

TECHNICAL SUPPORT DOCUMENT
For
DRAFT/PROPOSED AIR EMISSION PERMIT NO. 16100013-005

This technical support document (TSD) is intended for all parties interested in the draft/proposed permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the preliminary determination to issue the draft/proposed permit.

1. General Information:

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 2752)
Brown Printing Co – Waseca Division 2300 Brown Ave Waseca, MN 56093	Brown Printing Company 2300 Brown Ave Waseca Waseca County
Contact: Jack Johnson Phone: (507) 835-0184 Fax: (507) 835-0218 Email: jack.johnson@bpc.com	

1.2 Facility Description:

Brown Printing is a commercial printing facility. Since 1963, this facility has been in operation. The stationary source currently consists of eleven (11) web offset printing presses/dryers and pollution control equipments. The main sources of emissions are Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs). The facility also has several activities that qualify as insignificant activities under Minn. R. 7007.1300, subp. 3(D), 3(H)(3) and Minn. R. 7008.4110.

Emissions from all the heat web offset presses are controlled by three regenerative thermal oxidizers. Common ductwork (headers) allows any combination of the three regenerative oxidizers to control any operating combination of presses.

The facility has accepted limits on VOC and HAP emissions such that they are below Prevention of Significant Deterioration (PSD) and National Emission Standards for Hazardous Air Pollutants (NESHAP) major source thresholds. The other unlimited criteria pollutant emissions are below PSD thresholds.

This permit action is a Part 70 permit re-issuance.

1.3 Description of changes:

This permit does not authorize any new emission units or allow for increase in emissions.

The following modifications have been made by the Permittee since the last permit action (PER 004):

- Retired a thermal oxidizer (TO - CE 008) and installed a regenerative thermal oxidizer (RTO – CE 014).
- Installed a continuous monitor for the RTOs to monitor combustion chamber temperature and flow rate.
- Added emission units, including boiler (EU 078) and unit heater (EU 080).
- Removed a 3,000 gallon above ground solvent storage tank.
- Expanded a building 160,000 square feet.
- Paved all of the parking lots.

The following changes have been made to the permit:

- Pre-cap language and limits for VOC and VOC-HAP have been added.
- Each press has an internal dryer and should be treated as one emission unit.
- Added the material usage recordkeeping requirement at the presses to keep track of the amount of ink material ordered (daily), the amount and type of solvent material used (each instant), and other VOC and HAP-containing materials usage (monthly).
- Removed the web offset press capacity limit of 1,900,000 impressions per hour.
- Replaced the Heat input limit of 210 mmBtu/hr with GreenHouse Gases (GHGs) limits (1,290.4 mmscf/yr when using natural gas as fuel and 210,000 gal/yr when fuel used is liquid propane (see below for more detail).
- Included diesel fuel to the fuel restriction and also used diesel engine's AP-42 emission factor to calculate the potential emission.
- Added language for Direct Heating Equipment at the facility.
- Compliance Assurance Monitoring (CAM) requirements have been added for the regenerative thermal oxidizers (RTOs – CE 009, CE 010, and CE 014) to control VOC and HAPs at the Presses. CAM requirements also are added for Fabric filters (CE 012 and CE 013) to control particulate matter at Paper Waste Recycling system.
- Removed insignificant activities (IAs) from Delta database, included IAs emission calculation in GI-07 form, and updated the appendix material.
- Updated permit language to reflect current MPCA templates and standard citation formatting.
- Updated Delta database to show current data emission units, control equipments, and stack vents.
- Updated permit language and Delta database of the efficiencies for control equipment.

PM_{2.5} emissions:

As required by Minnesota rule 7007.0500 Brown Printing was required to include information on PM_{2.5} in the permit applications. This includes, but is not limited to, emission calculations (Emission Calculations Forms) emission sources and total facility potential and actual emissions (Form GI-07). It should be assumed that PM_{2.5} is required whenever criteria pollutant information is required. According to the submitted calculations the Permittee uses PM₁₀ as a surrogate for PM_{2.5}. According to EPA's AP-42, Table 1.4-2 Emission Factors for Criteria Pollutants and GHGs from Natural Gas Combustion, all PM (total, condensable, and filterable) is assumed to be less than 1.0 micrometer in diameter. Hence, the emission factors used to calculate PM can also be used for PM₁₀ and PM_{2.5}. Therefore, it is reasonable to assume that PM₁₀ as a surrogate for PM_{2.5} is a conservative assumption.

Greenhouse Gas (GHG) emissions:

As required by the GHG Tailoring rule, the Permittee calculated the PTE for GHGs and submitted it to the PCA. According to the calculation Brown Printing's PTE for CO₂ equivalent is over the threshold of 100,000 tons per year (tpy). In this permit, fuel usage limits of 1,290.4 mmscf/yr natural gas and 210,000 gal/yr propane are included to keep CO₂ equivalent emission at the facility at or below 90,000 tpy. Using the heating value for natural gas and propane we can convert the GHGs limits to mmBtu/hr. Hence, 1,290.4 mmscf/yr equals to 154.7 mmBtu/hr and 210,000 gal/yr equals to 2.2 mmBtu/hr. So, the total limit for GHGs (or combustion sources) is approximately 157 mmBtu/hr.

1.4 Permit History:

Permit Number and Issuance Date	Action Authorized
16100013-001 January 13, 2003	Initial Title V (Total Facility Operating Permit).
16100013-002 June 30, 2005	Major Amendment - increased impression cap from 1,300,391 to 1,900,000; changed the status for CE 008 from back up to production; modified intake air flow from presses to oxidizers and combustion chamber temperature residence time curve.
16100013-003 March 2, 2006	Moderate Amendment – added the waste paper concentrator recycling system (EU 034) and fabric filter (CE 011).
16100013-004 February 5, 2007	Major Amendment – added PM/PM ₁₀ limit of 0.010 gr/dscf to the existing waste paper recycling fabric filters (group 008).

1.5 Facility Emissions:

Table 2. Total Facility Potential to Emit Summary

	PM Tpy	PM ₁₀ tpy	PM _{2.5} Tpy	NO _x Tpy	SO ₂ Tpy	CO Tpy	CO ₂ e Tpy	VOC Tpy	Single HAP Tpy	All HAPs Tpy
Total Facility Uncontrolled Potential Emission	8,865	6,733	6,733	74.1	0.5	62.1	105,415	11,829	91.5	124
Total Facility Limited Potential Emissions	94.2	94.2	94.2	65.5	0.4	55	90,000	236.1	9.2	23.6
Total Facility Actual Emissions (2010)	85.21	6.75	NR*	6.36	0.04	1.58	NR*	92.82	NR*	

NR* = Not reported in emission inventory

Table 3. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		PM, PM ₁₀ , PM _{2.5}	SO ₂ , NO _x , CO, VOC
Part 70 Permit Program	VOC	PM ₁₀ , NO _x	SO ₂ , CO
Part 63 NESHAP		HAP	

2. **Regulatory and/or Statutory Basis:**

New Source Review (NSR):

The facility has existing limits (VOC and fuel usage) to avoid major source classification under the New Source Review program. No changes are authorized by this permit.

Part 70 Permit Program:

The facility is a major source under the Part 70 permit program.

New Source Performance Standards (NSPS):

There are no New Source Performance Standards applicable to the operations at this facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

The facility is not a flexographic printer (as defined in 40 CFR § 63.822(a)). The facility has accepted limits on single and total HAPs such that it is considered an area source with respects to the NESHAP regulations. Therefore, no major source NESHAPs apply. The facility uses a diesel engine only for back-up operation (500 hrs/yr). This diesel engine is an affected source under subpart ZZZZ NESHAP; however, no requirements apply.

Compliance Assurance Monitoring (CAM):

The requirement of 40 CFR 64, Compliance Assurance Monitoring is included in this permit for the existing Paper Waste Recycling System including EU 034, EU 043 and EU 044, and the Web Offset Presses/Dryers (EU 001, EU 002, EU 004, EU 006 to EU 010, EU 024, and EU 027 to EU 029). In order for this rule to apply, a pollutant-specific-emissions-unit at a source that requires a Part 70 permit must meet the following two criteria for a given pollutant: 1) the unit has potential emissions (before controls) of the applicable regulated air pollutant greater than major source size threshold (e.g., greater than 100 tpy uncontrolled emissions for PM, PM10, PM2.5, SO₂, NO_x, VOC, and CO; 10 tpy uncontrolled emission for any HAP and 25 tpy for total HAPs) and 2) the unit is subject to emission limitation or standard and 3) has a control device to achieve compliance with the applicable emission limitation or standard. All the emission units mentioned in this paragraph meet these criteria; therefore, the requirements of 40 CFR 64 are applicable. If the emission units have potential controlled emissions equal to or greater than 100 percent of the major source threshold amount for the applicable regulated pollutant such as PM, PM10, PM2.5, SO₂, NO_x, VOC, CO, total HAPs and single HAP; they will be categorized as large pollutant specific emission units (PSEU). If the emission units have the potential uncontrolled emissions equal to or more than 100 percent of the major source threshold amount, but controlled potential emissions are less than the threshold they will be categorized as other PSEU. Note: the following emission units are not subject to CAM because they don't have associated control device (EU 017 and EU 018).

Table 4. CAM Summary

Unit	Control	CAM Applicability	Pollutant	Monitoring Parameters
EU 001, EU 002, EU 004, EU 006, EU 007, EU 008, EU 009, EU 010, EU 028, EU 029	CE 009, CE 010, CE 014 (RTO)	Other	VOC	Temperature monitoring at RTOs. Material usage, VOC limit at Presses.
EU 024 and EU 027	CE 009, CE 010, CE 014 (RTO)	Large (> 100 tpy controlled VOC PTE)	VOC and HAPs	Temperature monitoring at RTOs. Material usage, VOC and HAPs limits at Presses.
EU034, EU043, and EU044	CE 011 (Fabric Filter) CE 012 (Fabric Filter) CE 013 (Fabric Filter)	Other	PM, PM ₁₀ , PM _{2.5}	Daily monitoring of pressure drop

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0515 Standards of Performance for the New Indirect Heating Equipment.
- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment.
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment.
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines (EU 076).

Table 5. Regulatory Overview of Facility

Level*	Applicable Regulations	Comments:
Total Facility	Title 1 Condition to avoid classification as a major source or modification under 40 CFR § 52.21 and Minn. R. 7007.3000; to avoid major source classification under 40 CFR § 63.2	New Source Review and NESHAP: This language warns the Permittee before making change at the source that could make the source a major source including insignificant modifications.
GP 001 Press limits (VOC and HAP)	<p>Title 1 Condition to avoid classification as major source or modification under 40 CFR § 52.21and Minn. R. 7007.3000</p> <p>Title 1 Condition to avoid classification as major source or modification under 40 CFR § 63.2</p>	<p>Prevention of Significant Deterioration (PSD). Limits taken to avoid major source and modification classification under PSD for all non-combustion emissions of VOC. It is a rolling limit due to substantial and unpredictable variations in operation. Requirement to control emissions from press operations, with pre-authorization to replace control equipment with equipment meeting the requirements of the permit.</p> <p>National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Source Categories. Limits taken to avoid major source classification under the NESHAPs for both total and individual HAPs.</p>
GP 002 Combustion Sources and GHG Limits	Title I Condition to avoid classification as a major source or modification under 40 CFR § 52; Minn. R. 7007.3000	PSD and GreenHouse Gas Tailoring Rule. Fuel Usage limits to keep Brown Printing below 100,000 tpy for CO ₂ e.
GP 003 (Direct Heating Equipment)	Minn. R. 7011.0610	Minnesota Standard of Performance for Direct Heating Equipment.

Level*	Applicable Regulations	Comments:
	Title 1 Condition: to avoid classification as a major source or modification under 40 CFR § 52.21 and Minn. R. 7007.3000	Fuel type limits to Natural Gas (NG) or liquefied petroleum gas (LPG) for most of combustion sources at the facility except a diesel engine which burns diesel fuel.
GP 004 (Regenerative Thermal Oxidizers)	Title 1 Condition to avoid classification as a major source or modification under 40 CFR § 52.21 and Minn. R. 7007.3000	PSD and NESHAP. Control efficiency and other operating parameter requirements to limit VOC and VOC-HAP PTE to avoid major source classification under PSD and NESHAP (including future modifications).
	40 CFR § 64	CAM. See Table 4.
	Minn. R. 7017.0200	Minnesota Performance Testing Rule. Requirements to test RTO.
	Title 1 Condition: to avoid classification as a major source or modification under 40 CFR § 52.21 and Minn. R. 7007.3000	Fuel type limits to Natural Gas (NG) or liquefied petroleum gas (LPG) for most of combustion sources at the facility except a diesel engine which burns diesel fuel.

Level*	Applicable Regulations	Comments:
GP 006 (Indirect Heating Equipment)	Minn. R. 7011.0515 Title 1 Condition: to avoid classification as a major source or modification under 40 CFR § 52.21 and Minn. R. 7007.3000	Standards of Performance for Indirect Heating Fossil-Fuel Burning Equipment. Fuel type limits to Natural Gas (NG) or liquefied petroleum gas (LPG) for most of combustion sources at the facility except a diesel engine which burns diesel fuel.
GP 008 (Paper Waste Recycling no CAM)	Title I Condition to avoid classification as a major source or modification under 40 CFR §52.21 and Minn. R. 7007.3000 Minn. R. 7011.0715	PSD. Control efficiency and other operating parameter requirements to limit particulate matter PTE to avoid major source classification under PSD. Minnesota Industrial Process Equipment Rule (IPER).
GP 009 (Paper Waste Recycling with CAM)	Title I Condition to avoid classification as a major source or modification under 40 CFR §52.21 and Minn. R. 7007.3000 40 CFR pt. 64	PSD. Operating requirements to limit particulate matter PTE to avoid major source classification under PSD. CAM. (See Table 4).
EU 026 (Chiller Unit)	Minn. R. 7011.0715	Standards of Performance for Post 1969 Industrial Process Equipment. Fuel limited to natural gas only (carryover from previous amendment).
EU 076 (Diesel Engine)	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines. Affected source subjects to subpart ZZZZ NESHAP but no requirements apply.

*Level – EU: emission unit, GP: group, TF: total facility, SV: stack/vent, CE: control equipment

3. Technical Information:

3.1 Potential to Emit (PTE) calculations:

Brown printing originally submitted a spreadsheet in the permit application. However, the PTEs were calculated using average actual data at the facility. The spreadsheet was then revised to include both the information provided from the Permittee and the calculations prepared by the MPCA. The following lists the changes that were made to the submitted calculations

- Calculated uncontrolled VOC PTE emission from ink at the presses based on the maximum printing capacity of each press and historical data from a similar printing industry.
- Added an additional factor of 25% to PTE calculations that are based off actual data scaled to 8760 hours/yr.
- Used 97% of destruction efficiency (DE) for PTE calculations of VOCs and HAPs though result from previous performance test demonstrates 99% DE.
- Made correction to particulate (PM, PM₁₀ and PM_{2.5} emission calculations at scrap collection operation. Limited PTE using Industrial Process Equipment Rule (Minn. R. 7011.0070) cannot be used as uncontrolled PTE; instead, limited and controlled PTE should be calculated using permit limit (0.01 gr/dscf) and flow rate (dscfm). Uncontrolled PTE can then be back calculated using limited and controlled PTE and control efficiency of the control equipment (fabric filters)
- Added emission calculations for insignificant activities at facility.
- Included HAPs calculations for all the combustion sources.

Calculation spreadsheet is attached to this TSD.

3.2 Material Usage Recordkeeping at Group 1 - Presses:

Brown Printing is required to monitor the ink materials used at presses, the amount and type of solvent used at fountain solution and automatic and manual blanket wash, and also other VOC and HAP-containing materials. Summary of the recordkeeping requirement can be listed as follows:

- Daily recordkeeping of the ink materials is required. This can be done by tracking amount of ink materials ordered/delivered each day. Due to operation at Brown Printing daily order records of the ink materials are tracked instead of monitoring ink daily usages. This is a reasonable assumption because each day ink materials are ordered from a local vendor, used, and any leftovers are shipped out of the facility. Hence, no old, un-used ink materials are stored on-site at the facility.
- Brown Printing is required to do recordkeeping of the amount and type of solvent used for fountain solution, automatic and manual blanket wash whenever it is dispensed.
- For other VOC and HAP-containing materials not mentioned above, the Permittee must maintain monthly usage records of the materials. Purchase records can be used to estimate the quantity materials used. Calculation is needed to determine the amount used.

3.2 Periodic Monitoring and CAM:

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

The Permittee need to submit a CAM proposal as required by 40 CFR § 64.3. Further discussion of decisions about CAM can be found in Table 4.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or where CAM applies.

Table 6. Periodic Monitoring

Level*	Requirement (basis)	Additional Monitoring	Discussion
GP 001 Press Limits	VOC \leq 232.5 tons per year, on a 12 month rolling basis (limit to avoid NSR) Individual HAP \leq 9.0 tpy on a 12 month rolling sum basis (avoid NESHAP) Total HAP \leq 22.1 tpy on a 12 month rolling sum basis (avoid NESHAP)	Recordkeeping: Daily records of quantity of each ink material delivered to the facility; VOC vapor pressure; Monthly calculations and recordkeeping.	Daily written logs to document the order/delivery records of ink materials used at the presses. Whenever the material is dispensed at fountain solution, automatic and manual blanket wash the Permittee shall record the amount and type of solvent material. Credit can be taken for waste materials collected and shipped off-site (dispensed - waste = emissions). Since this is done at most monthly, calculating emissions more frequently than monthly would result in large spikes (while waste is accumulating) and dips (when waste is shipped) – resulting (continued next page) in possible paperwork violations and days with negative emissions. (continued next page) For these reasons, 12 month rolling sum

Level*	Requirement (basis)	Additional Monitoring	Discussion
			limits are reasonable for this Facility. The permit also requires all units are labeled and inventoried (at TF level).
GP 002 Combustion Sources and GHG Limits	GHGs Fuel Usage limits: 1,290.4 mmscf/yr using natural gas and 210,000 gals/yr using LPG as fuel.	Recordkeeping including calculation of 12-month rolling sum of the fuel usage at the facility.	
GP 003 Direct Heating Equipment	PM \leq 0.3 gr/dscf of exhaust gas (Minn. R. 7011.0610) Opacity \leq 20% (Minn. R. 7011.0610)	Fuel usage records	Fuel used for direct heating equipment is either NG or LPG (same as indirect heating equipment); so, it is unlikely that emission limit will be exceeded.
GP 004 (Regenerative Thermal Oxidizers)	VOC and VOC-HAP: Control Efficiency of 97% (limit to avoid NSR + NESHAP) Temperature limit \geq 1,575 degree F (achieved during initial performance test).	Temperature monitoring, Recordkeeping, O & M, inspections Fuel usage records	Monitoring based on the Minnesota Performance Standard for Control Equipment and CAM is adequate to have a reasonable assurance of compliance. Performance testing will be required of each of the applicable units. Subsequent testing of these units will be based on the MPCA Performance Testing Frequency Guidance. Fuel used for RTO is either NG or LPG (same as indirect heating equipment); so, it is unlikely that emission limit will be exceeded.
GP 006 (Indirect Heating Equipment)	PM \leq 0.4 lbs/MMBTU heat input Opacity \leq 20% (Minn. R 7011.0515)	Fuel usage records	All units use NG or LPG fuel only; therefore, the likelihood of violating either of the emission limits is very small. The Permittee can demonstrate that these units will continue to operate such that emissions are well below the emission limits by only burning natural gas or LPG. Since this is a permit condition, the semi-annual deviation report will document any

Level*	Requirement (basis)	Additional Monitoring	Discussion
			deviations from this condition. Design based PTE for each unit, using AP-42, is 0.0006 lbs/MMBTU.
GP 008 (Paper Waste Recycling no CAM)	<p>(Title I limit to avoid NSR + Minn. R. 7017.0200)</p> <p>PM and PM₁₀ ≤ 0.01 grain/dry standard cubic feet of exhaust gas.</p> <p>Opacity ≤ 20% (Minn. R. 7011.0715)</p> <p>Equipment Efficiency: PM ≥ 99.0 PM₁₀ ≥ 93.0 and PM_{2.5} ≥ 93.0</p> <p>Pressure drop (based on manufacturer's specification)</p>	Visible emission monitoring and Pressure drop monitoring during inclement weather, recordkeeping O &M, inspections	<p>PM and PM₁₀ limits (0.01 gr/dscf) come from the manufacturer and are more stringent than limits (0.3 gr/dscf) from Minnesota rule 7011.0715.</p> <p>Using fabric filters as control equipment, the likelihood of violating either of the emission limits is very small. Since this is a permit condition, the semi-annual deviation report will document any deviations from this condition.</p>
GP 009 (Paper Waste Recycling with CAM)	<p>(Title I limit to avoid NSR + Minn. R. 7017.0200)</p> <p>PM and PM₁₀ ≤ 0.01 grain/dry standard cubic feet of exhaust gas.</p> <p>Control Equipment Efficiency: PM ≥ 99.0 PM₁₀ ≥ 93.0 and PM_{2.5} ≥ 93.0</p> <p>Pressure drop (based on manufacturer's specification)</p>	Visible emission monitoring and Pressure drop monitoring during inclement weather, recordkeeping O &M, inspections	<p>The proposed CAM is similar to the Minnesota Performance Standard for Control Equipment for fabric filters (daily pressure drop reading, (continued next page) periodic inspections, corrective actions, and O&M). For the filters belong to this group, the daily pressure drop reading is the primary compliance method for both the emission limit as well as the control efficiency limit. For this reason, the pressure drop range is a limit (standard MPCA practice for fabric filters), not just a control equipment indicator range; therefore, having pressure drop values outside the specified range would be considered a deviation of the pressure drop limit, not just an excursion for CAM.</p>

Level*	Requirement (basis)	Additional Monitoring	Discussion
EU 076 (Diesel Engine)	SO ₂ ≤ .50 lbs/mmBtu heat input, Opacity ≤ 20% (Minn. R. 7011.2300)	Monthly recordkeeping of fuel type and fuel usage.	The emission comes from this engine should be small since it's a backup unit with estimated operation of 500 hours per year. It is unlikely for this unit to violate the emission limits based on the fuel used and the equipment capacity.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3.3 Deviations from Delta Guidance:

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

Appendix I contains the specific calculation procedures for VOC and HAP emissions. These procedures are too complex to enter into Delta and must go in an Appendix. Appendix II is a listing of the Facility's Insignificant Activities and their applicable requirements. This is a fairly standard way to include these in the permit, since it is highly unlikely the MPCA would need to have these as traceable items in Delta. Appendix III is a summary of the various emission units, stack vents, control equipment, groups, and emission unit description. This documents the correlation of specific emissions units to specific control equipment. Delta does not show this data as part of the "associated items" in Table A of the permit.

Another area where the permit deviates from guidance is in the use of groups for requirements that apply to individual pieces of equipment. This is done in order to streamline the permit.

3.4 Insignificant Activities:

Brown Printing has several operations which are classified as insignificant activities. These are listed in Appendix II to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities.

Table 7. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
Fuel use: space heaters fueled by kerosene, natural gas, or propane	PM \leq 0.6 or 0.4 lb/MMBtu, depending on year constructed Opacity \leq 20% with exceptions (Minn. R. 7011.0510/515)	For this unit, based on the fuels used and EPA published emissions factors, it is highly unlikely that it could violate the applicable requirement. In addition, these types of units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Equipment venting PM/PM ₁₀ inside a building, provided that emissions from the equipment are vented inside of the building 100% of the time	PM, variable depending on airflow Opacity \leq 20% (Minn. R. 7011.0715)	For these units, it is highly unlikely that they could violate the applicable requirement. In addition, these units are vented inside a building, so testing for PM or opacity is not feasible.
Individual units that have potential emissions of less than 1 tpy of various criteria pollutants	PM, variable depending on airflow Opacity \leq 20% (Minn. R. 7011.0715)	These units consist of gluing and water-based inkjet printers. Neither is reasonably expected to generate particulate matter. It is highly unlikely that they could violate the applicable (continued next page) requirement. In addition, these units are operated and vented inside a building, so testing for PM or opacity is not feasible.

3.5 Comments Received:

Document the official start/end dates of EPA's review period if they are different than the default (i.e., start of the notice + 45 days) and explain why the EPA review period is different. Document whether or not EPA agreed that we could go ahead and issue the permit prior to the end of their official review period by stating how and when this was communicated (or by attaching e-mails/letters).

Public Notice Period: <start date> - <end date>

EPA 45-day Review Period: <start date> - <end date>

If comments were received during the public notice period from the public or if comments are received from EPA, they should be described briefly here, as well as any changes made to the permit as a result of the comments. Generally, the comment letters should also be provided as attachments to the TSD.

Comments were <not> received from the public during the public notice period. <The comments received did <not> include adverse comments on any applicable requirements of the permit. Changes to the permit were <not> made as a result of the comments. *Provide summary of changes.* >

<The revised permit was sent to EPA for their 45-day review on <date>.> Comments were <not> received from EPA during their review period. Changes to the permit were <not> made as a result of the comments. *Provide summary of changes.* >

4. Permit Fee Assessment:

Minnesota Rule Chapter 7002, Air Emission and Water Quality Permit Fees excludes reissuance of an individual Part 70 permit; therefore, the application fee doesn't apply to this permit action (PER 16100013-005). The rule became effective on March 15, 2010. So, in case a permit amendment is needed in the future the Permittee must determine the permit application fee as required by Minn. R. 7002.0019. To calculate the fees the Permittee can complete the Submittal Cover Page form (SPC-01) and follow the instructions from the MPCA's website. If the fee is applicable it must be paid in order for the permit to be issued.

