Facility Name: **Southwire Company – Carrollton**
City: Carrollton
County: Carroll
AIRS #: 04-13-045-00008 Application #: 556038

Date SIP Application Received: May 19, 2021
Date Title V Application Received: April 26, 2021
Permit No: 3357-045-0008-V-05-2

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Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
3357-045-0008-V-05-0	April 20, 2018	Title V Renewal
3357-045-0008-V-05-1	August 12, 2019	502(b)(10) Modification to include equipment installed under the cumulative modification exemption and construction and operation of new wire production equipment and new peak shaving engines.

B. Regulatory Status

1. PSD/NSR/RACT

The Cofer Technology Center (formerly AFS No. 04500043), Southwire Copper Rod Mill (AFS No. 04500008), Southwire Corporate Energy Management (formerly AFS No. 04500051), Southwire Machinery Division (formerly AFS No. 04500038), Southwire Carrollton Building Wire Plant (formerly AFS No. 04500012), and Southwire Carrollton Utility Products Plant (formerly AFS No. 04500052) comprise one Title I and Title V site. Formerly, each of these facilities had their own AFS No. and Title V Permit. These facilities currently operate under one AFS (AFS No. 04500008) that covers Southwire Company's entire Carrollton main campus.

The permitted Southwire Company – Carrollton consists of eight distinct entities. The entities are as follows:

- Building Wire Plant [BWP] – formerly permitted as Southwire Company – Carrollton Building Wire Plant
- MC [Metal Clad] Plant– formerly permitted as Southwire Company Machine Services
- Copper Rod Mill [CRM] – formerly permitted as Southwire Company Copper Rod Mill
- Utility Products Plant [UPP] – formerly permitted as Southwire Company – Carrollton Utility Products Plant

- Machine Services Group [MSG] – formerly permitted as Southwire Company Machine Services

- Cofer Technology Center [CTC] – formerly permitted as Southwire Company – Cofer Technology Center

- Corporate Energy Management [CEM] – formerly permitted as Southwire Company Corporate Energy Management

- Southwire Tools and Assembled Products [TAP] – facility located at 840 Old Bremen Road (added per Title V Permit Number 3357-045-0008-V-04-5)

The collective operations of the former Southwire Company – Carrollton Building Wire Plant and other Southwire facilities discussed above are considered a "major source" under Title I PSD regulations.

The former Southwire Utility Products Plant Permit No. 3357-045-0052-V-01-1, issued June 3, 2002, included a NO_x emissions cap on the boilers which served to limit NO_x emissions below 100 tons per year for the entire Title I site. This NO_x emissions limit was classified as a Georgia Rule 391-3-1-.02(2)(yy) Avoidance Limit. Since the last Title V Renewal, the Boilers P296 and P297 have been permanently decommissioned; therefore this limit is no longer applicable.

Per Permit 3351-045-0008-V-02-2, the former Southwire Company Copper Rod Mill received PSD avoidance limits of 9.9 tons per year for PM/PM_{10} emissions and 39.9 tons per year for VOC emissions related to a modification.

Per Permit 3351-045-0008-V-02-3, the former Southwire Company Copper Rod Mill modified PSD avoidance limits established by Permit Number 3351-045-0008-V-02-2 for PM/PM_{10} emissions to 14 tons per year and VOC emission to 39 tons per year. In addition, PSD avoidance limits were established for $PM_{2.5}$ emissions to 14 tons per year.

Per Permit 3357-045-0052-V-01-3, the former Southwire Company – Carrollton Utility Products Plant received PSD avoidance limits of 9.9 tons per year for PM/PM_{10} emissions and 39.9 tons per year for VOC emissions related to a modification.

Per Permit 3357-045-0052-V-01-5, the former Southwire Company – Carrollton Utility Products Plant modified PSD avoidance limits established by Permit Number 3357-045-0052-V-01-3 for PM/PM_{10} emissions to 14 tons per year and VOC emission to 39 tons per year. In addition, PSD avoidance limits were established for $PM_{2.5}$ emissions to 14 tons per year.

Per Permit 3357-045-0012-V-01-3, the former Southwire Company – Carrollton Building Wire Plant received PSD avoidance limits of 9.9 tons per year for PM/PM_{10} emissions and 39.9 tons per year for VOC emissions related to a modification.

Per Permit 3357-045-0012-V-01-5, the former Southwire Company – Carrollton Building Wire Plant modified PSD avoidance limits established by Permit Number 3357-045-0012-V-01-3 for PM/PM_{10} emissions to 14 tons per year and VOC emission to 39 tons per year. In addition, PSD avoidance limits were established for $PM_{2.5}$ emissions to 14 tons per year.

Per Permit 3499-045-0038-02-3, the former Southwire Company – Machine Services received PSD avoidance limits for PM/PM_{10} related to a modification.

As part of the Title V renewal, Southwire updated its RACT Plan to include applicable equipment. VOC RACT was determined as follows.

1. Copper Rod Mill –

    - Operate the Vapor Capture System during all periods of operation of the Rod Mill Quenching and Cooling System.

    - Route any vapor from the Vapor Capture System to the Rod Mill Shaft Furnace for combustion/destruction purposes. During such periods, the Rod Mill Shaft Furnace shall be operating at a temperature representative of normal source operation.

2. Utility Products Plant –

    - Spray Paint Booths: Use of compliant coatings consistent with Georgia Rule (ii).

    - Plastic Extrusion Lines and Curing: VOC RACT for these emission units is no additional control measures.

    - Ink Application Systems: VOC RACT for these emission units is no additional control measures.

    - Ink Wash Stations: The installation of a cover for the station trough and drainage and for the storage of solvents when the ink wash station is not in use.

    - Boiler: VOC RACT for this emission unit is no additional control measures. These units have since been decommissioned and were removed in 2016 Title V Renewal.

    - Parts Cleaning Oven: VOC RACT for this emission unit is use of integrated afterburner while in operation.

3. Building Wire Plant –

    - Plastic Extrusion Lines and Curing: VOC RACT for these emission units is no additional control measures.

    - Ink Application Systems: VOC RACT for these emission units is no additional control measures.

    - Ink Wash Stations: The installation of a cover for the station trough and drainage and for the storage of solvents when the ink wash station is not in use.

- Parts Cleaning Ovens: VOC RACT for this emission unit is use of integrated afterburner while in operation. Specifically for P690, limit plastic residue burned off to 56 pounds per week.

4. MC Plant and Machine Services Group –

   - Spray Paint Booth: Use of compliant coatings consistent with Georgia Rule (ii).

   - Strip Coating: VOC RACT for these emission units is use of ultraviolet light-cured coatings.

   - Armoring Operations. VOC RACT for these emission units is no additional control measures.

   - Plastic Extrusion Lines and Curing: VOC RACT for these emission units is no additional control measures.

   - Ink Application Systems: VOC RACT for these emission units is no additional control measures.

   - Ink Wash Stations: The installation of a cover for the station trough and drainage and for the storage of solvents when the ink wash station is not in use.

5. Cofer Technology Center –

   - Vertical Flame Chamber: VOC RACT for this emission unit is no additional control measures.

6. Corporate Energy Management –

   - Internal Combustion Engines: Operation of the non-selective catalytic reduction systems on the peak shaving engines to demonstrate compliance with 40 CFR 63, Subpart ZZZZ is considered VOC RACT. Operation of the emergency ITS generator to demonstrate compliance with 40 CFR 63, Subpart ZZZZ is considered VOC RACT.

   - Waukesha units are equipped with non-selective catalytic reduction (NSCR) to control emissions of NOx and VOC. These units must demonstrate compliance with 40 CFR 63, Subpart ZZZZ is considered VOC RACT. Operation of NSCR is considered RACT for the Waukesha units.

7. Southwire Company Miscellaneous Sources –

   - Spray Paint Booth: Use of compliant coatings consistent with Georgia Rule (ii).

   - Strip Coating: VOC RACT for these emission units is use of ultraviolet light-cured coatings.

- Wastewater Treatment Plant Evaporator: VOC RACT for these emission units is no additional control measures. This unit has since been decommissioned.

- Propane Vaporizer: VOC RACT for these emission units is no additional control measures.

- Various Small Fuel Burning Sources: VOC RACT for these emission units is no additional control measures.

8. Tools and Assembly Plant –

Per Permit Number 3357-045-0008-V-04-5, Southwire proposed to limit the VOC content for painting operations associated with P970 that utilize air drying to 3.5 pounds of VOC per gallon, excluding water, Alternatively, if a coating containing more than 3.5 pounds of VOC per gallon is used, the solids equivalent must be limited to 6.67 pounds of VOC per gallon of coating solids delivered to the coating applicator. This is the proposed VOC RACT limit with no add on controls. This proposal is consistent with their VOC RACT proposal for similar equipment at the Utility Products Plant. It is also consistent with the requirements of Georgia Rule 391-3-1-.02(2)(ii), should it have been applicable to Blade Coating P790. Since the proposed RACT is consistent with that imposed on existing similar equipment, the Division did not require Southwire to conduct a review of the RACT/BACT/LAER Clearinghouse (RBLC) to determine if VOC control systems have been utilized on processes similar to the painting operations at TAP. Therefore, the Southwire RACT Plan for proposed painting operations will be use of compliant coatings consistent with Georgia Rule 391-3-1-.02(2)(ii) as originally proposed. The Division agrees with Southwire that use of Georgia Rule 391-3-1-.02(2)(ii) compliant coatings which is currently in use for equipment similar to this at Southwire. Therefore, the Division approves the decision that VOC RACT for the Blade Coating P970 is Georgia Rule 391-3-1-.02(2)(ii) compliant coatings. This operation has since been discontinued.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Y	✓		
PM_{10}	Y	✓		
$PM_{2.5}$	Y	✓		
SO_2	Y			✓
VOC	Y	✓		
NO_x	Y	✓		
CO	Y	✓		
TRS	Y			✓
H_2S	Y			✓
Individual HAP (methanol)	Y	✓		
Total HAPs	Y	✓		

II. Proposed Modification

A. Description of Modification

Southwire is proposing to construct and operate several new pieces of equipment. At the same time, older equipment will be removed and replaced. Below is a summary of the proposed equipment changes:

Building Wire Plant *is planning to install:*
- Nine (9) extrusion lines (extruder, plastic pellet feed hopper system, and ink application).
- Six (6) polyvinyl chloride (PVC) extruders
- One (1) PVC storage silo
- Three (3) dual wire copper drawing machines with annealer
- Five (5) tandem extrusion lines (extruder, plastic pellet feed hopper system, ink application, and drawing machine).
- Three (3) PVC compounding lines

And is planning to remove:
- Fourteen (14) extrusion lines (extruder, plastic pellet feed hopper system, and ink application).
- Three (3) tandem extrusion lines (extruder, plastic pellet feed hopper system, ink application, and drawing machine).
- One (1) PVC compounding line

Metal Clad *is planning to install:*
- One (1) tandem extrusion line (extruder, plastic pellet feed hopper system, ink application, and drawing machine).
- Eleven (11) armoring lines
- Eleven (11) armoring line printers

Copper Rod Mill *is planning to install:*
- Two (2) rod mill shaft furnaces
- One (1) rod production system
- One (1) quenching and cooling system with scrubber and vapor capture system.

