be approved by the Executive Director of the TCEQ or his designated representative prior to sampling.
39. If testing is required, a pretest meeting concerning the required monitoring shall be held with personnel from the TCEQ before the required tests are performed. Air contaminants to be tested for will be defined and the TM to be used shall be determined at this pretest meeting.
- A. Sampling shall occur within 60 days of being informed that testing other than that set forth specifically in this permit is required.
  - B. The TCEQ Corpus Christi Regional Office shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The notice to the TCEQ Corpus Christi Regional Office shall include:

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- (1) Date for pretest meeting.
- (2) Date sampling shall occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission.

- C. A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Corpus Christi Regional Office shall approve or disapprove of any deviation from specified sampling procedures.
- D. The permit holder shall be limited to the hourly EAF production rates established during testing (up to +10 percent). Additional stack testing shall be required when higher production rates are achieved.
- E. The sampling report shall include the following:
  - (1) Plant production rate in tons of steel melted per hour
  - (2) The amperage of the fan motors shall be recorded along with the corresponding test value of volumetric air flow related to that fan motor for each fabric filter stack tested
  - (3) Fuel consumption rate in standard cubic feet per minute; and
  - (4) Any other pertinent parameters, as determined at the pretest meeting.
- F. Once copy of the final sampling report shall be submitted within 60 days after sampling is completed. Sampling reports shall comply with the provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Corpus Christi Regional Office

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RECORDKEEPING

40. The following records shall be maintained on-site and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction. Records shall be of sufficient detail to demonstrate compliance with authorized throughputs and operating parameters. These records shall be retained for a rolling 60-month period.
- A. A daily record of operating hours and steel produced in tons per 24-hour period. From this data, average hourly production shall be calculated;
  - B. A record of annual steel production in tons on a rolling 12-month basis;
  - C. Records of pipe production in tons per hour and tons per year, based on a rolling 12-month basis;
  - D. Records of annual usage of natural gas, oils, welding electrodes, and paint used on a rolling 12-month basis;
  - E. Records of the inspection, maintenance, malfunction, and repair of abatement equipment. Inspections of capture systems and abatement devices shall be recorded as they occur;
  - F. All monitoring data and support information as specified in 30 TAC § 122.144;
  - G. Records of the differential pressure readings required for fabric filters listed in Special Condition No. 30B;
  - H. Records of visible emission readings for EPN's EBS, LSTBS, and HRLDS as required by NSPS, CAMS, or Special Condition No. 31;
  - I. Records of monthly inspections required by Special Condition No. 34 and actions taken;
  - J. Records of the calibration of monitoring devices identified in Special Conditions No. 30;
  - K. Records shall be kept in sufficient detail to allow emission rates of Hazardous Air Pollutants (HAPS) to be accurately determined from all emission points having the potential to emit HAPS. Using this recorded data, a report shall be produced for the emission of HAPs (in tons per year) over the previous 12 consecutive months.

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The required records shall be kept with examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions;

- L. A record of the types of materials used and MSDS for each material;
- M. Records to document compliance with changes in compound usage as specified in Special Condition No. 25.

CHEMICAL LIST

41. The following compounds are approved for use in accordance with permit application representations and the permit Special Conditions.

<u>Compound</u>	<u>Compound</u>
n-Butyl Acetate	Methyl Normal Propyl Ketone
Aliphatic Hydrocarbons (Stoddard Type)	Ethanol
1-Butanol	Ethylbenzene
VM&P Naphtha	Toluene
Aliphatic Hydrocarbons	Isobutanol
Methyl Isobutyl Ketone	Methyl Ethyl ketone
1-Methoxy 2-Propanol	Methyl Normal Amyl Ketone
Urea-Aldehyde Polymer	Ppropylene Glycol Monomethyl Ether Acetate
Modified Oxazolidone	2, 4 Pentaedione
Ethyl 3-Epoxypropionate	Propylene Glycol
Methyl Isoamyl Ketone	Propylene Glycol Tert-Butyl Ether
2-Propoxy Ethanol	Acetate Ester
Methyl-2-Pyrrolidone	Anti-float Agent

