TABLES

TABLE 4-1: CHEMICALS IN BONNELL ALUMINUM, INC. PROCESSES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

ALUMINUM ALLOY CHEMICALS	
Aluminum	Magnesium
Chromium	Manganese
Copper	Silicon
Iron	Titanium
Lead	Zinc

ANODIZING CHEMICALS	
COMMON OR TRADE NAME	**CHEMICAL NAME**
Sodium Acetate Buffer	Acetic acid
Caustic soda	Sodium hydroxide
Diammonium phosphate	Diammonium phosphate
Nitric acid	Nitric acid
Sulfuric acid	Sulfuric acid
HOUGHTO-COLOR A-597	Stannous Sulfate
Methanol	Methanol
HOUGHTO-SEAL A-620	Nickel compounds
HOUGHTO-ETCH AX-1897	Proprietary – no hazardous chemicals on SDS
HOUGHTON A-720	Proprietary – no hazardous chemicals on SDS
HOUGHTO-SEAL A-638	Proprietary – no hazardous chemicals on SDS
SODIUM PERIODATE 10.69 G/L	Proprietary – no hazardous chemicals on SDS
HOUGHTO-CLEAN A 1090	Alkylated naphthalene sulfonate, sodium salt
HOUGHTO-CLEAN A-1083	Disodium tetraborate pentahydrate
HOUGHTODEOX A 1714	Disodium peroxodisulphate
HOUGHTO-DEOX A-1724	Soluble Iron Salt, Nitric Acid, Phosphoric Acid, Sulfuric Acid
HOUGHTO-ETCH AX-2050	Ammonium hydrogendifluoride
HOUGHTON A-710	Nonylphenol, branched, ethoxylated; Polyethylene glycol mono(octylphenyl) ether phosphate
HOUGHTO-SEAL A-635	Potassium Hydroxide
HOUGHTO-SEAL A-672	Potassium Hydroxide

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JEC/03-15-2024

TABLE 4-2: SOLID WASTE MANAGEMENT UNITS (SWMU)
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU NUMBER	SWMU DESCRIPTION	APPROXIMATE OPERATIONAL DATES	APPROXIMATE DIMENSIONS/CAPACITY	FUNCTION/DESCRIPTION	MATERIALS/CHEMICALS
1	Calcium Aluminate Landfill	1972 to 1992	4 acres X 15 ft deep	Land disposal unit for vacuum filtered waste from the process recovery of caustic etching solution.	Calcium aluminate, caustics
2	Chromium Hydroxide Sand Drying Beds	1970 to 1989	40 ft X 15 ft X 5 ft deep	RCRA Regulated Unit. Received clarified sludge (FO19) from aluminum chemical conversion coating wastewater treatment.	See Section 4.3
3	Chromium Hydroxide Landfill	1980 to 1989	1 acre x 8 ft deep	RCRA Regulated Unit. Land disposal unit for sludge from Chromium Hydroxide Sand Drying Beds.	See Section 4.3
4	Surface Impoundment (Settling Pond & Polishing Pond)	Settling Pond: Early 1960s to 1991 Polishing Pond: 1972 to 1991	1 acre	RCRA Regulated Unit. Settling pond portion received non-clarified, pH adjusted, polymerized wastewater from anodizing wastewater treatment. Acted as a clarifier. Contains F019 sludge. Polishing pond portion on unit received supernate and some sludge from Settling Pond. Contains F019 sludge.	See Section 4.3
5	Not Used (reserved)				
6	Aluminum Hydroxide Land Treatment Unit	1971 to 1991	5.6 acres x 6 ft deep 1.6 acres x 3 ft deep 38.5 acre-ft total	RCRA Regulated Unit. Land application area for thesludge (F019) from the Settling Pond. Area includes four aluminum hydroxide sand drying beds	See Section 4.3
7/46	Tank Farm Unit	1970 to 1995 Documented Release in July 1990	5000 gallons	Solvents from the paintline cleaning are stored for less than 90 days before being reclaimed by an outside contractor. Secondary containment since 1989. Virgin Toluene solvent tank released near 1000 lbs to the air and soil.	Paint pigments, xylene, toluene, Sol-150
8	Temporary F019 Drum and Roll-Off Container Storage Area	1989	50 ft X 100 ft 50 ft X 50 ft	Areas used for temporary storage (60 days) of FO19 sludge prior to offsite disposal.	FO19 sludge
9	Roll-Off Container Storage Area, CrOH Sludge Tank and CrOH Filter Press	1989 to Present	60 ft X 20 ft	Concrete, curbed and roofed area beneath filter press that receives sludge from the conversion coatingwastewater clarifier.	FO19 sludge - See Section 4.3
10	Paintline Wastewater Treatment System and all piping	1970 to Present		Collects and treats wastewater that results from preparation of aluminum for painting. Includes two PVC lined 5500 gallon basins for reducing hexavalent chromium, adjusting pH, and polymer mixing; a clarifier; associated piping; and a pipe from the clarifier to the NPDES outfall.	Aluminum, chromic acid, hydrofluoric acid, isopropyl alcohol, phosphoric acid, sodium hydroxide, lime, organic polymer, sodium bisulfite, sulfuric acid

TABLE 4-2: SOLID WASTE MANAGEMENT UNITS (SWMU)
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU NUMBER	SWMU DESCRIPTION	APPROXIMATE OPERATIONAL DATES	APPROXIMATE DIMENSIONS/CAPACITY	FUNCTION/DESCRIPTION	MATERIALS/CHEMICALS
11	Anodizing Wastewater Treatment System and Piping Upstream of Settling Pond	1971 to Present		Collects and treats wastewater from anodizing process tanks.Includes two 20,000 gallon pH neutralization tanks and all collection pits and piping downstream of the anodizing tanks.	Aluminum, hydrogen peroxide, nickel acetate, nitric acid, sodium hydroxide, sulfuric acid, lime, organic polymer
12	Truck Shop Sump plus Piping and Trench	1975 to Present	1000 gallons	Underground concrete tank that receives floor washings, waste oil and solvents from shop.	Waste oils, solvents and detergents
13	Truck Shop Pipe Discharge	1975 to 1990	50 ft X 50 ft	Formerly received supernatant from truck shop oil/waterseparator. Mostly clear liquid was discharged. Oily discharge was covered and mixed with soil.	Water and oily mixtures
14	Truck Shop Parking Area	1975 to 1987	Approx. 3 acres	Received waste oil from oil/water separator for dust control.	Waste oils
15	Area Under Truck Shop Oil/Water Separator	1987 to Present	15 ft X 20 ft	Receives spills from overflow and during removal of waste oils and supernatant from separator.	Water and oily mixtures
16	Storage Yard Behind Maintenance plus Ditch and Drum Storage	1970 to Present	2 acres	General use for metal parts storage with a 20 ft X 50 ft storage area for empty drums.	Scrap metal parts, empty drums that held process and wastewater treatment chemicals (See SWMU Nos. 10 and 11).
17	Drum Crusher Area	1975 to Present	20 ft X 20 ft	Used to compact steel drums that are not refilled.	Paint, caustics, acids, nickel acetate, oil
18	Storm Sewer System That Conducted Hydraulic Oils, Acids, Caustics, Solvents Including Ditches	1954 to 1970		Piping and the open creek/ditch that received oil leaks from hydrauilc presses, storm water and process wastewater. Since 1970, system only received storm water.	Hydraulic oil, storm water, solvents, acids, caustics
19	Area West of Die Shop	1975 to Present	80 ft X 20 ft	Open ground area that received discarded metal filings and petroleum coolant, and graphite.	Steel, carbon, petroleum hydrocarbon (dielectric oil)
20	Discharge Areas from Fabrication Building	1966 to Present	Several small	Open ground areas that receive welding cooling water and rinseate from aluminum fabrication operations.	Welding cooling water
21	Former Oil/Water Seperator Near Fabrication Building	1980 to 1990	100 ft X 40 ft	Received oil leaked from hydraulic presses. Supernatant went to Settling Pond. Waste oil handled by outside contractor. Soil berms for containment.	Hydraulic oil
22	Active Oil/Water Separator	1990 to Present	70 ft X 50 ft	Same description as SWMU No. 21 above with the addition of concrete secondary containment and concrete truckloading pad.	Hydraulic oil