And is planning to remove:
- One (1) rod mill shaft furnace
- One (1) rod production system
- One (1) quenching and cooling system with vapor capture system
- One (1) bucket Elevator

Utility Product Plant *is planning to install:*
- Two (2) Covered Aerial Medium Voltage (CAMV) extrusion lines (three extruders each, three plastic pellet feeder hopper systems each, and two ink application system each)
- Four (4) reprint lines
- Ten (10) curing ovens or saunas provided steam by three (3) steam generators

B. Emissions Change

Emission estimates are as discussed in Section 2.0 of the narrative associated with Application 556038 and in Appendix B of Application 556038.

Table 3: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	Y	-	+9.80
PM_{10}	Y	-	+9.80
$PM_{2.5}$	Y	-	+9.80
SO_2	Y	-	+0.47
VOC	Y	-	+20.66
NO_x	Y	-	+0.87
CO	Y	-	+46.63
TRS	N	-	-
H_2S	N	-	-
Individual HAP	Y	-	+0.45
Total HAPs	Y	-	+7.60

C. PSD/NSR Applicability

Per Application Number 556038, estimated emissions increases resulting from the project discussed in detail later in this document are less than the PSD thresholds for all pollutants. However, the estimates depend upon the efficiency of control systems planned for the new rod mill. Specifically, a scrubber will be installed on the rod mill furnace exhaust to reduce the PM emissions, and the VOC emissions from the cooling and quenching process will be captured and directed to the new furnaces for destruction. The potential uncontrolled VOC emissions increase from the proposed modifications at the wire mills is 36.3 tpy. In order to maintain the total projected VOC emissions increase from the project to less than the 40-tpy PSD threshold, the emissions increase associated with the new rod mill quenching and cooling system cannot exceed 3.60 tpy. To ensure that the project does not exceed the PSD threshold for VOC emissions, Southwire proposes a vapor capture system and exhaust VOC emissions into the Rod Mill Shaft Furnaces to be destructed. Historical baseline VOC emissions from the existing quenching and cooling system are 40.64 tpy. Therefore, emissions from the new system must remain below 44.24 (3.60 tpy + 40.64 tpy) to avoid triggering PSD.

The potential uncontrolled $PM/PM_{10}/PM_{2.5}$ emissions increase from the proposed modification is 13.73 tpy. In order to ensure that the project does not exceed the 10-tpy PSD threshold for $PM/PM_{10}/PM_{2.5}$ emissions, Southwire proposes to install a scrubber unit that will reduce $PM/PM_{10}/PM_{2.5}$ emissions from the proposed new Rod Mill Shaft Furnaces by a minimum of 40%. This scrubber removal efficiency will reduce the controlled $PM/PM_{10}/PM_{2.5}$ emissions increase to no more 7.41 tpy from the Furnaces and less than 9.9 tpy for the site. Southwire will monitor daily scrubber pressure drop and scrubbant flow rate to ensure the unit is operating effectively.
In order to demonstrate compliance with the proposed VOC limit, Southwire proposes to use records of the isopropyl alcohol (IPA) used at the rod mill to calculate the total monthly VOC emissions (in tons) from the Rod Mill Shaft Furnaces (F4001 and F4002), and the Rod Mill Quenching and Cooling System (F4003), combined using the following formula:

$$VOC\left(\frac{tons}{month}\right) = U\ x\ 0.83\ X\ \left(1 - \frac{D}{100}\right) x\ AF\ x \frac{1\ ton}{2000\ lbs}$$

Where,

U = VOC/IPA Usage;

0.83 = A constant factor used to represent the weight percent VOCs not consumed in the rod pickling/cleaning process. This constant is a carryover from the permitting work for the existing system which was previously approved by Georgia EPD;

D = The VOC destruction efficiency of the Rod Mill Shaft Furnace (F4001 and F4002). Southwire proposes to conservatively use 90% for this value. The isopropyl alcohol solution (as part of the non-acid pickling reagent) will be applied in an enclosed tube containing the rod as it run through the mill. The rod passes through an "air wipe box" where non-reacted excess solution is blown off of the rod with compressed air (in order to dry it to the extent possible) and captured by the vapor capture system. The vapor is then ducted to the blower room where it is mixed with air and injected into the furnace to be burned as fuel. Southwire anticipates an overall 90% VOC removal efficiency of the vapor capture and furnace system (approximately 100% capture efficiency and 90% destruction efficiency);

AF = The availability of the Rod Mill Shaft Furnace (F4001 and F4002). The air wipe box will be enclosed and designed with a negative pressure system. Vapors will be drawn into a "blower room" which will push air/vapor into the furnace. As indicated before, this system will be much "tighter" than our current vapor collection system. We manually track "availability" now based on furnace uptime.

Note that this equation differs from the equation currently in the facility's permit as the new control system will effectively capture all IPA that is not destroyed in the quenching process and route those gases to the furnace for destruction. Unlike the current control system, the new system is being designed as part of the initial design of the rod mill and does not include a chiller component that serves to condense some of the gases and return them to the system.

In order to demonstrate compliance with the proposed PM/PM_{10}/$PM_{2.5}$ limit, Southwire proposes to conduct a stack test on the Rod Shaft Furnaces (F4001 and F4002) to demonstrate that the emissions do not exceed the hourly equivalent emission rate (1.69 lb/hr) determined as shown below:

$$7.41\ \frac{\text{tons}}{\text{year}} \times\ 2{,}000\ \frac{\text{lb}}{\text{ton}} \times \frac{1\ \text{year}}{8{,}760\ \text{hour}} = 1.69\ \frac{\text{lb}}{\text{hr}}$$

After review of the proposed PSD avoidance emission limits and compliance monitoring, the Division will modify the proposed VOC emission limit to 44 tons per year rather than 44.24 tons per year. In addition, the Division will modify the proposed PM/PM_{10}/$PM_{2.5}$ limit to 7 tons per year rather than 7.41 tons per year. The modified emission rates reflect the fact that emissions limits are based on IPA usage for VOC and an assumed emission control device reduction of PM emissions of 40 percent. Given the basis for the emission limits determination, the additional significant digits as proposed for each limit are believed too many based on the potentially less significant digits for the data inputs used to determine the limits. The Division proposed monitoring and performance testing associated with PSD avoidance for the proposed modification will be discussed later in this document.

III. Facility Wide Requirements

A. Emission and Operating Caps:

No emission and/or operating caps were added, removed or modified as a result of the proposed modification.

B. Applicable Rules and Regulations

Rules and Regulations Assessment – No rules and/or regulations were added, removed or modified as a result of the proposed modification.

Emission and Operating Standards – No emission and/or operating standards were added, removed or modified as a result of the proposed modification.

C. Compliance Status

Application Number 556038 does not address facility wide compliance status.

D. Permit Conditions

No permit conditions were added, removed or modified in Section 2.0 of the permit as a result of the proposed modification.

IV. Regulated Equipment Requirements

A. Brief Process Description

Building Wire Plant and Metal Clad Facility

According to Application Number 556038, Southwire proposes to add a series of extruders, hoppers, printers, drawing machines and PVC compounding lines to both the Building Wire Plant (BWP) and Metal Clad (MC). In summary, there will be 15 extrusion lines, nine (9) rated at 1,800 pounds per hour (lbs/hr) with attached printers and six (6) rated at 14,600 lbs/hr. Other equipment added include one (1) PVC Storage Silo, three (3) drawing machines, and one (1) wire buncher. Please note that wire buncher units have negligible emissions and are considered insignificant activities based on emission levels in line with Bunchers & Stranders category. Southwire also plans to add five (5) tandem extrusion lines and three (3) PVC compounding lines located at BWP. The PVC compounding lines will include mostly insignificant emission units. However, the hoppers and mixers will contribute to $PM/PM_{10}/PM_{2.5}$ emissions and the pelletizer will contribute to the total VOC emissions.

The following table was provided in Application Number 556038 which lists equipment to be added to the BWP.

Type of Equipment	Unit ID	Throughput	Make	Description
Extruder	P6001	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6002			
Ink Application System	P6003	--	GEM	Inkjet Printer
Extruder	P6004	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6005			
Ink Application System	P6006	--	GEM	Inkjet Printer
Extruder	P6007	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6008			
Ink Application System	P6009	--	GEM	Inkjet Printer
Extruder	P6010	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6011			
Ink Application System	P6012	--	GEM	Inkjet Printer
Extruder	P6013	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line

Plastic Pellet Feed Hopper System	P6014			
Ink Application System	P6015	--	GEM	Inkjet Printer
Extruder	P6016	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6017			
Ink Application System	P6018	--	GEM	Inkjet Printer
Extruder	P6019	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6020			
Ink Application System	P6021	--	GEM	Inkjet Printer
Extruder	P6022	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6023			
Ink Application System	P6024	--	GEM	Inkjet Printer
Extruder	P6025	1,800 lbs/hr	Maillefer	PVC – NM Jacket Line
Plastic Pellet Feed Hopper System	P6026			
Ink Application System	P6027	--	GEM	Inkjet Printer
Extruder	P6028	14,600 lbs/hr	BUSS	PVC
Extruder	P6029	14,600 lbs/hr	BUSS	PVC
Extruder	P6030	14,600 lbs/hr	BUSS	PVC
Extruder	P6031	14,600 lbs/hr	BUSS	PVC Discharge Extruder
Extruder	P6032	14,600 lbs/hr	BUSS	PVC Discharge Extruder
Extruder	P6033	14,600 lbs/hr	BUSS	PVC Discharge Extruder
PVC Storage Silo	P6034	14,600 lbs/hr	TBH	--
Drawing Machine	P6035	18,000 lbs/hr	Neihoff	Dual Wire Copper Drawing Machine with Annealer
Drawing Machine	P6036	18,000 lbs/hr	Neihoff	Dual Wire Copper Drawing Machine with Annealer
Drawing Machine	P6037	18,000 lbs/hr	Neihoff	Dual Wire Copper Drawing Machine with Annealer
Wire Buncher	--	--	MFL	Negligible emissions
Tandem Line 1				
Extruder	P6038	1,500 lbs/hr PVC 350 lbs/hr Nylon	US Extruder	PVC/Nylon (THHN)
Plastic Pellet Feed Hopper System	P6039			
Ink Application System	P6040	--	--	Contact Printer