<u>Compound</u>	<u>Compound</u>
Acrylic Copolymer	Synthetic Wax
Fluoroaliphatic Polymer Esters	Dimethyl Polysiloxane Copolymer
Polyether Polymer	Formaldehyde
p-Xylene or Para Xylene	Benzene
Methoxypropyltrimethoxysilane	Methyl Alcohol
Methyl Ethyl Ketoxime	Calcium Carboxylate
Styrene	Dimethyl Ethanolamine
Cellulose Acetate Butyrate	Ortho Cresyl Glycidyl Ether
Aromatic Diluent	Isopropyl Alcohol
Benzyl Alcohol	Barite
Zinc Phosphate	Titanium Dioxide
Zinc Dust	Tall Oil Alkyd Polymer
Salts from Alkylamides and Esters	Organosilane Ester
2, 2, 4- Trimethyl-1,2-Pentanedioil Monoisobutrate	
Acrylic Polymer	Propylene glycol Phenyl Ether
Tris-2,4,6- (dimethylaminomethyl) Phenol	
Iron oxide	3-Trimethoxysilypropane-1-thiol
Polyester Resin	Polyester Polyol
Polyalkene Glycol	N-beta-(aminoethyl)-gamma- Aminopropyltrimethoxyxilane
Alkyd Resin	Ceramic Microspheres

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<u>Compound</u>	<u>Compound</u>
Phthalo Blue Pigment	Organic Resin
Zirconium-2-Ethylhexanoate	Iron Oxide Yellow
Dianisidine Orange 16	Resin Solids
Wollastonite	Diglycidyl Ether of Bisphenol A Homopolymer
Pigment solids	Polyamide Resin
Liquid Polyamide Resin	Triethylenetetramine
Alkyd Polomer	Phenolic Resin
Polyamine Amide salt	Calcium Neodecanoate
Calcium 2-Ethylhexanoate	2-Ethyl Hexanoate
Xylene	

Dated \_\_\_\_\_

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 86860 and PSDTX1188

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
AABS	Alloy Aggregate Baghouse Stack Flux Uload/Lad Storage Bin	PM/PM <sub>10</sub>	5.35	23.42
LWS	Lime Warehouse Stack Lime Silo	PM/PM <sub>10</sub>	7.47	32.71
LSTBS	LF and Stock Tank (5)	PM/PM <sub>10</sub>	4.54	19.89
	Baghouse Stack	Cd	<0.001	<0.004
	EAF Elevated Bunker	Cr	<0.006	0.02
	LF Elevated Lime Bunker	Pb	0.04	0.17
	Ladle Furnace	Mn	0.03	0.15
		Hg	0.0001	<0.0004
		Si	<0.005	0.02
		Zn	0.28	1.23
EBS	EAF Baghouse Stack (5)	NO <sub>x</sub>	44.64	137.24
		CO	595.24	1829.82
		VOC	44.64	137.24
		SO <sub>2</sub>	89.29	274.47
		PM/PM <sub>10</sub> total	20.18	88.38
		PM/PM <sub>10</sub> front half	15.13	66.28
		Cd	<0.004	0.02
		Cr	0.02	0.11
		Pb	0.17	0.74
		Mn	0.15	0.67
		Hg	<0.0004	<0.002
		Si	0.02	0.08
		Zn	1.24	5.45