TABLE 4-2: SOLID WASTE MANAGEMENT UNITS (SWMU)
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU NUMBER	SWMU DESCRIPTION	APPROXIMATE OPERATIONAL DATES	APPROXIMATE DIMENSIONS/CAPACITY	FUNCTION/DESCRIPTION	MATERIALS/CHEMICALS
23	Inactive Oil/Water Separator	1972 to 1985	50 ft X 20 ft	Positioned to intercept creekwater that carried hydraulic oil, storm water and process wastewater discussed with SWMU No. 18.	Hydraulic oil, storm water, solvents, acids, caustics
24	Reported Trash Dump(shown on 1966 topo)	Early 1950s to	0.5 acres	Apparently received municipal and domestic waste materials.	Debris, paper waste, other unknowns
25	Reported Trash Dump Near Chromium Hydroxide Landfill	Prior to 1970	0.5 acres	Apparently received municipal and domestic waste materials.	Home garbage and other unknowns
26	Demolition/Construction Debris Disposal Area	1972 to Present	2 acres	Opened to receive large construction debris exclusively.	Concrete, bricks, asphalt, lumber
27	Acid Spill Area Near Phosphoric Acid Storage	1958 to Present	50 ft X 10 ft	Concrete area cracked and degraded by acid spills.	Phosphoric acid
28	Scrubbers Serving Fabrication Building	1975 to Present	2 areas 20 ft X 20 ft	Removes particulates from carbon cutting operations. Solids accumulate in area. Scrubbing water was discharged to surface.	Carbon, water, particulates
29	Steam Cleaner Area	1970 to Present	50 ft X 30 ft	Machinery and mobile equipment are cleaned on aconcrete apron. Runoff to Settling Pond until new treatment system was installed in fall of 1991.	Detergents, oils, grease and dust
30	Battery Recharge Stations	1970 to Present	3 areas 8 ft X 15 ft	Acid lead batteries for electric fork lifts are removed/installed and recharged. Concrete sumps containing limestone are below recharge stations.	Sulfuric acid
31	Paintline Spill Area	1970 to Present	2 ft X 30 ft	Soil and gravel adjacent to building that received paint that seeped down outside wall of building.	Wet paint, solvents
32	Old Melter Burial Areas (3 areas) - Casting Offices, West of Settling Pond, Near Truck Shop	1965 to 1980	3 locations 30 ft X 30 ft X 10 ft	Disposal sites for non-functional melting furnaces.	Steel, aluminum, fire brick
33	Fork Lift Shop Oil Sump	1970 to Present	200 gallons	Concrete sump used to collect waste oils from fork liftrepairs and maintenance. Sump contents are removed by outside recycling contractor.	Waste oils and solvents
34	Exterior Trash Containers (3)	Late 1960s to Present	3 containers 2 X 8 cu yds 1 X 40 cu yds	Receive plant and paper trash that goes toCoweta County Landfill.	Paper, cardboard, empty containers, scrap metal, etc.

TABLE 4-2: SOLID WASTE MANAGEMENT UNITS (SWMU)
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU NUMBER	SWMU DESCRIPTION	APPROXIMATE OPERATIONAL DATES	APPROXIMATE DIMENSIONS/CAPACITY	FUNCTION/DESCRIPTION	MATERIALS/CHEMICALS
35	Sink Frame Building Area	1953 to 1970	220 ft X 80 ft	Building and area that contained the initial aluminum extrusion business. Included paint and fabrication processes.	Paint, solvents, caustics, acids
36	Sump Below Paint Booths	1970 to Present	2 cylindrical sumps 4 ft diam X 16 ft	Abandoned sumps that formerly housed hydraulic units. The sumps are no longer used but could receive wastepaint and solvents. The sumps are periodically emptied to thewaste solvent storage tank.	Solvents and paint
37	Fabrication Building Cooling Tower Discharge Ditch	1972 to Present	50 ft X 10 ft	Cooling tower blows down discharges to open ditch.	Hydrogen peroxide, 1-H-methylbenzotriazole, potassium hydroxide, zinc salts, organophosphate, sodium bisulfite
38	Discharge Areas from Sinks Not Connected to Sanitary or Process Sewers	1960 to Present	Several small areas < 10 sq ft	Receives wastewater from employee hand washings. Discharges to storm water sewer or ground surface.	Wastewater containing soap, oil, grease, other unknowns
39	Former Employee Parking Lot	1955 to 1970	1.5 acres	Received waste oil for dust control. The area surface was paved with concrete in 1970.	Waste oil
40	Buffing Dust Area in Fabrication Building	1970 to 1980	50 ft X 30 ft	Open ground area that received buffing dust prior to expansion of building. Area is now covered by a concrete floor.	Aluminum oxide, glycerides, fatty acids, ethanol, animal fats, water
41	Paint Hook Burn-Off Oven	1989 to Present	20 ft X 20 ft	Building with concrete floor and apron containing a furnace used to remove paint from metal paint hooks.	Paint ash, volatile organics
42	Cooling Tower Areas (6 areas)	1960 to Present	Each Tower Area 15 ft X 25 ft	Areas received spills from cooling towers.	Hydrogen peroxide, 1-H-methylbenzotriazole, potassium hydroxide, zinc salts, organophosphate,
43	Former Die Shop Waste Oil/Solvent Area	1960 to 1972	15 ft X 75 ft	Open ground area that received waste oil and solvents generated from die making machinery maintenance and die making. Area paved with concrete after 1972.	Waste oil and solvents
44	Chromium Hydroxide Sand Drying Beds Closure Stockpile Area	1990	200 ft X 50 ft	Temporary (60 days) polyethylene lined area for soil and debris storage prior to shipment offsite. Area was bermed and covered.	FO19 sludge, chromium, fluoride
45	Container Cleaner Unit	1985 to Present	10 ft X 20 ft	Covered above-ground steel 300 gallon tank in which die parts are chemically cleaned.	Aluminum, sodium hydroxide
47	Underground Storage Tank	Documented Release in July 1990	10,000 Gal. Tank.	Tank stores diesel for mobile equipment, trucks.	Diesel fuel

TABLE 4-2: SOLID WASTE MANAGEMENT UNITS (SWMU)
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU NUMBER	SWMU DESCRIPTION	APPROXIMATE OPERATIONAL DATES	APPROXIMATE DIMENSIONS/CAPACITY	FUNCTION/DESCRIPTION	MATERIALS/CHEMICALS
48	Paintline Pit	1986 to 1987	Pit Area: 9 Ft. by 70 Ft. Release area: Small Cracked/Eroded Area	Unknown quantitiy of hexavalent chromium released to the soil due to crack in the concrete pit beneath the pretreatment system.	Aluminum, chromic acid, hydrofluoric acid, isopropyl alcohol, phosphoric acid, sodium hydroxide, lime, organic polymer, sodium bisulfite, sulfuric acid
49	PCE Degreasing Unit	1954 to 1957	50 Gal. Liquid	Tank vaporized PCE to degrease extrusions. Sludge containing PCE was probably discharged to soil and/or the storm sewer system (SWMU 18).	Tetrachloroethylene (PCE), trichloroethylene (TCE), buffing dust (aluminum oxide, tallow)
50	F019 Spill area	Discovered in December 1991	2 cubic yards	Spill was discovered in the Calcium AluminateLandfill area.	F019 Sludge
51	Oil Changing Area	1994	200 Ft. by 100 Ft.	Area where vehicle and maintenance equipment oil was changed	Petroleum hydrocarbons and BTEX
52	Pipe Disposal Area	1994	200 Ft. by 75 Ft.	Pipe and piping type debris was buried within this SWMU.	VOCs and Permit Metals
53	Furnace Foundation in Casting	Prior to 1980	20 ft x 30 ft	Support of the casting part of the furnace	Refractory, aluminum dross, and aluminum inside a steel shell that was the bottom of an old aluminum melting furnace for 6XXX series alloy
54	Hydraulic Oil Storage Tank Area	Prior to 2014	18 ft x 34 ft	Stored hydraulic oil for the presses and mobile equipment.	Hydraulic Oil
55	Die Repair Process	Prior to 2014	40 ft x 40 ft	Clean press dies	Caustic

Note:
1. Information contained in this table taken from the 2014 Permit Renewal Application.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 4-3: HISTORICAL RELEASES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	LOCATION / DESCRIPTION	MEDIA CONTAMINATED	IMPACT ON THE ENVIRONMENT	DATE OF RELEASE	MATERIAL RELEASED	WASTE CHARACTERIZATION	APPROXIMATE AMOUNT OF RELEASE
2	Chromium Hydroxide Sand Drying Beds	Soil, Ground Water	See Section 7	1970 to 1989	Leachate containing Trivalent Chromium and Fluoride	See Section 7	Unknown
13	Truck Shop Pipe Discharge Area Discharge Area	Soil	Groundwater may have been affected as down gradient wells 31 and 32 show xylene contamination	1975 to 1990	Oily Wastewater	Water with trace amounts of motor oils. Composite soil sample confirms TPH and xylenes.	Unknown
15	Area Under Truck Shop Oil/Water Separator Oil/Water Separator	Soil	Down gradient well 24 showing no VOC's.	1987 to 1995	Oily Wastewater	Motor oils and water as supported by soil composite showing TPH's and xylenes.	Unknown
17	Drum Crusher Area	Soil	[Discrete unit to be addressed in RFI].	1975 to 1995	Paint, Caustics, Acids, Oil	BTEX, TPH found in soil samples (see September 19, 1991 data submittal and Appendix L for SWMU 16).	Unknown
18	Storm Sewer System that Conducted Hydraulic Oil, Acids, Caustics, Solvents Including Ditches	Soil, Ground Water, Surface Water	[See VOC Assessment]. Release groundwater.	Prior to 1970	Oils, Solvents, Acid, Caustics	Hydraulic Oil, acids, caustic, solvent [See VOC Assessment]	Unknown
19	Area West of Die Shop	Soil	Graphite, oil, steel to soil.	Prior to 1990	Steel, Carbon, Dielectric Oil		Unknown
20	Discharge Areas from Fabrication Building Fabrication Building	Soil	Well 44S & 44D do not indicate metals or VOC contamination	1965 to 1995	Welding Cooling Water	Welding cooling water, rinsate from aluminum fabrication operations. No known hazardous compounds.	10 gal/day