5. Conclusion:

Based on the information provided by Brown Printing, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 16100013-005 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Hien Le (permit writer/engineer)
 Jennifer Lovett (enforcement)
 Jim Kolar (stack testing)
 Kelsey Suddard (peer reviewer)

AQ File No. 1556; DQ 2095, 16100013-005

Attachments: 1. PTE Summary and Calculation Spreadsheets
 2. Facility Description and CD-01 Forms
 3. *Note about the CAM plan*

Brown Printing Co
Permit No. 16100013-005
Technical Support Document

Attachment 1

PTE Summary and Calculation Spreadsheets



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

Substitute Form GI-07
Facility Emissions Summary
Air Quality Permit Program

Doc Type: Permit Application

Instructions on Page 2




1a) AQ Facility ID No.: _____ 1b) AQ File No.: _____
2) Facility Name: _____

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# : NA				3c) CAS# : NA				3c) CAS# : NA			
		3d) Pollutant Name: PM				3d) Pollutant Name: PM ₁₀				3d) Pollutant Name: PM _{2.5}			
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	2.90E-02	0.13	0.13	See AEIR	2.90E-02	0.13	0.13	See AEIR	2.90E-02	0.13	0.13	See AEIR
EU	002	2.75E-02	0.12	0.12	See AEIR	2.75E-02	0.12	0.12	See AEIR	2.75E-02	0.12	0.12	See AEIR
EU	004	6.22E-02	0.27	0.27	See AEIR	6.22E-02	0.27	0.27	See AEIR	6.22E-02	0.27	0.27	See AEIR
EU	006	7.89E-02	0.35	0.35	See AEIR	7.89E-02	0.35	0.35	See AEIR	7.89E-02	0.35	0.35	See AEIR
EU	007	3.11E-02	0.14	0.14	See AEIR	3.11E-02	0.14	0.14	See AEIR	3.11E-02	0.14	0.14	See AEIR
EU	008	6.66E-02	0.29	0.29	See AEIR	6.66E-02	0.29	0.29	See AEIR	6.66E-02	0.29	0.29	See AEIR
EU	009	7.89E-02	0.35	0.35	See AEIR	7.89E-02	0.35	0.35	See AEIR	7.89E-02	0.35	0.35	See AEIR
EU	010	6.51E-02	0.29	0.29	See AEIR	6.51E-02	0.29	0.29	See AEIR	6.51E-02	0.29	0.29	See AEIR
EU	017	257.14	1126.29	11.26	See AEIR	1594.29	997.57	11.26	See AEIR	1594.29	997.57	11.26	See AEIR
EU	018	257.14	1126.29	11.26	See AEIR	1594.29	997.57	11.26	See AEIR	1594.29	997.57	11.26	See AEIR
EU	019	2.42E-02	0.11	0.11	See AEIR	2.42E-02	0.11	0.11	See AEIR	2.42E-02	0.11	0.11	See AEIR
EU	020	2.42E-02	0.11	0.11	See AEIR	2.42E-02	0.11	0.11	See AEIR	2.42E-02	0.11	0.11	See AEIR
EU	024	0.16	0.70	0.70	See AEIR	0.16	0.70	0.70	See AEIR	0.16	0.70	0.70	See AEIR
EU	026	2.66E-02	0.12	0.12	See AEIR	2.66E-02	0.12	0.12	See AEIR	2.66E-02	0.12	0.12	See AEIR
EU	027	4.32E-02	0.19	0.19	See AEIR	4.32E-02	0.19	0.19	See AEIR	4.32E-02	0.19	0.19	See AEIR
EU	028	4.34E-02	0.19	0.19	See AEIR	4.34E-02	0.19	0.19	See AEIR	4.34E-02	0.19	0.19	See AEIR
EU	029	4.34E-02	0.19	0.19	See AEIR	4.34E-02	0.19	0.19	See AEIR	4.34E-02	0.19	0.19	See AEIR
EU	030	5.43E-02	0.24	0.24	See AEIR	5.43E-02	0.24	0.24	See AEIR	5.43E-02	0.24	0.24	See AEIR

EU	031	3.26E-02	0.14	0.14	See AEIR	3.26E-02	0.14	0.14	See AEIR	3.26E-02	0.14	0.14	See AEIR
EU	032	3.26E-02	0.14	0.14	See AEIR	3.26E-02	0.14	0.14	See AEIR	3.26E-02	0.14	0.14	See AEIR
EU	033	5.43E-02	0.24	0.24	See AEIR	5.43E-02	0.24	0.24	See AEIR	5.43E-02	0.24	0.24	See AEIR
EU	034	428.57	1877.14	18.77	See AEIR	2271.43	1421.27	18.77	See AEIR	2271.43	1421.27	18.77	See AEIR
EU	035	3.26E-02	0.14	0.14	See AEIR	3.26E-02	0.14	0.14	See AEIR	3.26E-02	0.14	0.14	See AEIR
EU	036	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR
EU	037	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR
EU	038	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR
EU	039	1.62E-03	7.09E-03	7.09E-03	See AEIR	1.62E-03	7.09E-03	7.09E-03	See AEIR	1.62E-03	7.09E-03	7.09E-03	See AEIR
EU	040	1.16E-02	5.07E-02	5.07E-02	See AEIR	1.16E-02	5.07E-02	5.07E-02	See AEIR	1.16E-02	5.07E-02	5.07E-02	See AEIR
EU	041	1.16E-02	5.07E-02	5.07E-02	See AEIR	1.16E-02	5.07E-02	5.07E-02	See AEIR	1.16E-02	5.07E-02	5.07E-02	See AEIR
EU	042	6.37E-03	2.79E-02	2.79E-02	See AEIR	6.37E-03	2.79E-02	2.79E-02	See AEIR	6.37E-03	2.79E-02	2.79E-02	See AEIR
EU	043	540.00	2365.20	23.65	See AEIR	2646.00	1655.64	23.65	See AEIR	2646.00	1655.64	23.65	See AEIR
EU	044	540.00	2365.20	23.65	See AEIR	2646.00	1655.64	23.65	See AEIR	2646.00	1655.64	23.65	See AEIR
EU	045	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	046	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	047	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	048	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	049	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	050	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR
EU	051	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR
EU	052	4.98E-03	2.18E-02	2.18E-02	See AEIR	4.98E-03	2.18E-02	2.18E-02	See AEIR	4.98E-03	2.18E-02	2.18E-02	See AEIR
EU	053	4.98E-03	2.18E-02	2.18E-02	See AEIR	4.98E-03	2.18E-02	2.18E-02	See AEIR	4.98E-03	2.18E-02	2.18E-02	See AEIR
EU	056	7.24E-04	3.17E-03	3.17E-03	See AEIR	7.24E-04	3.17E-03	3.17E-03	See AEIR	7.24E-04	3.17E-03	3.17E-03	See AEIR
EU	057	7.24E-04	3.17E-03	3.17E-03	See AEIR	7.24E-04	3.17E-03	3.17E-03	See AEIR	7.24E-04	3.17E-03	3.17E-03	See AEIR
EU	058	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	059	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	060	2.90E-04	1.27E-03	1.27E-03	See AEIR	2.90E-04	1.27E-03	1.27E-03	See AEIR	2.90E-04	1.27E-03	1.27E-03	See AEIR
EU	061	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	062	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	063	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	064	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR

EU	065	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR
EU	066	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	067	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	068	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	069	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	070	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	071	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	072	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	073	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	074	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	075	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR	1.45E-03	6.34E-03	6.34E-03	See AEIR
EU	076	6.35E-02	1.59E-02	1.59E-02	See AEIR	6.35E-02	1.59E-02	1.59E-02	See AEIR	6.35E-02	1.59E-02	1.59E-02	See AEIR
EU	077	2.90E-03	1.27E-02	1.27E-02	See AEIR	2.90E-03	1.27E-02	1.27E-02	See AEIR	1.27E-02	1.27E-02	1.27E-02	See AEIR
EU	078	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR	7.24E-03	3.17E-02	3.17E-02	See AEIR
EU	079	5.43E-02	0.24	0.24	See AEIR	5.43E-02	0.24	0.24	See AEIR	5.43E-02	0.24	0.24	See AEIR
IA	001	7.23E-04	3.17E-03	3.17E-03	See AEIR	7.23E-04	3.17E-03	3.17E-03	See AEIR	7.23E-04	3.17E-03	3.17E-03	See AEIR
IA	002	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR
IA	003	4.47E-04	1.96E-03	1.96E-03	See AEIR	4.47E-04	1.96E-03	1.96E-03	See AEIR	4.47E-04	1.96E-03	1.96E-03	See AEIR
IA	004	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR
IA	005	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR
IA	006	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR
IA	007	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR	3.73E-04	1.63E-03	1.63E-03	See AEIR
IA	008	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR
IA	009	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR
IA	010	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR
IA	011	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR
IA	012	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR
IA	013	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR
IA	014	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR
IA	015	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR	5.59E-04	2.45E-03	2.45E-03	See AEIR
IA	016	9.66E-03	4.23E-02	4.23E-02	See AEIR	9.66E-03	4.23E-02	4.23E-02	See AEIR	9.66E-03	4.23E-02	4.23E-02	See AEIR
IA	017	9.66E-03	4.23E-02	4.23E-02	See AEIR	9.66E-03	4.23E-02	4.23E-02	See AEIR	9.66E-03	4.23E-02	4.23E-02	See AEIR

IA	018	9.66E-03	4.23E-02	4.23E-02	See AEIR	9.66E-03	4.23E-02	4.23E-02	See AEIR	9.66E-03	4.23E-02	4.23E-02	See AEIR
IA	019	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR	1.01E-03	4.41E-03	4.41E-03	See AEIR
IA	020	6.71E-04	2.94E-03	2.94E-03	See AEIR	6.71E-04	2.94E-03	2.94E-03	See AEIR	6.71E-04	2.94E-03	2.94E-03	See AEIR
IA	021	3.58E-03	1.57E-02	1.57E-02	See AEIR	3.58E-03	1.57E-02	1.57E-02	See AEIR	3.58E-03	1.57E-02	1.57E-02	See AEIR
IA	031	7.45E-04	3.26E-03	3.26E-03	See AEIR	7.45E-04	3.26E-03	3.26E-03	See AEIR	7.45E-04	3.26E-03	3.26E-03	See AEIR
IA	032	5.96E-04	2.61E-03	2.61E-03	See AEIR	5.96E-04	2.61E-03	2.61E-03	See AEIR	5.96E-04	2.61E-03	2.61E-03	See AEIR
IA	033	1.52E-03	6.66E-03	6.66E-03	See AEIR	1.52E-03	6.66E-03	6.66E-03	See AEIR	1.52E-03	6.66E-03	6.66E-03	See AEIR
IA	034	8.94E-04	3.92E-03	3.92E-03	See AEIR	8.94E-04	3.92E-03	3.92E-03	See AEIR	8.94E-04	3.92E-03	3.92E-03	See AEIR
IA	035	1.79E-03	7.83E-03	7.83E-03	See AEIR	1.79E-03	7.83E-03	7.83E-03	See AEIR	1.79E-03	7.83E-03	7.83E-03	See AEIR
IA	036	9.31E-04	4.08E-03	4.08E-03	See AEIR	9.31E-04	4.08E-03	4.08E-03	See AEIR	9.31E-04	4.08E-03	4.08E-03	See AEIR
IA	037	7.45E-04	3.26E-03	3.26E-03	See AEIR	7.45E-04	3.26E-03	3.26E-03	See AEIR	7.45E-04	3.26E-03	3.26E-03	See AEIR
IA	038	9.31E-04	4.08E-03	4.08E-03	See AEIR	9.31E-04	4.08E-03	4.08E-03	See AEIR	9.31E-04	4.08E-03	4.08E-03	See AEIR
IA	039	5.14E-04	2.25E-03	2.25E-03	See AEIR	5.14E-04	2.25E-03	2.25E-03	See AEIR	5.14E-04	2.25E-03	2.25E-03	See AEIR
IA	040	5.14E-04	2.25E-03	2.25E-03	See AEIR	5.14E-04	2.25E-03	2.25E-03	See AEIR	5.14E-04	2.25E-03	2.25E-03	See AEIR
IA	041	9.31E-04	4.08E-03	4.08E-03	See AEIR	9.31E-04	4.08E-03	4.08E-03	See AEIR	9.31E-04	4.08E-03	4.08E-03	See AEIR
IA	042	8.94E-04	3.92E-03	3.92E-03	See AEIR	8.94E-04	3.92E-03	3.92E-03	See AEIR	8.94E-04	3.92E-03	3.92E-03	See AEIR
IA	047	1.71E-02	7.47E-02	7.47E-02	See AEIR	1.71E-02	7.47E-02	7.47E-02	See AEIR	1.71E-02	7.47E-02	7.47E-02	See AEIR
IA	048	6.28E-03	2.75E-02	2.75E-02	See AEIR	6.28E-03	2.75E-02	2.75E-02	See AEIR	6.28E-03	2.75E-02	2.75E-02	See AEIR
IA	049	6.28E-03	2.75E-02	2.75E-02	See AEIR	6.28E-03	2.75E-02	2.75E-02	See AEIR	6.28E-03	2.75E-02	2.75E-02	See AEIR
IA	050	3.54E-03	1.55E-02	1.55E-02	See AEIR	3.54E-03	1.55E-02	1.55E-02	See AEIR	3.54E-03	1.55E-02	1.55E-02	See AEIR
IA	052	1.57E-03	6.88E-03	6.88E-03	See AEIR	1.57E-03	6.88E-03	6.88E-03	See AEIR	1.57E-03	6.88E-03	6.88E-03	See AEIR

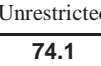





4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		8,865.7	94.2	See AEIR		6,733.3	94.2	See AEIR		6,733.3	94.2	See AEIR

- 5) ☐ Compact disc containing editable calculation spreadsheet(s) included in the application package
☐ Editable calculation spreadsheet(s) will be emailed to the MPCA upon request

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# : NA				3c) CAS# : NA				3c) CAS# : NA			
		3d) Pollutant Name: NO _x				3d) Pollutant Name: SO ₂				3d) Pollutant Name: CO			
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	0.38	1.67	1.67	See AEIR	2.29E-03	1.00E-02	1.00E-02	See AEIR	0.32	1.40	1.40	See AEIR
EU	002	0.36	1.59	1.59	See AEIR	2.17E-03	9.51E-03	9.51E-03	See AEIR	0.30	1.33	1.33	See AEIR
EU	004	0.82	3.59	3.59	See AEIR	4.91E-03	2.15E-02	2.15E-02	See AEIR	0.69	3.01	3.01	See AEIR
EU	006	1.04	4.55	4.55	See AEIR	6.23E-03	2.73E-02	2.73E-02	See AEIR	0.87	3.82	3.82	See AEIR
EU	007	0.41	1.79	1.79	See AEIR	2.46E-03	1.08E-02	1.08E-02	See AEIR	0.34	1.51	1.51	See AEIR
EU	008	0.88	3.84	3.84	See AEIR	5.26E-03	2.30E-02	2.30E-02	See AEIR	0.74	3.22	3.22	See AEIR
EU	009	1.04	4.55	4.55	See AEIR	6.23E-03	2.73E-02	2.73E-02	See AEIR	0.87	3.82	3.82	See AEIR
EU	010	0.86	3.75	3.75	See AEIR	5.14E-03	2.25E-02	2.25E-02	See AEIR	0.72	3.15	3.15	See AEIR
EU	019	0.32	1.40	1.40	See AEIR	1.91E-03	8.38E-03	8.38E-03	See AEIR	0.27	1.17	1.17	See AEIR
EU	020	0.32	1.40	1.40	See AEIR	1.91E-03	8.38E-03	8.38E-03	See AEIR	0.27	1.17	1.17	See AEIR
EU	024	2.10	9.18	9.18	See AEIR	1.26E-02	5.51E-02	5.51E-02	See AEIR	1.76	7.71	7.71	See AEIR
EU	026	0.35	1.54	1.54	See AEIR	2.10E-03	9.21E-03	9.21E-03	See AEIR	0.29	1.29	1.29	See AEIR
EU	027	0.57	2.49	2.49	See AEIR	3.41E-03	1.49E-02	1.49E-02	See AEIR	0.48	2.09	2.09	See AEIR
EU	028	0.57	2.50	2.50	See AEIR	3.43E-03	1.50E-02	1.50E-02	See AEIR	0.48	2.10	2.10	See AEIR
EU	029	0.57	2.50	2.50	See AEIR	3.43E-03	1.50E-02	1.50E-02	See AEIR	0.48	2.10	2.10	See AEIR
EU	030	0.71	3.13	3.13	See AEIR	4.29E-03	1.88E-02	1.88E-02	See AEIR	0.60	2.63	2.63	See AEIR
EU	031	0.43	1.88	1.88	See AEIR	2.57E-03	1.13E-02	1.13E-02	See AEIR	0.36	1.58	1.58	See AEIR
EU	032	0.43	1.88	1.88	See AEIR	2.57E-03	1.13E-02	1.13E-02	See AEIR	0.36	1.58	1.58	See AEIR
EU	033	0.71	3.13	3.13	See AEIR	4.29E-03	1.88E-02	1.88E-02	See AEIR	0.60	2.63	2.63	See AEIR
EU	035	0.10	1.88	1.88	See AEIR	2.57E-03	1.13E-02	1.13E-02	See AEIR	0.36	1.58	1.58	See AEIR
EU	036	0.10	0.42	0.42	See AEIR	5.71E-04	2.50E-03	2.50E-03	See AEIR	8.00E-02	0.35	0.35	See AEIR
EU	037	0.10	0.42	0.42	See AEIR	5.71E-04	2.50E-03	2.50E-03	See AEIR	8.00E-02	0.35	0.35	See AEIR
EU	038	0.10	0.42	0.42	See AEIR	5.71E-04	2.50E-03	2.50E-03	See AEIR	8.00E-02	0.35	0.35	See AEIR
EU	039	2.13E-02	0.09	0.09	See AEIR	1.28E-04	5.59E-04	5.59E-04	See AEIR	1.79E-02	7.83E-02	7.83E-02	See AEIR
EU	040	0.15	0.67	0.67	See AEIR	9.14E-04	4.00E-03	4.00E-03	See AEIR	0.13	0.56	0.56	See AEIR
EU	041	0.15	0.67	0.67	See AEIR	9.14E-04	4.00E-03	4.00E-03	See AEIR	0.13	0.56	0.56	See AEIR
EU	042	8.38E-02	0.37	0.37	See AEIR	5.03E-04	2.20E-03	2.20E-03	See AEIR	7.04E-02	0.31	0.31	See AEIR
EU	045	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	046	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	047	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	048	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	049	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	050	0.10	0.42	0.42	See AEIR	5.71E-04	2.50E-03	2.50E-03	See AEIR	8.00E-02	0.35	0.35	See AEIR
EU	051	0.10	0.42	0.42	See AEIR	5.71E-04	2.50E-03	2.50E-03	See AEIR	8.00E-02	0.35	0.35	See AEIR
EU	052	6.55E-02	0.29	0.29	See AEIR	3.93E-04	1.72E-03	1.72E-03	See AEIR	5.50E-02	0.24	0.24	See AEIR
EU	053	6.55E-02	0.29	0.29	See AEIR	3.93E-04	1.72E-03	1.72E-03	See AEIR	5.50E-02	0.24	0.24	See AEIR
EU	056	9.52E-03	4.17E-02	4.17E-02	See AEIR	5.71E-05	2.50E-04	2.50E-04	See AEIR	8.00E-03	3.50E-02	3.50E-02	See AEIR

EU	057	9.52E-03	4.17E-02	4.17E-02	See AEIR	5.71E-05	2.50E-04	2.50E-04	See AEIR	8.00E-03	3.50E-02	3.50E-02	See AEIR
EU	058	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	059	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	060	3.81E-03	1.67E-02	1.67E-02	See AEIR	2.29E-05	1.00E-04	1.00E-04	See AEIR	3.20E-03	1.40E-02	1.40E-02	See AEIR
EU	061	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	062	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	063	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	064	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	065	2.86E-02	0.13	0.13	See AEIR	1.71E-04	7.51E-04	7.51E-04	See AEIR	2.40E-02	0.11	0.11	See AEIR
EU	066	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	067	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	068	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	069	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	070	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	071	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	072	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	073	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	074	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	075	1.90E-02	8.34E-02	8.34E-02	See AEIR	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.60E-02	7.01E-02	7.01E-02	See AEIR
EU	076	0.90	0.23	0.23	See AEIR	5.94E-02	1.49E-02	1.49E-02	See AEIR	0.19	4.87E-02	4.87E-02	See AEIR
EU	077	3.81E-02	0.17	0.17	See AEIR	2.29E-04	1.00E-03	1.00E-03	See AEIR	3.20E-02	0.14	0.14	See AEIR
EU	078	0.10	0.42	0.42	See AEIR	5.71E-04	2.50E-03	2.50E-03	See AEIR	8.00E-02	0.35	0.35	See AEIR
EU	079	0.71	3.13	3.13	See AEIR	4.29E-03	1.88E-02	1.88E-02	See AEIR	0.60	2.63	2.63	See AEIR
IA	001	9.51E-03	4.17E-02	4.17E-02	See AEIR	5.71E-05	2.50E-04	2.50E-04	See AEIR	7.99E-03	3.50E-02	3.50E-02	See AEIR
IA	002	1.32E-02	5.80E-02	5.80E-02	See AEIR	7.94E-05	3.48E-04	3.48E-04	See AEIR	1.11E-02	4.87E-02	4.87E-02	See AEIR
IA	003	5.88E-03	2.58E-02	2.58E-02	See AEIR	3.53E-05	1.55E-04	1.55E-04	See AEIR	4.94E-03	2.16E-02	2.16E-02	See AEIR
IA	004	4.90E-03	2.15E-02	2.15E-02	See AEIR	2.94E-05	1.29E-04	1.29E-04	See AEIR	4.12E-03	1.80E-02	1.80E-02	See AEIR
IA	005	4.90E-03	2.15E-02	2.15E-02	See AEIR	2.94E-05	1.29E-04	1.29E-04	See AEIR	4.12E-03	1.80E-02	1.80E-02	See AEIR
IA	006	4.90E-03	2.15E-02	2.15E-02	See AEIR	2.94E-05	1.29E-04	1.29E-04	See AEIR	4.12E-03	1.80E-02	1.80E-02	See AEIR
IA	007	4.90E-03	2.15E-02	2.15E-02	See AEIR	2.94E-05	1.29E-04	1.29E-04	See AEIR	4.12E-03	1.80E-02	1.80E-02	See AEIR
IA	008	7.35E-03	3.22E-02	3.22E-02	See AEIR	4.41E-05	1.93E-04	1.93E-04	See AEIR	6.18E-03	2.71E-02	2.71E-02	See AEIR
IA	009	1.32E-02	5.80E-02	5.80E-02	See AEIR	7.94E-05	3.48E-04	3.48E-04	See AEIR	1.11E-02	4.87E-02	4.87E-02	See AEIR
IA	010	1.32E-02	5.80E-02	5.80E-02	See AEIR	7.94E-05	3.48E-04	3.48E-04	See AEIR	1.11E-02	4.87E-02	4.87E-02	See AEIR
IA	011	1.32E-02	5.80E-02	5.80E-02	See AEIR	7.94E-05	3.48E-04	3.48E-04	See AEIR	1.11E-02	4.87E-02	4.87E-02	See AEIR
IA	012	1.32E-02	5.80E-02	5.80E-02	See AEIR	7.94E-05	3.48E-04	3.48E-04	See AEIR	1.11E-02	4.87E-02	4.87E-02	See AEIR
IA	013	7.35E-03	3.22E-02	3.22E-02	See AEIR	4.41E-05	1.93E-04	1.93E-04	See AEIR	6.18E-03	2.71E-02	2.71E-02	See AEIR
IA	014	7.35E-03	3.22E-02	3.22E-02	See AEIR	4.41E-05	1.93E-04	1.93E-04	See AEIR	6.18E-03	2.71E-02	2.71E-02	See AEIR




IA	015	7.35E-03	3.22E-02	3.22E-02	See AEIR	4.41E-05	1.93E-04	1.93E-04	See AEIR	6.18E-03	2.71E-02	2.71E-02	See AEIR
IA	016	0.13	0.56	0.56	See AEIR	7.62E-04	3.34E-03	3.34E-03	See AEIR	0.11	0.47	0.47	See AEIR
IA	017	0.13	0.56	0.56	See AEIR	7.62E-04	3.34E-03	3.34E-03	See AEIR	0.11	0.47	0.47	See AEIR
IA	018	0.13	0.56	0.56	See AEIR	7.62E-04	3.34E-03	3.34E-03	See AEIR	0.11	0.47	0.47	See AEIR
IA	019	1.32E-02	5.80E-02	5.80E-02	See AEIR	7.94E-05	3.48E-04	3.48E-04	See AEIR	1.11E-02	4.87E-02	4.87E-02	See AEIR
IA	020	8.82E-03	3.86E-02	3.86E-02	See AEIR	5.29E-05	2.32E-04	2.32E-04	See AEIR	7.41E-03	3.25E-02	3.25E-02	See AEIR
IA	021	4.71E-02	0.21	0.21	See AEIR	2.82E-04	1.24E-03	1.24E-03	See AEIR	3.95E-02	0.17	0.17	See AEIR
IA	031	9.80E-03	4.29E-02	4.29E-02	See AEIR	5.88E-05	2.58E-04	2.58E-04	See AEIR	8.24E-03	3.61E-02	3.61E-02	See AEIR
IA	032	7.84E-03	3.44E-02	3.44E-02	See AEIR	4.71E-05	2.06E-04	2.06E-04	See AEIR	6.59E-03	2.89E-02	2.89E-02	See AEIR
IA	033	2.00E-02	8.76E-02	8.76E-02	See AEIR	1.20E-04	5.26E-04	5.26E-04	See AEIR	1.68E-02	7.36E-02	7.36E-02	See AEIR
IA	034	1.18E-02	5.15E-02	5.15E-02	See AEIR	7.06E-05	3.09E-04	3.09E-04	See AEIR	9.88E-03	4.33E-02	4.33E-02	See AEIR
IA	035	2.35E-02	0.10	0.10	See AEIR	1.41E-04	6.18E-04	6.18E-04	See AEIR	1.98E-02	8.66E-02	8.66E-02	See AEIR
IA	036	1.23E-02	5.37E-02	5.37E-02	See AEIR	7.35E-05	3.22E-04	3.22E-04	See AEIR	1.03E-02	4.51E-02	4.51E-02	See AEIR
IA	037	9.80E-03	4.29E-02	4.29E-02	See AEIR	5.88E-05	2.58E-04	2.58E-04	See AEIR	8.24E-03	3.61E-02	3.61E-02	See AEIR
IA	038	1.23E-02	5.37E-02	5.37E-02	See AEIR	7.35E-05	3.22E-04	3.22E-04	See AEIR	1.03E-02	4.51E-02	4.51E-02	See AEIR
IA	039	6.76E-03	2.96E-02	2.96E-02	See AEIR	4.06E-05	1.78E-04	1.78E-04	See AEIR	5.68E-03	2.49E-02	2.49E-02	See AEIR
IA	040	6.76E-03	2.96E-02	2.96E-02	See AEIR	4.06E-05	1.78E-04	1.78E-04	See AEIR	5.68E-03	2.49E-02	2.49E-02	See AEIR
IA	041	1.23E-02	5.37E-02	5.37E-02	See AEIR	7.35E-05	3.22E-04	3.22E-04	See AEIR	1.03E-02	4.51E-02	4.51E-02	See AEIR
IA	042	1.18E-02	5.15E-02	5.15E-02	See AEIR	7.06E-05	3.09E-04	3.09E-04	See AEIR	9.88E-03	4.33E-02	4.33E-02	See AEIR
IA	047	0.22	0.98	0.98	See AEIR	1.35E-03	5.90E-03	5.90E-03	See AEIR	0.19	0.83	0.83	See AEIR
IA	048	8.26E-02	0.36	0.36	See AEIR	4.95E-04	2.17E-03	2.17E-03	See AEIR	6.94E-02	0.30	0.30	See AEIR
IA	049	8.26E-02	0.36	0.36	See AEIR	4.95E-04	2.17E-03	2.17E-03	See AEIR	6.94E-02	0.30	0.30	See AEIR
IA	050	4.66E-02	0.20	0.20	See AEIR	2.80E-04	1.22E-03	1.22E-03	See AEIR	3.91E-02	0.17	0.17	See AEIR
IA	052	2.07E-02	0.09	0.09	See AEIR	1.24E-04	5.43E-04	5.43E-04	See AEIR	1.74E-02	7.60E-02	7.60E-02	See AEIR

	4)	Potential			Actual	Potential			Actual	Potential			Actual						
	Total		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year						
	Facility		74.1	74.1	See AEIR		0.5	0.5	See AEIR		62.1	62.1	See AEIR						
3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :			NA		3c) CAS# :			NA		3c) CAS# :			NA				
		3d) Pollutant Name:			VOC			3d) Pollutant Name:			Lead			3d) Pollutant Name:			CO ₂ e		
		3e) Potential				3f) Actual		Potential			Actual		Potential				Actual		
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr						
EU	001	144.55	633.14	32.63	See AEIR	0	0	0	See AEIR	544.27	2383.92	2383.92	See AEIR						