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
RHFS	Rotary Hearth Furnace Stack	NO <sub>x</sub>	44.63	67.91
		CO	36.75	55.93
		VOC	2.41	3.66
		SO <sub>2</sub>	0.26	0.40
		PM/PM <sub>10</sub>	3.33	5.06
RFS	Reheating Furnace Stack	NO <sub>x</sub>	13.97	28.81
		CO	11.50	23.73
		VOC	0.75	1.55
		SO <sub>2</sub>	0.08	0.17
		PM/PM <sub>10</sub>	1.04	2.15
MPFS	Mandrel Preheat Furnace Stack	NO <sub>x</sub>	1.33	5.83
		CO	1.12	4.90
		VOC	0.07	0.32
		SO <sub>2</sub>	<0.01	0.03
		PM/PM <sub>10</sub>	0.10	0.44
QFS	Quench Furnace Stack	NO <sub>x</sub>	6.85	11.89
		CO	5.75	9.99
		VOC	0.38	0.65
		SO <sub>2</sub>	0.04	0.07
		PM/PM <sub>10</sub>	0.52	0.90
TFS	Tempering Furnace Stack	NO <sub>x</sub>	5.71	9.51
		CO	4.79	7.99
		VOC	0.31	0.52
		SO <sub>2</sub>	0.03	0.06
		PM/PM <sub>10</sub>	0.43	0.72
VDBS	VD Boiler Stack	NO <sub>x</sub>	4.01	7.58
		CO	3.37	6.37
		VOC	0.22	0.42
		SO <sub>2</sub>	0.02	0.05
		PM/PM <sub>10</sub>	0.30	0.58

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
SMWV	Steel Making Workshop Vent (5 and 6) Ladle Pre-Heater Tundish Pre-Heater Ladle Relining	NO <sub>x</sub>	11.54	29.04
		CO	11.31	30.02
		VOC	1.24	4.01
		SO <sub>2</sub>	0.08	0.20
		PM	1.30	3.80
		PM <sub>10</sub>	1.29	3.77
		Cd	<0.00001	<0.0001
		Cr Total	<0.0022	<0.0087
		Cr VI	0.002	<0.008
		Pb	<0.0001	<0.0002
		Mn	<0.01	<0.005
		Hg	<0.00001	<0.00001
		Si	<0.00001	<0.00001
		Zn	0.0001	<0.0005
AAWV	Alloy Aggregate Warehouse Vent	PM/PM <sub>10</sub>	<0.01	<0.01
PCLWV	Premium Connecting Line Workshop Vent (6)	CO	1.27	5.22
		VOC	0.90	3.86
		PM/PM <sub>10</sub>	0.89	3.81
HRPPWV	Hot Rolling and Pipe Processing Workshop Vent (5 and 6)	CO	1.44	6.21
		VOC	3.14	12.46
		PM/PM <sub>10</sub>	2.24	9.03
		Cr Total	<0.003	<0.012
		Cr VI	0.002	0.008
HRLDS	Hot Rolling Line Sinter Plate Filter Stack Piercing Mill Borax Spraying PQF Pipe Mill Extracting Mill Pipe Cutting	PM/PM <sub>10</sub>	4.25	4.25