TABLE 4-3: HISTORICAL RELEASES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	LOCATION / DESCRIPTION	MEDIA CONTAMINATED	IMPACT ON THE ENVIRONMENT	DATE OF RELEASE	MATERIAL RELEASED	WASTE CHARACTERIZATION	APPROXIMATE AMOUNT OF RELEASE
21	Oil/Water Separator Adjacent to Fabrication Building to Fabrication Building	Soil	[See "Waste Oil Tanks/Separator Soil Excavation Report," Appendix L)	1980 to August 1990	Waste Oil	Hydraulic oils and water as supported by soil analyses (see SES report: "Waste Oil Tanks/Separator Soil Ex-cavation Report," Appendix L)	Unknown
27	Acid Spill Area Near Phosphoric Acid Storage Phosphoric Acid Storage	Soil	pH of groundwater not adversely affected as shown in wells 33D and 41D *	1958 to 1995	Acid	Phosphoric acid	Unknown
28	Scrubbers Serving Fabrication Building Fabrication Building	Soil	Wells 44S & 44D do not indicate metals or VOC contamination	1975 to 1995	Water, Carbon	Water, Carbon	Up to 9000 gal/day
29	Steam Cleaner Area	Soil	These constituents not found in downgradient wells 27S & 27D. *	1970 to 1995	Oily Water, Detergents,	Motor fuel and oil and detergents as supported by soil sample composite showing TPH, Xylenes, Toluene, chloroform chloroform	Unknown
31	Paintline Spill Area	Soil	These constituents not found in downgradient wells 27S & 27D. The nearby spring may be intercepting	1970 to 1995	Wet Paint, Solvents	Paints, Toluene, Xylene	Unknown
37	Fabrication Building Cooling Tower Discharge Ditch Tower Discharge Ditch	Soil	[Discrete unit to be addressed in RFI]	1972 to 1995	Blowdown Water Peroxide, 1-H-methyl-benzotriazole, Potassium Hydroxide, Zinc Salts, Organophosphate, Sodium Bisulfite	Non-contact cooling tower water.	50 gal/day
38	Sinks Not Connected to Sanitary or Process Sewers or Process Sewers	Soil	Releases to groundwater unknown	1960 to 1995	Wastewater with Soap, Oil, Grease	Water, detergent, oil	50 gal/day
39	Former Employee Parking Lot	Soil	Downgradient wells 26S & 26D show no BETX constituents. *	1955 to 1970	Waste Oil	Light oils used for dust control.	Unknown

TABLE 4-3: HISTORICAL RELEASES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	LOCATION / DESCRIPTION	MEDIA CONTAMINATED	IMPACT ON THE ENVIRONMENT	DATE OF RELEASE	MATERIAL RELEASED	WASTE CHARACTERIZATION	APPROXIMATE AMOUNT OF RELEASE
40	Buffing Dust Area in Fabrication Building Fabrication Building	Soil	Releases to groundwater unknown	1970 to 1980	Buffing Compound	Tallow, abrasives (clay, aluminum oxide, aluminum dust)	Unknown
42	Cooling Towers (6 areas)	Soil	[Discrete unit to be addressed in RFI]	1960 to 1995	Blowdown Water including Hydrogen Peroxide, 1-H-methyl-benzotriazole, Potassium Hydroxide, Zinc Salts, Organophosphate, Sodium Bisulfite benzotriazole, Potassium Hydroxide, Zinc Salts, Organophosphate, Sodium Bisulfite	Noncontact and 1 contact (with aluminum) towers. [See RFA, Appendix L].	Unknown

TABLE 4-3: HISTORICAL RELEASES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	LOCATION / DESCRIPTION	MEDIA CONTAMINATED	IMPACT ON THE ENVIRONMENT	DATE OF RELEASE	MATERIAL RELEASED	WASTE CHARACTERIZATION	APPROXIMATE AMOUNT OF RELEASE
43	Former Die Shop Waste Oil/ Solvents Disposal Area Solvents Disposal Area	Soil	[Discrete unit to be addressed in RFI]	1960 to 1972	Waste Oil, Solvents	Waste oils, solvents	Unknown
45	Container Cleaner Unit	Soil	[Discrete unit to be addressed in RFI]	1985 to 1995	Aluminum, Sodium Hydroxide	Caustic. A composite soil sample showed a pH of 9.0.	Unknown
46	Solvent Tank Farm	Soil, Air	Releases to groundwater unknown	September 1989	Toluene	Toluene release. Soil samples indicate BTEX and PCE. See Soil Gas Survey in Appendix G, (RFA Appendix L).	1000 lbs

TABLE 4-3: HISTORICAL RELEASES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	LOCATION / DESCRIPTION	MEDIA CONTAMINATED	IMPACT ON THE ENVIRONMENT	DATE OF RELEASE	MATERIAL RELEASED	WASTE CHARACTERIZATION	APPROXIMATE AMOUNT OF RELEASE
47	Underground Storage Tank	Soil	Tank tightness test indicated leak. Okay on retest.	July 1990	Diesel Fuel	Diesel Fuel	3 to 4 gallons
48	Paintline Pit	Soil	Releases to groundwater unknown	1986 to 1987	Wastewater containing Chromic Acid, Hydrofluoric Acid, Isopropyl Alcohol, Phosphoric Acid, Sodium Hydroxide	Dilute acids (chromic, hydroflouric, phosphoric), sodium hydroxide, and isopropyl alcohol.	Unknown
49	Degreasing Unit	Soil, Ground Water, Surface Water	[See VOC Assessment]. Release to groundwater.	Prior to 1970	Oils, Solvents, Acid, Caustics	PCE, TCE, Buffing Dust (Tallow, Aluminum oxide, Alumium dust)	Unknown
50	F019 Spill Area	Soil	Releases to groundwater unknown	Unknown	F019 Sludge	F019 Sludge	2 cubic yds
51	Oil Changing Area						
52	Pipe Disposal Area						
53	Furnace Foundation in Casting	None	None	Unknown	Refractory, aluminum dross and aluminum	Material was disposed of as non-hazardous waste or reused in the facility	Unspecified

TABLE 4-3: HISTORICAL RELEASES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	LOCATION / DESCRIPTION	MEDIA CONTAMINATED	IMPACT ON THE ENVIRONMENT	DATE OF RELEASE	MATERIAL RELEASED	WASTE CHARACTERIZATION	APPROXIMATE AMOUNT OF RELEASE
54	Hydraulic Oil Storage Tank Area	Soil	Releases to groundwater unknown	Unknown	Hydraulic Oil	Visibly stained soils were excavated until Aroclor 1254 concentrations in confirmation samples were below 1 mg/kg	Unspecified
55	Die Repair Process	Soil	Releases to groundwater unknown	Unknown	Caustic	Soils exceeding a pH of 9 were excavated	Unspecified
Non-SWMU related Releases							
N/A	Truck Shop Parking Lot	Soil		1975 to 1987	Waste Oil		Unknown
N/A	Paintline Waste Filter Press	Soil		8/22/1997	F019 Sludge		2 gallons
N/A	Groundwater Collection Tank	Soil		12/15/1997	F001		500 gallons
N/A	Casting, Chlorine Storage	Surface water puddled on concrete		1/8/1998	Chlorine gas/liquid		15-20 pounds
N/A	Recovery Well 7	Soil		1/15/1998	F001		800 gallons
N/A	Pretreat Chemicals, Wet Paint Area	Soil		1/22/1998	Pretreat Chemicals		Unknown
N/A	Groundwater Collection Tank	Soil		1/28/1998	F001		10 gallons
N/A	Groundwater Collection Tank	Soil		2/9/1998	F001		570 gallons
N/A	Wastewater Treatment Plant	Surface Water		4/4/1998	Anodizing Sludge		Unknown
N/A	Groundwater Collection Tank	Soil and Surface Water		8/16/1998	F001		500 gallons
N/A	Paintline Pit	Soil and Surface Water		6/22/1999	Chromic Acid in Water		20 pounds
N/A	Bonnell and Henry Streets/Paintline Wastewater	City Sewer		6/4/2004	Dilute Chrome-Free Conversion Coating		50 gallons
N/A	Caustic Etch Storage Tank - Environmental Department	Soil		11/21/2004	Sodium Hydroxide and Sodium Aluminate		200-400 gallons of solution, 100 lbs of sodium hydroxide and 67 lbs of sodium aluminate estimated
N/A	Stormwater Ditch Located South of Parking Area	Soil and Surface Water		10/1/2005	Treated Wastewater		100 gallons
N/A	Empty Drum Storage Located South of Main Building	Soil		2/8/2006	Hydraulic Oil		18 gallons
N/A	Die Repair and Ditch Behind Maintenance Area	Soil and Surface Water		2/28/2006	Caustic (12-25% solution)		100 gallons
N/A	Etch Storage Tank in Environmental Department	Soil and Surface Water		8/25/2006	Sodium Hydroxide (5% solution)		43 gallons
N/A	Etch Storage Tank in Environmental Department	Soil and Surface Water		8/30/2006	Sodium Hydroxide (5% solution)		600 lbs sodium hydroxide