EU	002	130.61	572.09	29.49	See AEIR	0	0	0	See AEIR	517.06	2264.72	2264.72	See AEIR
EU	004	171.58	751.51	57.58	See AEIR	0	0	0	See AEIR	1170.19	5125.42	5125.42	See AEIR
EU	006	234.17	1025.66	73.60	See AEIR	0	0	0	See AEIR	1483.14	6496.17	6496.17	See AEIR
EU	007	144.55	633.15	32.64	See AEIR	0	0	0	See AEIR	585.09	2562.71	2562.71	See AEIR
EU	008	234.16	1025.62	73.56	See AEIR	0	0	0	See AEIR	1251.83	5483.01	5483.01	See AEIR
EU	009	234.17	1025.66	73.60	See AEIR	0	0	0	See AEIR	1483.14	6496.17	6496.17	See AEIR
EU	010	234.16	1025.61	73.56	See AEIR	0	0	0	See AEIR	1224.62	5363.81	5363.81	See AEIR
EU	019	1.75E-02	7.69E-02	7.69E-02	See AEIR	0	0	0	See AEIR	455.83	1996.53	1996.53	See AEIR
EU	020	1.75E-02	7.69E-02	7.69E-02	See AEIR	0	0	0	See AEIR	455.83	1996.53	1996.53	See AEIR
EU	021-023	4.64	20.33	20.33	See AEIR	0	0	0	See AEIR	--	--	--	See AEIR
EU	024	328.89	1440.53	130.82	See AEIR	0	0	0	See AEIR	2993.50	13111.55	13111.55	See AEIR
EU	026	1.93E-02	8.44E-02	8.44E-02	See AEIR	0	0	0	See AEIR	500.73	2193.20	2193.20	See AEIR
EU	027	319.69	1400.24	101.49	See AEIR	0	0	0	See AEIR	812.33	3558.00	3558.00	See AEIR
EU	028	259.66	1137.29	93.60	See AEIR	0	0	0	See AEIR	816.41	3575.88	3575.88	See AEIR
EU	029	259.66	1137.29	93.60	See AEIR	0	0	0	See AEIR	816.41	3575.88	3575.88	See AEIR
EU	030	3.93E-02	0.17	0.17	See AEIR	0	0	0	See AEIR	1020.51	4469.85	4469.85	See AEIR
EU	031	2.36E-02	0.10	0.10	See AEIR	0	0	0	See AEIR	612.31	2681.91	2681.91	See AEIR
EU	032	2.36E-02	0.10	0.10	See AEIR	0	0	0	See AEIR	612.31	2681.91	2681.91	See AEIR
EU	033	3.93E-02	0.17	0.17	See AEIR	0	0	0	See AEIR	1020.51	4469.85	4469.85	See AEIR
EU	035	2.36E-02	0.10	0.10	See AEIR	0	0	0	See AEIR	612.31	2681.91	2681.91	See AEIR
EU	036	5.24E-03	2.29E-02	2.29E-02	See AEIR	0	0	0	See AEIR	136.07	595.98	595.98	See AEIR
EU	037	5.24E-03	2.29E-02	2.29E-02	See AEIR	0	0	0	See AEIR	136.07	595.98	595.98	See AEIR
EU	038	5.24E-03	2.29E-02	2.29E-02	See AEIR	0	0	0	See AEIR	136.07	595.98	595.98	See AEIR
EU	039	1.17E-03	5.13E-03	5.13E-03	See AEIR	0	0	0	See AEIR	30.41	133.20	133.20	See AEIR
EU	040	8.38E-03	3.67E-02	3.67E-02	See AEIR	0	0	0	See AEIR	217.71	953.57	953.57	See AEIR
EU	041	8.38E-03	3.67E-02	3.67E-02	See AEIR	0	0	0	See AEIR	217.71	953.57	953.57	See AEIR
EU	042	4.61E-03	2.02E-02	2.02E-02	See AEIR	0	0	0	See AEIR	119.74	524.46	524.46	See AEIR
EU	045	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	046	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	047	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	048	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	049	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	050	5.24E-03	2.29E-02	2.29E-02	See AEIR	0	0	0	See AEIR	136.07	595.98	595.98	See AEIR
EU	051	5.24E-03	2.29E-02	2.29E-02	See AEIR	0	0	0	See AEIR	136.07	595.98	595.98	See AEIR
EU	052	3.60E-03	1.58E-02	1.58E-02	See AEIR	0	0	0	See AEIR	93.55	409.74	409.74	See AEIR
EU	053	3.60E-03	1.58E-02	1.58E-02	See AEIR	0	0	0	See AEIR	93.55	409.74	409.74	See AEIR

EU	056	5.24E-04	2.29E-03	2.29E-03	See AEIR	0	0	0	See AEIR	13.61	59.60	59.60	See AEIR
EU	057	5.24E-04	2.29E-03	2.29E-03	See AEIR	0	0	0	See AEIR	13.61	59.60	59.60	See AEIR
EU	058	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	059	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	060	2.10E-04	9.18E-04	9.18E-04	See AEIR	0	0	0	See AEIR	5.44	23.84	23.84	See AEIR
EU	061	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	062	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	063	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	064	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	065	1.57E-03	6.88E-03	6.88E-03	See AEIR	0	0	0	See AEIR	40.82	178.79	178.79	See AEIR
EU	066	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	067	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	068	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	069	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	070	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	071	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	072	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	073	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	074	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	075	1.05E-03	4.59E-03	4.59E-03	See AEIR	0	0	0	See AEIR	27.21	119.20	119.20	See AEIR
EU	076	7.38E-02	1.84E-02	1.84E-02	See AEIR	0	0	0	See AEIR	33.53	146.85	146.85	See AEIR
EU	077	2.10E-03	9.18E-03	9.18E-03	See AEIR	0	0	0	See AEIR	54.43	238.39	238.39	See AEIR
EU	078	5.24E-03	2.29E-02	2.29E-02	See AEIR	0	0	0	See AEIR	136.07	595.98	595.98	See AEIR
EU	079	3.93E-02	0.17	0.17	See AEIR	0	0	0	See AEIR	1020.51	4469.85	4469.85	See AEIR
IA	001	5.23E-04	2.29E-03	2.29E-03	See AEIR	0	0	0	See AEIR	13.20	57.81	57.81	See AEIR
IA	002	7.28E-04	3.19E-03	3.19E-03	See AEIR	0	0	0	See AEIR	18.37	80.46	80.46	See AEIR
IA	003	3.24E-04	1.42E-03	1.42E-03	See AEIR	0	0	0	See AEIR	8.16	35.76	35.76	See AEIR
IA	004	2.70E-04	1.18E-03	1.18E-03	See AEIR	0	0	0	See AEIR	6.80	29.80	29.80	See AEIR
IA	005	2.70E-04	1.18E-03	1.18E-03	See AEIR	0	0	0	See AEIR	6.80	29.80	29.80	See AEIR
IA	006	2.70E-04	1.18E-03	1.18E-03	See AEIR	0	0	0	See AEIR	6.80	29.80	29.80	See AEIR
IA	007	2.70E-04	1.18E-03	1.18E-03	See AEIR	0	0	0	See AEIR	6.80	29.80	29.80	See AEIR
IA	008	4.04E-04	1.77E-03	1.77E-03	See AEIR	0	0	0	See AEIR	10.21	44.70	44.70	See AEIR
IA	009	7.28E-04	3.19E-03	3.19E-03	See AEIR	0	0	0	See AEIR	18.37	80.46	80.46	See AEIR
IA	010	7.28E-04	3.19E-03	3.19E-03	See AEIR	0	0	0	See AEIR	18.37	80.46	80.46	See AEIR
IA	011	7.28E-04	3.19E-03	3.19E-03	See AEIR	0	0	0	See AEIR	18.37	80.46	80.46	See AEIR




IA	012	7.28E-04	3.19E-03	3.19E-03	See AEIR	0	0	0	See AEIR	18.37	80.46	80.46	See AEIR
IA	013	4.04E-04	1.77E-03	1.77E-03	See AEIR	0	0	0	See AEIR	10.21	44.70	44.70	See AEIR
IA	014	4.04E-04	1.77E-03	1.77E-03	See AEIR	0	0	0	See AEIR	10.21	44.70	44.70	See AEIR
IA	015	4.04E-04	1.77E-03	1.77E-03	See AEIR	0	0	0	See AEIR	10.21	44.70	44.70	See AEIR
IA	016	6.99E-03	3.06E-02	3.06E-02	See AEIR	0	0	0	See AEIR	176.34	772.39	772.39	See AEIR
IA	017	6.99E-03	3.06E-02	3.06E-02	See AEIR	0	0	0	See AEIR	176.34	772.39	772.39	See AEIR
IA	018	6.99E-03	3.06E-02	3.06E-02	See AEIR	0	0	0	See AEIR	176.34	772.39	772.39	See AEIR
IA	019	7.28E-04	3.19E-03	3.19E-03	See AEIR	0	0	0	See AEIR	18.37	80.46	80.46	See AEIR
IA	020	4.85E-04	2.13E-03	2.13E-03	See AEIR	0	0	0	See AEIR	12.25	53.64	53.64	See AEIR
IA	021	2.59E-03	1.13E-02	1.13E-02	See AEIR	0	0	0	See AEIR	65.31	286.07	286.07	See AEIR
IA	031	5.39E-04	2.36E-03	2.36E-03	See AEIR	0	0	0	See AEIR	13.61	59.60	59.60	See AEIR
IA	032	4.31E-04	1.89E-03	1.89E-03	See AEIR	0	0	0	See AEIR	10.89	47.68	47.68	See AEIR
IA	033	1.10E-03	4.82E-03	4.82E-03	See AEIR	0	0	0	See AEIR	27.76	121.58	121.58	See AEIR
IA	034	6.47E-04	2.83E-03	2.83E-03	See AEIR	0	0	0	See AEIR	16.33	71.52	71.52	See AEIR
IA	035	1.29E-03	5.67E-03	5.67E-03	See AEIR	0	0	0	See AEIR	32.66	143.04	143.04	See AEIR
IA	036	6.74E-04	2.95E-03	2.95E-03	See AEIR	0	0	0	See AEIR	17.01	74.50	74.50	See AEIR
IA	037	5.39E-04	2.36E-03	2.36E-03	See AEIR	0	0	0	See AEIR	13.61	59.60	59.60	See AEIR
IA	038	6.74E-04	2.95E-03	2.95E-03	See AEIR	0	0	0	See AEIR	17.01	74.50	74.50	See AEIR
IA	039	3.72E-04	1.63E-03	1.63E-03	See AEIR	0	0	0	See AEIR	9.39	41.12	41.12	See AEIR
IA	040	3.72E-04	1.63E-03	1.63E-03	See AEIR	0	0	0	See AEIR	9.39	41.12	41.12	See AEIR
IA	041	6.74E-04	2.95E-03	2.95E-03	See AEIR	0	0	0	See AEIR	17.01	74.50	74.50	See AEIR
IA	042	6.47E-04	2.83E-03	2.83E-03	See AEIR	0	0	0	See AEIR	16.33	71.52	71.52	See AEIR
IA	047	1.23E-02	5.41E-02	5.41E-02	See AEIR	0	0	0	See AEIR	311.60	1364.79	1364.79	See AEIR
IA	048	4.54E-03	1.99E-02	1.99E-02	See AEIR	0	0	0	See AEIR	114.61	501.99	501.99	See AEIR
IA	049	4.54E-03	1.99E-02	1.99E-02	See AEIR	0	0	0	See AEIR	114.61	501.99	501.99	See AEIR
IA	050	2.56E-03	1.12E-02	1.12E-02	See AEIR	0	0	0	See AEIR	64.66	283.21	283.21	See AEIR
IA	052	1.14E-03	4.98E-03	4.98E-03	See AEIR	0	0	0	See AEIR	28.67	125.57	125.57	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		11,829.9	888.3	See AEIR		0.0	0.0	See AEIR		105,415.3	105,415.3	See AEIR

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :	75-07-0			3c) CAS# :	107-02-8			3c) CAS# :	106-99-0		
		3d) Pollutant Name:	Acetaldehyde			3d) Pollutant Name:	Acrolein			3d) Pollutant Name:	1,3-Butadiene		
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	076	1.57E-04	6.88E-04	6.88E-04	See AEIR	1.90E-05	8.30E-05	8.30E-05	See AEIR	8.01E-06	3.51E-05	3.51E-05	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		6.88E-04	6.88E-04	See AEIR		8.30E-05	8.30E-05	See AEIR		3.51E-05	3.51E-05	See AEIR




3a)	3b)	3c) CAS# :	115-07-1			3c) CAS# :	NA			3c) CAS# :	1330-20-7		
Emission Source Type	Emission Source ID No.	3d) Pollutant Name:	Propylene			3d) Pollutant Name:	PAH			3d) Pollutant Name:	Xylene		
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	--	--	--	--	--	--	--	--	0.15	0.67	0.41	See AEIR
EU	002	--	--	--	--	--	--	--	--	0.14	0.61	0.37	See AEIR
EU	004	--	--	--	--	--	--	--	--	0.39	1.73	1.06	See AEIR
EU	006	--	--	--	--	--	--	--	--	0.48	2.11	1.29	See AEIR
EU	007	--	--	--	--	--	--	--	--	0.15	0.67	0.41	See AEIR
EU	008	--	--	--	--	--	--	--	--	0.48	2.11	1.29	See AEIR
EU	009	--	--	--	--	--	--	--	--	0.48	2.11	1.29	See AEIR
EU	010	--	--	--	--	--	--	--	--	0.48	2.11	1.29	See AEIR
EU	024	--	--	--	--	--	--	--	--	0.99	4.32	2.65	See AEIR
EU	027	--	--	--	--	--	--	--	--	0.67	2.94	1.80	See AEIR
EU	028	--	--	--	--	--	--	--	--	0.67	2.94	1.80	See AEIR
EU	029	--	--	--	--	--	--	--	--	0.67	2.94	1.80	See AEIR
EU	076	5.29E-04	2.32E-03	2.32E-03	See AEIR	3.41E-05	1.50E-04	1.50E-04	See AEIR	5.84E-05	2.56E-04	2.56E-04	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		2.32E-03	2.32E-03	See AEIR		1.50E-04	1.50E-04	See AEIR		25.29	15.48	See AEIR

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :		71-43-2		3c) CAS# :		7440-41-7		3c) CAS# :		7440-38-2	
		3d) Pollutant Name:		Benzene		3d) Pollutant Name:		Beryllium		3d) Pollutant Name:		Arsenic	
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	8.00E-06	3.50E-05	3.50E-05	See AEIR	4.57E-08	2.00E-07	2.00E-07	See AEIR	7.62E-07	3.34E-06	3.34E-06	See AEIR
EU	002	7.60E-06	3.33E-05	3.33E-05	See AEIR	4.34E-08	1.90E-07	1.90E-07	See AEIR	7.24E-07	3.17E-06	3.17E-06	See AEIR
EU	004	1.72E-05	7.53E-05	7.53E-05	See AEIR	9.83E-08	4.30E-07	4.30E-07	See AEIR	1.64E-06	7.17E-06	7.17E-06	See AEIR
EU	006	2.18E-05	9.55E-05	9.55E-05	See AEIR	1.25E-07	5.46E-07	5.46E-07	See AEIR	2.08E-06	9.09E-06	9.09E-06	See AEIR
EU	007	8.60E-06	3.77E-05	3.77E-05	See AEIR	4.91E-08	2.15E-07	2.15E-07	See AEIR	8.19E-07	3.59E-06	3.59E-06	See AEIR
EU	008	1.84E-05	8.06E-05	8.06E-05	See AEIR	1.05E-07	4.61E-07	4.61E-07	See AEIR	1.75E-06	7.68E-06	7.68E-06	See AEIR
EU	009	2.18E-05	9.55E-05	9.55E-05	See AEIR	1.25E-07	5.46E-07	5.46E-07	See AEIR	2.08E-06	9.09E-06	9.09E-06	See AEIR
EU	010	1.80E-05	7.88E-05	7.88E-05	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.71E-06	7.51E-06	7.51E-06	See AEIR
EU	019	6.70E-06	2.93E-05	2.93E-05	See AEIR	3.83E-08	1.68E-07	1.68E-07	See AEIR	6.38E-07	2.79E-06	2.79E-06	See AEIR
EU	020	6.70E-06	2.93E-05	2.93E-05	See AEIR	3.83E-08	1.68E-07	1.68E-07	See AEIR	6.38E-07	2.79E-06	2.79E-06	See AEIR
EU	024	4.40E-05	1.93E-04	1.93E-04	See AEIR	2.51E-07	1.10E-06	1.10E-06	See AEIR	4.19E-06	1.84E-05	1.84E-05	See AEIR
EU	026	7.36E-06	3.22E-05	3.22E-05	See AEIR	4.21E-08	1.84E-07	1.84E-07	See AEIR	7.01E-07	3.07E-06	3.07E-06	See AEIR
EU	027	1.19E-05	5.23E-05	5.23E-05	See AEIR	6.82E-08	2.99E-07	2.99E-07	See AEIR	1.14E-06	4.98E-06	4.98E-06	See AEIR
EU	028	1.20E-05	5.26E-05	5.26E-05	See AEIR	6.86E-08	3.00E-07	3.00E-07	See AEIR	1.14E-06	5.01E-06	5.01E-06	See AEIR
EU	029	1.20E-05	5.26E-05	5.26E-05	See AEIR	6.86E-08	3.00E-07	3.00E-07	See AEIR	1.14E-06	5.01E-06	5.01E-06	See AEIR
EU	030	1.50E-05	6.57E-05	6.57E-05	See AEIR	8.57E-08	3.75E-07	3.75E-07	See AEIR	1.43E-06	6.26E-06	6.26E-06	See AEIR
EU	031	9.00E-06	3.94E-05	3.94E-05	See AEIR	5.14E-08	2.25E-07	2.25E-07	See AEIR	8.57E-07	3.75E-06	3.75E-06	See AEIR
EU	032	9.00E-06	3.94E-05	3.94E-05	See AEIR	5.14E-08	2.25E-07	2.25E-07	See AEIR	8.57E-07	3.75E-06	3.75E-06	See AEIR
EU	033	1.50E-05	6.57E-05	6.57E-05	See AEIR	8.57E-08	3.75E-07	3.75E-07	See AEIR	1.43E-06	6.26E-06	6.26E-06	See AEIR
EU	035	9.00E-06	3.94E-05	3.94E-05	See AEIR	5.14E-08	2.25E-07	2.25E-07	See AEIR	8.57E-07	3.75E-06	3.75E-06	See AEIR
EU	036	2.00E-06	8.76E-06	8.76E-06	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	1.90E-07	8.34E-07	8.34E-07	See AEIR
EU	037	2.00E-06	8.76E-06	8.76E-06	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	1.90E-07	8.34E-07	8.34E-07	See AEIR
EU	038	2.00E-06	8.76E-06	8.76E-06	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	1.90E-07	8.34E-07	8.34E-07	See AEIR
EU	039	4.47E-07	1.96E-06	1.96E-06	See AEIR	2.55E-09	1.12E-08	1.12E-08	See AEIR	4.26E-08	1.86E-07	1.86E-07	See AEIR
EU	040	3.20E-06	1.40E-05	1.40E-05	See AEIR	1.83E-08	8.01E-08	8.01E-08	See AEIR	3.05E-07	1.33E-06	1.33E-06	See AEIR
EU	041	3.20E-06	1.40E-05	1.40E-05	See AEIR	1.83E-08	8.01E-08	8.01E-08	See AEIR	3.05E-07	1.33E-06	1.33E-06	See AEIR
EU	042	1.76E-06	7.71E-06	7.71E-06	See AEIR	1.01E-08	4.41E-08	4.41E-08	See AEIR	1.68E-07	7.34E-07	7.34E-07	See AEIR
EU	045	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR

EU	046	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR
EU	047	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR
EU	048	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR
EU	049	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR
EU	050	2.06E-06	9.02E-06	9.02E-06	See AEIR	1.18E-08	5.15E-08	5.15E-08	See AEIR	1.96E-07	8.59E-07	8.59E-07	See AEIR
EU	051	2.06E-06	9.02E-06	9.02E-06	See AEIR	1.18E-08	5.15E-08	5.15E-08	See AEIR	1.96E-07	8.59E-07	8.59E-07	See AEIR
EU	052	1.42E-06	6.20E-06	6.20E-06	See AEIR	8.09E-09	3.54E-08	3.54E-08	See AEIR	1.35E-07	5.90E-07	5.90E-07	See AEIR
EU	053	1.42E-06	6.20E-06	6.20E-06	See AEIR	8.09E-09	3.54E-08	3.54E-08	See AEIR	1.35E-07	5.90E-07	5.90E-07	See AEIR
EU	056	2.06E-07	9.02E-07	9.02E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.96E-08	8.59E-08	8.59E-08	See AEIR
EU	057	2.06E-07	9.02E-07	9.02E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.96E-08	8.59E-08	8.59E-08	See AEIR
EU	058	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR
EU	059	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR
EU	060	8.24E-08	3.61E-07	3.61E-07	See AEIR	4.71E-10	2.06E-09	2.06E-09	See AEIR	7.84E-09	3.44E-08	3.44E-08	See AEIR
EU	061	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	062	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	063	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	064	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	065	6.18E-07	2.71E-06	2.71E-06	See AEIR	3.53E-09	1.55E-08	1.55E-08	See AEIR	5.88E-08	2.58E-07	2.58E-07	See AEIR
EU	066	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	067	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	068	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	069	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	070	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	071	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	072	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	073	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	074	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	075	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.92E-08	1.72E-07	1.72E-07	See AEIR
EU	076	1.91E-04	8.37E-04	8.37E-04	See AEIR	--	--	--	--	--	--	--	--
EU	077	8.24E-07	3.61E-06	3.61E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	7.84E-08	3.44E-07	3.44E-07	See AEIR
EU	078	2.00E-06	8.76E-06	8.76E-06	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	1.90E-07	8.34E-07	8.34E-07	See AEIR
EU	079	1.54E-05	6.76E-05	6.76E-05	See AEIR	8.82E-08	3.86E-07	3.86E-07	See AEIR	1.47E-06	6.44E-06	6.44E-06	See AEIR
IA	001	2.00E-07	8.75E-07	8.75E-07	See AEIR	1.14E-09	5.00E-09	5.00E-09	See AEIR	1.90E-08	8.33E-08	8.33E-08	See AEIR
IA	002	2.78E-07	1.22E-06	1.22E-06	See AEIR	1.59E-09	6.96E-09	6.96E-09	See AEIR	2.65E-08	1.16E-07	1.16E-07	See AEIR
IA	003	1.24E-07	5.41E-07	5.41E-07	See AEIR	7.06E-10	3.09E-09	3.09E-09	See AEIR	1.18E-08	5.15E-08	5.15E-08	See AEIR




IA	004	1.03E-07	4.51E-07	4.51E-07	See AEIR	5.88E-10	2.58E-09	2.58E-09	See AEIR	9.80E-09	4.29E-08	4.29E-08	See AEIR
IA	005	1.03E-07	4.51E-07	4.51E-07	See AEIR	5.88E-10	2.58E-09	2.58E-09	See AEIR	9.80E-09	4.29E-08	4.29E-08	See AEIR
IA	006	1.03E-07	4.51E-07	4.51E-07	See AEIR	5.88E-10	2.58E-09	2.58E-09	See AEIR	9.80E-09	4.29E-08	4.29E-08	See AEIR
IA	007	1.03E-07	4.51E-07	4.51E-07	See AEIR	5.88E-10	2.58E-09	2.58E-09	See AEIR	9.80E-09	4.29E-08	4.29E-08	See AEIR
IA	008	1.54E-07	6.76E-07	6.76E-07	See AEIR	8.82E-10	3.86E-09	3.86E-09	See AEIR	1.47E-08	6.44E-08	6.44E-08	See AEIR
IA	009	2.78E-07	1.22E-06	1.22E-06	See AEIR	1.59E-09	6.96E-09	6.96E-09	See AEIR	2.65E-08	1.16E-07	1.16E-07	See AEIR
IA	010	2.78E-07	1.22E-06	1.22E-06	See AEIR	1.59E-09	6.96E-09	6.96E-09	See AEIR	2.65E-08	1.16E-07	1.16E-07	See AEIR
IA	011	2.78E-07	1.22E-06	1.22E-06	See AEIR	1.59E-09	6.96E-09	6.96E-09	See AEIR	2.65E-08	1.16E-07	1.16E-07	See AEIR
IA	012	2.78E-07	1.22E-06	1.22E-06	See AEIR	1.59E-09	6.96E-09	6.96E-09	See AEIR	2.65E-08	1.16E-07	1.16E-07	See AEIR
IA	013	1.54E-07	6.76E-07	6.76E-07	See AEIR	8.82E-10	3.86E-09	3.86E-09	See AEIR	1.47E-08	6.44E-08	6.44E-08	See AEIR
IA	014	1.54E-07	6.76E-07	6.76E-07	See AEIR	8.82E-10	3.86E-09	3.86E-09	See AEIR	1.47E-08	6.44E-08	6.44E-08	See AEIR
IA	015	1.54E-07	6.76E-07	6.76E-07	See AEIR	8.82E-10	3.86E-09	3.86E-09	See AEIR	1.47E-08	6.44E-08	6.44E-08	See AEIR
IA	016	2.67E-06	1.17E-05	1.17E-05	See AEIR	1.52E-08	6.68E-08	6.68E-08	See AEIR	2.54E-07	1.11E-06	1.11E-06	See AEIR
IA	017	2.67E-06	1.17E-05	1.17E-05	See AEIR	1.52E-08	6.68E-08	6.68E-08	See AEIR	2.54E-07	1.11E-06	1.11E-06	See AEIR
IA	018	2.67E-06	1.17E-05	1.17E-05	See AEIR	1.52E-08	6.68E-08	6.68E-08	See AEIR	2.54E-07	1.11E-06	1.11E-06	See AEIR
IA	019	2.78E-07	1.22E-06	1.22E-06	See AEIR	1.59E-09	6.96E-09	6.96E-09	See AEIR	2.65E-08	1.16E-07	1.16E-07	See AEIR
IA	020	1.85E-07	8.12E-07	8.12E-07	See AEIR	1.06E-09	4.64E-09	4.64E-09	See AEIR	1.76E-08	7.73E-08	7.73E-08	See AEIR
IA	021	9.88E-07	4.33E-06	4.33E-06	See AEIR	5.65E-09	2.47E-08	2.47E-08	See AEIR	9.41E-08	4.12E-07	4.12E-07	See AEIR
IA	031	2.06E-07	9.02E-07	9.02E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.96E-08	8.59E-08	8.59E-08	See AEIR
IA	032	1.65E-07	7.21E-07	7.21E-07	See AEIR	9.41E-10	4.12E-09	4.12E-09	See AEIR	1.57E-08	6.87E-08	6.87E-08	See AEIR
IA	033	4.20E-07	1.84E-06	1.84E-06	See AEIR	2.40E-09	1.05E-08	1.05E-08	See AEIR	4.00E-08	1.75E-07	1.75E-07	See AEIR
IA	034	2.47E-07	1.08E-06	1.08E-06	See AEIR	1.41E-09	6.18E-09	6.18E-09	See AEIR	2.35E-08	1.03E-07	1.03E-07	See AEIR
IA	035	4.94E-07	2.16E-06	2.16E-06	See AEIR	2.82E-09	1.24E-08	1.24E-08	See AEIR	4.71E-08	2.06E-07	2.06E-07	See AEIR
IA	036	2.57E-07	1.13E-06	1.13E-06	See AEIR	1.47E-09	6.44E-09	6.44E-09	See AEIR	2.45E-08	1.07E-07	1.07E-07	See AEIR
IA	037	2.06E-07	9.02E-07	9.02E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.96E-08	8.59E-08	8.59E-08	See AEIR
IA	038	2.57E-07	1.13E-06	1.13E-06	See AEIR	1.47E-09	6.44E-09	6.44E-09	See AEIR	2.45E-08	1.07E-07	1.07E-07	See AEIR
IA	039	1.42E-07	6.22E-07	6.22E-07	See AEIR	8.12E-10	3.56E-09	3.56E-09	See AEIR	1.35E-08	5.93E-08	5.93E-08	See AEIR
IA	040	1.42E-07	6.22E-07	6.22E-07	See AEIR	8.12E-10	3.56E-09	3.56E-09	See AEIR	1.35E-08	5.93E-08	5.93E-08	See AEIR
IA	041	2.57E-07	1.13E-06	1.13E-06	See AEIR	1.47E-09	6.44E-09	6.44E-09	See AEIR	2.45E-08	1.07E-07	1.07E-07	See AEIR
IA	042	2.47E-07	1.08E-06	1.08E-06	See AEIR	1.41E-09	6.18E-09	6.18E-09	See AEIR	2.35E-08	1.03E-07	1.03E-07	See AEIR
IA	047	4.71E-06	2.07E-05	2.07E-05	See AEIR	2.69E-08	1.18E-07	1.18E-07	See AEIR	4.49E-07	1.97E-06	1.97E-06	See AEIR
IA	048	1.73E-06	7.60E-06	7.60E-06	See AEIR	9.91E-09	4.34E-08	4.34E-08	See AEIR	1.65E-07	7.23E-07	7.23E-07	See AEIR
IA	049	1.73E-06	7.60E-06	7.60E-06	See AEIR	9.91E-09	4.34E-08	4.34E-08	See AEIR	1.65E-07	7.23E-07	7.23E-07	See AEIR
IA	050	9.78E-07	4.29E-06	4.29E-06	See AEIR	5.59E-09	2.45E-08	2.45E-08	See AEIR	9.32E-08	4.08E-07	4.08E-07	See AEIR
IA	052	4.34E-07	1.90E-06	1.90E-06	See AEIR	2.48E-09	1.09E-08	1.09E-08	See AEIR	4.13E-08	1.81E-07	1.81E-07	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		2.39E-03	2.39E-03	See AEIR		8.88E-06	8.88E-06	See AEIR		1.48E-04	1.48E-04	See AEIR