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
ODPSS1	Outdoor Drop Points (4) Scrap Steel by Truck 10	PM	0.03	0.10
		PM <sub>10</sub>	0.01	0.05
ODPSS2	Outdoor Drop Points (4) Scrap Steel by Train 4	PM	0.03	0.10
		PM <sub>10</sub>	0.01	0.05
ODPSR1	Outdoor Drop Point (4) Spent Refractory and Other Waste Storage Pile 1	PM	<0.01	0.03
		PM <sub>10</sub>	<0.01	0.02
ODPS1	Outdoor Drop Point (4) Slag 1	PM/PM <sub>10</sub>	<0.01	<0.01
		Pb	<0.00001	<0.00001
ODPSR2	Outdoor Drop Point (4) Spent Refractory and Other Waste Storage Pile 2	PM	0.10	0.06
		PM <sub>10</sub>	0.05	0.03
ODPS2	Outdoor Drop Point (4) Slag 2-2	PM/PM <sub>10</sub>	<0.01	<0.01
		Pb	<0.00001	<0.00001
ODPSR3	Outdoor Drop Point (4) Spent Refractory and Other Waste Storage Pile 3	PM	<0.01	0.04
		PM <sub>10</sub>	<0.01	0.02
ODPS3	Outdoor Drop (4) Point Slag 3	PM/PM <sub>10</sub>	<0.01	<0.01
		Pb	<0.00001	<0.00001
OSPSS	Outdoor Storage Piles (4) Scrap Steel	PM	-	1.55
		PM <sub>10</sub>	-	0.77
OSPFST	Outdoor Storage Pile (4) First Sedimentation Tank	PM/PM <sub>10</sub>	-	<0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
OSPS1	Outdoor Storage Piles (4) Slag 1	PM	-	0.51
		PM <sub>10</sub>	-	0.26
		Pb	-	<0.001
OSPSR1	Outdoor Storage Pile (4) Spent Refractory and Other Waste 1	PM	-	2.01
		PM <sub>10</sub>	-	1.00
OSPS2	Outdoor Storage Piles (4) Slag 2	PM	-	0.51
		PM <sub>10</sub>	-	0.26
		Pb	-	<0.001
OSPSR2	Outdoor Storage Pile (4) Spent Refractory and Other Waste 2	PM	-	2.01
		PM <sub>10</sub>	-	1.00
N6CCT	Contact Cooling (4) Tower No. 6	PM/PM <sub>10</sub>	0.03	0.14
N7CCT	Contact Cooling (4) Tower No. 7	PM/PM <sub>10</sub>	0.02	0.07
RSCCT	Rolling Steel Contact (4) Cooling Tower	PM/PM <sub>10</sub>	0.03	0.14
PPCCT	Pipe Processing (4) Contact Cooling Tower	PM/PM <sub>10</sub>	0.03	0.14
SMWTF	Steel Making Water (4) Treatment Facility	VOC	0.10	0.10
		PM/PM <sub>10</sub>	0.10	0.10
RSWTF	Rolling Steel Water (4) Treatment Facility	VOC	0.10	0.10
		PM/PM <sub>10</sub>	0.10	0.10
GWTF	Graphite Water (4) Treatment Facility	VOC	0.10	0.10
		PM/PM <sub>10</sub>	0.10	0.10

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
CMSCS1	Caster Spray Chamber Stack 1	NO <sub>x</sub>	0.18	0.55
		CO	0.58	1.75
		VOC	0.02	0.07
		PM/PM <sub>10</sub>	0.07	0.22
		Pb	0.001	0.002
CMSCS2	Caster Spray Chamber Stack 2	NO <sub>x</sub>	0.18	0.55
		CO	0.58	1.75
		VOC	0.02	0.07
		PM/PM <sub>10</sub>	0.07	0.22
		Pb	0.001	0.002
CS1	Coating Stack 1	VOC	0.21	0.82
		PM/PM <sub>10</sub>	0.64	2.45
CS2	Coating Stack 2	VOC	0.21	0.82
		PM/PM <sub>10</sub>	0.64	2.45
CS3	Coating Stack 3	VOC	0.21	0.82
		PM/PM <sub>10</sub>	0.64	2.45
UVCS	UV Coating Stack	VOC	<0.01	0.01
		PM/PM <sub>10</sub>	0.01	0.04
VDSS	VD Steam Stack	NO <sub>x</sub>	0.73	2.19
		CO	29.10	87.43
		VOC	0.09	0.26
		SO <sub>2</sub>	0.02	0.04
		PM/PM <sub>10</sub>	0.29	0.87
ALL	ALL	HAPs	<0.45	<1.92

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>
  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - CO - carbon monoxide
  - Cd - cadmium
  - Cr - chromium
  - Cr VI - chromium valence + 6
  - Pb - lead
  - Mn - manganese
  - Hg - mercury
  - Si - silicon
  - Zn - zinc
  - HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
- (4) Fugitive emissions are an estimate only.
  - (5) Speciated metals/HAPs are included in the PM/PM<sub>10</sub> values.
  - (6) The PM/PM<sub>10</sub> may include trace amounts of non-speciated metals including but not limited to Cr, Pb, and Mn.