TABLE 4-3: HISTORICAL RELEASES
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	LOCATION / DESCRIPTION	MEDIA CONTAMINATED	IMPACT ON THE ENVIRONMENT	DATE OF RELEASE	MATERIAL RELEASED	WASTE CHARACTERIZATION	APPROXIMATE AMOUNT OF RELEASE
N/A	Paintline Pretreatment to Storm Ditch	Soil and Surface Water		9/15/2006	Dilute sodium and potassium hydroxides		343 lbs of mixed hydroxides
N/A	Paint Building (on top of)	Soil and Surface Water		10/8/2008	Hydraulic Oil		8-15 gallons
N/A	Truck Scale at Security Gate	Soil and Surface Water		11/11/2009	Diesel Fuel		5-10 gallons
N/A	Water Recycle System	Soil and Surface Water		6/26/2011	100% Caustic and Ammonium Bifluoride		< 0.5 lbs
N/A	GroundwaterTreatment System	Soil		12/11/2011	Groundwater (~50 ug/L PCE and TCE)		Approximately 1,000 gallons (< 1 g PCE)
N/A	Boneyard	Soil		5/29/2012	Paint Booth Drippings		~ 5 gallons
N/A	Near Equalization Basin at Wastewater Treatment	Soil		9/20/2012	25% Caustic and Sodium Aluminate Solution		800 lbs Caustic
N/A	Near R-48	Soil		1/18/2013	25% Caustic and Sodium Aluminate Solution		133 lbs Caustic
N/A	Near Die Repair and the Trash Compactor	None (material collected in shallow pit)		4/9/2013	Caustic Etch Solution (sodium hydroxide and sodium aluminate)		200 gallons, 741 lbs sodium hydroxide
N/A	Plant West Side of the Extrusion Department	None		6/24/2013	50% Caustic		Unknown
N/A	Water Tank at Storm Water Ditch Behind Maintenance	None		6/26/2013	Water with Elevated pH		No Known Quantity
N/A	Receiving Dock Shed	None		7/30/2013	Acetone		5-10 gallons
N/A	Paintline Pretreatment Room	None		8/10/2013	Water with Sulfuric Acid		50 gallons, < 1.0 lbs of sulfuric acid
N/A	Paintline Pretreatment Room	None		8/12/2013	Rinse Water with Sulfuric Acid		10 gallons, < 1.0 lbs of sulfuric acid
N/A	Storm Drain in Die Repair Area and Attached Storm Drainage Ditch	Soil, Surface Water		11/15/2013	50% Sodium Hydroxide		250 gallons
N/A	Paintline Area	None		Prior to 2014	Paint		No Known Quantity
N/A	Die Repair Area	Soil		Prior to 2014	Caustic		No Known Quantity
N/A	Outside of Die Repair Area	Soil		Prior to 2014	Sediment from Old Sanitary Sewer Line (VOCs, Metals, PCBs)		No Known Quantity
N/A	Former Hydraulic Oil AST Area	Soil		Prior to 2014	Hydraulic Oil		No Known Quantity
N/A	Storage Tank at Environmental	Air		2/10/2014	Ammonia vapor		42 lbs

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 4-4: SUMMARY OF RELEASES FROM JUNE 2014 TO FEBRUARY 2024
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Incident date	March 1, 2014
Incident description	Release of process water, calcium sulfate, aluminum hydroxide, sulfuric acid, and phosphoric acid
Location	
Material discharged	Process Water, Calcium Sulfate, Aluminum hydroxide, 93% sulfuric acid, 17% sulfuric acid, 80% phosphoric acid
Volume discharged	13,165 gallons (total process water); 38.59lbs 93% sulfuric acid, 211lbs 17% sulfuric acid, 44.87lbs 80% phosphoric acid
pH	
Cause	Sump pump failure
Discharge to surface water	
Volume reaching surface water	
Incident reported	Oral reports to EPA and EPD

Incident date	March 15, 2014
Incident description	Release of sodium hydroxide.
Location	Die Repair
Material discharged	25% Sodium Hydroxide
Volume discharged	<100 gallons
pH	9.5
Cause	Control valve failure
Discharge to surface water	No
Volume reaching surface water	None
Incident reported	EPD

Incident date	August 18, 2014
Incident description	Release of untreated process waters
Location	
Material discharged	Diluted solution of sodium hydroxide
Volume discharged	400 gallons
pH	Between 9 and 10
Cause	Leak when transferring from temporary to permanent storage tank.
Discharge to surface water	No
Volume reaching surface water	None
Incident reported	Oral to EPA and EPD.

Incident date	February 15, 2015
Incident description	Sludge from thickener tank release
Location	Environmental
Material discharged	Lime
Volume discharged	400-500 gallons
pH	7.5
Cause	Piping elbow came apart
Discharge to surface water	No
Volume reaching surface water	n/a
Incident reported	Yes

Incident date	January 4, 2016
Incident description	NAS Wastewater Spill from Broken Pipe
Location	Pipe from Preneutralization Basin
Material discharged	NAS Wastewater - Caustic (7%), Water (93%)
Volume discharged	Caustic (7%) - 7,953 gallons
pH	10.41 (collected at septic system prior to creek)
Cause	Pipe from Preneutralization Basin broke
Discharge to surface water	Weir in storm drain diverted flow to septic system which pumps back to WWT - no release occurred
Volume reaching surface water	None
Incident reported	Oral Reports to NRC & EPD. Email to EPD - Angel White and Bryan Heard - documenting pH readings in creek that show no release occurred.

TABLE 4-4: SUMMARY OF RELEASES FROM JUNE 2014 TO FEBRUARY 2024
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Incident date	April 19, 2016
Incident description	Caustic Spill DRT
Location	Outside Die Repair
Material discharged	25-50% caustic solution (remaining volume is water)
Volume discharged	300 gallons of 25-50% caustic solution
pH	Ranged from 8.51 to 11.14 from sample locations in area.
Cause	A solenoid valve failed on the caustic system allowing the 1st and 2nd rinse tanks to overflow through vent pipes outside and onto the ground (soil and concrete).
Discharge to surface water	No
Volume reaching surface water	None - contained and prevented from reaching storm drains
Incident reported	Oral reports to NRC & EPD. Written report to EPA & EPD.

Incident date	June 29, 2016
Incident description	Molten Aluminum Explosion
Location	Cast House - Hot Top
Material discharged	Debris - Aluminum and Concrete
Volume discharged	NA
pH	NA
Cause	Water came into contact with molten aluminum during casting of molds
Discharge to surface water	NA
Volume reaching surface water	NA
Incident reported	Oral reports to NRC and EPD.

Incident date	May 8, 2017
Incident description	Unknown black sludge that was dumped from a contractor's vacuum truck
Location	Hydrochloric Acid Containment area and drain to Preneutralization Basin in WWT along roadway
Material discharged	
Volume discharged	Unknown (sludge = 3 drums; 14,000 gallons impacted water in preneutralization basin)
pH	8
Cause	Contractor vacuum truck driver washed out truck in containment area
Discharge to surface water	No
Volume reaching surface water	None
Summary of Clean Up	No - spill was in containment and did not reach environment. Contractor was notified and removed the solids and affected process water, sampled for disposal profile and disposed of by others.
Incident reported	Yes, reported in Semi-Annual Non-Compliance Report dated July 12, 2017

Incident date	May 24, 2017
Incident description	Treated SAS waste water overflowed tank F1 into containment then overflowed outside containment
Location	SAS WWT building
Material discharged	Treated SAS wastewater from tank F1
Volume discharged	Approximately 500 gallons
pH	F1 tank set point pH 5.5 (5<pH<6)
Cause	pipe clogged between process tanks F1 and T1, overflowed F1
Discharge to surface water	No
Volume reaching surface water	None
Incident reported	No -not reportable.

TABLE 4-4: SUMMARY OF RELEASES FROM JUNE 2014 TO FEBRUARY 2024
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Incident date	October 12, 2017
Incident description	25% Die Burn out Caustic was spilled from overturned tote during transfer. Reached storm water drain and was captured in stormwater containment.
Location	Bulk Caustic tank area
Material discharged	25% Die Burn out Caustic
Volume discharged	100-125 gallons
pH	~12
Cause	Tote lid was not secured and tote fell off fork lift during transfer
Discharge to surface water	No - contained in stormwater containment/sump
Volume reaching surface water	NA
Incident reported	Not Reported - below reportable amount

Incident date	November 6, 2017
Incident description	Leaking gasket flange observed by operator at 11:30 am, called in maintenance to repair. 11:45 am maintenance did not empty tank prior to replacing flange, acid shot out over containment area and flowed to storm drain vault.
Location	Nitric tank behind A-1 (anodizing line)
Material discharged	63% nitric acid
Volume discharged	30 gallons
pH	<2
Cause	worn out flange, and maintenance did not follow proper line breaking to release pressure or empty tank prevent spill
Discharge to surface water	No - reached stormwater containment sump & diverted to wastewater system
Volume reaching surface water	NA
Incident reported	Oral reports to NRC and EPD.

Incident date	November 21, 2017
Incident description	pipe coupling broke at sump pit in wastewater treatment, non-hazardous process water spilled on surface and into storm drain
Location	wastewater treatment sump pit
Material discharged	process water
Volume discharged	5000 gallons
pH	45451
Cause	pipe broke at coupling
Discharge to surface water	yes - confirmed did not reach offsite
Volume reaching surface water	approx. 5,000 gallons
Incident reported	Not reportable

Incident date	March 6, 2018
Incident description	Drum slipped out of drum clamp on forklift during loading for disposal, hit ground and dented lid, spilling contents
Location	Hazardous waste storage building
Material discharged	D001 Hazardous Waste - Paintline Aromatic 100 solvent
Volume discharged	25 gallons
pH	
Cause	Drum slipped out of clamp - raining weather conditions
Discharge to surface water	no
Volume reaching surface water	na
Incident reported	Oral and Written Reports submitted to EPA, DOT and EPD

TABLE 4-4: SUMMARY OF RELEASES FROM JUNE 2014 TO FEBRUARY 2024
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Incident date	April 8, 2018
Incident description	Caustic/rinse tank overflow through vent line to outside causing a wet area visual on the ground outside DRT
Location	Outside Die Repair & Tooling
Material discharged	NaOH / Water (<25% solution); RQ 4,000 lbs (25% solution)
Volume discharged	less than 200 gal (estimated at 75-100 gal)
pH	>11
Cause	Maitnenance engaged a pump inside DRT and it caused the tank to overflow into the vent lines outside
Discharge to surface water	No
Volume reaching surface water	NA
Incident reported	Not Reported