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :		7440-43-9		3c) CAS# :		7440-47-3		3c) CAS# :		7440-48-4	
		3d) Pollutant Name:		Cadmium		3d) Pollutant Name:		Chromium		3d) Pollutant Name:		Cobalt	
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	4.19E-06	1.84E-05	1.84E-05	See AEIR	5.33E-06	2.34E-05	2.34E-05	See AEIR	3.20E-07	1.40E-06	1.40E-06	See AEIR
EU	002	3.98E-06	1.74E-05	1.74E-05	See AEIR	5.07E-06	2.22E-05	2.22E-05	See AEIR	3.04E-07	1.33E-06	1.33E-06	See AEIR
EU	004	9.01E-06	3.95E-05	3.95E-05	See AEIR	1.15E-05	5.02E-05	5.02E-05	See AEIR	6.88E-07	3.01E-06	3.01E-06	See AEIR
EU	006	1.14E-05	5.00E-05	5.00E-05	See AEIR	1.45E-05	6.37E-05	6.37E-05	See AEIR	8.72E-07	3.82E-06	3.82E-06	See AEIR
EU	007	4.50E-06	1.97E-05	1.97E-05	See AEIR	5.73E-06	2.51E-05	2.51E-05	See AEIR	3.44E-07	1.51E-06	1.51E-06	See AEIR
EU	008	9.64E-06	4.22E-05	4.22E-05	See AEIR	1.23E-05	5.37E-05	5.37E-05	See AEIR	7.36E-07	3.22E-06	3.22E-06	See AEIR
EU	009	1.14E-05	5.00E-05	5.00E-05	See AEIR	1.45E-05	6.37E-05	6.37E-05	See AEIR	8.72E-07	3.82E-06	3.82E-06	See AEIR
EU	010	9.43E-06	4.13E-05	4.13E-05	See AEIR	1.20E-05	5.26E-05	5.26E-05	See AEIR	7.20E-07	3.15E-06	3.15E-06	See AEIR
EU	019	3.51E-06	1.54E-05	1.54E-05	See AEIR	4.47E-06	1.96E-05	1.96E-05	See AEIR	2.68E-07	1.17E-06	1.17E-06	See AEIR
EU	020	3.51E-06	1.54E-05	1.54E-05	See AEIR	4.47E-06	1.96E-05	1.96E-05	See AEIR	2.68E-07	1.17E-06	1.17E-06	See AEIR
EU	024	2.30E-05	1.01E-04	1.01E-04	See AEIR	2.93E-05	1.28E-04	1.28E-04	See AEIR	1.76E-06	7.71E-06	7.71E-06	See AEIR
EU	026	3.86E-06	1.69E-05	1.69E-05	See AEIR	4.91E-06	2.15E-05	2.15E-05	See AEIR	2.94E-07	1.29E-06	1.29E-06	See AEIR
EU	027	6.25E-06	2.74E-05	2.74E-05	See AEIR	7.96E-06	3.49E-05	3.49E-05	See AEIR	4.78E-07	2.09E-06	2.09E-06	See AEIR
EU	028	6.29E-06	2.75E-05	2.75E-05	See AEIR	8.00E-06	3.50E-05	3.50E-05	See AEIR	4.80E-07	2.10E-06	2.10E-06	See AEIR
EU	029	6.29E-06	2.75E-05	2.75E-05	See AEIR	8.00E-06	3.50E-05	3.50E-05	See AEIR	4.80E-07	2.10E-06	2.10E-06	See AEIR
EU	030	7.86E-06	3.44E-05	3.44E-05	See AEIR	1.00E-05	4.38E-05	4.38E-05	See AEIR	6.00E-07	2.63E-06	2.63E-06	See AEIR
EU	031	4.71E-06	2.06E-05	2.06E-05	See AEIR	6.00E-06	2.63E-05	2.63E-05	See AEIR	3.60E-07	1.58E-06	1.58E-06	See AEIR
EU	032	4.71E-06	2.06E-05	2.06E-05	See AEIR	6.00E-06	2.63E-05	2.63E-05	See AEIR	3.60E-07	1.58E-06	1.58E-06	See AEIR
EU	033	7.86E-06	3.44E-05	3.44E-05	See AEIR	1.00E-05	4.38E-05	4.38E-05	See AEIR	6.00E-07	2.63E-06	2.63E-06	See AEIR
EU	035	4.71E-06	2.06E-05	2.06E-05	See AEIR	6.00E-06	2.63E-05	2.63E-05	See AEIR	3.60E-07	1.58E-06	1.58E-06	See AEIR
EU	036	1.05E-06	4.59E-06	4.59E-06	See AEIR	1.33E-06	5.84E-06	5.84E-06	See AEIR	8.00E-08	3.50E-07	3.50E-07	See AEIR
EU	037	1.05E-06	4.59E-06	4.59E-06	See AEIR	1.33E-06	5.84E-06	5.84E-06	See AEIR	8.00E-08	3.50E-07	3.50E-07	See AEIR
EU	038	1.05E-06	4.59E-06	4.59E-06	See AEIR	1.33E-06	5.84E-06	5.84E-06	See AEIR	8.00E-08	3.50E-07	3.50E-07	See AEIR
EU	039	2.34E-07	1.03E-06	1.03E-06	See AEIR	2.98E-07	1.31E-06	1.31E-06	See AEIR	1.79E-08	7.83E-08	7.83E-08	See AEIR
EU	040	1.68E-06	7.34E-06	7.34E-06	See AEIR	2.13E-06	9.34E-06	9.34E-06	See AEIR	1.28E-07	5.61E-07	5.61E-07	See AEIR
EU	041	1.68E-06	7.34E-06	7.34E-06	See AEIR	2.13E-06	9.34E-06	9.34E-06	See AEIR	1.28E-07	5.61E-07	5.61E-07	See AEIR
EU	042	9.22E-07	4.04E-06	4.04E-06	See AEIR	1.17E-06	5.14E-06	5.14E-06	See AEIR	7.04E-08	3.08E-07	3.08E-07	See AEIR
EU	045	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR
EU	046	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR

EU	047	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR
EU	048	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR
EU	049	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR
EU	050	1.08E-06	4.72E-06	4.72E-06	See AEIR	1.37E-06	6.01E-06	6.01E-06	See AEIR	8.24E-08	3.61E-07	3.61E-07	See AEIR
EU	051	1.08E-06	4.72E-06	4.72E-06	See AEIR	1.37E-06	6.01E-06	6.01E-06	See AEIR	8.24E-08	3.61E-07	3.61E-07	See AEIR
EU	052	7.41E-07	3.25E-06	3.25E-06	See AEIR	9.44E-07	4.13E-06	4.13E-06	See AEIR	5.66E-08	2.48E-07	2.48E-07	See AEIR
EU	053	7.41E-07	3.25E-06	3.25E-06	See AEIR	9.44E-07	4.13E-06	4.13E-06	See AEIR	5.66E-08	2.48E-07	2.48E-07	See AEIR
EU	056	1.08E-07	4.72E-07	4.72E-07	See AEIR	1.37E-07	6.01E-07	6.01E-07	See AEIR	8.24E-09	3.61E-08	3.61E-08	See AEIR
EU	057	1.08E-07	4.72E-07	4.72E-07	See AEIR	1.37E-07	6.01E-07	6.01E-07	See AEIR	8.24E-09	3.61E-08	3.61E-08	See AEIR
EU	058	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR
EU	059	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR
EU	060	4.31E-08	1.89E-07	1.89E-07	See AEIR	5.49E-08	2.40E-07	2.40E-07	See AEIR	3.29E-09	1.44E-08	1.44E-08	See AEIR
EU	061	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	062	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	063	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	064	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	065	3.24E-07	1.42E-06	1.42E-06	See AEIR	4.12E-07	1.80E-06	1.80E-06	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR
EU	066	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	067	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	068	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	069	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	070	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	071	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	072	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	073	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	074	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	075	2.16E-07	9.45E-07	9.45E-07	See AEIR	2.75E-07	1.20E-06	1.20E-06	See AEIR	1.65E-08	7.21E-08	7.21E-08	See AEIR
EU	077	4.31E-07	1.89E-06	1.89E-06	See AEIR	5.49E-07	2.40E-06	2.40E-06	See AEIR	3.29E-08	1.44E-07	1.44E-07	See AEIR
EU	078	1.05E-06	4.59E-06	4.59E-06	See AEIR	1.33E-06	5.84E-06	5.84E-06	See AEIR	8.00E-08	3.50E-07	3.50E-07	See AEIR
EU	079	8.09E-06	3.54E-05	3.54E-05	See AEIR	1.03E-05	4.51E-05	4.51E-05	See AEIR	6.18E-07	2.71E-06	2.71E-06	See AEIR
IA	001	1.05E-07	4.58E-07	4.58E-07	See AEIR	1.33E-07	5.83E-07	5.83E-07	See AEIR	7.99E-09	3.50E-08	3.50E-08	See AEIR
IA	002	1.46E-07	6.38E-07	6.38E-07	See AEIR	1.85E-07	8.12E-07	8.12E-07	See AEIR	1.11E-08	4.87E-08	4.87E-08	See AEIR
IA	003	6.47E-08	2.83E-07	2.83E-07	See AEIR	8.24E-08	3.61E-07	3.61E-07	See AEIR	4.94E-09	2.16E-08	2.16E-08	See AEIR
IA	004	5.39E-08	2.36E-07	2.36E-07	See AEIR	6.86E-08	3.01E-07	3.01E-07	See AEIR	4.12E-09	1.80E-08	1.80E-08	See AEIR
IA	005	5.39E-08	2.36E-07	2.36E-07	See AEIR	6.86E-08	3.01E-07	3.01E-07	See AEIR	4.12E-09	1.80E-08	1.80E-08	See AEIR




IA	006	5.39E-08	2.36E-07	2.36E-07	See AEIR	6.86E-08	3.01E-07	3.01E-07	See AEIR	4.12E-09	1.80E-08	1.80E-08	See AEIR
IA	007	5.39E-08	2.36E-07	2.36E-07	See AEIR	6.86E-08	3.01E-07	3.01E-07	See AEIR	4.12E-09	1.80E-08	1.80E-08	See AEIR
IA	008	8.09E-08	3.54E-07	3.54E-07	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	6.18E-09	2.71E-08	2.71E-08	See AEIR
IA	009	1.46E-07	6.38E-07	6.38E-07	See AEIR	1.85E-07	8.12E-07	8.12E-07	See AEIR	1.11E-08	4.87E-08	4.87E-08	See AEIR
IA	010	1.46E-07	6.38E-07	6.38E-07	See AEIR	1.85E-07	8.12E-07	8.12E-07	See AEIR	1.11E-08	4.87E-08	4.87E-08	See AEIR
IA	011	1.46E-07	6.38E-07	6.38E-07	See AEIR	1.85E-07	8.12E-07	8.12E-07	See AEIR	1.11E-08	4.87E-08	4.87E-08	See AEIR
IA	012	1.46E-07	6.38E-07	6.38E-07	See AEIR	1.85E-07	8.12E-07	8.12E-07	See AEIR	1.11E-08	4.87E-08	4.87E-08	See AEIR
IA	013	8.09E-08	3.54E-07	3.54E-07	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	6.18E-09	2.71E-08	2.71E-08	See AEIR
IA	014	8.09E-08	3.54E-07	3.54E-07	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	6.18E-09	2.71E-08	2.71E-08	See AEIR
IA	015	8.09E-08	3.54E-07	3.54E-07	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	6.18E-09	2.71E-08	2.71E-08	See AEIR
IA	016	1.40E-06	6.12E-06	6.12E-06	See AEIR	1.78E-06	7.79E-06	7.79E-06	See AEIR	1.07E-07	4.67E-07	4.67E-07	See AEIR
IA	017	1.40E-06	6.12E-06	6.12E-06	See AEIR	1.78E-06	7.79E-06	7.79E-06	See AEIR	1.07E-07	4.67E-07	4.67E-07	See AEIR
IA	018	1.40E-06	6.12E-06	6.12E-06	See AEIR	1.78E-06	7.79E-06	7.79E-06	See AEIR	1.07E-07	4.67E-07	4.67E-07	See AEIR
IA	019	1.46E-07	6.38E-07	6.38E-07	See AEIR	1.85E-07	8.12E-07	8.12E-07	See AEIR	1.11E-08	4.87E-08	4.87E-08	See AEIR
IA	020	9.71E-08	4.25E-07	4.25E-07	See AEIR	1.24E-07	5.41E-07	5.41E-07	See AEIR	7.41E-09	3.25E-08	3.25E-08	See AEIR
IA	021	5.18E-07	2.27E-06	2.27E-06	See AEIR	6.59E-07	2.89E-06	2.89E-06	See AEIR	3.95E-08	1.73E-07	1.73E-07	See AEIR
IA	031	1.08E-07	4.72E-07	4.72E-07	See AEIR	1.37E-07	6.01E-07	6.01E-07	See AEIR	8.24E-09	3.61E-08	3.61E-08	See AEIR
IA	032	8.63E-08	3.78E-07	3.78E-07	See AEIR	1.10E-07	4.81E-07	4.81E-07	See AEIR	6.59E-09	2.89E-08	2.89E-08	See AEIR
IA	033	2.20E-07	9.64E-07	9.64E-07	See AEIR	2.80E-07	1.23E-06	1.23E-06	See AEIR	1.68E-08	7.36E-08	7.36E-08	See AEIR
IA	034	1.29E-07	5.67E-07	5.67E-07	See AEIR	1.65E-07	7.21E-07	7.21E-07	See AEIR	9.88E-09	4.33E-08	4.33E-08	See AEIR
IA	035	2.59E-07	1.13E-06	1.13E-06	See AEIR	3.29E-07	1.44E-06	1.44E-06	See AEIR	1.98E-08	8.66E-08	8.66E-08	See AEIR
IA	036	1.35E-07	5.90E-07	5.90E-07	See AEIR	1.72E-07	7.51E-07	7.51E-07	See AEIR	1.03E-08	4.51E-08	4.51E-08	See AEIR
IA	037	1.08E-07	4.72E-07	4.72E-07	See AEIR	1.37E-07	6.01E-07	6.01E-07	See AEIR	8.24E-09	3.61E-08	3.61E-08	See AEIR
IA	038	1.35E-07	5.90E-07	5.90E-07	See AEIR	1.72E-07	7.51E-07	7.51E-07	See AEIR	1.03E-08	4.51E-08	4.51E-08	See AEIR
IA	039	7.44E-08	3.26E-07	3.26E-07	See AEIR	9.47E-08	4.15E-07	4.15E-07	See AEIR	5.68E-09	2.49E-08	2.49E-08	See AEIR
IA	040	7.44E-08	3.26E-07	3.26E-07	See AEIR	9.47E-08	4.15E-07	4.15E-07	See AEIR	5.68E-09	2.49E-08	2.49E-08	See AEIR
IA	041	1.35E-07	5.90E-07	5.90E-07	See AEIR	1.72E-07	7.51E-07	7.51E-07	See AEIR	1.03E-08	4.51E-08	4.51E-08	See AEIR
IA	042	1.29E-07	5.67E-07	5.67E-07	See AEIR	1.65E-07	7.21E-07	7.21E-07	See AEIR	9.88E-09	4.33E-08	4.33E-08	See AEIR
IA	047	2.47E-06	1.08E-05	1.08E-05	See AEIR	3.14E-06	1.38E-05	1.38E-05	See AEIR	1.89E-07	8.26E-07	8.26E-07	See AEIR
IA	048	9.08E-07	3.98E-06	3.98E-06	See AEIR	1.16E-06	5.06E-06	5.06E-06	See AEIR	6.94E-08	3.04E-07	3.04E-07	See AEIR
IA	049	9.08E-07	3.98E-06	3.98E-06	See AEIR	1.16E-06	5.06E-06	5.06E-06	See AEIR	6.94E-08	3.04E-07	3.04E-07	See AEIR
IA	050	5.12E-07	2.24E-06	2.24E-06	See AEIR	6.52E-07	2.86E-06	2.86E-06	See AEIR	3.91E-08	1.71E-07	1.71E-07	See AEIR
IA	052	2.27E-07	9.95E-07	9.95E-07	See AEIR	2.89E-07	1.27E-06	1.27E-06	See AEIR	1.74E-08	7.60E-08	7.60E-08	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		8.14E-04	8.14E-04	See AEIR		1.04E-03	1.04E-03	See AEIR		6.22E-05	6.22E-05	See AEIR

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :		50-00-0		3c) CAS# :		NA		3c) CAS# :		110-54-3	
		3d) Pollutant Name:		Formaldehyde		3d) Pollutant Name:		POM		3d) Pollutant Name:		n-Hexane	
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	2.86E-04	1.25E-03	1.25E-03	See AEIR	3.29E-07	1.44E-06	1.44E-06	See AEIR	6.86E-03	3.00E-02	3.00E-02	See AEIR
EU	002	2.71E-04	1.19E-03	1.19E-03	See AEIR	3.13E-07	1.37E-06	1.37E-06	See AEIR	6.51E-03	2.85E-02	2.85E-02	See AEIR
EU	004	6.14E-04	2.69E-03	2.69E-03	See AEIR	7.08E-07	3.10E-06	3.10E-06	See AEIR	1.47E-02	6.46E-02	6.46E-02	See AEIR
EU	006	7.79E-04	3.41E-03	3.41E-03	See AEIR	8.97E-07	3.93E-06	3.93E-06	See AEIR	1.87E-02	8.18E-02	8.18E-02	See AEIR
EU	007	3.07E-04	1.35E-03	1.35E-03	See AEIR	3.54E-07	1.55E-06	1.55E-06	See AEIR	7.37E-03	3.23E-02	3.23E-02	See AEIR
EU	008	6.57E-04	2.88E-03	2.88E-03	See AEIR	7.57E-07	3.32E-06	3.32E-06	See AEIR	1.58E-02	6.91E-02	6.91E-02	See AEIR
EU	009	7.79E-04	3.41E-03	3.41E-03	See AEIR	8.97E-07	3.93E-06	3.93E-06	See AEIR	1.87E-02	8.18E-02	8.18E-02	See AEIR
EU	010	6.43E-04	2.82E-03	2.82E-03	See AEIR	7.41E-07	3.24E-06	3.24E-06	See AEIR	1.54E-02	6.76E-02	6.76E-02	See AEIR
EU	019	2.39E-04	1.05E-03	1.05E-03	See AEIR	2.76E-07	1.21E-06	1.21E-06	See AEIR	5.74E-03	2.52E-02	2.52E-02	See AEIR
EU	020	2.39E-04	1.05E-03	1.05E-03	See AEIR	2.76E-07	1.21E-06	1.21E-06	See AEIR	5.74E-03	2.52E-02	2.52E-02	See AEIR
EU	021-023	--	--	--	--	--	--	--	--	3.81E-03	1.67E-02	1.67E-02	See AEIR
EU	024	1.57E-03	6.88E-03	6.88E-03	See AEIR	1.81E-06	7.93E-06	7.93E-06	See AEIR	3.77E-02	0.17	0.17	See AEIR
EU	026	2.63E-04	1.15E-03	1.15E-03	See AEIR	3.03E-07	1.33E-06	1.33E-06	See AEIR	6.31E-03	2.76E-02	2.76E-02	See AEIR
EU	027	4.26E-04	1.87E-03	1.87E-03	See AEIR	4.91E-07	2.15E-06	2.15E-06	See AEIR	1.02E-02	4.48E-02	4.48E-02	See AEIR
EU	028	4.29E-04	1.88E-03	1.88E-03	See AEIR	4.94E-07	2.16E-06	2.16E-06	See AEIR	1.03E-02	4.51E-02	4.51E-02	See AEIR
EU	029	4.29E-04	1.88E-03	1.88E-03	See AEIR	4.94E-07	2.16E-06	2.16E-06	See AEIR	1.03E-02	4.51E-02	4.51E-02	See AEIR
EU	030	5.36E-04	2.35E-03	2.35E-03	See AEIR	6.17E-07	2.70E-06	2.70E-06	See AEIR	1.29E-02	5.63E-02	5.63E-02	See AEIR
EU	031	3.21E-04	1.41E-03	1.41E-03	See AEIR	3.70E-07	1.62E-06	1.62E-06	See AEIR	7.71E-03	3.38E-02	3.38E-02	See AEIR
EU	032	3.21E-04	1.41E-03	1.41E-03	See AEIR	3.70E-07	1.62E-06	1.62E-06	See AEIR	7.71E-03	3.38E-02	3.38E-02	See AEIR
EU	033	5.36E-04	2.35E-03	2.35E-03	See AEIR	6.17E-07	2.70E-06	2.70E-06	See AEIR	1.29E-02	5.63E-02	5.63E-02	See AEIR
EU	035	3.21E-04	1.41E-03	1.41E-03	See AEIR	3.70E-07	1.62E-06	1.62E-06	See AEIR	7.71E-03	3.38E-02	3.38E-02	See AEIR
EU	036	7.14E-05	3.13E-04	3.13E-04	See AEIR	8.23E-08	3.60E-07	3.60E-07	See AEIR	1.71E-03	7.51E-03	7.51E-03	See AEIR
EU	037	7.14E-05	3.13E-04	3.13E-04	See AEIR	8.23E-08	3.60E-07	3.60E-07	See AEIR	1.71E-03	7.51E-03	7.51E-03	See AEIR
EU	038	7.14E-05	3.13E-04	3.13E-04	See AEIR	8.23E-08	3.60E-07	3.60E-07	See AEIR	1.71E-03	7.51E-03	7.51E-03	See AEIR
EU	039	1.60E-05	6.99E-05	6.99E-05	See AEIR	1.84E-08	8.06E-08	8.06E-08	See AEIR	3.83E-04	1.68E-03	1.68E-03	See AEIR
EU	040	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.32E-07	5.77E-07	5.77E-07	See AEIR	2.74E-03	1.20E-02	1.20E-02	See AEIR
EU	041	1.14E-04	5.01E-04	5.01E-04	See AEIR	1.32E-07	5.77E-07	5.77E-07	See AEIR	2.74E-03	1.20E-02	1.20E-02	See AEIR

EU	042	6.29E-05	2.75E-04	2.75E-04	See AEIR	7.24E-08	3.17E-07	3.17E-07	See AEIR	1.51E-03	6.61E-03	6.61E-03	See AEIR
EU	045	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	046	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	047	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	048	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	049	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	050	7.35E-05	3.22E-04	3.22E-04	See AEIR	8.47E-08	3.71E-07	3.71E-07	See AEIR	1.76E-03	7.73E-03	7.73E-03	See AEIR
EU	051	7.35E-05	3.22E-04	3.22E-04	See AEIR	8.47E-08	3.71E-07	3.71E-07	See AEIR	1.76E-03	7.73E-03	7.73E-03	See AEIR
EU	052	5.06E-05	2.21E-04	2.21E-04	See AEIR	5.82E-08	2.55E-07	2.55E-07	See AEIR	1.21E-03	5.31E-03	5.31E-03	See AEIR
EU	053	5.06E-05	2.21E-04	2.21E-04	See AEIR	5.82E-08	2.55E-07	2.55E-07	See AEIR	1.21E-03	5.31E-03	5.31E-03	See AEIR
EU	056	7.35E-06	3.22E-05	3.22E-05	See AEIR	8.47E-09	3.71E-08	3.71E-08	See AEIR	1.76E-04	7.73E-04	7.73E-04	See AEIR
EU	057	7.35E-06	3.22E-05	3.22E-05	See AEIR	8.47E-09	3.71E-08	3.71E-08	See AEIR	1.76E-04	7.73E-04	7.73E-04	See AEIR
EU	058	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	059	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	060	2.94E-06	1.29E-05	1.29E-05	See AEIR	3.39E-09	1.48E-08	1.48E-08	See AEIR	7.06E-05	3.09E-04	3.09E-04	See AEIR
EU	061	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	062	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	063	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	064	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	065	2.21E-05	9.66E-05	9.66E-05	See AEIR	2.54E-08	1.11E-07	1.11E-07	See AEIR	5.29E-04	2.32E-03	2.32E-03	See AEIR
EU	066	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	067	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	068	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	069	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	070	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	071	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	072	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	073	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	074	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	075	1.47E-05	6.44E-05	6.44E-05	See AEIR	1.69E-08	7.42E-08	7.42E-08	See AEIR	3.53E-04	1.55E-03	1.55E-03	See AEIR
EU	076	2.42E-04	1.06E-03	1.06E-03	See AEIR	--	--	--	--	--	--	--	--
EU	077	2.94E-05	1.29E-04	1.29E-04	See AEIR	3.39E-08	1.48E-07	1.48E-07	See AEIR	7.06E-04	3.09E-03	3.09E-03	See AEIR
EU	078	7.14E-05	3.13E-04	3.13E-04	See AEIR	8.23E-08	3.60E-07	3.60E-07	See AEIR	1.71E-03	7.51E-03	7.51E-03	See AEIR
EU	079	5.51E-04	2.42E-03	2.42E-03	See AEIR	6.35E-07	2.78E-06	2.78E-06	See AEIR	1.32E-02	5.80E-02	5.80E-02	See AEIR
IA	001	7.13E-06	3.12E-05	3.12E-05	See AEIR	8.22E-09	3.60E-08	3.60E-08	See AEIR	1.71E-04	7.50E-04	7.50E-04	See AEIR
IA	002	9.93E-06	4.35E-05	4.35E-05	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	2.38E-04	1.04E-03	1.04E-03	See AEIR
IA	003	4.41E-06	1.93E-05	1.93E-05	See AEIR	5.08E-09	2.23E-08	2.23E-08	See AEIR	1.06E-04	4.64E-04	4.64E-04	See AEIR