Dated \_\_\_\_\_

## Construction Permit Source Analysis & Technical Review

Company	TPCO America Corporation	Permit Number	86860 & PSDTX1188
City	Gregory	Project Number	142712 & 142427
County	San Patricio	Account Number	N/A
Project Type	Initial	Regulated Entity Number	RN105655823
Project Reviewer	Mr. Dois Webb, P.E.	Customer Reference Number	CN603427220
Site Name	Pipe Manufacturing Steel Minimill		

### Project Overview

TPCO submitted a permit application to authorize the construction and operation of a seamless pipe manufacturing plant which will include both a steel minimill and pipe manufacturing lines.

The plant will be a major source of contaminants and the application required PSD review for CO, NO<sub>x</sub>, SO<sub>2</sub>, PM, PM<sub>10</sub>, VOC, and Pb.

The plant will be constructed on a "Greenfield" site near Gregory in San Patricio County.

### Emission Summary

Air Contaminant	Proposed Allowable Emission Rates (tpy)
PM	211.60
PM <sub>10</sub>	208.11
Pb	0.91
Zn	6.68
VOC	167.86
NO <sub>x</sub>	301.10
CO	2071.11
SO <sub>2</sub>	275.49
HAPs	<1.92

Although, the PM/PM10 may contain Cd, Cr, Co, Mn, Hg, Si, and Ni, the emissions of each are well below 1.0 TPY and have not been listed. PM<sub>2.5</sub> was considered, but emission rate values have not been established.

### Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	7-2-09
Compliance period:	11-18-03 to 11-17-08
Site rating & classification:	Avg./3.01
Company rating & classification:	Avg./3.01
If the rating is 40<RATING<45, what was the outcome, if any, based on the findings in the formal report:	NA
Has the permit changed on the basis of the compliance history or rating?	NO

**Construction Permit**  
**Source Analysis & Technical Review**

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Regulated Entity No. RN105655823

**Public Notice Information - 30 TAC Chapter 39 Rules**

<b>Rule Citation</b>	<b>Requirement</b>	
39.403	Date Application Received:	November 17, 2008
	Date Administratively Complete:	December 3, 2008
	Small Business Source?	NO
	Date Leg Letters mailed:	December 3, 2008
39.603	Date Published:	12-30-08 and 1-8-09
	Publication Name:	Corpus Christi Caller Times and Portland News
	Pollutants:	NOx, CO, VOC, SOx, and PM and PM10 including but not limited to Pb and Zn
	Date Affidavits/Copies Received:	1-27-09
	Is bilingual notice required?	NO, Not required by the school District
	Language:	NA
	Date Published:	NA
	39.604	Public Comments Received?
Hearing Requested?		YES
Meeting Request?		NO
Date Response to Comments sent to OCC:		TBD/After PN2 Comment Period
Consideration of Comments:		YES
Is 2nd Public Notice required?		Yes
39.419	Date 2nd Public Notice Mailed:	July 20, 2009
	Preliminary Determination:	Emissions will not contribute to a condition of air pollution, thus Approve
39.603	Date Published:	10-29-09
	Publication Name:	Corpus Caller Times and Portland News
	Pollutants:	NOx, CO, VOC, SOx, and PM and PM10 including but not limited to Pb and Zn
	Date Affidavits/Copies Received:	11-13-09
	Is bilingual notice required?	NO, but applicant published in Spanish in the Corpus Christi Caller Times and Portland News.
	Date Certification of Sign Posting / Application Availability Received:	12-3-09
	Public Comments Received?	YES
	Meeting Request?	NO
	Date Meeting Held:	NA
	Hearing Request?	YES
	Date Hearing Held:	TBD
	Request(s) withdrawn?	TBD
	Date Withdrawn:	TBD
	Consideration of Comments:	YES
	39.421	Date RTC, Technical Review & Draft Permit Conditions sent to OCC:
Request for Reconsideration Received?		NO
Final Action:		TBD