Incident date	June 25, 2018
Incident description	Equipment failure at Casting cooling tower releasing reuse-water
Location	Casting Cooling Tower
Material discharged	Re-use water
Volume discharged	Unknown
pH	Neutral (6-8)
Cause	Water from cooling tower overran secondary containment, Maintenace Ditch Containment Sump Pump Failed
Discharge to surface water	Yes
Volume reaching surface water	Unknown
Incident reported	No

Incident date	July 23, 2018
Incident description	Visually observed water overflow from Brite Dip Scrubber Containment area to storm drain nearby, water from Casting cooling tower from overflow from casting pit clean out
Location	Brite Dip Scrubber Containment Area, Northside of Casting
Material discharged	Re-use Water
Volume discharged	Unknown
pH	Neutral (6-8)
Cause	Equipment Failure
Discharge to surface water	Yes
Volume reaching surface water	Unknown
Incident reported	No

Incident date	August 20, 2018
Incident description	Hazardous Waste Drum slipped from clamp on forklift during transport to 90-day storage area
Location	90-day storage area
Material discharged	hazardous waste D001 - waste solvent (line flush & paint)
Volume discharged	50 gallons
pH	NA
Cause	clamp lost grip on drum and drum slipped from elevated height hitting ground and spilling contents
Discharge to surface water	No
Volume reaching surface water	NA
Incident reported	Yes - Written and Oral Reports to EPA & EPD

TABLE 4-4: SUMMARY OF RELEASES FROM JUNE 2014 TO FEBRUARY 2024
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Incident date	August 7, 2020
Incident description	The DCU feed tank reptured and was caught on the first round of fire watch on Friday 8/7/20 at 11:00 pm.
Location	Phosphoric Recovery, Buffing, and A-1 Basket crane que area. The solution was in 3 different containment areas and 2 concrete areas inside the plant building.
Material discharged	85% Water and 15% Phosphoric Acid
Volume discharged	18,372 pounds / 2000 gallons
pH	Not Recorded - acidic
Cause	A polyethylene tank was over 20 years old and deteriorated.
Discharge to surface water	No
Volume reaching surface water	NA
Incident reported	No - contained inside building, no release to environment

Incident date	September 8, 2020
Incident description	Employees were pumping out the casting pit to be able to get access to a float switch that failed and pumped to much water back into #6 cooling tower. Water overran Cooling Tower containment.
Location	Cooling Tower #6 / Casting concrete yard
Material discharged	water with dilute cooling tower inhibitor
Volume discharged	2000 gallons
pH	neutral
Cause	Operator error / pumped more water into Cooling tower than it could hold
Discharge to surface water	yes
Volume reaching surface water	1250 gallons
Incident reported	No

Incident date	February 5, 2022
Incident description	Caustic released when hose disconnected from air diaphragm pump during unloading/loading process
Location	Bulk Caustic Tank Area
Material discharged	25% Sodium hydroxide (spent die repair caustic)
Volume discharged	150 gallons
pH	>12
Cause	Equipment failure - hose disconnected from pump
Discharge to surface water	No - stopped at containment at Maint. Ditch and was pumped to storage for WW treatment
Volume reaching surface water	NA
Incident reported	No (below RQ and did not reach surface water)

Incident date	February 8, 2022
Incident description	Forklift driver was removing tote from trailer in loading area. One of the forks punctured the plastic tote and the driver immediately placed the forks down and a maintenance employee working the area grabbed some chemical gloves and turned the tote onto its side so that all of the contents would not spill out.
Location	Loading/Receiving Area
Material discharged	Cleaner - Sulfuric Acid
Volume discharged	194 gallons
pH	<2
Cause	Punctured tote with fork lift forks
Discharge to surface water	No
Volume reaching surface water	NA
Incident reported	No

TABLE 4-4: SUMMARY OF RELEASES FROM JUNE 2014 TO FEBRUARY 2024
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Incident date	August 24, 2022
Incident description	The casting table was having mechanical issues, and hydraulic oil used in the process was not flowing as it normally does. Compressed air was put into a valve attached to the system at 80 psi and insufficient pressurization indicated the 2.5-inch pipe located under the concrete slab near the casting pit, was breached. Hydraulic oil was assumed to have leaked in the area outside of the pit area. The pipes are surrounded by sand and gravel not lined under the slab and sit outside of containment.
Location	Casting Pit Area
Material discharged	Hydraulic Oil
Volume discharged	660 gallons
pH	NA
Cause	Breached pipe underground
Discharge to surface water	NA
Volume reaching surface water	NA
Incident reported	Yes - Oral and Written, & Follow-up Investigation Reports

Incident date	March 8, 2023
Incident description	Tote of Aromatic 100 solvent fell off the fork lift during transit. Tote had a faulty lid that came off when the tote fell.
Location	Outside of paintline
Material discharged	Aromatic 100 solvent (naptha solvent)
Volume discharged	125 gallons (estimated from contents remaining in tote)
pH	NA
Cause	Tote fell off the fork lift and had a faulty lid
Discharge to surface water	NA
Volume reaching surface water	NA
Incident reported	Yes - Oral & Written

Incident date	June 28, 2023
Incident description	The pump that was being used to pump the partially-treated wastewater from the thickener tank to the prenute tank fell off the concrete pad at the filtration basin.
Location	waste water treatment thickner tank
Material discharged	Treated wastewater and wastewater sludge
Volume discharged	approx. 1500 gallons
pH	pH readings indicated neutral pH (8.5 @ RO feed tank, 8.18 @ creek)
Cause	equipment failure - Pump malfunction on thickener tank
Discharge to surface water	Yes - storm drains to outfall 008
Volume reaching surface water	225-300 gal
Incident reported	Not reported

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 4-5: CAST HOUSE SOIL SAMPLE ANALYTICAL RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

CONSTITUENTS	WELL ID:	SB2		SB3		SB4		SB5	
	SAMPLE DATE:	12/28/2022	12/28/2022	12/28/2022	12/28/2022	12/28/2022	12/28/2022	12/28/2022	12/28/2022
	DEPTH:	10'-12'	20'-22'	13'-15'	21'-23'	8'-10'	13'-15'	10'-12'	16'-18'
TPH DRO (mg/kg)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
PAHs (multiple constituents)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-Dioxane (ug/kg)		NA	NA	NA	NA	NA	NA	NA	NA
Ethylene Chloride (ug/kg)		NA	NA	NA	NA	NA	NA	NA	NA

CONSTITUENTS	WELL ID:	SB8		SB13		SB14	
	SAMPLE DATE:	12/29/2022	12/29/2022	12/29/2022	12/29/2022	12/29/2022	12/29/2022
	DEPTH:	6'-8'	18'-20'	13'-15'	21'-23'	8'-10'	20'-25'
TPH DRO (mg/kg)		687.0	BDL	BDL	BDL	BDL	BDL
PAHs (multiple constituents)		BDL	BDL	BDL	BDL	BDL	BDL
1,4-Dioxane (ug/kg)		BDL	NA	NA	NA	NA	NA
Ethylene Chloride (ug/kg)		BDL	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram
ug/kg - micrograms per kilogram
BDL = Below Detection Limit
NA - Not Analyzed

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 4-6: SOLID WASTE MANAGEMENT UNITS WITH CORRECTIVE ACTIONS COMPLETED
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	SWMU DESCRIPTION	REASON FOR CORRECTIVE ACTION	CORRECTIVE ACTION	CORRECTIVE ACTION DATE
2	Chromium Hydroxide Sand Drying Beds	RCRA Regulated Unit. Received clarified sludge (FO19) from aluminum chemical conversion coating wastewater treatment. Clarified wastewaters leached into the groundwater.	HWMU closed according to closure plan and included in Post Closure Care Permit.	NA
3	Chromium Hydroxide Landfill	RCRA Regulated Unit. Land disposal unit for F019 sludge from Chromium Hydroxide Sand Drying Beds.	HWMU closed according to closure plan and included in Post Closure Care Permit.	NA
4	Surface Impoundment (Settling Pond & Polishing Pond)	RCRA Regulated Unit. Settling pond portion received non-clarified, pH adjusted, polymerized wastewater from anodizing wastewater treatment. Settling Pond acted as a clarifier. Claried wastewater from the treatment of aluminum chemical conversion coating wastewaters was discharged into the Settling Pond. Polishing pond portion on unit received supernate from settling pond. Clarified wastewaters from the chemical conversion coating wastewater treatment system was considered to contain some F019 sludge. Based on the Mixture Rule, the water and sludge in the Surface Impoundment was considered to be F019 waste.	HWMU closed according to closure plan and included in Post Closure Care Permit.	NA
6	Aluminum Hydroxide Land Treatment Unit	RCRA Regulated Unit. Sludge considered to be F019 wastes was pumped from the Settling Pond to four sand drying beds. Sludge was land applied. All the sludge was considered to be F019 sludge based on the Mixture Rule.	HWMU closed according to closure plan and included in Post Closure Care Permit.	NA