IA	004	3.68E-06	1.61E-05	1.61E-05	See AEIR	4.24E-09	1.86E-08	1.86E-08	See AEIR	8.82E-05	3.86E-04	3.86E-04	See AEIR
IA	005	3.68E-06	1.61E-05	1.61E-05	See AEIR	4.24E-09	1.86E-08	1.86E-08	See AEIR	8.82E-05	3.86E-04	3.86E-04	See AEIR
IA	006	3.68E-06	1.61E-05	1.61E-05	See AEIR	4.24E-09	1.86E-08	1.86E-08	See AEIR	8.82E-05	3.86E-04	3.86E-04	See AEIR
IA	007	3.68E-06	1.61E-05	1.61E-05	See AEIR	4.24E-09	1.86E-08	1.86E-08	See AEIR	8.82E-05	3.86E-04	3.86E-04	See AEIR
IA	008	5.51E-06	2.42E-05	2.42E-05	See AEIR	6.35E-09	2.78E-08	2.78E-08	See AEIR	1.32E-04	5.80E-04	5.80E-04	See AEIR
IA	009	9.93E-06	4.35E-05	4.35E-05	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	2.38E-04	1.04E-03	1.04E-03	See AEIR
IA	010	9.93E-06	4.35E-05	4.35E-05	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	2.38E-04	1.04E-03	1.04E-03	See AEIR
IA	011	9.93E-06	4.35E-05	4.35E-05	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	2.38E-04	1.04E-03	1.04E-03	See AEIR
IA	012	9.93E-06	4.35E-05	4.35E-05	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	2.38E-04	1.04E-03	1.04E-03	See AEIR
IA	013	5.51E-06	2.42E-05	2.42E-05	See AEIR	6.35E-09	2.78E-08	2.78E-08	See AEIR	1.32E-04	5.80E-04	5.80E-04	See AEIR
IA	014	5.51E-06	2.42E-05	2.42E-05	See AEIR	6.35E-09	2.78E-08	2.78E-08	See AEIR	1.32E-04	5.80E-04	5.80E-04	See AEIR
IA	015	5.51E-06	2.42E-05	2.42E-05	See AEIR	6.35E-09	2.78E-08	2.78E-08	See AEIR	1.32E-04	5.80E-04	5.80E-04	See AEIR
IA	016	9.53E-05	4.17E-04	4.17E-04	See AEIR	1.10E-07	4.81E-07	4.81E-07	See AEIR	2.29E-03	1.00E-02	1.00E-02	See AEIR
IA	017	9.53E-05	4.17E-04	4.17E-04	See AEIR	1.10E-07	4.81E-07	4.81E-07	See AEIR	2.29E-03	1.00E-02	1.00E-02	See AEIR
IA	018	9.53E-05	4.17E-04	4.17E-04	See AEIR	1.10E-07	4.81E-07	4.81E-07	See AEIR	2.29E-03	1.00E-02	1.00E-02	See AEIR
IA	019	9.93E-06	4.35E-05	4.35E-05	See AEIR	1.14E-08	5.01E-08	5.01E-08	See AEIR	2.38E-04	1.04E-03	1.04E-03	See AEIR
IA	020	6.62E-06	2.90E-05	2.90E-05	See AEIR	7.62E-09	3.34E-08	3.34E-08	See AEIR	1.59E-04	6.96E-04	6.96E-04	See AEIR
IA	021	3.53E-05	1.55E-04	1.55E-04	See AEIR	4.07E-08	1.78E-07	1.78E-07	See AEIR	8.47E-04	3.71E-03	3.71E-03	See AEIR
IA	031	7.35E-06	3.22E-05	3.22E-05	See AEIR	8.47E-09	3.71E-08	3.71E-08	See AEIR	1.76E-04	7.73E-04	7.73E-04	See AEIR
IA	032	5.88E-06	2.58E-05	2.58E-05	See AEIR	6.78E-09	2.97E-08	2.97E-08	See AEIR	1.41E-04	6.18E-04	6.18E-04	See AEIR
IA	033	1.50E-05	6.57E-05	6.57E-05	See AEIR	1.73E-08	7.57E-08	7.57E-08	See AEIR	3.60E-04	1.58E-03	1.58E-03	See AEIR
IA	034	8.82E-06	3.86E-05	3.86E-05	See AEIR	1.02E-08	4.45E-08	4.45E-08	See AEIR	2.12E-04	9.28E-04	9.28E-04	See AEIR
IA	035	1.76E-05	7.73E-05	7.73E-05	See AEIR	2.03E-08	8.90E-08	8.90E-08	See AEIR	4.24E-04	1.86E-03	1.86E-03	See AEIR
IA	036	9.19E-06	4.03E-05	4.03E-05	See AEIR	1.06E-08	4.64E-08	4.64E-08	See AEIR	2.21E-04	9.66E-04	9.66E-04	See AEIR
IA	037	7.35E-06	3.22E-05	3.22E-05	See AEIR	8.47E-09	3.71E-08	3.71E-08	See AEIR	1.76E-04	7.73E-04	7.73E-04	See AEIR
IA	038	9.19E-06	4.03E-05	4.03E-05	See AEIR	1.06E-08	4.64E-08	4.64E-08	See AEIR	2.21E-04	9.66E-04	9.66E-04	See AEIR
IA	039	5.07E-06	2.22E-05	2.22E-05	See AEIR	5.84E-09	2.56E-08	2.56E-08	See AEIR	1.22E-04	5.33E-04	5.33E-04	See AEIR
IA	040	5.07E-06	2.22E-05	2.22E-05	See AEIR	5.84E-09	2.56E-08	2.56E-08	See AEIR	1.22E-04	5.33E-04	5.33E-04	See AEIR
IA	041	9.19E-06	4.03E-05	4.03E-05	See AEIR	1.06E-08	4.64E-08	4.64E-08	See AEIR	2.21E-04	9.66E-04	9.66E-04	See AEIR
IA	042	8.82E-06	3.86E-05	3.86E-05	See AEIR	1.02E-08	4.45E-08	4.45E-08	See AEIR	2.12E-04	9.28E-04	9.28E-04	See AEIR
IA	047	1.68E-04	7.38E-04	7.38E-04	See AEIR	1.94E-07	8.50E-07	8.50E-07	See AEIR	4.04E-03	1.77E-02	1.77E-02	See AEIR
IA	048	6.19E-05	2.71E-04	2.71E-04	See AEIR	7.13E-08	3.13E-07	3.13E-07	See AEIR	1.49E-03	6.51E-03	6.51E-03	See AEIR
IA	049	6.19E-05	2.71E-04	2.71E-04	See AEIR	7.13E-08	3.13E-07	3.13E-07	See AEIR	1.49E-03	6.51E-03	6.51E-03	See AEIR
IA	050	3.49E-05	1.53E-04	1.53E-04	See AEIR	4.03E-08	1.76E-07	1.76E-07	See AEIR	8.39E-04	3.67E-03	3.67E-03	See AEIR
IA	052	1.55E-05	6.79E-05	6.79E-05	See AEIR	1.78E-08	7.82E-08	7.82E-08	See AEIR	3.72E-04	1.63E-03	1.63E-03	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		5.66E-02	5.66E-02	See AEIR		6.40E-05	6.40E-05	See AEIR		1.35	1.35	See AEIR

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :		7439-96-5		3c) CAS# :		7439-97-6		3c) CAS# :		91-20-3	
		3d) Pollutant Name:		Manganese		3d) Pollutant Name:		Mercury		3d) Pollutant Name:		Naphthalene	
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	1.45E-06	6.34E-06	6.34E-06	See AEIR	9.90E-07	4.34E-06	4.34E-06	See AEIR	4.39E-02	0.19	0.12	See AEIR
EU	002	1.38E-06	6.02E-06	6.02E-06	See AEIR	9.41E-07	4.12E-06	4.12E-06	See AEIR	3.96E-02	0.17	0.11	See AEIR
EU	004	3.11E-06	1.36E-05	1.36E-05	See AEIR	2.13E-06	9.33E-06	9.33E-06	See AEIR	0.11	0.49	0.30	See AEIR
EU	006	3.94E-06	1.73E-05	1.73E-05	See AEIR	2.70E-06	1.18E-05	1.18E-05	See AEIR	0.14	0.60	0.37	See AEIR
EU	007	1.56E-06	6.82E-06	6.82E-06	See AEIR	1.06E-06	4.66E-06	4.66E-06	See AEIR	4.39E-02	0.19	0.12	See AEIR
EU	008	3.33E-06	1.46E-05	1.46E-05	See AEIR	2.28E-06	9.98E-06	9.98E-06	See AEIR	0.14	0.60	0.37	See AEIR
EU	009	3.94E-06	1.73E-05	1.73E-05	See AEIR	2.70E-06	1.18E-05	1.18E-05	See AEIR	0.14	0.60	0.37	See AEIR
EU	010	3.26E-06	1.43E-05	1.43E-05	See AEIR	2.23E-06	9.76E-06	9.76E-06	See AEIR	0.14	0.60	0.37	See AEIR
EU	019	1.21E-06	5.31E-06	5.31E-06	See AEIR	8.30E-07	3.63E-06	3.63E-06	See AEIR	1.95E-06	8.52E-06	8.52E-06	See AEIR
EU	020	1.21E-06	5.31E-06	5.31E-06	See AEIR	8.30E-07	3.63E-06	3.63E-06	See AEIR	1.95E-06	8.52E-06	8.52E-06	See AEIR
EU	024	7.96E-06	3.49E-05	3.49E-05	See AEIR	5.45E-06	2.39E-05	2.39E-05	See AEIR	0.28	1.24	0.76	See AEIR
EU	026	1.33E-06	5.83E-06	5.83E-06	See AEIR	9.11E-07	3.99E-06	3.99E-06	See AEIR	2.14E-06	9.36E-06	9.36E-06	See AEIR
EU	027	2.16E-06	9.46E-06	9.46E-06	See AEIR	1.48E-06	6.47E-06	6.47E-06	See AEIR	0.19	0.84	0.51	See AEIR
EU	028	2.17E-06	9.51E-06	9.51E-06	See AEIR	1.49E-06	6.51E-06	6.51E-06	See AEIR	0.19	0.84	0.51	See AEIR
EU	029	2.17E-06	9.51E-06	9.51E-06	See AEIR	1.49E-06	6.51E-06	6.51E-06	See AEIR	0.19	0.84	0.51	See AEIR
EU	030	2.71E-06	1.19E-05	1.19E-05	See AEIR	1.86E-06	8.13E-06	8.13E-06	See AEIR	4.36E-06	1.91E-05	1.91E-05	See AEIR
EU	031	1.63E-06	7.13E-06	7.13E-06	See AEIR	1.11E-06	4.88E-06	4.88E-06	See AEIR	2.61E-06	1.15E-05	1.15E-05	See AEIR
EU	032	1.63E-06	7.13E-06	7.13E-06	See AEIR	1.11E-06	4.88E-06	4.88E-06	See AEIR	2.61E-06	1.15E-05	1.15E-05	See AEIR
EU	033	2.71E-06	1.19E-05	1.19E-05	See AEIR	1.86E-06	8.13E-06	8.13E-06	See AEIR	4.36E-06	1.91E-05	1.91E-05	See AEIR
EU	035	1.63E-06	7.13E-06	7.13E-06	See AEIR	1.11E-06	4.88E-06	4.88E-06	See AEIR	2.61E-06	1.15E-05	1.15E-05	See AEIR
EU	036	3.62E-07	1.59E-06	1.59E-06	See AEIR	2.48E-07	1.08E-06	1.08E-06	See AEIR	5.81E-07	2.54E-06	2.54E-06	See AEIR
EU	037	3.62E-07	1.59E-06	1.59E-06	See AEIR	2.48E-07	1.08E-06	1.08E-06	See AEIR	5.81E-07	2.54E-06	2.54E-06	See AEIR
EU	038	3.62E-07	1.59E-06	1.59E-06	See AEIR	2.48E-07	1.08E-06	1.08E-06	See AEIR	5.81E-07	2.54E-06	2.54E-06	See AEIR
EU	039	8.09E-08	3.54E-07	3.54E-07	See AEIR	5.53E-08	2.42E-07	2.42E-07	See AEIR	1.30E-07	5.69E-07	5.69E-07	See AEIR
EU	040	5.79E-07	2.54E-06	2.54E-06	See AEIR	3.96E-07	1.74E-06	1.74E-06	See AEIR	9.30E-07	4.07E-06	4.07E-06	See AEIR
EU	041	5.79E-07	2.54E-06	2.54E-06	See AEIR	3.96E-07	1.74E-06	1.74E-06	See AEIR	9.30E-07	4.07E-06	4.07E-06	See AEIR
EU	042	3.18E-07	1.39E-06	1.39E-06	See AEIR	2.18E-07	9.54E-07	9.54E-07	See AEIR	5.11E-07	2.24E-06	2.24E-06	See AEIR

EU	045	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	046	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	047	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	048	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	049	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	050	3.73E-07	1.63E-06	1.63E-06	See AEIR	2.55E-07	1.12E-06	1.12E-06	See AEIR	5.98E-07	2.62E-06	2.62E-06	See AEIR
EU	051	3.73E-07	1.63E-06	1.63E-06	See AEIR	2.55E-07	1.12E-06	1.12E-06	See AEIR	5.98E-07	2.62E-06	2.62E-06	See AEIR
EU	052	2.56E-07	1.12E-06	1.12E-06	See AEIR	1.75E-07	7.68E-07	7.68E-07	See AEIR	4.11E-07	1.80E-06	1.80E-06	See AEIR
EU	053	2.56E-07	1.12E-06	1.12E-06	See AEIR	1.75E-07	7.68E-07	7.68E-07	See AEIR	4.11E-07	1.80E-06	1.80E-06	See AEIR
EU	056	3.73E-08	1.63E-07	1.63E-07	See AEIR	2.55E-08	1.12E-07	1.12E-07	See AEIR	5.98E-08	2.62E-07	2.62E-07	See AEIR
EU	057	3.73E-08	1.63E-07	1.63E-07	See AEIR	2.55E-08	1.12E-07	1.12E-07	See AEIR	5.98E-08	2.62E-07	2.62E-07	See AEIR
EU	058	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	059	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	060	1.49E-08	6.53E-08	6.53E-08	See AEIR	1.02E-08	4.47E-08	4.47E-08	See AEIR	2.39E-08	1.05E-07	1.05E-07	See AEIR
EU	061	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	062	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	063	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	064	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	065	1.12E-07	4.90E-07	4.90E-07	See AEIR	7.65E-08	3.35E-07	3.35E-07	See AEIR	1.79E-07	7.86E-07	7.86E-07	See AEIR
EU	066	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	067	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	068	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	069	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	070	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	071	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	072	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	073	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	074	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	075	7.45E-08	3.26E-07	3.26E-07	See AEIR	5.10E-08	2.23E-07	2.23E-07	See AEIR	1.20E-07	5.24E-07	5.24E-07	See AEIR
EU	077	1.49E-07	6.53E-07	6.53E-07	See AEIR	1.02E-07	4.47E-07	4.47E-07	See AEIR	2.39E-07	1.05E-06	1.05E-06	See AEIR
EU	078	3.62E-07	1.59E-06	1.59E-06	See AEIR	2.48E-07	1.08E-06	1.08E-06	See AEIR	5.81E-07	2.54E-06	2.54E-06	See AEIR
EU	079	2.79E-06	1.22E-05	1.22E-05	See AEIR	1.91E-06	8.37E-06	8.37E-06	See AEIR	4.49E-06	1.96E-05	1.96E-05	See AEIR
IA	001	3.61E-08	1.58E-07	1.58E-07	See AEIR	2.47E-08	1.08E-07	1.08E-07	See AEIR	5.80E-08	2.54E-07	2.54E-07	See AEIR
IA	002	5.03E-08	2.20E-07	2.20E-07	See AEIR	3.44E-08	1.51E-07	1.51E-07	See AEIR	8.07E-08	3.54E-07	3.54E-07	See AEIR
IA	003	2.24E-08	9.79E-08	9.79E-08	See AEIR	1.53E-08	6.70E-08	6.70E-08	See AEIR	3.59E-08	1.57E-07	1.57E-07	See AEIR
IA	004	1.86E-08	8.16E-08	8.16E-08	See AEIR	1.27E-08	5.58E-08	5.58E-08	See AEIR	2.99E-08	1.31E-07	1.31E-07	See AEIR




IA	005	1.86E-08	8.16E-08	8.16E-08	See AEIR	1.27E-08	5.58E-08	5.58E-08	See AEIR	2.99E-08	1.31E-07	1.31E-07	See AEIR
IA	006	1.86E-08	8.16E-08	8.16E-08	See AEIR	1.27E-08	5.58E-08	5.58E-08	See AEIR	2.99E-08	1.31E-07	1.31E-07	See AEIR
IA	007	1.86E-08	8.16E-08	8.16E-08	See AEIR	1.27E-08	5.58E-08	5.58E-08	See AEIR	2.99E-08	1.31E-07	1.31E-07	See AEIR
IA	008	2.79E-08	1.22E-07	1.22E-07	See AEIR	1.91E-08	8.37E-08	8.37E-08	See AEIR	4.49E-08	1.96E-07	1.96E-07	See AEIR
IA	009	5.03E-08	2.20E-07	2.20E-07	See AEIR	3.44E-08	1.51E-07	1.51E-07	See AEIR	8.07E-08	3.54E-07	3.54E-07	See AEIR
IA	010	5.03E-08	2.20E-07	2.20E-07	See AEIR	3.44E-08	1.51E-07	1.51E-07	See AEIR	8.07E-08	3.54E-07	3.54E-07	See AEIR
IA	011	5.03E-08	2.20E-07	2.20E-07	See AEIR	3.44E-08	1.51E-07	1.51E-07	See AEIR	8.07E-08	3.54E-07	3.54E-07	See AEIR
IA	012	5.03E-08	2.20E-07	2.20E-07	See AEIR	3.44E-08	1.51E-07	1.51E-07	See AEIR	8.07E-08	3.54E-07	3.54E-07	See AEIR
IA	013	2.79E-08	1.22E-07	1.22E-07	See AEIR	1.91E-08	8.37E-08	8.37E-08	See AEIR	4.49E-08	1.96E-07	1.96E-07	See AEIR
IA	014	2.79E-08	1.22E-07	1.22E-07	See AEIR	1.91E-08	8.37E-08	8.37E-08	See AEIR	4.49E-08	1.96E-07	1.96E-07	See AEIR
IA	015	2.79E-08	1.22E-07	1.22E-07	See AEIR	1.91E-08	8.37E-08	8.37E-08	See AEIR	4.49E-08	1.96E-07	1.96E-07	See AEIR
IA	016	4.83E-07	2.11E-06	2.11E-06	See AEIR	3.30E-07	1.45E-06	1.45E-06	See AEIR	7.75E-07	3.39E-06	3.39E-06	See AEIR
IA	017	4.83E-07	2.11E-06	2.11E-06	See AEIR	3.30E-07	1.45E-06	1.45E-06	See AEIR	7.75E-07	3.39E-06	3.39E-06	See AEIR
IA	018	4.83E-07	2.11E-06	2.11E-06	See AEIR	3.30E-07	1.45E-06	1.45E-06	See AEIR	7.75E-07	3.39E-06	3.39E-06	See AEIR
IA	019	5.03E-08	2.20E-07	2.20E-07	See AEIR	3.44E-08	1.51E-07	1.51E-07	See AEIR	8.07E-08	3.54E-07	3.54E-07	See AEIR
IA	020	3.35E-08	1.47E-07	1.47E-07	See AEIR	2.29E-08	1.00E-07	1.00E-07	See AEIR	5.38E-08	2.36E-07	2.36E-07	See AEIR
IA	021	1.79E-07	7.83E-07	7.83E-07	See AEIR	1.22E-07	5.36E-07	5.36E-07	See AEIR	2.87E-07	1.26E-06	1.26E-06	See AEIR
IA	031	3.73E-08	1.63E-07	1.63E-07	See AEIR	2.55E-08	1.12E-07	1.12E-07	See AEIR	5.98E-08	2.62E-07	2.62E-07	See AEIR
IA	032	2.98E-08	1.31E-07	1.31E-07	See AEIR	2.04E-08	8.93E-08	8.93E-08	See AEIR	4.78E-08	2.10E-07	2.10E-07	See AEIR
IA	033	7.60E-08	3.33E-07	3.33E-07	See AEIR	5.20E-08	2.28E-07	2.28E-07	See AEIR	1.22E-07	5.34E-07	5.34E-07	See AEIR
IA	034	4.47E-08	1.96E-07	1.96E-07	See AEIR	3.06E-08	1.34E-07	1.34E-07	See AEIR	7.18E-08	3.14E-07	3.14E-07	See AEIR
IA	035	8.94E-08	3.92E-07	3.92E-07	See AEIR	6.12E-08	2.68E-07	2.68E-07	See AEIR	1.44E-07	6.29E-07	6.29E-07	See AEIR
IA	036	4.66E-08	2.04E-07	2.04E-07	See AEIR	3.19E-08	1.40E-07	1.40E-07	See AEIR	7.48E-08	3.27E-07	3.27E-07	See AEIR
IA	037	3.73E-08	1.63E-07	1.63E-07	See AEIR	2.55E-08	1.12E-07	1.12E-07	See AEIR	5.98E-08	2.62E-07	2.62E-07	See AEIR
IA	038	4.66E-08	2.04E-07	2.04E-07	See AEIR	3.19E-08	1.40E-07	1.40E-07	See AEIR	7.48E-08	3.27E-07	3.27E-07	See AEIR
IA	039	2.57E-08	1.13E-07	1.13E-07	See AEIR	1.76E-08	7.70E-08	7.70E-08	See AEIR	4.13E-08	1.81E-07	1.81E-07	See AEIR
IA	040	2.57E-08	1.13E-07	1.13E-07	See AEIR	1.76E-08	7.70E-08	7.70E-08	See AEIR	4.13E-08	1.81E-07	1.81E-07	See AEIR
IA	041	4.66E-08	2.04E-07	2.04E-07	See AEIR	3.19E-08	1.40E-07	1.40E-07	See AEIR	7.48E-08	3.27E-07	3.27E-07	See AEIR
IA	042	4.47E-08	1.96E-07	1.96E-07	See AEIR	3.06E-08	1.34E-07	1.34E-07	See AEIR	7.18E-08	3.14E-07	3.14E-07	See AEIR
IA	047	8.53E-07	3.74E-06	3.74E-06	See AEIR	5.84E-07	2.56E-06	2.56E-06	See AEIR	1.37E-06	6.00E-06	6.00E-06	See AEIR
IA	048	3.14E-07	1.37E-06	1.37E-06	See AEIR	2.15E-07	9.40E-07	9.40E-07	See AEIR	5.04E-07	2.21E-06	2.21E-06	See AEIR
IA	049	3.14E-07	1.37E-06	1.37E-06	See AEIR	2.15E-07	9.40E-07	9.40E-07	See AEIR	5.04E-07	2.21E-06	2.21E-06	See AEIR
IA	050	1.77E-07	7.75E-07	7.75E-07	See AEIR	1.21E-07	5.31E-07	5.31E-07	See AEIR	2.84E-07	1.24E-06	1.24E-06	See AEIR
IA	052	7.85E-08	3.44E-07	3.44E-07	See AEIR	5.37E-08	2.35E-07	2.35E-07	See AEIR	1.26E-07	5.52E-07	5.52E-07	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		2.81E-04	2.81E-04	See AEIR		1.92E-04	1.92E-04	See AEIR		7.23E+00	4.42E+00	See AEIR




3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :		7440-02-0		3c) CAS# :		7782-49-2		3c) CAS# :		108-88-3	
		3d) Pollutant Name:		Nickel		3d) Pollutant Name:		Selenium		3d) Pollutant Name:		Toluene	
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	8.00E-06	3.50E-05	3.50E-05	See AEIR	9.14E-08	4.00E-07	4.00E-07	See AEIR	1.30E-05	5.67E-05	5.67E-05	See AEIR
EU	002	7.60E-06	3.33E-05	3.33E-05	See AEIR	8.69E-08	3.80E-07	3.80E-07	See AEIR	1.23E-05	5.39E-05	5.39E-05	See AEIR
EU	004	1.72E-05	7.53E-05	7.53E-05	See AEIR	1.97E-07	8.61E-07	8.61E-07	See AEIR	2.78E-05	1.22E-04	1.22E-04	See AEIR
EU	006	2.18E-05	9.55E-05	9.55E-05	See AEIR	2.49E-07	1.09E-06	1.09E-06	See AEIR	3.53E-05	1.55E-04	1.55E-04	See AEIR
EU	007	8.60E-06	3.77E-05	3.77E-05	See AEIR	9.83E-08	4.30E-07	4.30E-07	See AEIR	1.39E-05	6.10E-05	6.10E-05	See AEIR
EU	008	1.84E-05	8.06E-05	8.06E-05	See AEIR	2.10E-07	9.21E-07	9.21E-07	See AEIR	2.98E-05	1.30E-04	1.30E-04	See AEIR
EU	009	2.18E-05	9.55E-05	9.55E-05	See AEIR	2.49E-07	1.09E-06	1.09E-06	See AEIR	3.53E-05	1.55E-04	1.55E-04	See AEIR
EU	010	1.80E-05	7.88E-05	7.88E-05	See AEIR	2.06E-07	9.01E-07	9.01E-07	See AEIR	2.91E-05	1.28E-04	1.28E-04	See AEIR
EU	019	6.70E-06	2.93E-05	2.93E-05	See AEIR	7.66E-08	3.35E-07	3.35E-07	See AEIR	1.08E-05	4.75E-05	4.75E-05	See AEIR
EU	020	6.70E-06	2.93E-05	2.93E-05	See AEIR	7.66E-08	3.35E-07	3.35E-07	See AEIR	1.08E-05	4.75E-05	4.75E-05	See AEIR
EU	024	4.40E-05	1.93E-04	1.93E-04	See AEIR	5.03E-07	2.20E-06	2.20E-06	See AEIR	7.12E-05	3.12E-04	3.12E-04	See AEIR
EU	026	7.36E-06	3.22E-05	3.22E-05	See AEIR	8.41E-08	3.68E-07	3.68E-07	See AEIR	1.19E-05	5.22E-05	5.22E-05	See AEIR
EU	027	1.19E-05	5.23E-05	5.23E-05	See AEIR	1.36E-07	5.98E-07	5.98E-07	See AEIR	1.93E-05	8.47E-05	8.47E-05	See AEIR
EU	028	1.20E-05	5.26E-05	5.26E-05	See AEIR	1.37E-07	6.01E-07	6.01E-07	See AEIR	1.94E-05	8.51E-05	8.51E-05	See AEIR
EU	029	1.20E-05	5.26E-05	5.26E-05	See AEIR	1.37E-07	6.01E-07	6.01E-07	See AEIR	1.94E-05	8.51E-05	8.51E-05	See AEIR
EU	030	1.50E-05	6.57E-05	6.57E-05	See AEIR	1.71E-07	7.51E-07	7.51E-07	See AEIR	2.43E-05	1.06E-04	1.06E-04	See AEIR
EU	031	9.00E-06	3.94E-05	3.94E-05	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.46E-05	6.38E-05	6.38E-05	See AEIR
EU	032	9.00E-06	3.94E-05	3.94E-05	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.46E-05	6.38E-05	6.38E-05	See AEIR
EU	033	1.50E-05	6.57E-05	6.57E-05	See AEIR	1.71E-07	7.51E-07	7.51E-07	See AEIR	2.43E-05	1.06E-04	1.06E-04	See AEIR
EU	035	9.00E-06	3.94E-05	3.94E-05	See AEIR	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.46E-05	6.38E-05	6.38E-05	See AEIR
EU	036	2.00E-06	8.76E-06	8.76E-06	See AEIR	2.29E-08	1.00E-07	1.00E-07	See AEIR	3.24E-06	1.42E-05	1.42E-05	See AEIR
EU	037	2.00E-06	8.76E-06	8.76E-06	See AEIR	2.29E-08	1.00E-07	1.00E-07	See AEIR	3.24E-06	1.42E-05	1.42E-05	See AEIR
EU	038	2.00E-06	8.76E-06	8.76E-06	See AEIR	2.29E-08	1.00E-07	1.00E-07	See AEIR	3.24E-06	1.42E-05	1.42E-05	See AEIR
EU	039	4.47E-07	1.96E-06	1.96E-06	See AEIR	5.11E-09	2.24E-08	2.24E-08	See AEIR	7.24E-07	3.17E-06	3.17E-06	See AEIR
EU	040	3.20E-06	1.40E-05	1.40E-05	See AEIR	3.66E-08	1.60E-07	1.60E-07	See AEIR	5.18E-06	2.27E-05	2.27E-05	See AEIR
EU	041	3.20E-06	1.40E-05	1.40E-05	See AEIR	3.66E-08	1.60E-07	1.60E-07	See AEIR	5.18E-06	2.27E-05	2.27E-05	See AEIR
EU	042	1.76E-06	7.71E-06	7.71E-06	See AEIR	2.01E-08	8.81E-08	8.81E-08	See AEIR	2.85E-06	1.25E-05	1.25E-05	See AEIR
EU	045	6.18E-07	2.71E-06	2.71E-06	See AEIR	7.06E-09	3.09E-08	3.09E-08	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR

EU	046	6.18E-07	2.71E-06	2.71E-06	See AEIR	1.45E-14	6.37E-14	6.37E-14	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR
EU	047	6.18E-07	2.71E-06	2.71E-06	See AEIR	7.06E-09	3.09E-08	3.09E-08	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR
EU	048	6.18E-07	2.71E-06	2.71E-06	See AEIR	7.06E-09	3.09E-08	3.09E-08	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR
EU	049	6.18E-07	2.71E-06	2.71E-06	See AEIR	7.06E-09	3.09E-08	3.09E-08	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR
EU	050	2.06E-06	9.02E-06	9.02E-06	See AEIR	2.35E-08	1.03E-07	1.03E-07	See AEIR	3.33E-06	1.46E-05	1.46E-05	See AEIR
EU	051	2.06E-06	9.02E-06	9.02E-06	See AEIR	2.35E-08	1.03E-07	1.03E-07	See AEIR	3.33E-06	1.46E-05	1.46E-05	See AEIR
EU	052	1.42E-06	6.20E-06	6.20E-06	See AEIR	1.62E-08	7.09E-08	7.09E-08	See AEIR	2.29E-06	1.00E-05	1.00E-05	See AEIR
EU	053	1.42E-06	6.20E-06	6.20E-06	See AEIR	1.62E-08	7.09E-08	7.09E-08	See AEIR	2.29E-06	1.00E-05	1.00E-05	See AEIR
EU	056	2.06E-07	9.02E-07	9.02E-07	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.33E-07	1.46E-06	1.46E-06	See AEIR
EU	057	2.06E-07	9.02E-07	9.02E-07	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.33E-07	1.46E-06	1.46E-06	See AEIR
EU	058	6.18E-07	2.71E-06	2.71E-06	See AEIR	7.06E-09	3.09E-08	3.09E-08	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR
EU	059	6.18E-07	2.71E-06	2.71E-06	See AEIR	7.06E-09	3.09E-08	3.09E-08	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR
EU	060	8.24E-08	3.61E-07	3.61E-07	See AEIR	9.41E-10	4.12E-09	4.12E-09	See AEIR	1.33E-07	5.84E-07	5.84E-07	See AEIR
EU	061	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	062	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	063	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	064	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	065	6.18E-07	2.71E-06	2.71E-06	See AEIR	7.06E-09	3.09E-08	3.09E-08	See AEIR	1.00E-06	4.38E-06	4.38E-06	See AEIR
EU	066	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	067	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	068	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	069	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	070	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	071	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	072	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	073	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	074	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	075	4.12E-07	1.80E-06	1.80E-06	See AEIR	4.71E-09	2.06E-08	2.06E-08	See AEIR	6.67E-07	2.92E-06	2.92E-06	See AEIR
EU	076	--	--	--	--	--	--	--	--	8.38E-05	3.67E-04	3.67E-04	See AEIR
EU	077	8.24E-07	3.61E-06	3.61E-06	See AEIR	9.41E-09	4.12E-08	4.12E-08	See AEIR	1.33E-06	5.84E-06	5.84E-06	See AEIR
EU	078	2.00E-06	8.76E-06	8.76E-06	See AEIR	2.29E-08	1.00E-07	1.00E-07	See AEIR	3.24E-06	1.42E-05	1.42E-05	See AEIR
EU	079	1.54E-05	6.76E-05	6.76E-05	See AEIR	1.76E-07	7.73E-07	7.73E-07	See AEIR	2.50E-05	1.10E-04	1.10E-04	See AEIR
IA	001	2.00E-07	8.75E-07	8.75E-07	See AEIR	2.28E-09	1.00E-08	1.00E-08	See AEIR	3.23E-07	1.42E-06	1.42E-06	See AEIR
IA	002	2.78E-07	1.22E-06	1.22E-06	See AEIR	3.18E-09	1.39E-08	1.39E-08	See AEIR	4.50E-07	1.97E-06	1.97E-06	See AEIR
IA	003	1.24E-07	5.41E-07	5.41E-07	See AEIR	1.41E-09	6.18E-09	6.18E-09	See AEIR	2.00E-07	8.76E-07	8.76E-07	See AEIR


IA	004	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.67E-07	7.30E-07	7.30E-07	See AEIR
IA	005	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.67E-07	7.30E-07	7.30E-07	See AEIR
IA	006	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.67E-07	7.30E-07	7.30E-07	See AEIR
IA	007	1.03E-07	4.51E-07	4.51E-07	See AEIR	1.18E-09	5.15E-09	5.15E-09	See AEIR	1.67E-07	7.30E-07	7.30E-07	See AEIR
IA	008	1.54E-07	6.76E-07	6.76E-07	See AEIR	1.76E-09	7.73E-09	7.73E-09	See AEIR	2.50E-07	1.10E-06	1.10E-06	See AEIR
IA	009	2.78E-07	1.22E-06	1.22E-06	See AEIR	3.18E-09	1.39E-08	1.39E-08	See AEIR	4.50E-07	1.97E-06	1.97E-06	See AEIR
IA	010	2.78E-07	1.22E-06	1.22E-06	See AEIR	3.18E-09	1.39E-08	1.39E-08	See AEIR	4.50E-07	1.97E-06	1.97E-06	See AEIR
IA	011	2.78E-07	1.22E-06	1.22E-06	See AEIR	3.18E-09	1.39E-08	1.39E-08	See AEIR	4.50E-07	1.97E-06	1.97E-06	See AEIR
IA	012	2.78E-07	1.22E-06	1.22E-06	See AEIR	3.18E-09	1.39E-08	1.39E-08	See AEIR	4.50E-07	1.97E-06	1.97E-06	See AEIR
IA	013	1.54E-07	6.76E-07	6.76E-07	See AEIR	1.76E-09	7.73E-09	7.73E-09	See AEIR	2.50E-07	1.10E-06	1.10E-06	See AEIR
IA	014	1.54E-07	6.76E-07	6.76E-07	See AEIR	1.76E-09	7.73E-09	7.73E-09	See AEIR	2.50E-07	1.10E-06	1.10E-06	See AEIR
IA	015	1.54E-07	6.76E-07	6.76E-07	See AEIR	1.76E-09	7.73E-09	7.73E-09	See AEIR	2.50E-07	1.10E-06	1.10E-06	See AEIR
IA	016	2.67E-06	1.17E-05	1.17E-05	See AEIR	3.05E-08	1.34E-07	1.34E-07	See AEIR	4.32E-06	1.89E-05	1.89E-05	See AEIR
IA	017	2.67E-06	1.17E-05	1.17E-05	See AEIR	3.05E-08	1.34E-07	1.34E-07	See AEIR	4.32E-06	1.89E-05	1.89E-05	See AEIR
IA	018	2.67E-06	1.17E-05	1.17E-05	See AEIR	3.05E-08	1.34E-07	1.34E-07	See AEIR	4.32E-06	1.89E-05	1.89E-05	See AEIR
IA	019	2.78E-07	1.22E-06	1.22E-06	See AEIR	3.18E-09	1.39E-08	1.39E-08	See AEIR	4.50E-07	1.97E-06	1.97E-06	See AEIR
IA	020	1.85E-07	8.12E-07	8.12E-07	See AEIR	2.12E-09	9.28E-09	9.28E-09	See AEIR	3.00E-07	1.31E-06	1.31E-06	See AEIR
IA	021	9.88E-07	4.33E-06	4.33E-06	See AEIR	1.13E-08	4.95E-08	4.95E-08	See AEIR	1.60E-06	7.01E-06	7.01E-06	See AEIR
IA	031	2.06E-07	9.02E-07	9.02E-07	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.33E-07	1.46E-06	1.46E-06	See AEIR
IA	032	1.65E-07	7.21E-07	7.21E-07	See AEIR	1.88E-09	8.24E-09	8.24E-09	See AEIR	2.67E-07	1.17E-06	1.17E-06	See AEIR
IA	033	4.20E-07	1.84E-06	1.84E-06	See AEIR	4.80E-09	2.10E-08	2.10E-08	See AEIR	6.80E-07	2.98E-06	2.98E-06	See AEIR
IA	034	2.47E-07	1.08E-06	1.08E-06	See AEIR	2.82E-09	1.24E-08	1.24E-08	See AEIR	4.00E-07	1.75E-06	1.75E-06	See AEIR
IA	035	4.94E-07	2.16E-06	2.16E-06	See AEIR	5.65E-09	2.47E-08	2.47E-08	See AEIR	8.00E-07	3.50E-06	3.50E-06	See AEIR
IA	036	2.57E-07	1.13E-06	1.13E-06	See AEIR	2.94E-09	1.29E-08	1.29E-08	See AEIR	4.17E-07	1.83E-06	1.83E-06	See AEIR
IA	037	2.06E-07	9.02E-07	9.02E-07	See AEIR	2.35E-09	1.03E-08	1.03E-08	See AEIR	3.33E-07	1.46E-06	1.46E-06	See AEIR
IA	038	2.57E-07	1.13E-06	1.13E-06	See AEIR	2.94E-09	1.29E-08	1.29E-08	See AEIR	4.17E-07	1.83E-06	1.83E-06	See AEIR
IA	039	1.42E-07	6.22E-07	6.22E-07	See AEIR	1.62E-09	7.11E-09	7.11E-09	See AEIR	2.30E-07	1.01E-06	1.01E-06	See AEIR
IA	040	1.42E-07	6.22E-07	6.22E-07	See AEIR	1.62E-09	7.11E-09	7.11E-09	See AEIR	2.30E-07	1.01E-06	1.01E-06	See AEIR
IA	041	2.57E-07	1.13E-06	1.13E-06	See AEIR	2.94E-09	1.29E-08	1.29E-08	See AEIR	4.17E-07	1.83E-06	1.83E-06	See AEIR
IA	042	2.47E-07	1.08E-06	1.08E-06	See AEIR	2.82E-09	1.24E-08	1.24E-08	See AEIR	4.00E-07	1.75E-06	1.75E-06	See AEIR
IA	047	4.71E-06	2.07E-05	2.07E-05	See AEIR	5.39E-08	2.36E-07	2.36E-07	See AEIR	7.63E-06	3.34E-05	3.34E-05	See AEIR
IA	048	1.73E-06	7.60E-06	7.60E-06	See AEIR	1.98E-08	8.68E-08	8.68E-08	See AEIR	2.81E-06	1.23E-05	1.23E-05	See AEIR
IA	049	1.73E-06	7.60E-06	7.60E-06	See AEIR	1.98E-08	8.68E-08	8.68E-08	See AEIR	2.81E-06	1.23E-05	1.23E-05	See AEIR
IA	050	9.78E-07	4.29E-06	4.29E-06	See AEIR	1.12E-08	4.90E-08	4.90E-08	See AEIR	1.58E-06	6.94E-06	6.94E-06	See AEIR
IA	052	4.34E-07	1.90E-06	1.90E-06	See AEIR	4.96E-09	2.17E-08	2.17E-08	See AEIR	7.02E-07	3.08E-06	3.08E-06	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		1.55E-03	1.55E-03	See AEIR		1.77E-05	1.77E-05	See AEIR		2.88E-03	2.88E-03	See AEIR

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :	NA			3c) CAS# :	67-56-1			3c) CAS# :	108-10-1		
		3d) Pollutant Name:	Glycol Ethers			3d) Pollutant Name:	Methanol			3d) Pollutant Name:	Methyl Isobutyl Ketone		
		3e) Potential			3f) Actual	3e) Potential			3f) Actual	3e) Potential			3f) Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr	Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	001	0.55	2.42	0.84	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	002	0.50	2.19	0.76	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	004	1.42	6.23	2.17	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	006	1.74	7.62	2.65	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	007	0.55	2.42	0.84	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	008	1.74	7.62	2.65	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	009	1.74	7.62	2.65	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	010	1.74	7.62	2.65	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	021-023	1.28	5.59	5.59	See AEIR	3.31E-03	1.45E-02	1.45E-02	See AEIR	3.31E-03	1.45E-02	1.45E-02	See AEIR
EU	024	3.56	15.58	5.41	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	027	2.42	10.61	3.69	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	028	2.42	10.61	3.69	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR
EU	029	2.42	10.61	3.69	See AEIR	--	--	--	See AEIR	--	--	--	See AEIR

4)	Potential			Actual	Potential			Actual	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year		Unrestricted	Limited	Tons/year
		96.7	37.3	See AEIR		1.45E-02	1.45E-02	See AEIR		1.45E-02	1.45E-02	See AEIR

3a) Emission Source Type	3b) Emission Source ID No.	3c) CAS# :	108-05-4		
		3d) Pollutant Name:	Vinyl Acetate		
		3e) Potential			3f) Actual
		Lbs per Hr	Unrestricted tpy	Limited tpy	Tons per yr
EU	021-023	4.63E-03	2.03E-02	2.03E-02	See AEIR

4)	Potential			Actual
Total Facility		Unrestricted	Limited	Tons/year
		2.03E-02	2.03E-02	See AEIR

Brown Printing Co
Permit No. 16100013-005
Technical Support Document

Attachment 2

Facility Description and CD-01 Forms



GI-01

FACILITY INFORMATION

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

Permit Action No: PER005

1) AQD Facility ID No.: 16100013

2) Facility Name: Brown Printing Co - Waseca Division

3) Check the one that applies to your facility:

- ☐ New facility planned or under construction (first permit application)
- ☒ Existing facility, applying for renewal of a total facility operating permit issued by MPCA Air Quality
- ☐ Existing facility, and have never had a total facility operating permit, but have had another type of permit issued by MPCA Air Quality
- ☐ Existing facility, but have never had a total facility operating permit or any other type of permit issued by MPCA Air Quality

4) Facility Location:

Street Address: 2300 Brown Ave

City, County, Zip Code: Waseca Waseca 56093

Facility Mailing Address:

Street/Box: PO Box 1549

City, State, Zip Code: Waseca MN 56093-1549

Country: USA

5) Corporate/Company Owner:

Name: Brown Printing Co- Div of Gruner & Jahr

Mailing Address Street/Box: PO Box 1549

City, State, Zip Code: Waseca MN 56093-1549

Country: USA

Owner Classification:

☒ Private ☐ Local Govt. ☐ State Govt. ☐ Federal Govt. ☐ Utility

6) Corporate/Company Operator (if different than owner):

Name:

Mailing Address Street/Box:

City, State, Zip Code:

Country:

7) Co-permittee (if applicable):

Name:

Mailing Address Street/Box:

City, State, Zip Code:

Country:

8) Contact person for this permit:

Name: Mr. Jack Johnson

First

Middle

Last

Phone: (507) 835-2410 x

Fax: (507) 835-0170 x

Title:

Environmental Coordinator

At (check one):

☐ Owner Address

☐ Emission Facility Address

☐ Operator Address

☒ Other (specify)



GI-01

FACILITY INFORMATION

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

Permit Action No: PER005

9) All billings for annual fees should be addressed to:

Name: Mr. Jack Johnson
First Middle Last
Phone: (507) 835-2410 x Fax: (507) 835-0170 x
Title: Environmental Coordinator
At (check one):
☐ Owner Address ☐ Emission Facility Address
☐ Operator Address ☒ Other (specify)

10) Standard Industrial Classification (SIC) Code and description for the facility:

Primary: 2752 / Commercial printing, lithographic
Secondary (if applicable): /
Tertiary (if applicable): /

11) Primary product produced (or activity performed) at the facility is:

Magazines

12) Facility is: ☒ Stationary ☐ Portable

13) Check if the facility is in a non-attainment area for (check all that apply):

☐ CO ☐ Pb ☐ PM-10 ☐ SO₂ ☐ Other (specify)
☒ The facility is located in an area which is in attainment or is unclassifiable for all ambient air standards

14) Is environmental review required (either an Environmental Assessment Worksheet (EAW) or an Environmental Impact Statement (EIS))?

☐ Yes ☒ No

15) Are you required to submit a Toxics Release Inventory (Form R) under SARA Title 313?

☒ Yes ☐ No

16) Are you within 50 miles of another state or the Canadian border (if 'Yes' specify which states):

☐ Yes ☒ No NONE

17) Brief description of the source or proposed source to be permitted:

Brown Printing Company handles all aspects of the printing process at their Waseca Division facility, including film and plate processing, offset web and sheet-fed printing, binding and mailing.

18) Are you proposing any alternative operating or emissions trading scenarios in this application (see Minn. Rules pt. 7007.0800, Subp. 11 and 12)?

☐ Yes ☒ No

If yes, attach a description of your proposal, including a statement on how the proposal will meet all applicable requirements (in particular, please address federal New Source Review requirements, if applicable). See Form GI-09(C).



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: Total Facility

	NC/ CA	Type	Citation	Requirement
1.0		CD	Title I Condition: Limit to avoid classification as major source modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 63.2	This permit establishes limits on the facility to keep it a minor source under the New Source Review and the NESHAP program. The Permittee cannot make any change at the source that would make the source a major source under New Source Review or the NESHAP program until a permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.
2.0		S/A	Minn. R. 7007.0800, subp. 2 and 6.	Annual Report: due 30 days after end of each calendar year following Permit Issuance. The Permittee shall submit an annual report by January 31 that describes the changes made at the facility during the previous calendar year using the latest MPCA application forms. The report shall document: 1) the VOC and HAP 12-month rolling sum calculations for the previous calendar year and 2) 12-month rolling sum fuel usage limits. The report shall be submitted with the annual Compliance Certification listed in Table B. As part of the Annual Report, the Permittee shall verify and certify that the facility has maintained minor source status for New Source Review and Part 63.
3.0		CD	Minn. R. 7007.0800, subp. 2	Equipment Labeling: The Permittee shall permanently affix a unique number to each emissions unit for tracking purposes. The numbers shall correlate the unit to the appropriate EU and GP numbers used in this permit. The number can be affixed by placard, stencil, or other means. The number shall be maintained so that it is readable and visible at all times from a safe distance. If equipment is added, it shall be given a new unique number; numbers from replaced or removed equipment shall not be reused.
4.0		CD	Minn. R. 7007.0800, subps. 4 & 5	The Permittee shall maintain a written list of all fuel burning equipment on site (including both the fuel burning significant and insignificant equipment). The Permittee shall update the list to include any replaced, modified, or new equipment prior to making the change. The list shall include the capacity of each piece of equipment and the total facility capacity.
5.0		CD	hdr	STANDARD REQUIREMENTS
6.0		CD	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080	The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.
7.0		CD	Minn. R. 7011.0020	Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.
8.0		CD	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.
9.0		CD	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.
10.0		CD	Minn. R. 7019.1000, subp. 4	Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

11.0		CD	Minn. R. 7011.0150	Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.
12.0		CD	Minn. R. 7030.0010 - 7030.0080	Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.
13.0		CD	Minn. R. 7007.0800, subp. 9(A)	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).
14.0		CD	Minn. R. 7007.0800, subp. 16	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.
15.0		CD	hdr	PERFORMANCE TESTING
16.0		CD	Minn. R. ch. 7017	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A and/or B.
17.0		CD	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2	<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p>
18.0		CD	Minn. R. 7017.2025, subp. 3	Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.
19.0		CD	hdr	MONITORING REQUIREMENTS
20.0		CD	Minn. R. 7007.0800, subp. 4(D)	Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).
21.0		CD	Minn. R. 7007.0800, subp. 4(D)	Operation of Monitoring Equipment: Unless otherwise noted in Tables A and/or B, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.
22.0		CD	hdr	RECORDKEEPING
23.0		CD	Minn. R. 7007.0800, subp. 5(C)	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).
24.0		CD	Minn. R. 7007.0800, subp. 5(B)	Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

25.0		CD	Minn. R. 7007.1200, subp. 4	If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.
26.0		CD	hdr	REPORTING/SUBMITTALS
27.0		CD	Minn. R. 7019.1000, subp. 3	Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.
28.0		CD	Minn. R. 7019.1000, subp. 2	Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.
29.0		CD	Minn. R. 7019.1000, subp. 1	Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.
30.0		CD	Minn. R. 7019.1000, subp. 1	Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.
31.0		S/A	Minn. R. 7007.0800, subp. 6(A)(2)	Semiannual Deviations Report: due 30 days after end of each calendar half-year starting 01/23/2003. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.
32.0		CD	Minn. R. 7007.1150 through Minn. R. 7007.1500	Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.
33.0		S/A	Minn. R. 7007.0400, subp. 2	Application for Permit Reissuance: due 180 days before expiration of Existing Permit
34.0		CD	Minn. R. 7007.1400, subp. 1(H)	Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).
35.0		S/A	Minn. R. 7007.0800, subp. 6(C)	Compliance Certification: due 31 days after end of each calendar year starting 01/13/2003 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.



MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

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36.0		CD	Minn. R. 7019.3000 through Minn. R. 7019.3010	Emissions Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.
37.0		CD	Minn. R. 7002.0005 through Minn. R. 7002.0095	Emission Fees: due 60 days after receipt of an MPCA bill.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division
Permit Number: 16100013 - 005

Subject Item: GP 001 Press Limits

Associated Items: CE 009 Regenerative Thermal Oxidizer
CE 010 Regenerative Thermal Oxidizer
CE 014 Regenerative Thermal Oxidizer
EU 001 Web Offset Press / Dryer 1221
EU 002 Web Offset Press / Dryer 1219
EU 004 Web Offset Press / Dryer 1212
EU 006 Web Offset Press / Dryer 1214
EU 007 Web Offset Press / Dryer 1222
EU 008 Web Offset Press / Dryer 1216
EU 009 Web Offset Press / Dryer 1217
EU 010 Web Offset Press / Dryer 1218
EU 021 Press Room "Fugitives"
EU 022 Bindery "Fugitives"
EU 023 Prep Area "Fugitives"
EU 024 Web Offset Press / Dryer 1220
EU 027 Web Offset Press / Dryer 1223
EU 028 Web Offset Press / Dryer 1224
EU 029 Web Offset Press / Dryer 1225
SV 017 Regenerative Thermal Oxidizer
SV 018 Regenerative Thermal Oxidizer
SV 021 Regenerative Thermal Oxidizer

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	A. LIMITS
2.0		LIMIT	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	<p>Volatile Organic Compounds: less than or equal to 232.50 tons/year using 12-month Rolling Sum to be calculated, by the 15th day of each month, for the previous 12-month period as described in Appendix I. This includes all non-combustion VOC emissions including from all inks, pressrooms, prep areas, and bindery chemicals.</p> <p>All emission units included in or added to GP 001 as allowed in this permit shall be included in this calculation. VOC contents for each VOC-containing material shall be determined as described under the Material Content requirement in GP 001. The calculation of VOCs used may take into account recovered/recycled VOCs as described under the Waste Credit requirement in GP 001.</p>
3.0		LIMIT	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 63.2	<p>HAPs - Total: less than or equal to 22.10 tons/year using 12-month Rolling Sum to be calculated, by the 15th day of each month, for the previous 12-month period as described in Appendix I. This includes all non-combustion HAP emissions including from all inks, pressrooms, prep areas, and bindery chemicals.</p> <p>All emission units included in or added to GP 001 as allowed in this permit shall be included in this calculation. HAP contents for each HAP-containing material shall be determined as described under the Material Content requirement in GP 001. The calculation of HAPs used may take into account recovered/recycled HAPs as described under the Waste Credit requirement in GP 001.</p>



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

4.0		LIMIT	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 63.2	<p>HAP-Single: less than or equal to 9.00 tons/year using 12-month Rolling Sum to be calculated, by the 15th day of each month, for the previous 12-month period. This includes all non-combustion HAP emissions including from all inks, pressrooms, prep areas, and bindery chemicals.</p> <p>All emission units included in or added to GP 001 as allowed in this permit shall be included in this calculation. HAP contents for each HAP-containing material shall be determined as described under the Material Content requirement in GP 001. The calculation of HAP usage may take into account recovered/recycled HAPs as described under the Waste Credit requirement in GP 001.</p>
5.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 63.2	VOC and HAP PreCaps: If the Permittee replaces any non-combustion VOC or HAP-emitting equipment, adds new non-combustion VOC or HAP-emitting equipment, or modifies the existing equipment listed in GP 001, such equipment is subject to the above permit limits as well as all of the requirements of GP 001. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. For changes described in this item, the Permittee is not required to repeat VOC calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emission increase if the change will be subject to a new applicable requirement or requires revision to the limits or monitoring and recordkeeping in this permit.
6.0		CD	Title I Condition: Limit to avoid major source or modification under 40 CFR Section 52.21 and 40 CFR Section 63.2	The Permittee shall control the emissions from the Press operations (presses and dryers) including modified or new press operations with control devices meeting the requirements of GP 004, at all times that the given press is operating.
7.0		CD	hdr	B. MONITORING
8.0		CD	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	<p>Material Usage Recordkeeping:</p> <p>Ink materials used at the presses: On each day of operation, the Permittee shall calculate, record and maintain the quantity of each ink material delivered to the facility. This shall be based on written logs of order/delivery records. Ink is considered used on the day it is ordered/delivery.</p> <p>Fountain solution, automatic blanket wash, and manual blanket wash: The Permittee shall calculate, record and maintain the amount and type of solvent material. This shall be based on usage logs generated at the time material is taken out of inventory.</p> <p>Other VOC and HAP-containing materials: The Permittee shall calculate, record, and maintain monthly usage records showing the quantity of each material used. This shall be based on either written usage logs and/or purchase records. This includes VOC and HAP generated from Press room, Bindery, and Prep Area "Fugitives" (EU 021, EU 022, and EU 023 respectively).</p>
9.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping -- VOC Emissions</p> <p>By the 15th day of each month, the Permittee shall calculate and record the following for the previous month:</p> <ol style="list-style-type: none"> 1) The total usage of VOC-containing materials for the previous calendar month using the daily and monthly usage, purchase inventory, and/or delivery records. This record shall also include the VOC content of each material as determined by the Material Content requirement of this permit; 2) The VOC emissions for the previous month using the formulas specified in this permit; and 3) The 12-month rolling sum VOC emissions for the previous 12-month period by summing the monthly VOC emissions data for the previous 12 months.
10.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping - HAP Emissions. By the 15th day of the month, the Permittee shall calculate and record the following using the formulas specified in this permit for the previous month:</p> <ol style="list-style-type: none"> 1) The total HAP-containing materials used in the previous calendar month using the daily purchase, and/or delivery records. This record shall also include the individual and total HAP contents of each HAP-containing material used in the previous month, as determined by the Material Content requirement of this permit; 2) The total and individual HAP emissions for the previous month using the formulas specified in this permit; and 3) The 12-month rolling sum total and individual HAP emissions for the previous 12-month period by summing the monthly emissions data for the previous 12 months.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