**Construction Permit  
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Rule Citation	Requirement	
	Are letters Enclosed?	YES

**Construction Permit & Amendment Requirements - 30 TAC Chapter 116 Rules**

Rule Citation	Requirement	
116.111(a)(2)(G)	Is the facility expected to perform as represented in the application?	YES
116.111(a)(2)(A)(i)	Are emissions from this facility expected to comply with all TCEQ air quality Rules & Regulations, and the intent of the Texas Clean Air Act?	YES
116.111(a)(2)(B)	Emissions will be measured using the following method: Calculation, Record Keeping, and stack testing of the EAF fabric filter initially and annually.	
	Comments on emission verification:	NA
116.111(a)(2)(D)	Subject to NSPS? Subparts A & AAa	YES
116.111(a)(2)(E)	Subject to NESHAP?	NO, not a named NESHAP source for any of the applicable HAP compounds
116.111(a)(2)(F)	Subject to NESHAP (MACT) for source categories? Subparts <b>HHHHHH &amp; YYYYY</b>	YES
116.111(a)(2)(H)	Is nonattainment review required? Is the site located in a nonattainment area? Is the site a federal major source for a nonattainment pollutant? Is the project a federal major source for a nonattainment pollutant by itself? Is the project a federal major modification for a nonattainment pollutant? Did the project emission increases for nonattainment pollutant minus the two-year average actual emissions trigger netting?	NO NO NA NA NA NA
116.111(a)(2)(I)	Is PSD applicable? Is the site a federal major source (100/250 tons/yr)? Is the project a federal major source by itself? Is the project a federal major modification? Did project emission increases, without decreases, for pollutant of concern, minus the two-year average actual emissions trigger netting? Was the contemporaneous increase significant? Is the change excluded by 40 CFR 52.21(b)(2)(iii)?	YES YES YES NO, New Source NA, Not an existing source NA, New Source NA, Not an Existing Source
116.111(a)(2)(L)	Is Mass Emissions Cap and Trade applicable to the new or modified facilities? If yes, did the proposed facility, group of facilities, or account obtain allowances to operate:	NO, Not in a Cap & Trade Area NA
116.140 - 141	Permit Fee: \$ <b>75,000</b> Fee certification:	YES

**Title V Applicability - 30 TAC Chapter 122 Rules**

Rule Citation	Requirement	
122.10(13)(A)	Is the site a major source under FCAA Section 112(b)? Does the site emit 10 tons or more of any single HAP? Does the site emit 25 tons or more of a combination?	NO NO NO
122.10(13)(C)	Does the site emit 100 tons or more of any air pollutant?	YES
122.10(13)(D)	Is the site a non-attainment major source? Title V Operating Permit will be required and application to be submitted	NO YES

**Construction Permit**  
**Source Analysis & Technical Review**

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122.602	<b>Periodic Monitoring (PM) applicability: NA</b> Facility is subject to NSPS A and AAa and the permit includes monitoring requirements that are adequate to insure compliance with specified limits.
122.604	<b>Compliance Assurance Monitoring (CAM) applicability:</b> The EAF fabric filter, Hot Rolling Line Sinter Plate filter, and Ladle Furnace and Stock Tank fabric filter are subject to CAMs. Specific requirements regarding Bag Leak Detection Monitors, Pressure Drop Monitors, and visible emission observation requirements are outlined in Special Conditions 29-37

**Request for Comments**

Received From	Program/Area Name	Reviewed By	Comments
Region:	14	Clint Roitsch	Yes, addressed and incorporated
City:	Gregory	NA	
County:	San Patricio	NA	
Toxicology:		NA	Modeling predictions for non-criteria pollutants well below ESLs
Compliance:	X	D. Webb	
Legal:	X	Tucker Henson	No objection
Comment resolution and/or unresolved issues:	Discussed comments with Region Investigator and resolved concerns.		