TABLE 4-6: SOLID WASTE MANAGEMENT UNITS WITH CORRECTIVE ACTIONS COMPLETED
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	SWMU DESCRIPTION	REASON FOR CORRECTIVE ACTION	CORRECTIVE ACTION	CORRECTIVE ACTION DATE
7/46	Tank Farm Unit	Accumulation Tank for Waste Solvent (SWMU 7)	HWMU closed according to closure plan. SWMU 7 and 46 combined to make HWMU Tank Farm Unit.	1996-present
		Solvent Tank Farm (SWMU 46)	On-going air injection system.	1997-present
11	Anodizing Wastewater Treatment System and Piping Upstream of Settling Pond	Underground drain line leaked caustic near process water recycling system equalization basin.	In situ neutralization and soil removal	Sept 2012
		More contaminated soil was discovered under concrete near equalization basin and was remediated.	In situ neturalization and soil removal	January 2013
		Spills and leaks over many years had impacted the soils under the tanks in this storage area.	Tanks, foundations, and concrete were removed and soils with high and low pH were neutralized in situ.	June-July 2013
13	Truck Shop Pipe Discharge	Oily discharge from Truck Shop oil/water separater contaminated soil.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
14	Truck Shop Parking Area	Oily water from an oil/water separator for dust control in the Truck Shop parking area. Soils in the area were contaminated.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995

TABLE 4-6: SOLID WASTE MANAGEMENT UNITS WITH CORRECTIVE ACTIONS COMPLETED
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	SWMU DESCRIPTION	REASON FOR CORRECTIVE ACTION	CORRECTIVE ACTION	CORRECTIVE ACTION DATE
16	Truck Shop Parking Area	Diesel and motor oil spilled on the ground.	Removed water and contaminated soil.	February 2006
		While removing concrete during a general cleanup of the area behind the maintenance building, a contractor found a drum of paint booth drippings.	Excavated the drum along with small amount of contaminated soil. Drum and soils were disposed of as D001 waste	May 2009
		General use for metal parts storage with a 20 ft X 50 ft storage area for empty drums. Contaminated soils were discovered during the RCRA Facility Investigation.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
		While removing concrete duuring a general cleanup of the area behind the maintenance building, a contractor found a drum of paint booth drippings.	Excavated along with small amount of contaminated soil and disposed as D001 waste	May 2012
17	Drum Crusher Area	Contaminated soils were discovered during the RCRA Facility Investigation.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
18	Storm Sewer System That Conducted Hydraulic Oils, Acids, Caustics, Solvents Including Ditches	Spills of caustic occurred on August 25 and August 30 to the stormwater ditch leading to un-named tributary of Mineral Springs Branch.	Removed contamination and neutralized some water in situ	August - September, 2006
		A hydraulic oil spill was discovered on a road. Cleanup was interrupted by a storm event placing small amount of oil in a stormwater ditch leading to un-named tributary of Mineral Springs Branch.	Absorbents used and contaminated water were removed.	October 2008
		A fuel tank leak on a supplier's truck spilled diesel fuelinto the scales pit. Some of the diesel fuel leaked into the stormwater ditch leading to un-named tributary of Mineral Springs Branch.	Responsible party (supplier) remediated spill to pit at the scales.	November 2009

TABLE 4-6: SOLID WASTE MANAGEMENT UNITS WITH CORRECTIVE ACTIONS COMPLETED
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	SWMU DESCRIPTION	REASON FOR CORRECTIVE ACTION	CORRECTIVE ACTION	CORRECTIVE ACTION DATE
		A contractor was transfering waste to a vacuum truck and a plugged valve caused a surge of ammonium bifluoride and caustic liquid to spill onto soil near a drain. The spill may have reached the sormwater ditch leading to un-named tributary of Mineral Springs Branch.	Liquid spilled was removed by the contractor that caused the spill.	June 2011
		Piping and the open creek/ditch received oil leaks from hydrauilc presses, storm water, and process wastewater containing acids, caustics, and solvents.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
19	Area West of Die Shop	Open ground area that received discarded metal filings, petroleum coolant, and graphite.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
23	Inactive Oil/Water Separator	An inactive oil/water separator was positioned to intercept creekwater that carried hydraulic oil, storm water, and process wastewaters discussed with SWMU No. 18.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
29	Steam Cleaner Area	Machinery and mobile equipment are cleaned on a concrete apron. Runoff to the Settling Pond occurred until new treatment system was installed in fall of 1991.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
35	Sink Frame Building Area	Building and area that contained the initial aluminum extrusion business, including paint and fabrication processes. Contaminated soils were discovered during the RCRA Facility Investigation.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
42	Cooling Tower Areas (6 areas)	Areas received spills from cooling towers. Contaminated soils were discovered during the RCRA Facility Investigation.	Areas of concern have been capped with concrete. Metals contamination is not mobile in soil.	1995 and earlier

TABLE 4-6: SOLID WASTE MANAGEMENT UNITS WITH CORRECTIVE ACTIONS COMPLETED
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	SWMU DESCRIPTION	REASON FOR CORRECTIVE ACTION	CORRECTIVE ACTION	CORRECTIVE ACTION DATE
7/46	Tank Farm Unit	Accumulation Tank for Waste Solvent (SWMU 7)	HWMU closed according to closure plan. SWMU 7 and 46 combined to make HWMU Tank Farm Unit.	1996-present
		Solvent Tank Farm (SWMU 46)	On-going air injection system.	1997-present
50	F019 Spill area	F019 sludge was discovered in the Calcium Aluminate Landfill area.	Contaminated soil was removed and disposed of in Bon L's CAMU (Surface Impoundment Closure Area)	July-August, 1995
53	Furnace Foundation in Casting	An old reverbratory furnace bottom was discovered in the cast house near the current furnaces when heaving concrete was noticed just south of the holding furnace.	All burried materials were removed, tested and disposed as nonhazardous wastes	December 2008
54	Hydraulic Oil Storage Tank Area	Area contained storage tanks for hydraulic oil. Soil had been contaminated with oil that contained PCBs.	Excavated soil to risk-level PCB concentrations	June-July 2013
55	Die Repair Process	Soil under Die Repair Process is contaminated with caustic. Soils had high pH values.	Remediation soil removal and disposal.	Sept. 2013

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 4-7: SOLID WASTE MANAGEMENT UNITS REQUIRING NO FURTHER ACTIONS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	SWMU DESCRIPTION
1	Calcium Aluminate Landfill
8	Temporary F019 Drum and Roll-Off Container Storage Area
9	Roll-Off Container Storage Area, CrOH Sludge Tank and CrOH Filter Press
10	Paintline Wastewater Treatment System and all piping
12	Truck Shop Sump plus Piping and Trench
15	Area Under Truck Shop Oil/Water Separator
20	Discharge Areas from Fabrication Building
21	Former Oil/Water Seperator Near Fabrication Building
22	Active Oil/Water Separator
24	Reported Trash Dump(shown on 1966 topo)
25	Reported Trash Dump Near Chromium Hydroxide Landfill
26	Demolition/Construction Debris Disposal Area
27	Acid Spill Area Near Phosphoric Acid Storage
28	Scrubbers Serving Fabrication Building
30	Battery Recharge Stations
31	Paintline Spill Area
32	Old Melter Burial Areas (3 areas) - Casting Offices, West of Settling Pond, Near Truck Shop
33	Fork Lift Shop Oil Sump
34	Exterior Trash Containers (3)
36	Sump Below Paint Booths
37	Fabrication Building Cooling Tower Discharge Ditch
38	Discharge Areas from Sinks Not Connected to Sanitary or Process Sewers
39	Former Employee Parking Lot
40	Buffing Dust Area in Fabrication Building
41	Paint Hook Burn-Off Oven
43	Former Die Shop Waste Oil/Solvent Area
44	Chromium Hydroxide Sand Drying Beds Closure Stockpile Area
45	Container Cleaner Unit
47	Underground Storage Tank
48	Paintline Pit
51	Oil Changing Area
52	Pipe Disposal Area

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 4-8: SOLID WASTE MANAGEMENT UNITS WITH ON-GOING CORRECTIVE ACTIONS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SWMU #	SWMU DESCRIPTION	Reason for Corrective Action if Needed	Corrective Action	Corrective Action Date	FUNCTION/DESCRIPTION
49	PCE Degreasing Unit	PCE Degreasing Unit	Soil vapor extraction system operated between 1995 and 2004. On-going groundwater remediation using pump and treat and in-situ chemical oxidation.	1994 to present	Tank vaporized PCE to degrease extrusions. Sludge containing PCE was probably discharged to soil and/or the storm sewer system (SWMU 18).