Drawing Machine	P6041	9,000 lbs/hr	Niehoff	Single Wire Copper Drawing Machine Annealer
Tandem Line 2				
Extruder	P6042	1,500 lbs/hr PVC 350 lbs/hr Nylon	Maillefer	PVC/Nylon (THHN)
Plastic Pellet Feed Hopper System	P6043			
Ink Application System	P6044	--	--	Contact Printer
Drawing Machine	P6045	9,000 lbs/hr	Niehoff	Single Wire Copper Drawing Machine Annealer
Tandem Line 3				
Extruder	P6046	1,500 lbs/hr PVC 350 lbs/hr Nylon	Maillefer	PVC/Nylon (THHN)
Plastic Pellet Feed Hopper System	P6047			
Ink Application System	P6048	--	--	Contact Printer
Drawing Machine	P6049	9,000 lbs/hr	Niehoff	Single Wire Copper Drawing Machine Annealer
Tandem Line 4				
Extruder	P6050	1,500 lbs/hr PVC 350 lbs/hr Nylon	Maillefer	PVC/Nylon (THHN)
Plastic Pellet Feed Hopper System	P6051			
Ink Application System	P6052	--	--	Contact Printer
Drawing Machine	P6053	9,000 lbs/hr	Niehoff	Single Wire Copper Drawing Machine Annealer
Tandem Line 5				
Extruder	P6054	1,500 lbs/hr PVC 350 lbs/hr Nylon	Maillefer	PVC/Nylon (THHN)
Plastic Pellet Feed Hopper System	P6055			
Ink Application System	P6056	--	--	Contact Printer
Drawing Machine	P6057	9,000 lbs/hr	Niehoff	Single Wire Copper Drawing Machine Annealer
PVC Compounding Line 1				
Hot Mixer	PVC1-01	14,600 lbs/hr	Mixaco	Insignificant Activities
Cold Mixer	PVC1-02		Mixaco	Insignificant Activities
Additive Feeder Small (1)	PVC1-03		N/A	Insignificant Activities
Additive Feeder Small (2)	PVC1-04		N/A	Insignificant Activities
Additive Feeder Small (3)	PVC1-05		N/A	Insignificant Activities

Additive Feeder Small (4)	PVC1-06		N/A	Insignificant Activities
Additive Feeder Large (1)	PVC1-07		N/A	Insignificant Activities
Additive Feeder Large (2)	PVC1-08		N/A	Insignificant Activities
Additive Feeder Large (3)	PVC1-09		N/A	Insignificant Activities
Additive Feeder Large (4)	PVC1-10		N/A	Insignificant Activities
Dry Blend Hopper (1)	PVC1-11		N/A	Insignificant Activities
Dry Blend Hopper (2)	PVC1-12		N/A	Insignificant Activities
Dry Blend Hopper (3)	PVC1-13		N/A	Insignificant Activities
Dry Blend Hopper (4)	PVC1-14		N/A	Insignificant Activities
Plasticizer Hopper (1)	PVC1-15		N/A	Insignificant Activities
Plasticizer Hopper (2)	PVC1-16		N/A	Insignificant Activities
Plasticizer Hopper (3)	PVC1-17		N/A	Insignificant Activities
Maxifeeder	PVC1-18		J-Tec	Insignificant Activities
Underwater Pelletizer	PVC1-19		Gala	Insignificant Activities
Water Temp System	PVC1-20		N/A	Insignificant Activities
Classifier	PVC1-21		Witte	Insignificant Activities
Daybin	PVC-22		J-Tech	Insignificant Activities
Packaging Line	PVC-23		TBD	Insignificant Activities
PVC Compounding Line 2				
Hot Mixer	PVC2-01	14,600 lbs/hr	Mixaco	Insignificant Activities
Cold Mixer	PVC2-02		Mixaco	Insignificant Activities
Additive Feeder Small (1)	PVC2-03		N/A	Insignificant Activities
Additive Feeder Small (2)	PVC2-04		N/A	Insignificant Activities
Additive Feeder Small (3)	PVC2-05		N/A	Insignificant Activities
Additive Feeder Small (4)	PVC2-06		N/A	Insignificant Activities
Additive Feeder Large (1)	PVC2-07		N/A	Insignificant Activities
Additive Feeder Large (2)	PVC2-08		N/A	Insignificant Activities
Additive Feeder Large (3)	PVC2-09		N/A	Insignificant Activities
Additive Feeder Large (4)	PVC2-10		N/A	Insignificant Activities
Dry Blend Hopper (1)	PVC2-11		N/A	Insignificant Activities
Dry Blend Hopper (2)	PVC2-12		N/A	Insignificant Activities
Dry Blend Hopper (3)	PVC2-13		N/A	Insignificant Activities
Dry Blend Hopper (4)	PVC2-14		N/A	Insignificant Activities
Plasticizer Hopper (1)	PVC2-15		N/A	Insignificant Activities
Plasticizer Hopper (2)	PVC2-16		N/A	Insignificant Activities
Plasticizer Hopper (3)	PVC2-17		N/A	Insignificant Activities
Maxifeeder	PVC2-18		J-Tec	Insignificant Activities
Underwater Pelletizer	PVC2-19		Gala	Insignificant Activities

Water Temp System	PVC2-20		N/A	Insignificant Activities
Classifier	PVC2-21		Witte	Insignificant Activities
Daybin	PVC2-22		J-Tech	Insignificant Activities
Packaging Line	PVC2-23		N/A	Insignificant Activities
PVC Compounding Line 3				
Hot Mixer	PVC3-01	14,600 lbs/hr	Mixaco	Insignificant Activities
Cold Mixer	PVC3-02		Mixaco	Insignificant Activities
Additive Feeder Small (1)	PVC3-03		N/A	Insignificant Activities
Additive Feeder Small (2)	PVC3-04		N/A	Insignificant Activities
Additive Feeder Small (3)	PVC3-05		N/A	Insignificant Activities
Additive Feeder Small (4)	PVC3-06		N/A	Insignificant Activities
Additive Feeder Large (1)	PVC3-07		N/A	Insignificant Activities
Additive Feeder Large (2)	PVC3-08		N/A	Insignificant Activities
Additive Feeder Large (3)	PVC3-09		N/A	Insignificant Activities
Additive Feeder Large (4)	PVC3-10		N/A	Insignificant Activities
Dry Blend Hopper (1)	PVC3-11		N/A	Insignificant Activities
Dry Blend Hopper (2)	PVC3-12		N/A	Insignificant Activities
Dry Blend Hopper (3)	PVC3-13		N/A	Insignificant Activities
Dry Blend Hopper (4)	PVC3-14		N/A	Insignificant Activities
Plasticizer Hopper (1)	PVC3-15		N/A	Insignificant Activities
Plasticizer Hopper (2)	PVC3-16		N/A	Insignificant Activities
Plasticizer Hopper (3)	PVC3-17		N/A	Insignificant Activities
Maxifeeder	PVC3-18		J-Tec	Insignificant Activities
Underwater Pelletizer	PVC3-19		Gala	Insignificant Activities
Water Temp System	PVC3-20		N/A	Insignificant Activities
Classifier	PVC3-21		Witte	Insignificant Activities

According to Application Number 556038, Southwire proposes to add one (1) Tandem extrusion line with a printer, 11 armor lines, and 11 armor line printers at MC. The following table was provided in Application Number 556038 which lists equipment to be added to the MC.

Type of Equipment	Unit ID	Throughput	Make	Description
Tandem Line 1				
Extruder	P3001	1,500 lbs/hr PVC 350 lbs/hr Nylon	US Extruder	PVC/Nylon (THHN)
Plastic Pellet Feed Hopper System	P3002			
Ink Application System	P3003	--	GEM	PVC – NM Jacket Line
Drawing Machine	P3004	9,000 lbs/hr	Niehoff	Single Wire Copper Drawing Machine Annealer
Miscellaneous				
Armor Line	P3005	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3006	3.6 gallons/day oil	Calmec	Dual Line

Armor Line	P3007	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3008	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3009	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3010	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3011	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3012	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3013	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3014	3.6 gallons/day oil	Calmec	Dual Line
Armor Line	P3015	3.6 gallons/day oil	Calmec	Dual Line
Armor Line Printer	P3016			Printer
Armor Line Printer	P3017			Printer
Armor Line Printer	P3018			Printer
Armor Line Printer	P3020			Printer
Armor Line Printer	P3021			Printer
Armor Line Printer	P3022			Printer
Armor Line Printer	P3023			Printer
Armor Line Printer	P3024			Printer
Armor Line Printer	P3025			Printer
Armor Line Printer	P3026			Printer

According to Application Number 556038, Southwire proposes to remove equipment located at BWP and MC. In summary, 14 extrusion lines and three (3) tandem extrusion lines will be phased out over the next two years (2022-2023). The following table was provided in Application Number 556038 which lists equipment to be removed from the BWP and MC.