**Process/Project Description**

This plant will include two different operations, a melting/casting operation (steel minimill) and pipe manufacturing lines.

The steel minimill operations will receive pre shredded scrap steel which will be stored in a holding area until needed. The scrap will be moved from the holding area to the melt shop. In the melt shop, the scrap will be charged to an electric arc furnace (EAF) for melting. For startup, the EAF will be charged by a scrap bucket dumping into the open furnace. After startup, the EAF will be continuously charged by a conveyor with the EAF remaining closed. A variety of fluxes, additives, and oxygen may be injected into the EAF during the melt phase. The molten steel is tapped from the EAF into a ladle. The ladle is then coupled with a ladle furnace (LF) for further refining of the steel. After refining and appropriate alloying, the molten steel is poured into a tundish which feeds four casters. The casters shape the molten steel into billets. The billets are cut into desired lengths by an automatic natural gas torches and then moved to a holding area.

The billets produced by the minimill are the raw material for the pipe manufacturing operation. Depending on the requirements, either just produced billets or cold (previously produced billets) are moved by overhead crane to the hot pipe rolling workshop. As needed the billets are then transported to the billet preparation area where they are cut by a saw into the desired length and then reheated in a natural gas fired rotary hearth furnace (RHF). From the RHF, the billets are transported to the cone type piercing mill, by which they are pierced and become hollow thick wall pipes (hollow billets). The hollow billets are then further processed, i.e. de-scaled, reheated and resized to produce the desired type pipe, i.e. thin wall, normalized, or thick wall. The different pipe types then undergo further processing that includes heat treatment, cutting, cleaning, end finishing, marking, lubricating, and anti-rust treatment. When the manufacturing processes are complete, the pipes are moved to a holding area pending transport off property.

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**Pollution Prevention, Sources, Controls and BACT- [30 TAC 116.111(a)(2)(C)]**

The emission sources at this plant are varied and include material storage and handling, an electric arc furnace, ladles, a ladle furnace, vacuum degasser, boiler, casters, rotary hearth furnace, reheat furnace, tempering furnace, quench furnace, pipe forming operations, pipe end operations, and coating operations.

Since a comprehensive discussion of BACT is available in the permit application and the Preliminary Determination Summary, only a brief overview of BACT follows.

A combination of control methods are employed for control of emissions from material storage and handling and the methods selected have been tailored to each source. Control methods to be used and their control effectiveness include enclosure (90%), water sprays (70%), and fabric filters (99%).

Canopy hoods and direct evacuation will be used to capture EAF and LF emissions and exhaust them thru a fabric filter. Although add on control for pollutants other than PM are not employed, specific emission limits of pounds of pollutant per ton of melt have been established for the additional pollutants. Furthermore, the selected pollutant specific emission rates are within the limits of values found in the RBLC review and recent permits issued by TCEQ. Furthermore, stack testing to demonstrate compliance will be required. The exhaust gas capture system will provide 99% capture and the EAF fabric filter will have a PM front half outlet grain loading of 0.0018 gr/dscf and total catch outlet grain loading of 0.0024 gr/dscf.

The various furnaces and boiler will use pipeline natural gas for fuel and also have established emission limits for each pollutant which are within the range of values found in the RBLC review and comply with TCEQ BACT criteria.

Coating/painting/labeling operations will use a combination of low VOC and/or water based compounds and the coating process will employ both capture for the over spray(95%) and carbon absorption (60%) for VOC control.

The controls proposed for this site were determined to meet current BACT. As noted, RBLC review and recently issued permits were considered for each source and each pollutant.