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 5-1: INSPECTION SCHEDULE
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

INSPECTION ITEM	INSPECTION DESCRIPTION	INSPECTION FREQUENCY
Aluminum Hydroxide Land Treatment Unit	1. Visually inspect for vegetative distress, insect infestation, woody plant infiltration, erosion, or bare vegetative areas. 2. Visually inspect the Surface Water Monitoring Stations for structural integrity and for the presence and legibility of identification. 3. Note the reason for inspection: routine or post-rainfall.	1. Quarterly 2. Following heavy rainfall events or natural disaster
Hazardous Waste Management Area	1. Visually inspect for vegetative distress, insect infestation, woody plant infiltration, erosion, or bare vegetative areas. 2. Visually inspect drainage features for structural integrity and the presence of erosion. 3. Note the reason for inspection: routine or post-rainfall.	1. Quarterly 2. Following heavy rainfall events or natural disaster
Chromium Hydroxide Landfill	1. Visually inspect for vegetative distress, insect infestation, woody plant infiltration, erosion, or bare vegetative areas. 2. Visually inspect drainage features for structural integrity and the presence of erosion. 3. Note the reason for inspection: routine or post-rainfall.	1. Quarterly 2. Following heavy rainfall events or natural disaster
Tank Farm Unit	1. Visually inspect for cracks or breaks in the concrete cover. 2. Note the reason for inspection: routine or post-rainfall.	1. Quarterly 2. Following heavy rainfall events or natural disaster
Property Fence and Signage Inspection	1. Visually inspect the fence for any breaks, collapses, erosion, excessive rust, or any other damage. 2. Visually inspect the signage for its presence and legibility.	1. Quarterly 2. Following natural disaster
Monitoring Well Inspection	1. Visually inspect for damage or deterioration to the well pad, well vault, well lock, well cap including insect infiltration at the edges of the well pad. 2. Visually inspect for the presence and legibility of the well label, the presence of pooled water inside the well vault, and the presence of measuring point on top of the well casing.	1. Quarterly 2. Following natural disaster

Note:
1) Heavy rainfall event is defined as 3.0 inches or more in a single day.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 6-1: WATER SUPPLY WELLS SURVEY INFORMATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL NO.	OWNER	LATTITUDE	LONGITUDE	DEPTH (FT)	CASING DEPTH (FT)	YEAR DRILLED	ELEVATION (FT)
1	J.W. Hughie 11 Beech St. Newnan	33 23' 19"	84 49' 41"	320	70	1977	890
2	Fred L. Schronder 16 Beech St. Newnan	33 23' 17"	84 49' 45"	255	65	1974	940
3	Garnett H. Shirley 132 Temple Ave. Newnan	33 23' 17"	84 49' 46"	230	71	1972	920
4	Dixie Hill Enterprises McDowell Brothers Wedgewood Subdivision Newnan	33 23' 16"	84 49' 58"	unknown	unknown	1977	960
5	Dixie Hill Enterprises McDowell Brothers Wedgewood Subdivision Newnan	33 23' 17"	84 50' 10"	187	31	1977	840
6	Westside School Newnan	33 22' 27"	84 49' 48"	302	113	1954	860
7	Roy E. Knox Belt Rd. Newnan	33 22' 12"	84 49' 37"	136	19	1958	880

Prepared by/Date: TRK/02-22-2024
Checked by/Date: MPL/02-28-2024

TABLE 6-2: WELL CONSTRUCTION AND SURVEY INFORMATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL ID	WELL TYPE	DATE INSTALLED	DRILLER	ELEVATION PVC CASING (ft NGVD)	PAD ELEVATION (ft NGVD)	ELEVATION WELL BOTTOM (ft NGVD)	TOTAL WELL DEPTH (ft bgs)	AUGER REFUSAL	AUGER DIAMETER (in)	DEPTH TO SCREEN (ft)	SCREEN LENGTH (ft)	SLOT SIZE (in)	DEPTH TO SAND (ft)	DEPTH TO BENTONITE (ft)	GEOLOGIC UNIT MONITORED	WELL COORDINATES	
																NORTHING	EASTING
																(State Plane, ft)	
MW2SR	TYPE II	9/20/1990	LAYNE	918.60	917.90	905.10	13.5	NO	8	2.5	10		1.0	0.9	SAPROLITE	1230454.0	301086.6
MW2DR	TYPE II	9/20/1990	LAYNE	918.40	918.00	878.90	39.5	YES	8	29.5	10	0.01	19.0	16.0	SAPROLITE	1230451.6	301079.0
MW4SR	TYPE II	9/21/1990	LAYNE	909.80	907.80	881.80	28.0	NO	8	18.0	10	0.01	16.0	14.0	SAPROLITE	1229378.7	300519.6
MW7D	TYPE II	9/22/1989	ATEC	903.30	900.70	855.80	47.5	YES	8	37.0	10	0.01	34.0	30.0	SAPROLITE	1230256.8	300293.5
MW13S	TYPE II	11/29/1989	ATEC	952.50	950.40	927.50	25.0	NO	9	15.0	10	0.01	13.0	10.5	SAPROLITE	1231252.6	302075.1
MW17D	TYPE II	4/27/1990	LAYNE	912.60	911.10	878.20	34.4	YES	8	24.0	10	0.01	22.0	20.0	SAPROLITE	1229374.1	300619.6
MW18S	TYPE II	5/1/1990	LAYNE	903.80	901.70	883.00	20.8	NO	8	10.3	10	0.01	8.3	6.3	SAPROLITE	1229517.9	300563.4
MW18D	TYPE II	5/1/1990	LAYNE	903.90	901.80	869.30	34.6	YES	8	24.1	10	0.01	22.1	20.1	SAPROLITE	1229522.4	300563.3
MW19S	TYPE II	4/26/1990	LAYNE	906.90	907.00	875.70	31.2	NO	8	20.8	10	0.01	18.8	16.8	SAPROLITE	1229447.1	300351.6
MW19D	TYPE II	4/20/1990	LAYNE	907.00	907.10	863.80	43.2	YES	8	32.8	10	0.01	30.8	28.8	SAPROLITE	1229444.9	300355.3
MW20S	TYPE II	4/30/1990	LAYNE	880.30	880.40	864.80	15.5	NO	8	5.1	10	0.01	3.1	1.1	SAPROLITE	1229603.2	300053.8
MW20D	TYPE II	4/30/1990	LAYNE	880.00	880.30	839.90	40.1	YES	8	29.6	10	0.01	27.6	25.6	SAPROLITE	1229603.7	300048.9
MW21D	TYPE II	5/3/1990	LAYNE	871.90	871.90	831.30	40.6	YES	8	30.2	10	0.01	28.2	26.2	SAPROLITE	1229726.1	299864.9
MW24D	TYPE II	5/3/1990	LAYNE	926.20	926.20	887.70	38.5	YES	8	28.0	10	0.01	26.0	24.0	SAPROLITE	1229399.6	300956.0
MW26S	TYPE II	5/21/1990	LAYNE	935.50	935.90	913.60	21.9	NO	8	11.5	10	0.01	9.5	7.5	SAPROLITE	1230306.8	301422.0
MW26D	TYPE II	5/21/1990	LAYNE	935.50	935.90	889.90	45.6	YES	8	35.1	10	0.01	33.1	31.1	SAPROLITE	1230308.6	301420.3
MW27S	TYPE II	5/22/1990	LAYNE	914.20	911.50	902.50	11.7	NO	8	1.3	10	0.01	0.3	0.1	SAPROLITE	1230295.7	301218.2
MW27D	TYPE II	5/22/1990	LAYNE	912.30	911.50	883.00	29.3	YES	8	18.8	10	0.01	16.8	14.8	SAPROLITE	1230298.8	301222.0
MW28S	TYPE II	5/23/1990	LAYNE	909.60	908.20	896.90	12.7	NO	8	2.3	10	0.01	0.3	0.0	SAPROLITE	1230041.7	301034.9
MW28D	TYPE II	5/23/1990	LAYNE	909.80	908.20	881.00	28.8	YES	8	18.4	10	0.01	16.4	14.4	SAPROLITE	1230040.8	301039.3
MW31D	TYPE II	7/10/1990	LAYNE	928.80	925.80	891.80	37.0	YES	8	27.0	10	0.01	25.0	22.5	SAPROLITE	1229633.6	300729.8
MW32S	TYPE II	7/10/1990	LAYNE	922.70	920.80	887.70	35.0	NO	8	25.0	10	0.01	23.0	20.5	SAPROLITE	1229782.9	300704.5
MW32D	TYPE II	7/10/1990	LAYNE	922.60	920.90	877.60	45.0	YES	8	35.0	10	0.01	33.0	30.5	SAPROLITE	1229786.5	300704.9
MW35D	TYPE II	7/16/1990	LAYNE	922.30	920.40	898.30	24.0	YES	8	14.0	10	0.01	11.5	9.5	SAPROLITE	1229892.3	300933.7
MW36S	TYPE II	8/7/1990	LAYNE	940.90	940.90	915.90	25.0	NO	8	15.0	10	0.01	13.0	10.0	SAPROLITE	1231001.7	301953.5
MW36D	TYPE II	8/7/1990	LAYNE	941.00	941.00	900.60	40.4	YES	8	35.0	5	0.01	33.0	30.5	SAPROLITE	1230997.7	301957.4
MW37D	TYPE II	8/8/1990	LAYNE	932.40	932.50	869.40	63.0	YES	8	53.0	10	0.01	51.0	48.0	SAPROLITE	1230125.4	301763.9
MW39D	TYPE II	8/13/1990	LAYNE	927.90	928.00	892.70	35.2	YES	8	25.0	10	0.01	23.0	20.0	SAPROLITE	1229905.2	301235.6
MW40D	TYPE II	8/17/1990	SUNRISE	938.70	938.90	912.70	26.0	YES	8	16.0	10	0.01	14.0	11.0	SAPROLITE	1230812.2	301765.7
MW41D	TYPE II	8/17/1990	SUNRISE	938.20	938.50	910.20	28.0	YES	7	18.0	10	0.01	16.0	13.0	SAPROLITE	1230554.2	301593.0
MW42S	TYPE II	11/7/1990	LAYNE	891.70	889.10	866.20	25.5	NO	8	15.5	10	0.01	12.0	9.4	SAPROLITE	1229998.9	300027.0
MW43S	TYPE II	5/30/1990	LAYNE	881.60	879.00	859.60	22.0	NO	10	6.8	10	0.01	2.5	0.0	SAPROLITE	1230160.0	300050.0
MW44S	TYPE II	5/31/1990	LAYNE	890.70	888.20	871.70	19.0	NO	10	7.2	10	0.01	2.1	0.0	SAPROLITE	1230492.7	300105.4
MW44D	TYPE II	5/31/1990	LAYNE	890.80	888.10	851.30	39.5	YES	10	29.5	10	0.01	27.0	25.0	SAPROLITE	1230483.8	300105.1
MW45S	TYPE II	5/14/1992	LAYNE	898.00	895.40	881.68	16.3	NO	8	4.0	10	0.01	3.0	1.5	SAPROLITE	1230665.6	300199.8
MW48S	TYPE II	12/7/1995	KILMAN	898.40	896.30	877.40	21.0	NO	8	5.0	15	0.02	4.0	2.0	SAPROLITE	1230242.3	300747.8
MW49S	TYPE II	12/7/1995	KILMAN	901.20	898.70	887.20	14.0	YES	8	4.0	10	0.02	3.5	2.0	SAPROLITE	1230178.8	300781.2
MW50S	TYPE II	12/7/1995	KILMAN	898.50	895.70	883.50	15.0	YES	8	5.0	10	0.02	4.5	2.0	SAPROLITE	1230085.6	300817.6
MW51S	TYPE II	10/23/1997	ENV. EX.	929.10	926.40	907.97	21.1	YES	6	8.5	10	0.01	6.5	4.5	SAPROLITE	1230289.1	301318.7
MW52S	TYPE II	1/13/1997	ENV. EX.	929.90	927.40	910.40	19.5	YES	6	6.5	10	0.01	5.0	3.5	SAPROLITE	1230256.7	301328.5
MW53S	TYPE II	11/24/1997	ENV. EX.	904.20	901.40	883.45	20.8	NO	8	8.0	10	0.01	6.0	4.0	SAPROLITE	1229746.5	300486.6
MW54S	TYPE II	11/25/1997	ENV. EX.	895.90	893.10	878.03	17.9	NO	8	5.0	10	0.01	3.0	1.0	SAPROLITE	1230028.0	300287.0
MW73S	TYPE II	10/12/2006	PDMNT	938.30	938.50	909.37	28.9	NO	8	18.0	10	0.01	16.0	14.0	SAPROLITE	1230625.6	301622.5
MW75S	TYPE II	10/13/2006	PDMNT	938.30	938.60	907.97	30.3	NO	8	20.0	10	0.01	18.0	15.0	SAPROLITE	1230464.4	301477.3
MW76S	TYPE II	10/13/2006	PDMNT	938.10	938.30	907.73	30.4	NO	8	20.0	10	0.01	18.0	15.0	SAPROLITE	1230417.1	301417.7
MW76D	TYPE II	4/23/2012	PDMNT	938.10	938.40	893.10	45.0	YES	8	35.0	10	0.01	32.0	2.0	SAPROLITE	1230420.5	301423.1
MW77S	TYPE II	1/16/2007	PDMNT	937.80	938.40	908.07	29.7	NO	8	20.0	10	0.01	17.0	16.0	SAPROLITE	1230535.8	301559.5
MW77D	TYPE II	4/23/2012	PDMNT	938.20	938.40	897.20	41.0	YES	8	20.0	10	0.01	33.0	2.0	SAPROLITE	1230539.3	301562.9
MW78S	TYPE II	1/16/2007	PDMNT	938.40	938.60	908.51	29.9	NO	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1230439.5	301455.1
MW79S	TYPE II	3/5/2007	PDMNT	938.30	938.60	907.97	30.3	NO	8	20.0	10	0.01	17.5	16.0	SAPROLITE	1230472.5	301404.0