Estimated Time of Removal	Emission Units		Air Pollution Control Devices	
	Description	**ID No.**	**Description**	**ID No.**
Process Group – Extrusion Line 750-30				
Q1 2023	Extruders 750-30	P634	--	None
	Plastic Pellet Feeder Hopper System	P635	Dust Filters	C635
	Ink Application System	P636	--	None
Process Group – Extrusion Line 750-31				
Q1 2023	Extruders 750-31	P637	--	None
	Plastic Pellet Feeder Hopper System	P638	Dust Filters	C638
	Ink Application System	P639	--	None
Process Group – Extrusion Line 740-44				
Q 2023	Extruders 740-44	P662	--	None
	Plastic Pellet Feeder Hopper System	P663	Dust Filters	C663
	Ink Application System	P664	--	None
Process Group – Extrusion Line 750-34				
Q1 2023	Extruders	P323	--	None
	Plastic Pellet Feeder Hopper System	P324	Dust Filters	C324
	Ink Application System	P325	--	None
Process Group – Extrusion Line 750-35				
Q1 2023	Extruders 750-35	P675	--	None
	Plastic Pellet Feeder Hopper System	P676	Dust Filters	C676
	Ink Application System	P677	--	None
Process Group – Extrusion Line 750-38				
Q1 2022	Extruders 750-38	P678	--	None

	Plastic Pellet Feeder Hopper System	P679	Dust Filters	C679
	Ink Application System	P680	--	None
Process Group – Extrusion Line 750-08				
Q1 2022	Extruders 750-08	P112	--	None
	Plastic Pellet Feeder Hopper System	H112	Dust Filters	C112
	Ink Application System	I112	--	None
Process Group – Extrusion Line 750-04				
Q1 2022	Extruders 750-04	P113	--	None
	Plastic Pellet Feeder Hopper System	H113	Dust Filters	C113
	Ink Application System	I113	--	None
Process Group – Extrusion Line 750-02				
Q1 2022	Extruders 750-02	P114	--	None
	Plastic Pellet Feeder Hopper System	H114	Dust Filters	C114
	Ink Application System	I114	--	None
Process Group – Extrusion Line 740-03				
Q1 2022	Extruders 740-03	P118	--	None
	Plastic Pellet Feeder Hopper System	H118	Dust Filters	C118
	Ink Application System	I118	--	None
Process Group – Extrusion Line 750-06				
Q3 2022	Extruders 750-06	P122	--	None
	Plastic Pellet Feeder Hopper System	H122	Dust Filters	C122
	Ink Application System	I122	--	None
	Drawing Machine 420-08	P139	--	None
Process Group – Extrusion Line 750-09				
Q3 2022	Extruders 750-09	P123	--	None
	Plastic Pellet Feeder Hopper System	H123	Dust Filters	C123
	Drawing Machine 420-09	P140	--	None
Process Group – Tandem Extrusion Line 750-33				
Q2 2023	Extruders 750-33	P657	--	None
	Plastic Pellet Feeder Hopper System	P658	Dust Filters	C658
	Ink Application System	P659	--	None
	Drawing Machine 420-02	P142	--	None
Process Group – Tandem Extrusion Line 750-29				
Q2 2023	Extruders 750-29	P644	--	None
	Plastic Pellet Feeder Hopper System	P645	Dust Filters	C645
	Ink Application System	P646	--	None
	Cu Drawing Machine with Annealer 420-29	P656	--	None
Process Group – Tandem Extrusion Line 750-18				
Q3 2022	Extruders 750-18	P157	--	None
	Plastic Pellet Feeder Hopper System	P617	Dust Filters	C010
	Ink Application System	P158	--	None
	Drawing Machine 420-18	P144	--	None
Process Group – Extrusion Line 710-10				
Q1 2022	Extruders 710-10	P159	--	None
	Plastic Pellet Feeder Hopper System	P624	Dust Filters	C023
	Ink Application System	P160	--	None
Process Group – Extrusion Line 740-05				
Q1 2022	Extruders 710-10	P162	--	None

	Plastic Pellet Feeder Hopper System	P627	Dust Filters	C013
	Ink Application System	P161	--	None

Copper Rod Mill

Southwire proposes to replace all the entities located at the Copper Rod Mill. The new emission units and air pollution control devices will be similar to the ones being replaced with the exception that a scrubber will be utilized to control particulate emissions from the furnaces. The facility will be anticipating a six (6) percent increase in production, according to Application Number 556038. Consequently, the Rod Mill Shaft Furnace and Rod Mill Quenching and Cooling System will be expecting an increase in production rate.

Two new identical Rod Mill Shaft Furnaces (F4001 and F4002) with a combined anticipated future production of 475,000 tons will be installed. Only one furnace will be used at a time, according to Application Number 556038. The alternate furnace will be used only when the current furnace is taken down for maintenance and repairs. To decrease the emissions of PM, PM_{10}, and $PM_{2.5}$, the new furnaces will also have a scrubber installed which will remove at least 40% of the particles. VOC emissions from Quenching and Cooling will be controlled through combustion in the furnace, similar to its functionality in the current permit.

The new Rod Mill Quenching and Cooling System (F4003) will have the same functionality as the equipment it is replacing. The Shaft Furnaces (F4001 and F4002) will serve to control IPA emissions by mixing them with natural gas fuel which will eventually be combusted in the furnace.

Southwire will also add a series of supporting equipment in addition to the equipment listed above. Similar to the supporting insignificant equipment they are replacing in the current permit, the new units will have negligible emissions and will be permitted as insignificant equipment.

The other equipment located at the Copper Rod Mill Plant- Cu Drawing Machine with Annealer (P477), Cu/Al Drawing Machine with Annealer (F478), and Electric Induction Vertirod Copper Rod Production Unit (F476), will not be removed as part of this modification because they are not associated with the functionality of the copper wire plant.

The following table was provided in Application Number 556038 which lists equipment to be removed/replaced at the Copper Rod Mill.

Emission Units			Air Pollution Control Devices		
Description	**Old ID No.**	**New ID No.**	**Description**	**Old ID No.**	**New ID No.**
Process Group – Rod Mill					
Rod Mill Shaft Furnace	F409	F4001	Scrubber	--	C4001
	--	F4002			
Rod Mill Quenching and Cooling System	Q467	F4003	Vapor Capture System	A467	C4003
	--		Rod Mill Shaft Furnace	F409	F4001 F4002
Miscellaneous					
Bucket Elevator	BE1	None	--	None	--

The following table was provided in Application Number 556038 which lists equipment to be added at the Copper Rod Mill.

Type of Equipment	Unit ID	Throughput	Description
Graphite Injection System	F4004	Insignificant Activities	--
Upper Launders	F4005	Insignificant Activities	Six burners
Upper Launders	F4006	Insignificant Activities	Six burners
Taphole Burner	F4007	Insignificant Activities	Inside Upper Launders
Taphole Burner	F4008	Insignificant Activities	Inside Upper Launders
Slag Vessels	F4009	Insignificant Activities	Three burners
Slag Vessels	F4010	Insignificant Activities	Three burners
Holding Furnaces	F4011	Insignificant Activities	Two burners
Holding Furnaces	F4012	Insignificant Activities	Two burners
Intermediate Launders	F4013	Insignificant Activities	One Catch Basin with Six burners
Intermediate Launders	F4014	Insignificant Activities	One Catch Basin with Six burners
Lower Launder	F4015	Insignificant Activities	One Catch Basin with Six burners
Tundish	F4016	Insignificant Activities	Two burners
Tundish Preheat Stations	F4017	Insignificant Activities	Two burners
Tundish Preheat Stations	F4018	Insignificant Activities	Two burners
Acetylene Control Panels	F4019	Insignificant Activities	Used for wheel and band sooting
Acetylene Control Panels	F4020	Insignificant Activities	Used for wheel and band sooting
Acetylene Control Panels	F4021	Insignificant Activities	Used for wheel and band sooting
Casting Torch	F4022	Insignificant Activities	Placed near operator side
Tundish Spout Heater	F4023	Insignificant Activities	Placed near machine side

Utility Products Plant

Southwire proposes to add two (2) additional Covered Aerial Medium Voltage (CAMV) Lines to the Utility Product Plant (UPP). Both CAMV Lines will consist of three (3) extruders each, three (3) hoppers each, and two (2) printers each. Other equipment includes four (4) reprint lines and ten (10) curing ovens used to cure XLPE.

The following table was provided in Application Number 556038 which lists equipment to be added at the UPP.

Type of Equipment	Unit ID	Throughput	Make	Description
CAMV Line 1				
Extruder	P7001	Combined throughput of the three extruders is 2,600 lbs/hr total	--	PE, PVC, XLPE, and LDPE
Extruder	P7002		--	
Extruder	P7003		--	
Plastic Pellet Feeder Hopper System	P7004		--	

Plastic Pellet Feeder Hopper System	P7005		--	
Plastic Pellet Feeder Hopper System	P7006		--	
Ink Application System	P7007	--	--	
Ink Application System	P7008	--	--	
CAMV Line 2				
Extruder	P7009	Combined throughput of the three extruders is 2,600 lbs/hr total	--	PE, PVC, XLPE, and LDPE
Extruder	P7010		--	
Extruder	P7011		--	
Plastic Pellet Feeder Hopper System	P7012		--	
Plastic Pellet Feeder Hopper System	P7013		--	
Plastic Pellet Feeder Hopper System	P7014		--	
Ink Application System	P7015	--	--	
Ink Application System	P7016	--	--	
Reprint Line 1				
Ink Application System	P7017	0.0625 lb/hr	--	Printers P7017 through P7020 will have a combined throughput of 0.25 lb/hr total
Ink Application System	P7018	0.0625 lb/hr	--	
Reprint Line 2				
Ink Application System	P7019	0.0625 lb/hr	--	Printers P7017 through P7020 will have a combined throughput of 0.25 lb/hr total
Ink Application System	P7020	0.0625 lb/hr	--	
Miscellaneous				
Natural Gas Steam Generator	P7021	5×10^6 Btu/hr	--	Three steam generators with a total throughput of 15×10^6 Btu/hr will provide steam to ten Curing Ovens (CS15-CS24)
Natural Gas Steam Generator	P7022	5×10^6 Btu/hr	--	
Natural Gas Steam Generator	P7023	5×10^6 Btu/hr	--	
Curing Oven	CS15		--	Curing Ovens will be curing Cross-Linked Polyethylene (XLPE)
Curing Oven	CS16		--	
Curing Oven	CS17		--	
Curing Oven	CS18		--	
Curing Oven	CS19		--	
Curing Oven	CS20		--	
Curing Oven	CS21		--	
Curing Oven	CS22		--	
Curing Oven	CS23		--	
Curing Oven	CS24		--	

Medical Center

Southwire proposes to add one emergency generator located at the medical center, according to Application Number 556038. This generator will be used only for maintenance/testing purposes and as need for emergency backup power in the event of utility power or onsite power interruptions. Since the emissions from this generator are minimal, this engine will be classified as an insignificant unit per this permit application. The natural gas fired Emergency Standby Stationary Generator P820 has a capacity of 30 kilowatts (kW) will be a Generac In-line Model RG030.

Previously Removed Equipment NOT Associated with This Modification

According to Application Number 556038, as part of the modernization project of 2019 and 2020, Southwire removed several pieces of older equipment. These units are not replaced and their removal is not associated with this modification. Therefore, these units have no impact on the emissions of this project.

The following table was provided in Application Number 556038 which lists equipment previously removed from the BWP.

Removal Date	Emission Units		Air Pollution Control Devices	
	Description	**ID No.**	**Description**	**ID No.**
Process Group – Extrusion Line T-6				
2019	Extruder	P665	--	None
2019	Plastic Pellet Feeder Hopper System	P666	Dust Filters	C666
2019	Ink Application System	P667	--	None

The following table was provided in Application Number 556038 which lists equipment previously removed from MC.