11.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Material Content: VOC and HAPs contents in materials shall be determined by either:</p> <ol style="list-style-type: none">1. a Material Safety Data Sheet (MSDS); or2. a Letter of Certification, provided by the supplier for each material used. <p>If a material content range is given, the highest number in the range shall be used in all compliance calculations. Other alternative methods approved by the MPCA may be used to determine the VOC and HAPs contents. The Commissioner reserves the right to require the Permittee to determine the VOC and/or HAP contents of any material, according to EPA or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the MSDS.</p>
12.0		CD	Minn. R. 7005.0100, subp. 35a	<p>Maximum Contents of Materials: The Permittee assumed certain worst-case contents of materials when determining the short term potential to emit of units in GP001. These assumptions are listed in Appendix VI of this permit. Changes to a material that has a higher content of any of the given pollutants is considered a change in method of operation that must be evaluated under Minn. R. 7007.1200, subp. 3 to determine if a permit amendment or notification is required under Minn. R. 7007.1150.</p>
13.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Waste Credit: If the Permittee elects to obtain credit for HAPs and/or VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC and/or total and individual HAP content for each credited shipment.</p> <ol style="list-style-type: none">1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, total HAP, and each individual HAP, excluding water.2) The Permittee may use supplier data for raw materials to determine the VOC and total and individual HAP contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC and total and individual HAP content of any of the materials.
14.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Recordkeeping of Changes: Prior to making any change pertaining to the web offset presses, the Permittee shall document that the proposed change meets the criteria listed in this permit. This document shall include, at a minimum, 1) the new press is a web offset heat press; 2) the VOC and HAP emissions can be calculated in Appendix I; 3) VOC and HAPs limits will not be exceeded; and 4) the unit will be controlled as specified in GP 001. The Permittee shall maintain this documentation on-site.</p>



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: GP 002 Combustion Sources and GHG limits

Associated Items:

- EU 001 Web Offset Press / Dryer 1221
- EU 002 Web Offset Press / Dryer 1219
- EU 004 Web Offset Press / Dryer 1212
- EU 006 Web Offset Press / Dryer 1214
- EU 007 Web Offset Press / Dryer 1222
- EU 008 Web Offset Press / Dryer 1216
- EU 009 Web Offset Press / Dryer 1217
- EU 010 Web Offset Press / Dryer 1218
- EU 019 Boiler A
- EU 020 Boiler B
- EU 024 Web Offset Press / Dryer 1220
- EU 026 Chiller Unit
- EU 027 Web Offset Press / Dryer 1223
- EU 028 Web Offset Press / Dryer 1224
- EU 029 Web Offset Press / Dryer 1225
- EU 030 Boiler C
- EU 031 Regenerative Thermal Oxidizer (RTO) #1 (CE-009)
- EU 032 Regenerative Thermal Oxidizer (RTO) #2 (CE-010)
- EU 033 Boiler D
- EU 035 Regenerative Thermal Oxidizer (RTO) #3 (CE 014)
- EU 076 Diesel Engine
- EU 078 Water Tube Boiler 3
- EU 079 Make-up air-501 on M-530
- EU 080 Unit Heater - Baler room

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	FUEL USAGE LIMIT
2.0		LIMIT	Title I Condition: Limit to avoid classification as major source modification under 40 CFR pt. 70; Minn. R. 7007.1141	Fuel Usage: less than or equal to 1290.4 million cubic feet/year using 12-month Rolling Sum . This limit is applied to all fuel burning insignificant activities at the facility and when natural gas is used as fuel.
3.0		LIMIT	Title I Condition: Limit to avoid classification as major source modification under 40 CFR pt. 70; Minn. R. 7007.1141	Fuel Usage: less than or equal to 210,000 gallons/year using 12-month Rolling Sum . This limit is applied to all burning insignificant activities at the facility and when LPG is used as fuel.



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Facility Name: Brown Printing Co - Waseca Division

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4.0		CD	Title I Condition: Limit to avoid classification as major source modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 63.2	<p>If the Permittee replaces any existing combustion equipment, adds new combustion equipment, or modifies the existing combustion equipment, such equipment is subject to the fuel usage limit of GP 002, the fuel type limit at each group or emission unit level, as well as the applicable requirement listed here for the appropriate type of equipment:</p> <ol style="list-style-type: none">1) GP 001 Presses/Dryers,2) GP 003 Direct Heating Equipments,3) GP 004 RTOs,4) GP 006 Indirect Heating Equipments, and5) EU 076 Diesel engine. <p>Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. A permit amendment will still be needed regardless of the emission increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>
5.0		CD	hdr	RECORDKEEPING
6.0		CD	Title I Condition: Limit to avoid classification as major source modification under 40 CFR Section 52.21; Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	The Permittee must calculate and maintain records of a 12-month rolling sum of the Natural Gas and LPG usage by the 15th day of each month by summing the monthly fuel usage records from the previous 12 months.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: GP 003 Direct Heating Equipment

Associated Items:

- CE 009 Regenerative Thermal Oxidizer
- CE 010 Regenerative Thermal Oxidizer
- CE 014 Regenerative Thermal Oxidizer
- EU 001 Web Offset Press / Dryer 1221
- EU 002 Web Offset Press / Dryer 1219
- EU 004 Web Offset Press / Dryer 1212
- EU 006 Web Offset Press / Dryer 1214
- EU 007 Web Offset Press / Dryer 1222
- EU 008 Web Offset Press / Dryer 1216
- EU 009 Web Offset Press / Dryer 1217
- EU 010 Web Offset Press / Dryer 1218
- EU 024 Web Offset Press / Dryer 1220
- EU 027 Web Offset Press / Dryer 1223
- EU 028 Web Offset Press / Dryer 1224
- EU 029 Web Offset Press / Dryer 1225
- EU 079 Make-up air-501 on M-530
- EU 080 Unit Heater - Baler room

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(1)	Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0730. This applies separately to each piece of equipment listed in this group (GP 003).
2.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(2)	Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This applies separately to each piece of equipment listed in this group (GP 003).
3.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR 52.21, Minn. R. 7007.3000, and Minn. R. 7005.0100, subp. 35a	Fuel Type: Natural gas or liquified propane gas (LPG) only.
4.0		CD	Minn. R. 7007.0800, subps. 4 & 5	The Permittee shall keep records of fuel purchase for the facility on a monthly basis.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: GP 004 Regenerative Thermal Oxidizers

Associated Items: CE 009 Regenerative Thermal Oxidizer

CE 010 Regenerative Thermal Oxidizer

CE 014 Regenerative Thermal Oxidizer

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	These requirements apply individually to each control device listed in GP 004 (i.e., CE 009, CE 010, and CE 014).
2.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	VOC PreCaps: If the Permittee replaces any Regenerative Thermal Oxidizer (RTO), adds a new RTO, or modifies the existing RTO listed in GP 004, such equipment is subject to the permit limits as well as all of the requirements of GP 004. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. For changes described in this item, the Permittee is not required to repeat VOC calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emission increase if the change will be subject to a new applicable requirement or requires revision to the limits or monitoring and recordkeeping in this permit.
3.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14	The Permittee shall operate and maintain the regenerative thermal oxidizer - RTO (CE 009, CE 010, and CE 014) at all times that any emission unit controlled by the RTO (GP 001) is in operation. The Permittee shall document periods of non-operation of the control equipment.
4.0		CD	Minn. R. 7007.0800, subp. 14	The Permittee shall operate and maintain the thermal oxidizer in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.
5.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR 52.21, Minn. R. 7007.3000, and Minn. R. 7005.0100, subp. 35a	Fuel Type: Natural gas or liquified propane gas (LPG) only.
6.0		CD	Minn. R. 7007.0800, subps. 4 & 5	The Permittee shall keep records of fuel purchases for the facility on a monthly basis.
7.0		CD	hdr	LIMITS
8.0		LIMIT	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21, Minn. R. 7007.300, and 40 CFR Section 63.2	The Permittee shall operate and maintain the control equipment such that it achieves a destruction efficiency for Volatile Organic Compounds: greater than or equal to 97 percent control efficiency
9.0		LIMIT	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21, Minn. R. 7007.3000, and 40 CFR Section 63.2	The Permittee shall operate and maintain the control equipment such that it achieves a destruction efficiency for HAPs - Volatile: greater than or equal to 97 percent control efficiency
10.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21, Minn. R. 7007.3000, and 40 CFR Section 63.2	The Permittee shall operate and maintain the appropriate number of regenerative thermal oxidizer(s) as outlined in the condition below, any time that any process equipment controlled by the regenerative thermal oxidizer(s) is in operation.
11.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21, Minn. R. 7007.3000, and 40 CFR Section 63.2	Each regenerative thermal oxidizer (CE 009, CE 010, and CE 014) shall be in operation for Web Offset Presses with an adjustable intake flow rate. During normal production or backup mode operations, either the CE 009, CE 010, or CE 014 maximum intake flow rate shall not exceed 25,000 SCFM. For example, the sum of the individual press exhaust flow rates into CE 009 cannot exceed the CE 009 design intake flow of 25,000 SCFM. The individual press design flow rates are found in Appendix IV of the additional Appendix material.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

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12.0		LIMIT	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and 40 CFR Section 63.2	Temperature: greater than or equal to 1575.0 degrees F using 3-hour Rolling Average at the combustion chamber outlet, unless a new limit is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum is required to be set it will be based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The new limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. This limit is final upon issuance of a permit amendment incorporating the change. If the 3-hour rolling average temperature is below the minimum temperature limit, the VOC emitted during that time shall be considered uncontrolled until the average temperature is above the minimum temperature limit. This shall be reported as a deviation.
13.0		CD	hdr	PERFORMANCE TESTING
14.0		S/A	Minn. R. 7017.2020, subp. 1	Performance Test: due before end of each 60 months starting 10/28/2008 for VOC destruction efficiency of each RTO (CE 009, CE 010, and CE 014). The next due date for this performance test will be 10/28/2013.
15.0		CD	hdr	MONITORING
16.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21, Minn. R. 7007.3000; 40 CFR Section 64.3(b)(4)(ii); Minn. R. 7017.0200	Temperature Monitoring: The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the combustion chamber temperature of the thermal oxidizer. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius. The recording device shall also calculate the three-hour rolling average combustion chamber temperature. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a.
17.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21, Minn. R. 7007.3000 and 40 CFR Section 63.2; 40 CFR Section 64.3(b); Minn. R. 7017.0200	The Permittee shall maintain a minimum retention time, as provided by the manufacturer, in each regenerative thermal oxidizer that is controlling press operations. The manufacturer's warranty parameters are found in Appendix V of the additional Appendix material.
18.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; Minn. R. 7007.3000 and 40 CFR Section 63.2; Minn. R. 7007.0800 subp. 4 and 5; 40 CFR Section 64.3(b)(4)(ii); Minn. R. 7017.0200	Daily Monitoring: The Permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly. The Permittee shall maintain a written record of the daily verifications.
19.0		CD	40 CFR Section 64.7(b); Minn. R. 7017.0200; Minn. R. 7007.0800, subp. 4	Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.
20.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and 40 CFR Section 63.2; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5; 40 CFR Section 64.9(b); Minn. R. 7017.0200	The Permittee shall maintain a continuous hard copy readout or computer disk file of the temperature readings of each thermal oxidizer during oxidizer operation for the combustion chamber. Measurements shall be taken no less frequently than once every fifteen minutes. Measurements taken during each hour shall be averaged to determine the 1-hour average temperature. Once each hour, the Permittee shall take the average of the previous three 1-hour temperature averages to determine the 3-hour rolling average temperature.
21.0		CD	40 CFR Section 64.3; Minn. R. 7017.0200	Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the quarterly, semi-annual, and annual inspections and any corrective actions taken resulting from the inspection.
22.0		CD	40 CFR Section 64.3; Minn. R. 7017.0200	Annual Inspection: At least once per calendar year, the Permittee shall conduct an internal inspection of the control device that includes all operating systems of the control device. The Permittee shall maintain a written record of the inspection and any action resulting from the inspection.
23.0		CD	40 CFR Section 64.7(b); Minn. R. 7017.0200; Minn. R. 7007.0800, subps. 4, 5, and 14	Annual Calibration: The Permittee shall calibrate the temperature monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.



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24.0		CD	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and 40 CFR Section 63.2; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5	For periods when the regenerative thermal oxidizer is operated above the minimum combustion chamber temperature, the Permittee shall use either one of the following when completing calculations as required elsewhere in this permit: a. The overall control efficiency limit specified in this permit for this equipment (97%); or b. The overall control efficiency determined during the most recent MPCA approved performance test. If the tested efficiency is less than the efficiency limit in this permit, the Permittee must use the tested value in all calculations until the efficiency is demonstrated to be above the permit limit through a new test.
25.0		CD	40 CFR Section 64.7(d); Minn. R. 7017.0200	Corrective Actions: If the temperature is below the minimum specified by this permit or if the regenerative thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the regenerative thermal oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.
26.0		CD	40 CFR Section 64.7(e); Minn. R. 7017.0200	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing minimum combustion chamber temperature(s), the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring changes.
27.0		CD	40 CFR Section 64.9(a)(2); Minn. R. 7017.0200	As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report listed in Table B of this permit and/or the Notification of Deviations Endangering Human Health and the Environment listed earlier in Table A of this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents.
28.0		CD	40 CFR Section 64.9(b); Minn. R. 7017.0200	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: GP 006 Indirect Heating Equipment

Associated Items: EU 019 Boiler A

EU 020 Boiler B

EU 030 Boiler C

EU 033 Boiler D

EU 078 Water Tube Boiler 3

SV 009 Boiler A

SV 010 Boiler B

SV 016 Boiler D

SV 019 Boiler C

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	These requirements apply individually to each boiler listed in GP 006 (i.e., EU 019, EU 020, EU 030, EU 033, and EU 078).
2.0		LIMIT	Minn. R. 7011.0515, subp. 1	Total Particulate Matter: less than or equal to 0.40 lbs/million Btu heat input . (Note: design based PTE is 0.0006 lbs PM / million Btu heat input).
3.0		LIMIT	Minn. R. 7011.0515, subp. 2	Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.
4.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR 52.21, Minn. R. 7007.3000, and Minn. R. 7005.0100, subp. 35a	Fuel Type: Natural gas or liquified propane gas (LPG) only.
5.0		CD	Minn. R. 7007.0800, subps. 4 & 5	The Permittee shall keep records of fuel purchases for the facility on a monthly basis.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: GP 008 Paper Waste Recycling Fabric Filters (no CAM)

Associated Items: CE 006 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 017 Paper Waste Recycling System

EU 018 Paper Waste Recycling System

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	These requirements apply to each piece of control equipment individually.
2.0		CD	hdr	EMISSION AND OPERATIONAL LIMITS
3.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0070, subp. 1(A)	Total Particulate Matter: greater than or equal to 99 percent control efficiency .
4.0		LIMIT	Minn. R. 7007.0800, subp. 2 (This also satisfies Minn. R. 7011.0715, subp. 1(A))	Total Particulate Matter: less than or equal to 0.010 grains/dry standard cubic foot of exhaust gas. This limit comes from fabric filter manufacturer which satisfies Minn. R. 7011.0715, subp. 1(A) limit of 0.30 grains/dry standard cubic foot of exhaust gas.
5.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	PM < 10 micron: greater than or equal to 93 percent control efficiency .
6.0		LIMIT	Minn. R. 7007.0800, subp. 2	PM < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot of exhaust gas.
7.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	PM < 2.5 micron: greater than or equal to 93.0 percent control efficiency
8.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating. The Permittee shall document periods of non-operation of the control equipment.
9.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5	Visible Emissions: The Permittee shall check the fabric filter stacks (SV 007, SV 008, and SV 020) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across each fabric filter, once each day of operation (while venting externally).
10.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	Pressure Drop: greater than or equal to 0.50 inches of water column and less than or equal to 6.00 inches of water column as determined using manufacturer information, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. During inclement weather, the Permittee shall record the pressure drop at least once every 24 hours when in operation.
11.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	Recordkeeping of Pressure Drop during inclement weather: The Permittee shall record the time and date of each pressure drop reading and whether or not the recorded pressure drop was within the range specified in this permit.



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Facility Name: Brown Printing Co - Waseca Division

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12.0		CD	Minn. R. 7007.0800, subp. 4	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.
13.0		CD	Minn. R. 7007.0800, subps. 4, 5 and 14	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.
14.0		CD	Minn. R. 7007.0800, subp. 4, 5, and 14	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: -visible emissions are observed, - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.
15.0		CD	Minn. R. 7007.0800, subp. 14	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: GP 009 Paper Waste Recycling Fabric Filters (CAM)

Associated Items: CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 034 Paper Waste Recycling System

EU 043 Paper Waste Recycling

EU 044 Paper Waste Recycling

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION AND OPERATIONAL LIMITS
2.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14	The Permittee shall operate and maintain the fabric filters in this group (GP 009) at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipments.
3.0		LIMIT	Minn. R. 7007.0800, subp. 2 (This also satisfies Minn. R. 7011.0715, subp. 1(A))	Total Particulate Matter: less than or equal to 0.010 grains/dry standard cubic foot of exhaust gas. This limit comes from fabric filter manufacturer which satisfies Minn. R. 7011.0715, subp. 1(A) limit of 0.30 grains/dry standard cubic foot of exhaust gas.
4.0		LIMIT	Minn. R. 7007.0800, subp. 2	PM < 10 micron: greater than or equal to 0.010 grains/dry standard cubic foot of exhaust gas.
5.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron: greater than or equal to 93.0 percent control efficiency
6.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron: greater than or equal to 93.0 percent control efficiency
7.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Total Particulate Matter: greater than or equal to 99.0 percent control efficiency
8.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14	Pressure Drop: greater than or equal to 1 inches of water column and less than or equal to 12 inches of water column , unless a new range is set pursuant to Minn. R. 7017.0205, subp. 3.
9.0		CD	hdr	MONITORING AND RECORDKEEPING
10.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14; 40 CFR Section 64.3; Minn. R. 7017.0200	Daily Inspections: The Permittee shall do the following, once every 24 hours: 1). Inspect the fabric filter stacks (SV 020, SV 026 and SV 027) for any visible emissions during daylight hours, except during inclement weather. 2). During inclement weather, read and record the pressure drop across the fabric filter.
11.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14; 40 CFR Section 64.3; Minn. R. 7017.0200	Recordkeeping of Visible Emissions and Pressure Drop: The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a.



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12.0		CD	40 CFR Section 64.3; Minn. R. 7017.0200	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.
13.0		CD	40 CFR Section 64.7(d); Minn. R. 7017.0200	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.
14.0		CD	40 CFR Section 64.7(b); Minn. R. 7017.0200	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.
15.0		CD	40 CFR Section 64.3; Minn. R. 7017.0200	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration.
16.0		CD	40 CFR Section 64.7(e); Minn. R. 7017.0200	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change.
17.0		CD	40 CFR Section 64.9(a)(2); Minn. R. 7017.0200	As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report listed in Table B of this permit and/or the Notification of Deviations Endangering Human Health and the Environment listed earlier in Table A of this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents.
18.0		CD	40 CFR Section 64.9(b); Minn. R. 7017.0200	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.



COMPLIANCE PLAN **CD-01**

Facility Name: Brown Printing Co - Waseca Division

Permit Number: 16100013 - 005

Subject Item: EU 076 Diesel Engine

Associated Items: GP 002 Combustion Sources and GHG limits

SV 059 Engine Exhaust

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.2300, subp. 1	Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.
2.0		LIMIT	Minn. R. 7011.2300, subp. 2	Sulfur Dioxide: less than or equal to 0.50 lbs/million Btu heat input (The potential to emit from the unit is 0.295 lbs SO ₂ per MMBtu due to equipment design and using diesel as fuel)
3.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR 52.21, Minn. R. 7007.3000, and Minn. R. 7005.0100, subp. 35a	Fuel Type: Diesel fuel only.
4.0		CD	Minn. R. 7007.0800, subps. 4 & 5	The Permittee shall keep records of fuel purchases for the facility on a monthly basis.

FACILITY DESCRIPTION: GROUPS (GP)

Show: Active Records Only

Action:

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

ID No.	Group Status	Added By (Action)	Retired By (Action)	Include in EI	Operator ID for Item	Group Description	Group Items
1 GP 001	Active	PER 001		<input type="checkbox"/>		Press Limits	EU 001, EU 002, EU 003, EU 004, EU 005, EU 006, EU 007, EU 008, EU 009, EU 010, EU 024, EU 027, EU 028, EU 029
2 GP 002	Active	PER 001		<input type="checkbox"/>		Press Operations	CE 008, CE 009, CE 010, SV 014, SV 017, SV 018
3 GP 003	Retired	PER 002		<input type="checkbox"/>		Thermal Oxidizers	CE 008, SV 014
4 GP 004	Active	PER 001		<input type="checkbox"/>		Regenerative Thermal Oxidizers	CE 009, CE 010, SV 017, SV 018
5 GP 005	Active	PER 002		<input type="checkbox"/>		Direct Heating Equipment	CE 008, CE 009, CE 010, SV 014, SV 017, SV 018
6 GP 006	Active	PER 002		<input type="checkbox"/>		Indirect Heating Equipment	EU 019, EU 020, EU 030, EU 033, SV 009, SV 010, SV 016, SV 019
7 GP 007	Retired	PER 002		<input type="checkbox"/>		Dc Boilers	EU 033, SV 016, SV 019
8 GP 008	Active	PER 003		<input type="checkbox"/>		Paper Waste Recycling Fabric Filters	CE 004, CE 005, CE 006, CE 007, CE 011, EU 015, EU 016, EU 017, EU 018, EU 034, SV 005, SV 006, SV 007, SV 008, SV 020
9 GP 009	Active	PER 002		<input type="checkbox"/>		Total Facility Fuel Consumption Capacity	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active Records Only

Action:

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity Materials	Units n Units d	Max Fuel Input (mil Btu)
1 EU 001	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1221	Harris	M-1000-A1	2752	1400		Ft Min	4
2 EU 002	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1219	Harris	M-1000-A1	2752	1265		Ft Min	3.8
3 EU 003	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1211	Harris	M-1000-A2	2752	1600		Ft Min	8.6
4 EU 004	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1212	Harris	M-1000-B	2752	1600		Ft Min	8.6
5 EU 005	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1213	Harris	M-1000-B	2752	1800		Ft Min	8.8
6 EU 006	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1214	Rockwell/Baker-Perkin:	G-14	2752	2200		Ft Min	10.9
7 EU 007	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1222	Harris	M-1000-A1	2752	1400		Ft Min	4.3

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
1	EU 001	Active	PER 001		02/15/2001					
2	EU 002	Active	PER 001		06/01/1996					
3	EU 003	Active	PER 001		01/01/1985					
4	EU 004	Active	PER 001		09/01/1985					
5	EU 005	Active	PER 001		12/01/1985					
6	EU 006	Active	PER 001		05/01/1989					
7	EU 007	Active	PER 001		08/08/2001					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active Records Only

Action:

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s)	Control Equip. ID No(s)	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity Materials	Units n	Units d	Max Fuel Input (mil Btu)
8 EU 008	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1216	Rockwell/Baker-Perkin	G-14	2752	2200		Ft	Min	9.2
9 EU 009	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1217	Harris	M-1000-BE	2752	2200		Ft	Min	10.9
10 EU 010	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1218	Heidelberg/Harris	M-1000-BE	2752	2200		Ft	Min	9.0
11 EU 011	Removed	EIS 009		<input type="checkbox"/>		SV 001 (M)		Thermal Incinerator (CE-001)	Thermo Electron Wisc	KK8C	2752	5667		Ft3(s)	Min	2.33
12 EU 012	Removed	EIS 009		<input type="checkbox"/>				Thermal Incinerator (CE-002)	Thermo Electron Wisc	KK8C	2752	5667		Ft3(s)	Min	2.33
13 EU 013	Removed	EIS 009		<input type="checkbox"/>				Thermal Incinerator (CE-003)	Thermo Electron Wisc	KK8C	2752	5666		Ft3(s)	Min	2.34
14 EU 014	Removed	PER 001		<input type="checkbox"/>				Waste Incinerator	Atlas	CA2000	2752	1470		Lb	Hr	3.8
15 EU 015	Active	PER 001		<input type="checkbox"/>		SV 005 (M)	CE 004	Paper Waste Recycling System			2752	9700		Ft3	Min	
16 EU 016	Active	PER 001		<input type="checkbox"/>		SV 006 (M)	CE 005	Paper Waste Recycling System			2752	9700		Ft3	Min	
17 EU 017	Active	PER 003		<input type="checkbox"/>		SV 007 (M)	CE 006	Paper Waste Recycling System			2752	22500		Ft3	Min	
18 EU 018	Active	PER 003		<input type="checkbox"/>		SV 008 (M)	CE 007	Paper Waste Recycling System			2752	24000		Ft3	Min	
19 EU 019	Active	PER 001		<input type="checkbox"/>		SV 009 (M)		Boiler A	Kewanee	M-335	2752	1280		Ft3	Min	3.35
20 EU 020	Active	PER 001		<input type="checkbox"/>		SV 010 (M)		Boiler B	Kewanee	M-335	2752	1280		Ft3	Min	3.35
21 EU 021	Active	PER 001		<input type="checkbox"/>		SV 011 (M)		Press Room "Fugitives"			2752					
22 EU 022	Active	PER 001		<input type="checkbox"/>		SV 012 (M)		Bindery "Fugitives"			2752					
23 EU 023	Active	PER 001		<input type="checkbox"/>		SV 013 (M)		Prep Area "Fugitives"			2752					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
8	EU 008	Active	PER 001		10/01/1990					
9	EU 009	Active	PER 001		09/30/1994					
10	EU 010	Active	PER 001		12/31/1995					
11	EU 011	Removed	EIS 009		07/01/1988	12/31/2003				
12	EU 012	Removed	EIS 009		07/01/1988	12/31/2003				
13	EU 013	Removed	EIS 009		11/01/1988	12/31/2003				
14	EU 014	Removed	PER 001		02/01/1986					
15	EU 015	Active	PER 001		10/01/1982					
16	EU 016	Active	PER 001		10/01/1982					
17	EU 017	Active	PER 003		11/01/1990					
18	EU 018	Active	PER 003		11/01/1990					
19	EU 019	Active	PER 001		10/01/1987					
20	EU 020	Active	PER 001		10/01/1987					
21	EU 021	Active	PER 001		12/31/1963					
22	EU 022	Active	PER 001		12/31/1963					
23	EU 023	Active	PER 001		12/31/1963					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active Records Only