**Impacts Evaluation - 30 TAC 116.111(a)(2)(J)**

Was modeling conducted?	YES	Type of Modeling:	Site Wide AERMOD
Will GLC of any air contaminant cause violation of NAAQS?			NO
Is this a sensitive location with respect to nuisance?			NO
[§116.111(a)(2)(A)(ii)] Is the site within 3000 feet of any school?			NO
Additional site/land use information: The area within 3000 feet of the plant is primarily rural and can be characterized as agricultural or undeveloped, most of which is vegetated with a few low density residential areas and commercial/industrial structures..			

**Construction Permit**  
**Source Analysis & Technical Review**

Permit No. 86860 and PSDTX1188  
Page 6

Regulated Entity No. RN105655823

**Summary of Modeling Results**

Site wide air dispersion modeling of all pollutants was conducted and the modeling submitted by the applicant was audited by the TCEQ Modeling Staff. The audit concluded the modeling was conducted in accordance with TCEQ protocol. Furthermore, the modeling predictions reflected compliance with all state and federal requirements, i.e. both the NAAQS and state ESLs. The modeling evaluated 91 non criteria compounds that are constituents of coatings, lubricants, and/or paints used in the production process. Accordingly, no adverse impacts from the emissions are expected. The Air Dispersion Modeling predictions are reflected in the Preliminary Determination Summary document.

**Permit Concurrence and Related Authorization Actions**

Is the applicant in agreement with special conditions?	<b>Yes</b>
Company representative(s):	<b>Jessica Coleman, Trinity Consultants</b>
Contacted Via:	<b>E-Mail</b>
Date of contact:	<b>7-15-09</b>
Other permit(s) or permits by rule affected by this action:	<b>NO</b>
List permit and/or PBR number(s) and actions required or taken:	<b>NA</b>

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Project Reviewer	Date	Team Leader/Section Manager/Backup	Date
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## Compliance History Report

Customer/Respondent/Owner-Operator:	CN603427220 TPCO AMERICA CORPORATION	Classification: AVERAGE	Rating: 3.01
Regulated Entity:	RN105655823 TPCO TEXAS MILL	Classification: AVERAGE BY DEFAULT	Site Rating: 3.01
ID Number(s):	AIR NEW SOURCE PERMITS PERMIT AIR NEW SOURCE PERMITS EPA ID		86860 PSDTX1188
Location:	FROM GREGORY HEAD SOUTHEAST ON TX 202 TURN LEFT AT TX 361 FACILITY IS EAST OF INTERSECTION (TX 35 AND TX 361		
TCEQ Region:	REGION 14 - CORPUS CHRISTI		
Date Compliance History Prepared:	March 11, 2010		
Agency Decision Requiring Compliance History:	Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.		
Compliance Period:	September 01, 2004 to August 31, 2009		
TCEQ Staff Member to Contact for Additional Information Regarding this Compliance History			
Name:	Beecher cameron	Phone:	239 - 1495

### Site Compliance History Components

1. Has the site been in existence and/or operation for the full five year compliance period? No
2. Has there been a (known) change in ownership/operator of the site during the compliance period? No
3. If Yes, who is the current owner/operator? N/A
4. If Yes, who was/were the prior owner(s)/operator(s) ? N/A
5. When did the change(s) in owner or operator occur? N/A
6. Rating Date: 9/1/2009 Repeat Violator: NO

### Components (Multimedia) for the Site :

- A. Final Enforcement Orders, court judgements, and consent decrees of the state of Texas and the federal government.  
N/A
- B. Any criminal convictions of the state of Texas and the federal government.  
N/A
- C. Chronic excessive emissions events.  
N/A
- D. The approval dates of investigations. (CCEDS Inv. Track. No.)  
N/A
- E. Written notices of violations (NOV). (CCEDS Inv. Track. No.)  
N/A
- F. Environmental audits.  
N/A
- G. Type of environmental management systems (EMSs).
- H. Voluntary on-site compliance assessment dates.  
N/A
- I. Participation in a voluntary pollution reduction program.  
N/A
- J. Early compliance.  
N/A

Sites Outside of Texas

N/A