Removal Date	Emission Units		Air Pollution Control Devices	
	Description	**ID No.**	**Description**	**ID No.**
May 2014	Ink Application System	P321A	--	None
January 2020	Extruders 756-01	P329	--	None
January 2020	Plastic Pellet Feeder Hopper System	P330	Dust Filters	C330
January 2020	Ink Application System	P331	--	None
January 2020	Cu Drawing Machine with Annealer 420-32	P332	--	None

The following table was provided in Application Number 556038 which lists equipment previously removed from the UPP.

Removal Date	Emission Units		Air Pollution Control Devices	
	Description	**ID No.**	**Description**	**ID No.**
Process Group – Extrusion Line 720-05				
January 2015	Extruder 720-05	P254	--	None
January 2015	Plastic Pellet Feeder Hopper System	H254	--	None
January 2015	Ink Application System	P255	--	None

B. Equipment List for the Process

3.1.2 Additional Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
Building Wire Plant (B)					
Process Group – Extrusion Line 750-30					
P634	*Extruders 750-30*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P635	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C635*	*Dust Filters*
P636	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*
Process Group – Extrusion Line 750-31					
P637	*Extruders 750-31*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P638	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C638*	*Dust Filters*
P639	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*
Process Group – Extrusion Line 740-44					
P663	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C663*	*Dust Filters*
P662	*Extruders 740-44*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P664	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*
~~Process Group – Extrusion Line TH-6~~					
~~P665~~	~~Extruders~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~	~~3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7~~	~~None~~	~~NA~~
~~P666~~	~~Plastic Pellet Feed Hopper System~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~	~~3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.2.A.9, 6.2.A.10, 6.2.A.11~~	~~C666~~	~~Dust Filters~~
~~P667~~	~~Ink Application System~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~	~~3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7~~	~~None~~	~~NA~~
Process Group – Extrusion Line 750-35					
P676	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C676*	*Dust Filters*
P675	*Extruders 750-35*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P677	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
Building Wire Plant (B)					
		391-3-1-.02(2)(tt)			
Process Group – Extrusion Line 750-34					
P323	*Extruders*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P324	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C324*	*Dust Filters*
P325	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*
Process Group – Extrusion Line 750-38					
P679	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C679*	*Dust Filters*
P678	*Extruders 750-38*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P680	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*
Process Group – Extrusion Line 750-08					
P112	*Extruders 750-08*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
H112	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C112*	*Dust Filters*
I112	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group – Extrusion Line 750-04					
P113	*Extruders 750-04*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
H113	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C113*	*Dust Filters*
I113	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group – Extrusion Line 750-02					
P114	*Extruders 750-02*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
H114	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C114*	*Dust Filters*
I114	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group – Extrusion Line 740-03					
P118	*Extruders 740-03*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
Building Wire Plant (B)					
		391-3-1-.02(2)(tt)			
H118	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C118*	*Dust Filters*
I118	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group – Extrusion Line 750-06					
P122	*Extruders 750-06*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
H122	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C122*	*Dust Filters*
I122	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
P139	*Drawing Machine 420-08*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group – Extrusion Line 750-09					
P123	*Extruders 750-09*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
H123	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C123*	*Dust Filters*
P140	*Drawing Machine 420-09*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group – Tandem Extrusion Line 750-33					
P658	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C658*	*Dust Filters*
P657	*Extruders 750-33*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P659	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*
P142	*Drawing Machine with Annealer 420-02*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
Process Group – Tandem Extrusion Line 750-29					
P644	*Extruders 750-29*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.5, 6.2.A.6, 6.2.A.7*	*None*	*NA*
P645	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*	*3.2.A.1, 3.2.A.3, 3.4.B.1, 3.4.B.2, 5.2.B.1, 6.1.B.7, 6.2.A.9, 6.2.A.10, 6.2.A.11*	*C645*	*Dust Filters*
P646	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.A.2, 3.4.B.1, 3.4.B.2, 6.2.A.1, 6.2.A.2, 6.2.A.7*	*None*	*NA*
		391-3-1-.02(2)(e)	*3.2.A.1. 3.2.A.2, 3.2.A.3, 3.2.B.3, 3.4.B.1, 3.4.B.2,*		

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
Building Wire Plant (B)					
P656	*Cu Drawing Machine with Annealer 420-29*	*391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*6.1.B.7, 6.2.A.3, 6.2.A.4, 6.2.A.7, 6.2.A.8, 6.2.A.11, 6.2.B.9*	*None*	*NA*
Process Group – Tandem Extrusion Line 750-18					
P157	*Extruders 750-18*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
P617	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C010*	*Dust Filters*
P158	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
P144	*Drawing Machine 420-18*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group - Extrusion Line 710-10					
P159	*Extruders 710-10*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
P624	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C023*	*Dust Filters*
P160	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group - Extrusion Line 740-05					
P162	*Extruders 740-05*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.4.B.1, 3.4.B.2*	*None*	*NA*
P627	*Plastic Pellet Feed Hopper System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)*		*C013*	*Dust Filters*
P161	*Ink Application System*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*		*None*	*NA*
Process Group – PVC Jacket Line P6001					
P6001	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6002	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6003	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – PVC Jacket Line P6004					
P6004	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6005	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6006	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – PVC Jacket Line P6007					
P6007	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6008	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6009	Ink Application System	391-3-1-.02(2)(e)		None	NA

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
Building Wire Plant (B)					
		391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)			
Process Group – PVC Jacket Line P6010					
P6010	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6011	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6012	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – PVC Jacket Line P6013					
P6013	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6014	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6015	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – PVC Jacket Line P6016					
P6016	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6017	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6018	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – PVC Jacket Line P6019					
P6019	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6020	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6021	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – PVC Jacket Line P6022					
P6022	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6023	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6024	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – PVC Jacket Line P6025					
P6025	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6026	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6027	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
Building Wire Plant (B)					
Process Group – PVC Extrusion					
P6028	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6029	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6030	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6031	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6032	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6033	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Miscellaneous					
P6034	PVC Storage Silo	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6035	Cu/Al Drawing Machine with Annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6036	Cu/Al Drawing Machine with Annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6037	Cu/Al Drawing Machine with Annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – Tandem Extrusion Line P6038					
P6038	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6039	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6040	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6041	Cu Drawing Machine with annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – Tandem Extrusion Line P6042					
P6042	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6043	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6044	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6045	Cu Drawing Machine with annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
Building Wire Plant (B)					
Process Group – Tandem Extrusion Line P6046					
P6046	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6047	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6048	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6049	Cu Drawing Machine with annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – Tandem Extrusion Line P6050					
P6050	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6051	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6052	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6053	Cu Drawing Machine with annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Process Group – Tandem Extrusion Line P6054					
P6054	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6055	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P6056	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P6057	Cu Drawing Machine with annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA

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NOTE: Equipment in *italics* are to be removed.

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
MC Plant [C]					
~~P321A~~	~~Ink Application System~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~	~~Same as P319A~~	~~None~~	~~NA~~
~~P329~~	~~Extruders 756-01~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~	~~3.2.A.2, 3.4.C.1, 3.4.C.2, 6.2.A.5, 6.2.A.6, 6.2.A.7~~	~~None~~	~~NA~~
~~P330~~	~~Plastic Pellet Feed Hopper System~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~	~~3.2.A.1, 3.2.A.3, 3.4.C.1, 3.4.C.2, 5.2.C.1, 6.1.C.7, 6.2.A.9, 6.2.A.10, 6.2.A.11~~	~~C330~~	~~Dust Filters~~
~~P331~~	~~Ink Application System~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~	~~3.2.A.2, 3.4.C.1, 3.4.C.2, 6.2.A.1, 6.2.A.2, 6.2.A.7~~	~~None~~	~~NA~~
~~P332~~	~~Cu Drawing Machine with Annealer 420-32~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~	~~3.2.A.1, 3.2.A.2, 3.2.A.3, 3.2.C.1, 3.4.C.1, 3.4.C.2, 6.1.C.7, 6.2.A.3, 6.2.A.4, 6.2.A.7, 6.2.A.8, 6.2.A.11, 6.2.C.8~~	~~None~~	~~NA~~
Process Group: Tandem Extrusion Line P3001					
P3001	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P3002	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P3003	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P3004	Cu Drawing Machine with Annealer	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
Miscellaneous					
P3005 thru P3015	MC Armoring Lines	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P3016 thru P3026	MC Armoring Line Printers	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt) 40 CFR 63 Subpart A 40 CFR 63 Subpart MMMM		None	NA

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
Copper Rod Mill (D)					
Process Group – Rod Mill					
F409	*Rod Mill Shaft Furnace*	*391-3-1-.02(2)(e)* *391-3-1-.02(2)(g)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.D.1, 3.4.D.1, 3.4.D.2, 3.4.D.3, 3.4.D.5, 6.1.D.7, 6.2.D.1, 6.2.D.2, 6.2.D.3*	*None*	*NA*
Q467	*Rod Mill Quenching and Cooling System*	*40 CFR 64* *391-3-1-.02(2)(e)* *391-3-1-.02(2)(b)* *391-3-1-.02(2)(tt)*	*3.2.D.1, 3.4.D.1, 3.4.D.2, 3.4.D.4, 3.4.D.5, 5.2.D.2, 5.2.D.3, 6.1.D.7, 6.2.D.1, 6.2.D.2, 6.2.D.3*	*A467 F409*	*Vapor Capture System Rod Mill Shaft Furnace*
Miscellaneous					
BE1	*Bucket Elevator 1*	*391-3-1-.02(2)(n)*	*3.2.A.1, 3.2.A.3, 3.4.D.6, 3.4.D.7, 6.2.A.11*	*None*	*NA*
Process Group – Rod Mill					
F4001	Rod Mill Shaft Furnace No. 1	391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		C4001	Scrubber
F4002	Rod Mill Shaft Furnace No. 2				
F4003	Rod Mill Quenching and Cooling System	40 CFR 64 391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		C4003 F4001 F4002	Vapor Capture System Rod Mill Shaft Furnace No. 1 and No. 2

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

NOTE: Equipment in *italics* are to be removed.