Action:

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
24 EU 024	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1220	Heidelberg/Harris	M-3000	2752	3000		Ft	Min
25 EU 025	Active	PER 001		<input type="checkbox"/>		SV 014 (M)		Thermal Incinerator (CE-008)	Thermo Electron	Titan	2752				7
26 EU 026	Active	PER 001		<input type="checkbox"/>		SV 015 (M)		Chiller Unit	York	YGPCPCH1	2752	5000		Ft3(s)	Min
27 EU 027	Active	PER 002		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1223	Heidelberg/Harris	S-3000	2752	3000.0		Ft	Min
28 EU 028	Active	PER 002		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1224	Heidelberg/Harris	S-2000	2752	2400		Ft	Min
29 EU 029	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 002 (P) SV 003 (P) SV 014 (P) SV 017 (P) SV 018 (P)	CE 001 CE 002 CE 003 CE 008 CE 009 CE 010	Web Offset Press 1225 (future)	Heidelberg/Harris	S-2000	2752	2400		Ft	Min
30 EU 030	Active	PER 002		<input type="checkbox"/>		SV 019 (M)		Boiler C	Cleaver-Brooks	TBD	2752			Ft3	Min
31 EU 031	Active	PER 001		<input type="checkbox"/>				Regenerative Thermal Oxidizer (RTO) #1 (CE-009)	TBD	TBD	2752				
32 EU 032	Active	PER 001		<input type="checkbox"/>				Regenerative Thermal Oxidizer (RTO) #2 (CE-010)	TBD	TBD	2752				
33 EU 033	Active	PER 002		<input type="checkbox"/>		SV 016 (M)		Boiler D	Cleaver-Brooks	TBD	2752				7.5
34 EU 034	Active	PER 003		<input type="checkbox"/>		SV 020 (M)	CE 011	Paper Waste Recycling System			2752	20000		Ft3	Min

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
24	EU 024	Active	PER 001		03/11/2000					
25	EU 025	Active	PER 001		12/31/1995					
26	EU 026	Active	PER 001		06/30/1996					
27	EU 027	Active	PER 002							
28	EU 028	Active	PER 002							
29	EU 029	Active	PER 001							
30	EU 030	Active	PER 002		01/01/2003			100		
31	EU 031	Active	PER 001							
32	EU 032	Active	PER 001							
33	EU 033	Active	PER 002		01/01/2003					
34	EU 034	Active	PER 003	01/15/2006						

FACILITY DESCRIPTION: CONTROL EQUIPMENT (CE)

Show: Active Records Only

Action:

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

ID No.	Control Equip. Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Control Equip. Type	Control Equipment Description	Manufacturer	Model	Pollutants Controlled	Capture Efficiency (%)	Destruction/Collection Efficiency (%)	Afterburner Combustion Parameters
1	CE 001	Removed	PER 002		022	Direct Flame Afterburner w/Heat Exchanger	Thermo Electron Wisconsin	KK8C	VOC	100	95	1400/0.7s
2	CE 002	Removed	PER 002		022	Direct Flame Afterburner w/Heat Exchanger	Thermo Electron Wisconsin	KK8C	VOC	100	95	1400/0.7s
3	CE 003	Removed	PER 002		022	Direct Flame Afterburner w/Heat Exchanger	Thermo Electron Wisconsin	KK8C	VOC	100	95	1400/0.7s
4	CE 004	Active	PER 001		018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	DCE	Dalamite	Lead PM10 PM	100	79	
5	CE 005	Active	PER 001		018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	DCE	Dalamite	Lead PM10 PM	100	79	
6	CE 006	Active	PER 001		018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	American Air Filter	6-420-1500	Lead PM10 PM	100	79	
7	CE 007	Active	PER 001		018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	American Air Filter	6-420-1500	Lead PM10 PM	100	79	
8	CE 008	Active	PER 002		131	Thermal Oxidizer	Thermo Electron	Titan	CO VOC	100	95	1300/0.7s
9	CE 009	Active	PER 002		099	Regenerative Thermal Oxidizer	TBD	TBD	CO VOC	100	95	1600
10	CE 010	Active	PER 002		099	Regenerative Thermal Oxidizer	TBD	TBD	CO VOC	100	95	1600
11	CE 011	Active	PER 003		018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Farr	GS36	PM10 PM	100	99	



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active Records Only

Action:

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operator's Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
							Diameter or Length (feet)	Width (feet)				
1	SV 001	Retired	PER 002		Direct Flame Afterburner w/ Heat Exchanger	56.0	4.00		17000	650	Manufacturer	Up, No Cap
2	SV 002	Retired	PER 002		Direct Flame Afterburner w/ Heat Exchanger	56.0	4.00		17000	650	Manufacturer	Up, No Cap
3	SV 003	Retired	PER 002		Direct Flame Afterburner w/ Heat Exchanger	56.0	4.00		17000	650	Manufacturer	Up, No Cap
4	SV 004	Active	PER 001		Waste Incinerator	51.0	3.00		12700	1363	Manufacturer	Up, No Cap
5	SV 005	Active	PER 001		Fabric Filter - Low Temperature, i.e., T<180 Degrees F	32.0	4.00	2.50	9700	68	Manufacturer	Up, No Cap
6	SV 006	Active	PER 001		Fabric Filter - Low Temperature, i.e., T<180 Degrees F	32.0	4.00	2.50	9700	68	Manufacturer	Up, No Cap
7	SV 007	Active	PER 003		Fabric Filter - Low Temperature, i.e., T<180 Degrees F	33.0	4.00	2.50	22500	68	Manufacturer	Up, No Cap
8	SV 008	Active	PER 003		Fabric Filter - Low Temperature, i.e., T<180 Degrees F	33.0	4.00	3.00	24000	68	Manufacturer	Up, No Cap
9	SV 009	Active	PER 001		Boiler A	26.0	1.17		1280	350	Manufacturer	Up, No Cap
10	SV 010	Active	PER 001		Boiler B	26.0	1.17		1280	350	Manufacturer	Up, No Cap
11	SV 011	Active	PER 001		Press Room "Fugitives"					68		Up, No Cap
12	SV 012	Active	PER 001		Bindery "Fugitives"					68		Up, No Cap
13	SV 013	Active	PER 001		Prep Area "Fugitives"					68		Up, No Cap
14	SV 014	Active	PER 002		Thermal Oxidizer	56.0	4.16		210000	325	Manufacturer	Up, No Cap
15	SV 015	Active	PER 001		Chiller Unit	5.8	0.07		5000	800	Estimate	Up, No Cap
16	SV 016	Active	PER 002		Boiler D	41.3	1.66		2500	255	Estimate	Up, unknown Cap
17	SV 017	Active	PER 002		Regenerative Thermal Oxidizer	56	4				Manufacturer	Up, No Cap
18	SV 018	Active	PER 002		Regenerative Thermal Oxidizer	56	4				Manufacturer	Up, No Cap
19	SV 019	Active	PER 002		Boiler C	41.3	1.66		2500	255	Estimate	Up, unknown Cap
20	SV 020	Active	PER 003		Fabric Filter - Low Temperature				20000	68	Manufacturer	Up, unknown Cap

FACILITY DESCRIPTION: FUGITIVE SOURCES (FS)

Show: Active Records Only

Action:

AQD Facility ID: 16100013

Facility Name: Brown Printing Co - Waseca Division

ID No.	Fugitive Source Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Pollutant(s) Emitted	Control Equip. ID No(s).	Fugitive Source Description	Year Installed	Year Removed
1 FS 001	Active	EIS 001		<input type="checkbox"/>				Press Room Fugitives		
2 FS 002	Active	EIS 001		<input type="checkbox"/>				Bindery Fugitives		
3 FS 003	Active	EIS 001		<input type="checkbox"/>				Prep Area Fugitives		

Brown Printing Co
Permit No. 16100013-005
Technical Support Document

Attachment 3

***CAM* Plan**



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

GI-09H

Requirements: CAM (40 CFR pt. 64)
Air Quality Permit Program

Doc Type: Permit Application

Compliance Assurance Monitoring (40 CFR pt. 64)

AQ Facility ID No.: 16100013 Facility Name: Brown Printing Co - Waseca Division

The CAM rule applies to certain emission units at facilities required to obtain a Part 70 permit.

In general, CAM applies to emission units meeting the following criteria:

1. The emission unit is subject to an emission limit or standard (including limits and standards in Minnesota Rules contained in the State Implementation Plan) for an air pollutant regulated by Part 70;
2. Compliance with the applicable limit or standard is achieved through the use of add-on control equipment; and
3. The emission unit has pre-controlled potential emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the Part 70 major source level for that pollutant (in tons per year).

For exemptions, see Table C at the end of this form.

Use of continuous emissions monitoring system (CEMS), continuous opacity monitoring system (COMS), or predictive emission monitoring system (PEMS) does not qualify as an exemption to the CAM rule. However, 40 CFR §64.3(d) states that use of a CEMS, COMS, or PEMS meets the requirements of Compliance Assurance Monitoring (CAM).

CAM applicability is determined on a pollutant-by-pollutant basis for each "pollutant specific emissions unit," (PSEU) defined at 40 CFR § 64.1 as "an emissions unit considered separately with respect to each regulated air pollutant." For purposes of CAM submittal requirements, a "large PSEU" is an emissions unit with potential *controlled* emissions equal to or greater than 100 percent of the major source threshold amount for a given regulated pollutant. ("Major source threshold amount" as it applies to Minnesota, means 100 tons per year of particulate matter (PM), particulate matter smaller than 10 microns in aerodynamic diameter (PM₁₀), particulate matter smaller than 2.5 microns in aerodynamic diameter (PM_{2.5}), sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), or lead; 10 tons per year of any hazardous air pollutant (HAP); or 25 tons per year of any combination of HAPs. The levels may be different in current or future nonattainment areas. Refer to 40 CFR § 70.2 under the definition of "major source" for further detail. "Other PSEUs" are those units whose uncontrolled potential emissions may be equal to or greater than 100 percent of the major source threshold amount, but controlled emissions are less than that threshold.

- **If you are applying for the first time for a Part 70 permit**, after determining the uncontrolled and controlled potential emissions of the emissions units, questions 1-3 must be considered for each large PSEU, as defined above.
 - **If you are applying for a major amendment to an existing Part 70 permit**, after determining the uncontrolled and controlled potential emissions of the emissions units, questions 1-3 must be considered for any PSEU, as defined above, to which the amendment is applicable.
 - **If you are applying for reissuance of an existing Part 70 permit:**
 - ☐ CAM applicability has already been determined and incorporated in the permit where necessary, and this permit application requests no changes affecting CAM applicability. Done with this form. Submit this form with your application.
 - ☐ CAM applicability has already been determined and incorporated in the permit where necessary, but I would like to request some changes to the existing CAM. Done with this form. Submit this form and a new CAM Plan reflecting your requested changes with the application. Also show changes on CD-01-R and the Compliance Plan CD-01 received from the MPCA.
 - ☒ CAM applicability has not been determined for all sources at the facility. After determining the uncontrolled and controlled potential emissions of the emissions units, questions 1-3 must be considered for each PSEU (large and other) for which CAM applicability has not already been determined through a Part 70 permitting action.
- 1) Is the unit subject to an emission limitation or standard, specified in either a rule or permit? For existing emission units, check your current permit to see if there are any emission limits specified for the emission unit.
- ☒ Yes, the emission unit is subject to an emission limitation or standard. Go on to question 2.
- ☐ No, the emission unit is not subject to CAM. Record the EU number and reason CAM doesn't apply in Table B. Repeat question 1 for next emission unit.

- 2) Is an add-on control device used to achieve compliance with that limitation or standard? (For example, a boiler may have a NO_x limit and an SO₂ limit. If the boiler uses lime injection for SO₂ control but relies on a low-NO_x burner to meet the NO_x limit, then the emission unit would be subject to CAM for SO₂ but not for NO_x.)
- ☒ Yes. Go on to question 3.
- ☒ No, the emission unit is not subject to CAM. Record the EU number and reason CAM doesn't apply in Table B. Return to question 1 and repeat for next emission unit.
- 3) There are some exemptions allowed by the rule. Review the list of exemptions in Table C, then answer the following question.
- ☒ Yes, the emission unit is exempt from CAM. List the emission unit in Table B and repeat questions 1 through 3 for the next emissions unit. When each emission unit has been considered, go on to complete the rest of Table A and Table B.
- ☐ No, the emission unit is subject to CAM. List the emission unit in Table A and repeat questions 1 through 3 for the next emissions unit. When each emission unit has been considered, go on to complete the rest of Table A and Table B.

Table A. Emission units subject to CAM

EU #	Emission Unit	CE #	Description of control equipment	Pollutant(s) which are subject to CAM	Large PSEU or "Other" PSEU?
001-010, 027-029	Web Offset Presses	009,010,014	RTO	VOC	<input type="checkbox"/> Large <input checked="" type="checkbox"/> Other
024	Web Offset Press	009,010,014	RTO	VOC and HAPs	<input type="checkbox"/> Large <input checked="" type="checkbox"/> Other
043 & 044	Paper Waste Recycling Systems	012&013	Fabric Filter	PM and PM10	<input type="checkbox"/> Large <input checked="" type="checkbox"/> Other
					<input type="checkbox"/> Large <input checked="" type="checkbox"/> Other
					<input type="checkbox"/> Large <input type="checkbox"/> Other
					<input type="checkbox"/> Large <input type="checkbox"/> Other
					<input type="checkbox"/> Large <input type="checkbox"/> Other
					<input type="checkbox"/> Large <input type="checkbox"/> Other
					<input type="checkbox"/> Large <input type="checkbox"/> Other
					<input type="checkbox"/> Large <input type="checkbox"/> Other

You must prepare a CAM submittal for each unit listed in Table A, and provide it with the permit or amendment application. The CAM submittal, also referred to as the monitoring approach submittal, should include:

- information on indicators (gauges, meters, or other devices used to monitor operating parameters of control equipment)
- indicator ranges, or the process by which indicators are to be established
- performance criteria
- justification for the proposed monitoring
- control device operating data recorded during a performance test, supplemented by engineering assessments or manufacturer's recommendations to justify the proposed indicator range
- a test plan and schedule for obtaining data if performance test data are not available
- an implementation plan, if monitoring requires installation, testing or other activities prior to implementation

Some of this information will be incorporated into the operating permit. The permit will specify the approved monitoring approach and the indicator range(s), including the averaging periods.

Table B. Emission units not subject to CAM

EU #	Why ? (not large enough, uncontrolled, exemption category from Table C, etc.)
017 & 018	These units are used product collection. They are not controlled
034	Unit does not vent to the atmosphere.
Remaining units	Uncontrolled emissions less than Part 70 thresholds

Table C. CAM rule exemptions and exceptions

- ⇒ The CAM rule does not apply to units subject to emission limitations or standards proposed by EPA after November 15, 1990, pursuant to section 111 or 112 of the Clean Air Act. In situations where some portions of a facility operate control devices in order to comply with emission standards issued prior to November 15, 1990, only those portions of the facility must comply with the requirements of the CAM rule.
- ⇒ The CAM rule does not apply to Stratospheric ozone protection requirements.
- ⇒ The CAM rule does not apply to Acid Rain Program requirements.
- ⇒ The CAM rule does not apply to emission limitations or standards that apply solely under an emissions trading program.
- ⇒ The CAM rule does not apply to municipally-owned utility peak-shaving units where
 - the unit is exempt from all Acid Rain Program monitoring requirements, and
 - the unit operates for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations, and
 - the unit will be operated consistent with that purpose throughout the permit term, and
 - emissions from the unit are less than 50 percent of the amount required for the source to be classified as a major source, based on an average of the last 3 years, and are expected to remain so.
- ⇒ In situations where continuous compliance monitoring is already specified in an operating permit or applicable requirement, the CAM rule exempts the Permittee from additional monitoring requirements and directs the Permittee to use the continuous compliance monitoring data to fulfill the CAM rule monitoring and certification requirements.

Additional information, including a Technical Guidance Document that includes example submittals, is available on the Internet at <http://www.epa.gov/ttn/emc/cam.html>.

COMPLIANCE ASSURANCE MONITORING (CAM)
REGENERATIVE THERMAL OXIDIZERS FOR VOC AND HAP CONTROL:
BROWN PRINTING COMPANY WEB OFFSET PRESSES

I. Background

A. Emissions Unit

Description:	Web Offset Presses
Emission Unit ID:	EU 001, 002, 004, 006, 007, 008, 009, 010, 024, 027, 028 & 029 (GP001)
Control Equipment ID:	CE 009, 010 & 014
Facility:	Brown Printing Company, Waseca, MN

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	Permit and State Regulation
Emission Limits:	<p>VOC: less than or equal to 232.5 tons/year using 12-month Rolling Sum to be calculated, by the last day of each month, for the previous 12-month period as described in Appendix I (of the air permit). This includes all non-combustion VOC emissions including from all ink, pressrooms and prep areas, and bindery chemicals.</p> <p>[Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000]</p> <p>HAP-Single: less than or equal to 9.0 tons/year using 12-month Rolling Sum to be calculated, by the last day of each month, for the previous 12-month period as described in Appendix I (of the air permit). This includes all non-combustion VOC emissions including from all ink, pressrooms and prep areas, and bindery chemicals.</p> <p>[Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR Section 63.2]</p>
Monitoring Requirements:	Continuously monitor chamber temperature

C. Control Technology: Regenerative Thermal Oxidizer (RTO)

II. Monitoring Approach

	Indicator No. 1	Indicator No. 2
A. Indicator	Chamber Temperature	Work Practice Standard
Measurement Approach	The chamber temperature is monitored with a thermocouple.	Periodic inspection and maintenance of RTO per manufacturer maintenance manual.
B. Indicator Range	An excursion is defined as a temperature reading less than 1575°F using a 3-hours rolling average. A new minimum temperature can be set based on the most recent MPCA approved stack test. All excursions shall be reported as a deviation in the semi-annual deviation report.	An excursion is defined as a failure to perform a quarterly inspection. All excursions shall be reported as a deviation in the semi-annual deviation report.
C. Performance Criteria		
1. Data Representativeness	The thermocouple is located in the combustion chamber as an integral part of the RTO design. The minimum tolerance for the thermocouple is $\pm 2.5^{\circ}\text{C}$ or $\pm 0.75\%$ of the temperature being measured, whichever is greater.	Not applicable
2. Verification of Operational Status	Not Applicable	Not applicable
3. QA/QC Practices	Accuracy of the thermocouple will be calibrated at least annually	Not applicable
4. Monitoring Frequency	Measured Continuously	Quarterly inspections per maintenance manual.
5. Data Collection Procedures	Recorded continuously	Record results of quarterly inspections.
6. Averaging Period	3-hour rolling average	Not applicable

III. Monitoring Approach Justification

A. Background

- a. The CAM-affected “pollutant specific emission unit” (PSEU) are Web Offset Presses.
- b. The PSEU have annual VOC and HAP emission limits.

B. Rationale for Selection of Performance Indicators

- a. The incinerator chamber temperature was selected because it is indicative of the RTO operation. If the chamber temperature decreases significantly, complete combustion may not occur.

It has been shown that the control efficiency achieved by a thermal incinerator is a function of its operating temperature, or outlet temperature. By maintaining the operating temperature at or above a minimum, a level of control efficiency can be expected to be achieved. Attachment 1 presents information from the literature on incinerator control efficiency as a function of temperature.

- b. The work practice comprised of quarterly inspections and maintenance of the incinerator burner was selected because an inspection verifies equipment integrity and periodic maintenance will maintain proper burner operation and efficiency.

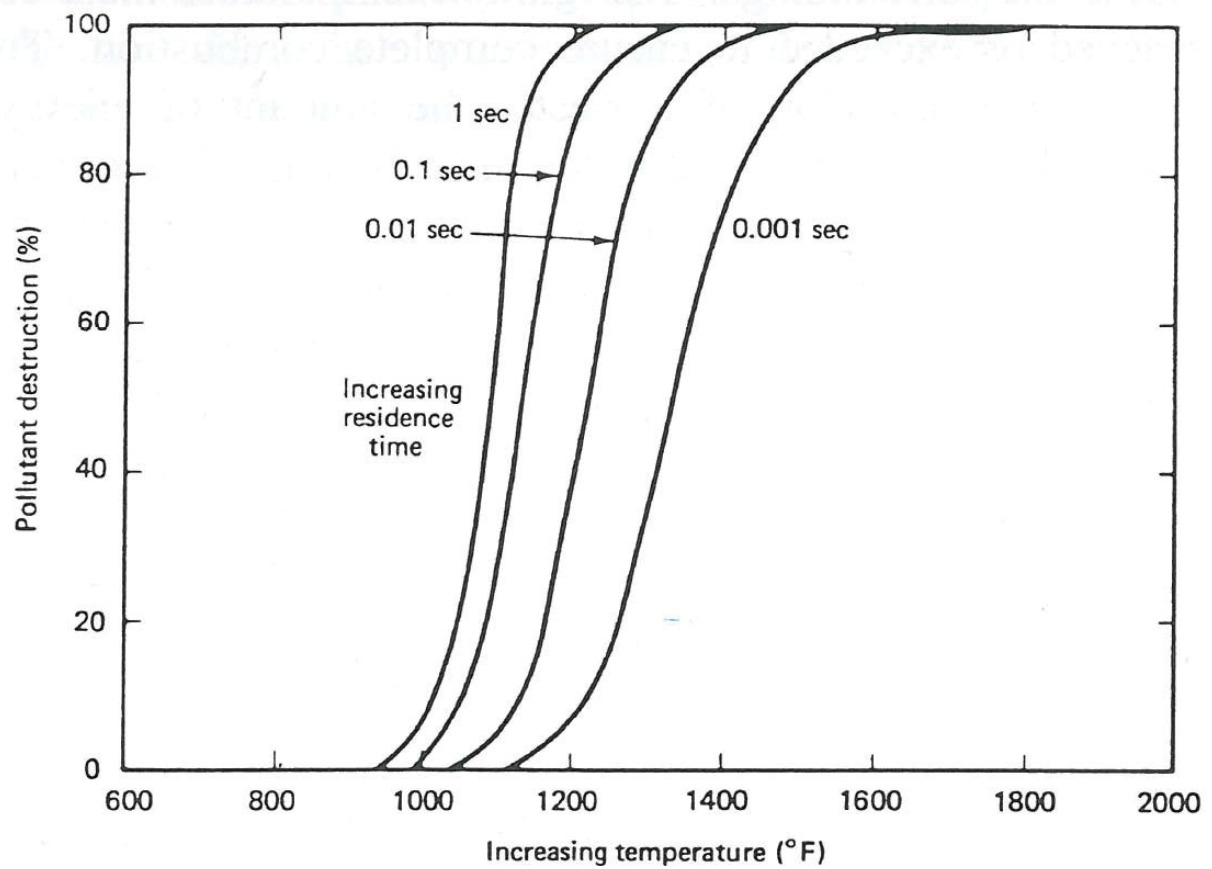
C. Rationale for Selection of Indicator Ranges

The selected indicator range for the incinerator chamber temperature is greater than 1575°F. When an excursion occurs corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation.

The facility’s air permit issued by the MPCA specifies that the incinerator must be maintain a minimum operating temperature of 1575°F based on a 3-hour rolling average. As indicated in the table below, an RTO is expected to achieve 98 percent or greater destruction efficiency (DRE) at this temperature. The permit requirement is 98 percent DRE. The incinerator employs a temperature controller that maintains the desired chamber temperature by using a natural gas-fired auxiliary burner; the temperature controller is set to maintain a temperature of at least 1575°F.

Review of historical monitoring data for a 6-month period (June – October 2011) indicates that 1575°F can be maintained on a routine basis with limited excursions.

Attachment 1



“Figure 1: Couple Effects of Temperature and Time on Rate of Pollutant Oxidation” from Chapter 5, Air Pollution Engineering Manual, Air and Waste management Association, 1992

COMPLIANCE ASSURANCE MONITORING (CAM)
FABRIC FILTER FOR PARTICULATE MATTER CONTROL:
BROWN PRINTING COMPANY PAPER RECYCLING SYSTEMS

I. Background

A. Emissions Unit

Description:	Paper Waste Recycling Systems
Emission Unit ID:	EU 043 & 044
Control Equipment ID:	CE 012 & 013
Facility:	Brown Printing Company, Waseca, MN

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	Permit and State Regulation
Emission Limits:	Total Particulate Matter: less than or equal to 0.010 grains/dry standard cubic foot of exhaust gas. [Minn. R. 7007.0800, subp. 2 (This also satisfies Minn.R. 7011.0715, subp. 1(A).] Particulate Matter < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot of exhaust gas. [Minn. R. 7007.0800, subp. 2] Opacity: less than or equal to 20 percent [Minn. R. 7011.0715, subp. 1(B)]
Monitoring Requirements:	Continuously monitor pressure drop across fabric filter; visible emission checks

C. Control Technology: Fabric Filter

II. Monitoring Approach

	Indicator No. 1	Indicator No. 2
A. Indicator	Visible Emissions	Pressure Drop
Measurement Approach	Visible Emissions: Once each day of operation that any GP 008 fabric filter is venting externally, the Permittee shall check the outlet of each operating fabric filter during daylight hours for any visible emissions (VEs). If inclement weather prohibits a VE check, the Permittee shall observe and record the pressure drop across each operating fabric filter.	Pressure Drop Monitoring: The Permittee shall monitor and record the pressure drop, for each fabric filter, once every day of operation (while venting externally).
B. Indicator Range	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a pressure drop greater than 6 inches of water column or less than 0.5 inches of water column. Excursions trigger an inspection, corrective action, and a reporting requirement.
C. Performance Criteria		
1. Data Representativeness	Measurements are made at the emission point (fabric filter exhaust).	Pressure drop gauge taps are located at the inlet and outlet of the fabric filter.
2. Verification of Operational Status	Not Applicable	Not applicable
3. QA/QC Practices	The observer will be familiar with Reference Method 22 and follow a Method 22-like procedure.	Accuracy of the pressure gauge will be calibrated at least annually.
4. Monitoring Frequency	Daily observations	Pressure gauge operates continuously.
5. Data Collection Procedures	The observation is documented by the observer.	Pressure drop manually recorded daily.

6. Averaging Period	Not Applicable	None
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III. Monitoring Approach Justification

A. Background

- a. The CAM-affected “pollutant specific emission unit” (PSEU) are Paper waste recycling systems EU 043 and 044.
- b. The PSEU is PM and PM₁₀ grain loading emission limits.

B. Rationale for Selection of Performance Indicators

- a. Visible emissions were selected because it is indicative of good operation and maintenance of the fabric filter. Fabric filters are effective at controlling PM and PM₁₀ as long as the filter medium remains intact. A breach in the filter will result in visible emissions.
- b. Pressure drop was selected because it is indicative of the fabric filter operation. A pressure drop greater than the indicator range is caused by excessive buildup on the filter possibly caused by damage to cleaning equipment. While material on the fabric filter actually increases removal efficiency, too much can cause excessive wear on the fabric filter unit increasing the likelihood of filter failure. A pressure drop reading less than the indicator range would result from a breach in the filter medium.

C. Rationale for Selection of Indicator Ranges

- a. Any visible emissions are selected as the indicator range. The facility is currently recording visible emissions as part of its air permit. These records show no visible emission while the fabric filter is operating.
- b. The indicator range for pressure drop across the fabric filter greater than 6 inches of water column and less than 0.5 inches of water column. The facility is currently collecting pressure drop data as part of its air permit. These records show that the pressure drop is between these values while the fabric filter is operating normally.