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
Utility Products Plant (E)					
Process Group – Extrusion Line 720-05					
~~P254~~	~~Extruders 720-05~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~	~~3.4.E.1, 3.4.E.3~~	~~None~~	~~NA~~
~~H254~~	~~Plastic Pellet Feed Hopper System~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~		~~None~~	~~NA~~
~~P255~~	~~Ink Application System~~	~~391-3-1-.02(2)(e)~~ ~~391-3-1-.02(2)(b)~~ ~~391-3-1-.02(2)(tt)~~		~~None~~	~~NA~~
CAMV Line 2					
P7001	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P7002	Extruder			None	NA
P7003	Extruder			None	NA
P7004	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P7005	Plastic Pellet Feed Hopper System			None	NA
P7006	Plastic Pellet Feed Hopper System			None	NA
P7007	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P7008	Ink Application System			None	NA
CAMV Line 3					
P7009	Extruder	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P7010	Extruder			None	NA
P7011	Extruder			None	NA
P7012	Plastic Pellet Feed Hopper System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b)		None	NA
P7013	Plastic Pellet Feed Hopper System			None	NA
P7014	Plastic Pellet Feed Hopper System			None	NA
P7015	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P7016	Ink Application System			None	NA
Reprint Line 1					
P7017	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P7018	Ink Application System			None	NA
P7019	Ink Application System	391-3-1-.02(2)(e) 391-3-1-.02(2)(b) 391-3-1-.02(2)(tt)		None	NA
P7020	Ink Application System			None	NA
Miscellaneous					
P7021	5 Btu/hr Natural Gas Steam Generator	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)		None	NA
P7022	5 Btu/hr Natural Gas Steam Generator	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)		None	NA
P7023	5 Btu/hr Natural Gas Steam Generator	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)		None	NA
CS15	Curing Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)		None	NA
CS16	Curing Oven			None	NA

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
Utility Products Plant (E)					
CS17	Curing Oven	391-3-1-.02(2)(tt)		None	NA
CS18	Curing Oven			None	NA
CS19	Curing Oven			None	NA
CS20	Curing Oven	391-3-1-.02(2)(b)		None	NA
CS21	Curing Oven	391-3-1-.02(2)(e)		None	NA
CS22	Curing Oven	391-3-1-.02(2)(tt)		None	NA
CS23	Curing Oven			None	NA
CS24	Curing Oven			None	NA

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

C. Equipment & Rule Applicability

Emission and Operating Caps –
As discussed above, to avoid applicability of PSD to the proposed modification for VOC emissions as discussed earlier in this document, Southwire proposes to install controls and perform specific monitoring requirements to limit the VOC emissions from the proposed Rod Mill Furnaces to below 44 tons per year. In order to ensure that the project does not exceed the PSD threshold for $PM/PM_{10}/PM_{2.5}$ emissions, Southwire proposes to install a scrubber unit that will reduce $PM/PM_{10}/PM_{2.5}$ emissions by a minimum of 40%. This control device will be consistently monitored for its effectiveness. The Rod Mill Furnaces' $PM/PM_{10}/PM_{2.5}$ emissions will be limited to 7 tons per year. In addition, the facility will only be allowed to operate one of the new Rod Mill Furnaces at a time and must always operate the scrubber during the operation of the new Rod Mill Furnaces.

The facility will also be required to continue to comply with all applicable regulations and limitations for equipment that will be removed from the facility over the next two years until applicable equipment has been removed.

Applicable Rules and Regulations -

Rules and regulations associated with modification will be discussed only. For a detail of rules and regulations applicable to this facility, please see the narrative associated with Title V Permit Number 3357-045-0008-V-05-0.

40 CFR 60 - New Source Performance Standards (NSPS) Subpart A – General Provisions
Except as provided in Subparts B and C of 40 CFR 60, the provisions of this regulation apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility [40 CFR 60.1(a)]. Any new or revised standard of performance promulgated pursuant to Section 111(b) of the Clean Air Act applies to equipment located at the Southwire site for which the construction or modification is commenced after the date of publication in 40 CFR 60 of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that equipment and/or processes [40 CFR 60.1(b)]. Southwire has equipment located at this facility subject to 40 CFR 60.

40 CFR 60 NSPS Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE)*

This regulation is applicable to stationary internal combustion engines based on the date each engine was constructed, reconstructed, or modified. Per 40 CFR 60.4233(d), owners and operators of stationary SI ICE with a maximum engine power greater than 19 kW (25 Hp) and less than 75 kW (100 Hp) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to 40 CFR 60, Subpart JJJJ for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 Hp) and less than 75 KW (100 Hp) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 Hp, may optionally choose to meet those standards. The proposed Emergency Generator P820 will be subject to this regulation.

According to Table 1 of 40 CFR 60, Subpart JJJJ, emergency generators greater than 25 Hp but less than 130 Hp with a manufacturing date of January 1, 2009 must limit carbon monoxide emissions to 387 g/Hp-hr and nitrogen oxides emissions to 10 g/Hp-hr (in terms of NO_x and HC). Owners or operators of a stationary SI internal combustion engine that must comply with the emission standards specified in 40 CFR 60.4233(d) must demonstrate compliance according to one of the methods specified in paragraphs 40 CFR 60.4243 (b)(1) and 40 CFR 60.4243(b)(2). The facility must (1) purchase an engine certified according to procedures specified in 40 CFR 60, Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR 60.4244(a), or (2) purchase a non-certified engine and demonstrate compliance with the emission standards specified in 40 CFR 60.4233(d) and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to 40 CFR 60.4243 (b)(2)(i) and 40 CFR 60.4243(b)(2)(ii) [40 CFR 60.4243(b)]. Southwire proposes to purchase a certified engine as specified by 40 CFR 60.4243 (b)(1). Facilities with certified stationary SI internal combustion engine and control device that are operated and maintained according to the manufacturer's emission-related written instructions, must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required by the facility. The facility must also meet the requirements as specified in 40 CFR 1068, Subparts A through D, as applicable. If engine settings are adjusted according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance [40 CFR 60.4243(a)(1)]. Southwire must operate the proposed generator, an emergency stationary ICE, according to the requirements in paragraphs 40 CFR 60.4243(d)(1) through CFR 60.4243(d)(3). Per 40 CFR 60.4237(c), an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, the facility must install a non-resettable hour meter upon startup of the generator.

40 CFR 63- National Emissions Standards for Hazardous Air Pollutants (NESHAP) Subpart A – General Provisions

This regulation contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants (HAPs) listed in this part pursuant to section 112(b) of the Act. Southwire is a major source of HAPs under this regulation and equipment located at the Southwire site are subject to a specified standard under this regulation.

40 CFR 63 NESHAP Subpart MMMM – Standards for Surface Coating of Miscellaneous Metal Parts and Products

This regulation establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. It also establishes requirements to demonstrate initial and continuous compliance with the emission limitations [40 CFR 63.3880]. This regulation applies to the surface coating of any miscellaneous metal parts or products, as described in 40 CFR 63.3881(a)(1), and it includes the subcategories listed in 40 CFR 63.3881(a)(2) through (6), except as provided in 40 CFR 63.3881(c) and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. Southwire is a major source of HAPs. Current Armoring Line Printers located at MC are subject to this rule. Similarly, the new Armoring Lines (P3001 through P3011) will also be subject to NESHAP Subpart MMMM.

A source is the collection of all of the items listed as follows that are used for surface coating of miscellaneous metal parts and products within each subcategory (1) All coating operations as defined in 40 CFR 63.3981; (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed; (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation [40 CFR 63.3882(b)(1) through (b)(4)]. Therefore all applicable limits will apply to new Armoring Lines (P3001 through P3011) Printers (P3016 through P3026) and associated equipment as described in 40 CFR 63.3882(b)(1) through (b)(4).

An affected source is a new affected source if you commenced its construction after August 13, 2002 and the construction is of a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products surface coating facility had existed [40 CFR 63.3882(c)]. An affected source is reconstructed if it meets the criteria as defined in 40 CFR 63.2 [40 CFR 63.3882(d)]. An affected source is existing if it is not new or reconstructed [40 CFR 63.3882(e)]. They are located at the MC Plant which has other metal coating activities. Southwire is considered an existing affected source. As a result, initial notification and notification of compliance status requirements specified in 40 CFR 63.383(d), 40 CFR 63.3910(a) and 40 CFR 63.3910(c) are deemed to have been met. Southwire will demonstrate the compliance status of Armoring Lines (P3001 through P3011) Printers (P3016 through P3026) during its scheduled semiannual NESHAP compliance status reports.

40 CFR 63, Subpart ZZZZ – Standards for Stationary Reciprocating Internal Combustion Engines (RICE)

This regulation is applicable to reciprocating internal combustion engines (RICEs) that are located at a major source or an area source of hazardous air pollutants (HAPs) [40 CFR 63.6585]. Southwire is considered a major source of HAPs. The proposed emergency generator has a site rating of 30 horsepower (Hp) and will fire natural gas. A new stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source commenced construction or reconstruction on or after June 12, 2006 [40 CFR 63.6590(a)(2)(ii)]. Therefore, the proposed Emergency Generator P820 will be subject to this regulation.

Emergency stationary RICE means any stationary RICE whose operation is limited to emergency situations and required testing and maintenance [40 CFR 63.6675]. Per 40 CFR 63.6590(c), a new emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions complies with the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ. The proposed Emergency Generator P820 is a SI engine subject to the requirements of 40 CFR 60, Subpart JJJJ. Therefore, the requirements of this regulation are not applicable to the proposed Emergency Generator P820.

40 CFR 64 – Continuous Compliance Monitoring (CAM)

Units that are considered pollutant specific emission units (PSEUs) under this regulation are (1) subject to a pollutant emission standard for which there is a control device and (2) the pre-control potential emissions for the pollutant is greater than the major source threshold. This regulation requires facilities to prepare and submit monitoring plans for certain emission units with the Title V application. The CAM Plans provide an on-going and reasonable assurance of compliance with applicable emission limits. It has previously been determined that the original Quenching and Cooling System (Q467) has precontrolled emissions above the applicable major source threshold. Therefore, CAM is applicable to Q467 for VOC emissions. The new Quenching and Cooling System (F4003) will have the same functionality and emission limitations as the equipment it is replacing. Therefore, equipment F4003 will require a CAM plan which will be discussed further in Section VI of this document.

Georgia Rule for Air Quality Control (*Georgia Rule) 391-3-1-.02(2)(b) – Emission Limitations and Standards Visible Emissions*

This regulation limits opacity to less than forty (40) percent, except as may be provided in other more restrictive or specific rules or subdivisions of Georgia Rule 391-3-1-.02(2). This limitation applies to direct sources of emissions such as stationary structures, equipment, machinery, stacks, flues, pipes, exhausts, vents, tubes, chimneys or similar structures. All equipment being added to the permit as part of this modification are subject to this regulation, with exception to the steam generators.

Georgia Rule 391-3-1-.02(2)(d) – Emission Limitations and Standards Fuel Burning Equipment

This regulation limits particulate emissions from fuel burning equipment. The steam generators are subject to Georgia Rule 391-3-1-.02(2)(d)2.(i) because they are fuel burning sources with a heat input less than 10×10^6 Btu/hr [5×10^6 Btu/hr per unit] and were constructed after January 1, 1972. Georgia Rule 391-3-1-.02(2)(d)2.(i) limits PM emissions based on the following equation:

P = 0.5 pounds per million Btu heat input

Georgia Rule 391-3-1-.02(2)(d)3.(i) limits opacity from fuel-burning equipment constructed or extensively modified after January 1, 1972 to less than twenty percent except for one six minute period per hour of not more than twenty-seven percent opacity.

Georgia Rule 391-3-1-.02(2)(e) – Emission Limitations and Standards – Particulate Emission from Manufacturing Processes

Georgia Rule 391-3-1-.02(2)(e)1(i) limits a source of particulate emissions that will be put into operation or extensively altered after July 2, 1968. Georgia Rule 391-3-1-.02(2)(e)1(i) limits PM emissions based on the following equations:

$E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour.

$E = 55P^{0.11} - 40$; for process input weight rate greater than 30 tons per hour.

In the equation, E is the emission rate in pounds per hour and P is the process input weight rate in tons per hour. All equipment being added to the permit as part of this modification are subject to this regulation, with exception to the steam generators.

Georgia Rule 391-3-1-.02(2)(g) – Emission Limitations and Standards Sulfur Dioxide

This regulation regulates fuel sulfur content, by weight. This regulation is applicable to the boilers at this facility. All fuel burning sources below 100 million British Thermal Units (Btus) of heat input per hour shall not burn fuel containing more than 2.5 percent sulfur, by weight. The new replacement Rod Mill Shaft Furnaces (F4001 and F4002) will fire only natural gas or propane. The new stream generators (P7021 through P7023) will fire natural gas. Emergency Standby Stationary Generator P820 at the Medical Center will fire natural gas. Therefore, the fuel burning equipment added as part of this permit modification will be able to comply with this regulation based on the fuel usage.

Georgia Rule 391-3-1-.02(2)(tt) – VOC Emissions from Major Sources

This regulation is applicable to equipment at the Southwire Title I site because potential volatile organic compounds (VOC) emissions from Georgia Rule (tt) activities on a combined basis exceed 100 tons per year (tpy), and is located in a designated county, Carroll County. This regulation requires all sources in Carroll County that have the potential to emit 100 tpy of VOC to install Reasonably Available Control Technology (RACT). As part of the Title V renewal, Southwire updated its RACT Plan to include applicable equipment.

<u>Copper Rod Mill</u>

The VOC emissions from the Rod Mill Shaft Furnaces, Cooling and Quenching, and miscellaneous combustion sources are addressed collectively for the determination of RACT as their emissions are interrelated. In the 2016 approved VOC RACT plan submitted as part of the Title V Renewal, the existing vapor capture system and shaft furnace are deemed RACT for emission from the Rod Mill. Since the new vapor capture system (C4003) and shaft furnaces (F4001 and F4002) are of similar build and functionality as the equipment they are replacing, Southwire proposed that the newly-proposed permit limit of 44.24 tpy of VOC emissions from the Rod Mill is sufficient to enforce the continued use of the vapor capture system and shaft furnace. The Division has determined that the emission limit of 44 tpy and the use of the vapor capture system and shaft furnace are deemed RACT for the proposed modification.

<u>Plastics Blending, Extrusion, and Curing</u>

According to Application Number 556038, a review of available controls and previous RACT determinations revealed that there are currently no controls in use for plastic extrusion processes similar to these at Southwire. There are determinations for polystyrene and polyethylene foam, but Southwire does not use polystyrene or polyethylene foam for any of the insulated products at Carrollton. Also, no similar blending

(or mixing) or curing operations were identified in the RBLC database. Therefore, "no control" as the VOC RACT have been approved by the Division for these units. The Division will continue accept no controls as RACT for the proposed plastics blending, extrusion and curing equipment added as part of this modification.

Ink Application Systems

According to Application Number 556038, Southwire and its ink vendors have made several attempts to formulate low-VOC inks for the use in the ink application systems. The primary problems hampering the development of low-solvent printing materials are the material on which Southwire is printing (plastic) and line speed requirements. Plastic insulation requires inks with certain adhesive properties that are not available in water and soy-based inks. Also, the extrusion line operating speed does not support the longer drying time required by these inks.

Southwire's ink vendor has developed some low- and no-VOC inks and make-up solutions by replacing much of the solvent with acetone (a non-VOC solvent). Based on use of these inks over the last several years, the low/no-VOC inks are not technically feasible in all cases. Southwire uses low-VOC and non-VOC inks where there is no impact to product quality and/or customer satisfaction, the ink dries quickly enough before the wire passes into the cooling water trough, and the ink is not cost prohibitive. Since low-VOC materials cannot be used in all applications, Southwire asserts that RACT for printing activities is "no controls." The Division will accept low-VOC ink where feasible; otherwise no controls as RACT for the proposed ink application systems added as part of this modification.

Drawing Machines/Annealers

A search of available controls and RACT determinations indicated that there are currently no control technologies currently being applied to wire drawing and annealing. Therefore, "no control" as the VOC RACT have been approved by the Division for these units according to Application Number 556038. The Division will continue accept no controls as RACT for the proposed drawing machines/annealers added as part of this modification.

Miscellaneous Sources

Southwire operates numerous small emission units with negligible VOC emissions. The units include MC armoring operations and various small fuel burning sources. Potential VOC emissions from each of these sources are expected to be less than 1.0 tpy. Considering the low potential emissions from these sources, "no control" as the VOC RACT have been approved by the Division for these units. The Division will continue accept no controls as RACT for the proposed miscellaneous sources added as part of this modification.

Per *Georgia Rule 391-3-1-.03(2)(c),* the Division may specify conditions under which the facility must be operated in or to comply with the Clean Air Act and State rules and regulations. The Division will require the facility to comply with all applicable rules, regulations and existing permit limitations for all equipment proposed to be removed as part of this modification until such equipment is removed from the facility. In addition, the facility will not be allowed to operate the new shaft furnaces (F4001 and F4002) at the same time. The alternate furnace can be used only when the other furnace is taken down for maintenance and repairs.

Georgia Air Toxics Guidelines Assessment

According to the State's *Guideline for Ambient Impact Assessment of Toxic Air Pollutant (TAP)Emissions (Revised March 2017),* existing facilities that require a State Implementation Plan (SIP) permit that are either adding new equipment or modifying existing equipment that results in an increase in the emission of specified toxic air pollutants must demonstrate compliance with the Allowable Ambient Concentration (AAC) for each air toxic. If the facility-wide annual emission rate of a given toxic air pollutant (TAP) is less than the Minimum Emission Rate (MER) no further analysis is required. However, if the facility-wide emission rate exceeds the MER, the facility must show that the resulting maximum ground- level concentration (MGLC) determined by air dispersion analysis does not exceed the ACC of the TAP in question.

Methanol, methyl isobutyl ketone (MIBK) and isopropyl alcohol (IPA) are the only air toxics emitted from equipment as part of this modification according to Application Number 556038. Annual emissions of MIBK and IPA are significantly below the respective MERS and, therefore will not be incorporated as part of this assessment.

Located at the Utility Product Plant, the two CAMV extrusion lines and the ten new curing ovens will emit methanol which necessitates an updated Air Toxics Assessment. The extrusion lines and ovens will emit a combined 0.81 pounds per hour of methanol into the interior of the Utility Products Plant where they will ultimately be exhausted to the atmosphere via a nearby roof exhauster. The closest roof exhauster to the lines and ovens has been added to the Assessment and given the designation of CVPFAN2. The stack parameters of CVPFAN2 are similar to the parameters of CVPFAN1, an existing emission point in the Assessment.

The CVPFAN2 emission characteristics and methanol emission rate to be incorporated into this current assessment is noted in the table below as included in Application Number 556038.

CVPFAN2 Emission Characteristics and Emission Rate

Model /Permit Emission Point Code	UTM Coordinate, m		Emission Point Parameters				Modeled Methanol Emission Rate, lb/hr
	East	North	Height feet	Diameter feet	Velocity ft/sec	Temp. °F	
CVPFAN2	679160	3715080	48	8	20	80	0.81

The Division's Data Management Unit (DMU) completed modeling using an updated receptor set. The results of this modeling are summarized in the table below.

Summary of DMU Modeling Results

TAP	Averaging Period	AAC ($\mu g/m^3$)	MGLC ($\mu g/m^3$)	Receptor UTM Zone: 16	
				Easting (meter)	Northing (meter)
Methanol	Annual	20,000	17.4	679,400.00	3,715,150.00
	15-min	32,800	2,130.7	679,400.00	3,715,100.00

The results of the analysis demonstrate that the MGLC for methanol for both the annual and 15-minute averaging periods continues to remain below the respective AACs.

D. Permit Conditions

Permit Condition 3.2.A.1 specifies PM_{10} emission limitations for PSD avoidance for multiple equipment. This condition was modified to remove applicable equipment as discussed above.

Permit Condition 3.2.A.2 specifies VOC emission limitations for PSD avoidance for multiple equipment. This condition was modified to remove applicable equipment as discussed above.

Permit Condition 3.2.A.3 specifies $PM_{2.5}$ emission limitations for PSD avoidance for multiple equipment. This condition was modified to remove applicable equipment as discussed above.

Permit Condition 3.2.A.4 was added to specify PM_{10} emission limitations for PSD avoidance for multiple equipment added as a result of this permit modification as discussed above.

Permit Condition 3.2.A.5 was added to specify VOC emission limitations for PSD avoidance for multiple equipment added as a result of this permit modification as discussed above.

Permit Condition 3.2.A.6 was added to specify PM_{10} emission limitations for PSD avoidance for multiple equipment added as a result of this permit modification as discussed above.

Permit Condition 3.2.A.7 was added to indicate that new equipment that might be present at the facility before the older equipment has been removed will not be simultaneously operational to avoid PSD limits.

Permit Condition 3.5.A.1 was added to require the facility to comply with all applicable regulatory requirements and limitations for equipment to be removed as part of this permit modification until they are physically removed.

Permit Condition 3.2.B.3 limits metal processed in applicable drawing machines. This condition was modified to add applicable equipment being added as part of this permit modification as discussed above.

Permit Condition 3.2.C.1 limits the material processed in Drawing Machine P332. This condition was modified to remove P332 and add P3004 as part of this permit modification as discussed above.

Permit Condition 3.3.C.7 specifies applicability of 40 CFR 63, Subpart MMMM to Printers P361-P380. This condition was modified to add Printers P3016-P3026 as part of this permit modification as discussed above.

Permit Condition 3.2.D.1 PSD avoidance limit specifies VOC limits for applicable equipment. This condition was modified to remove applicable equipment as discussed above.

Permit Condition 3.2.D.3 added a PSD avoidance limit which specifies VOC limits for the Rod Mill Shaft Furnaces (F4001 and F4002) and the Rod Mill Quenching and Cooling System (F4003).

Permit Condition 3.2.D.4 added a PSD avoidance limit which specifies PM/PM_{10}/$PM_{2.5}$ limits for the Rod Mill Shaft Furnaces (F4001 and F4002).

Permit Condition 3.2.D.5 was added to require Rod Mill Shaft Furnaces (F4001 and F4002) to only melt copper in one at a time. The condition also requires the facility to operate Scrubber C4001 when either of the Rod Mill Shaft Furnaces (F4001 or F4002) is operating.

Permit Condition 3.4.D.3 specifies fuel sulfur content requirements of Georgia Rule (g). This condition was modified to add applicable equipment being added and to remove applicable equipment being removed as part of this permit modification as discussed above.

Permit Condition 3.4.D.4 specifies operation requirements of Georgia Rule (tt) for Q467. This condition was modified to add applicable equipment being added and to remove applicable equipment being removed as part of this permit modification as discussed above.

Permit Condition 3.4.D.5 specifies operation requirements of Georgia Rule (tt) for F409. This condition was modified to add applicable equipment being added and to remove applicable equipment being removed as part of this permit modification as discussed above.

Permit Condition 3.4.D.6 specifies requirements of Georgia Rule (n) for BE1. This condition was modified to remove applicable equipment being removed as part of this permit modification as discussed above.

Permit Condition 3.4.D.7 specifies opacity limits of Georgia Rule (n) for BE1. This condition was modified to remove applicable equipment being removed as part of this permit modification as discussed above.

Permit Condition 3.4.D.8 was added to require operation of one of the Rod Mill Shaft Furnaces (F4001 or F4002) during all periods of operation of the Rod Mill Quenching and Cooling System (F4003).

V. Testing Requirements (with Associated Record Keeping and Reporting)

Permit Condition 4.1.3. hh was added to list acceptable testing methods to determine of particulate matter emissions from the Rod Mill Shaft Furnaces (F4001 and F4002). Since the two furnaces are identical, testing of only one furnace will be required. The facility has conservatively assumed that PM, PM_{10}, and $PM_{2.5}$ emissions from this process are equal. The PSD significance level is the most stringent for $PM_{2.5}$ emissions (10 tons per year) when compared to that of PM emissions (25 tons per year) and PM_{10} emissions (15 tons per year). In addition, $PM_{2.5}$ emissions are the basis for the PSD avoidance limit associated with this modification. Therefore, the facility will be required to sample for $PM_{2.5}$ emissions.

To demonstrate compliance with particulate matter emission limits, the facility must conduct performance testing using the testing methods in Permit Condition 4.1.3.hh for Rod Mill Shaft Furnace F4001 or Rod Mill Furnace F4002. Testing of each a representative Rod Mill Shaft Furnace must be conducted while operating at maximum load.

Initial performance testing must be conducted within 60 days after achieving the maximum production rate at which each Rod Mill Shaft Furnace will be operated, but not later than 180 days

after the initial startup of one Rod Mill Shaft Furnace. The must determine the hourly particulate matter emissions rate in terms of pounds per hour for each Rod Mill Shaft Furnace. A performance test for one representative furnace is required once every twelve (12) months thereafter for Rod Mill Furnace F4001 or Rod Mill Furnace F4002. The facility must submit the results of testing within 60 days of the completion of testing. Permit Condition 4.2.D.1 was added to specify the testing requirements associated with this permit modification.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

The VOC emissions from the proposed Rod Mill Quenching and Cooling System (F4003) are subject to 40 CFR 64, because like the existing Quenching and Cooling System (Q467), it has precontrolled emissions above the applicable major source threshold. This equipment is subject to a PSD avoidance limit of 44 tons per year and requires the use of Shaft Furnace F4001 or F4002 to comply with this limit. To comply with CAM, on at least a daily basis, a hand-held, infrared temperature sensor will be used (aimed through a sight glass of a Rod Mill Shaft Furnace burner– whichever is melting or holding molten copper) to establish a measurement of the Rod Mill Shaft Furnace's copper melting chamber temperature. No monitoring is required when the rod production process is shutdown. The monitoring proposed for F4003 is as required by existing Q467.

The facility will be required to monitor the pressure drop and scrubbant flow rate for Scrubber C4001. The data must be recorded at least one daily. The facility must operate the Scrubber C4001 within the applicable operating parameter range as specified by the manufacturer, or a recently Division-approved value.

Permit Condition 5.2.B.1 specifies monitoring for oil mist collectors and dust collectors. This condition was modified to remove applicable equipment as discussed above.

Permit Condition 5.2.C.1 specifies monitoring for dust collectors. This condition was modified to remove applicable equipment as discussed above.

Permit Condition 5.2.D.2 indicates the applicable pollutant and equipment subject to CAM. This condition was modified to add applicable equipment being added and remove applicable equipment being removed as part of this permit modification as discussed above.

Permit Condition 5.2.D.3 specifies the requirements of CAM. This condition was modified to add applicable equipment being added and remove applicable equipment being removed as part of this permit modification as discussed above.

Permit Condition 5.2.D.4 was added to require monitoring of applicable parameters for Scrubber C4001 as specified above.

VII. Other Record Keeping and Reporting Requirements

Permit Condition 6.1.A.7 defines excess emissions, exceedances, excursions, and other applicable reporting requirements for applicable equipment for General Record Keeping and Reporting Requirements [MULTI]. This condition was modified to add appliable exceedances for equipment being added as part of this permit modification as discussed above.

Permit Condition 6.1.B.7 defines excess emissions, exceedances, excursions, and other applicable reporting requirements for applicable equipment for General Record Keeping and Reporting Requirements [BWP]. This condition was modified to add appliable exceedances for equipment being added as part of this permit modification as discussed above.

Permit Condition 6.1.C.7 defines excess emissions, exceedances, excursions, and other applicable reporting requirements for applicable equipment for General Record Keeping and Reporting Requirements [MC]. This condition was modified to add appliable exceedances for equipment being added as part of this permit modification as discussed above and to remove applicable equipment.

Permit Condition 6.1.D.7 defines excess emissions, exceedances, excursions, and other applicable reporting requirements for applicable equipment for General Record Keeping and Reporting Requirements [CRM]. This condition was modified to add appliable exceedances and excursions for equipment being added as part of this permit modification as discussed above and to remove applicable equipment.

Permit Condition 6.2.A.1 requires monthly material usage records for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.3 requires monthly rod input records for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.4 requires monthly VOC emission calculations for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.5 requires monthly plastic usage records for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.6 requires monthly VOC emission calculations for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.7 requires monthly VOC emission calculations for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.8 requires monthly particulate emission calculations for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.9 requires monthly material throughput records for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.10 requires monthly particulate emission calculations for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.11 requires monthly particulate emission calculations for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.A.12 was added to require written notification of removal for each applicable equipment to be removed as specified in Application Number 556038.

Permit Condition 6.2.A.13 was added to require written notification of construction of each applicable equipment to be removed as specified in Application Number 556038.

Permit Condition 6.2.D.1 specifies PSD avoidance record keeping requirements for applicable equipment. This condition was modified to add applicable equipment being added and remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.D.2 specifies VOC emissions calculation requirements for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.D.3 specifies monthly VOC emissions calculations requirements for applicable equipment. This condition was modified to remove appliable equipment being removed as part of this permit modification as discussed above.

Permit Condition 6.2.D.8 was added to specify VOC emissions calculation requirements for each Rod Mill Shaft Furnace (F4001 and F4002), and the Rod Mill Quenching and Cooling System (F4003), combined.

Permit Condition 6.2.D.9 was added to specify monthly VOC emissions calculations requirements for each Rod Mill Shaft Furnace (F4001 and F4002), and the Rod Mill Quenching and Cooling System (F4003), combined.

Permit Condition 6.2.D.10 was added to specify recordkeeping/reporting requirements for Scrubber C4001 as part of the report required by Permit Condition 6.1.4. The facility will be required to report the nature and cause of a deviation, the time and date of occurrences, and any initial and final corrective action taken; a summary of any days for which any of the required operation and maintenance surveillance checks were not made and the reason for such failure to perform the surveillance; and all records of the deviated pressure drop measurements and scrubbant flow rate measurements.

Permit Condition Section 6.2.G.7 specifies required reports per 40 CFR 63, Subpart DDDDD for existing Boiler P911. This condition was modified to change the reporting schedule to match the schedule of Permit Condition 6.1.4.

VIII. Specific Requirements

A. Operational Flexibility

No operational flexibility is not requested as part of this permit modification.

B. Alternative Requirements

No alternative requirements were added, modified, or removed as a result of this permit modification.

C. Insignificant Activities

Insignificant Activities Based on Emission Levels have been updated to add and remove applicable equipment associated with this modification as discussed above.

D. Temporary Sources

No temporary sources were added, modified, or removed as a result of this permit modification.

E. Short-Term Activities

No short-term were added, modified, or removed as a result of this permit modification.

F. Compliance Schedule/Progress Reports

No compliance schedule/progress reports were added, modified, or removed as a result of this permit modification.

G. Emissions Trading

No emissions trading was added, modified, or removed as a result of this permit modification.

H. Acid Rain Requirements/CAIR/CSPAR

This permit modification does not change the applicability of Acid Rain Requirements/CAIR/CSAR to this facility.

I. Prevention of Accidental Releases

No prevention of accidental releases was added, modified, or removed as a result of this permit modification.

J. Stratospheric Ozone Protection Requirements

This permit modification does not change the applicability of Stratospheric Ozone Protection Requirements to this facility.

K. Pollution Prevention

No prevention of pollution prevention was added, modified, or removed as a result of this permit modification.

L. Specific Conditions

No prevention of specific conditions were added, modified, or removed as a result of this permit modification.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//