TABLE 6-2: WELL CONSTRUCTION AND SURVEY INFORMATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL ID	WELL TYPE	DATE INSTALLED	DRILLER	ELEVATION PVC CASING (ft NGVD)	PAD ELEVATION (ft NGVD)	ELEVATION WELL BOTTOM (ft NGVD)	TOTAL WELL DEPTH (ft bgs)	AUGER REFUSAL	AUGER DIAMETER (in)	DEPTH TO SCREEN (ft)	SCREEN LENGTH (ft)	SLOT SIZE (in)	DEPTH TO SAND (ft)	DEPTH TO BENTONITE (ft)	GEOLOGIC UNIT MONITORED	WELL COORDINATES (State Plane, ft)	
																NORTHING	EASTING
MW80S	TYPE II	3/6/2007	PDMNT	938.10	938.60	907.76	30.3	NO	8	20.0	10	0.01	17.5	16.0	SAPROLITE	1230560.6	301474.3
MW81S	TYPE II	3/6/2007	PDMNT	938.20	938.50	907.87	30.3	NO	8	20.0	10	0.01	17.5	16.0	SAPROLITE	1230564.5	301554.7
MW82S	TYPE II	3/7/2007	PDMNT	934.30	934.60	908.00	26.3	NO	8	20.0	10	0.01	14.3	16.0	SAPROLITE	1230420.4	301461.2
MW82D	TYPE II	4/23/2012	PDMNT	934.30	934.60	900.30	34.0	YES	8	24.0	10	0.10	22.0	2.0	SAPROLITE	1230414.4	301467.4
MW83S	TYPE II	3/7/2007	PDMNT	934.10	934.60	908.27	25.8	NO	8	20.0	10	0.01	14.3	16.0	SAPROLITE	1230475.0	301538.1
MW83D	TYPE II	1/11/2016	Atlas Geo	934.20	934.50	893.20	41.0	YES	8-8.25	31.0	10	0.01	28.0	21.0	SAPROLITE/PWR	1230466.8	301546.2
MW85D	TYPE III	10/26/2009	PDMNT	938.30	938.50	893.30	45.0	NO	10 to 4.5	40.0	5	0.01	38.0	36.0	PWR	1230553.5	301547.5
MW86D	TYPE III	10/27/2009	PDMNT	938.20	938.50	898.20	40.0	YES	10 to 4.5	35.0	5	0.01	33.0	30.0	SAPROLITE	1230493.3	301505.2
MW87D	TYPE III	12/29/2010	PDMNT	938.30	938.60	893.30	45.0	NO	10 to 4.5	43.0	2	0.01	41.0	38.0	PWR	1230472.8	301478.7
MW88D	TYPE III	12/29/2010	PDMNT	937.90	938.50	902.90	35.0	NO	10 to 4.5	33.0	2	0.01	30.0	28.0	PWR	1230555.3	301550.6
MW89D	TYPE III	1/11/2010	PDMNT	938.30	938.60	903.30	35.0	NO	10 to 4.5	33.0	2	0.01	31.0	29.0	PWR	1230471.1	301476.4
MW90D	TYPE II	9/20/2010	PDMNT	861.20	861.20	833.90	27.3	YES	8	17.3	10	0.01	15.0	13.0	SAPROLITE	1228839.8	299693.7
MW91D	TYPE II	9/20/2010	PDMNT	873.80	870.70	836.40	37.4	YES	8	27.4	10	0.01	25.0	23.0	SAPROLITE	1228828.0	299787.6
MW92D	TYPE II	9/21/2010	PDMNT	931.40	928.20	889.40	42.0	YES	8	32.0	10	0.01	30.0	28.0	SAPROLITE	1228872.9	300493.6
MW93D	TYPE II	9/21/2010	PDMNT	905.00	901.70	869.50	35.5	YES	8	25.0	10	0.01	23.0	21.0	SAPROLITE	1229054.9	300446.3
MWOS1S	TYPE II	7/9/1990	LAYNE	868.60	868.90	853.60	15.0	NO	8	5.0	10	0.01	4.0	2.0	SAPROLITE	1229431.6	299969.9
MWOS1D	TYPE II	7/9/1990	LAYNE	868.80	869.00	838.80	30.0	YES	8	20.0	10	0.01	17.5	15.5	SAPROLITE	1229434.9	299971.4
MWOS2S	TYPE II	7/11/1990	LAYNE	887.10	885.10	871.10	16.0	NO	8	6.0	10	0.01	5.0	3.0	SAPROLITE	1229356.6	300244.8
MWOS2D	TYPE II	7/11/1990	LAYNE	886.90	885.10	858.40	28.5	YES	8	18.8	10	0.01	17.0	14.7	SAPROLITE	1229355.7	300243.2
MWOS3S	TYPE II	7/12/1990	LAYNE	866.20	866.10	851.20	15.0	NO	8	5.0	10	0.01	4.0	2.0	SAPROLITE	1229234.4	299897.6
MWOS3D	TYPE II	7/12/1990	LAYNE	865.80	865.90	821.00	44.8	YES	8	35.0	10	0.01	32.5	14.5	SAPROLITE	1229237.4	299892.4
MWOS4S	TYPE II	7/12/1990	LAYNE	878.60	879.20	862.60	16.0	NO	8	6.0	10	0.01	4.5	2.0	SAPROLITE	1229148.9	300089.5
MWOS4D	TYPE II	7/12/1990	LAYNE	879.10	879.00	834.10	45.0	YES	8	35.0	10	0.01	33.0	30.5	SAPROLITE	1229151.0	300086.6
MWOS5D	TYPE II	7/19/1990	LAYNE	877.10	877.10	807.10	70.0	YES	8	60.0	10	0.01	57.5	55.0	SAPROLITE	1229244.2	299658.3
MWOS6D	TYPE II	11/6/1990	LAYNE	861.70	862.00	825.50	36.2	YES	8	26.2	10	0.01	22.5	20.0	SAPROLITE	1228927.5	299726.9
MWOS7D	TYPE II	11/5/1990	LAYNE	894.30	894.40	875.30	19.0	YES	8	9.0	10	0.01	6.5	4.5	SAPROLITE	1229212.3	300644.2
MWOS8D	TYPE II	10/4/1991	SUNRISE	874.10	874.10	832.10	42.0	YES	8	32.0	10	0.01	30.0	28.0	SAPROLITE	1228980.9	299878.4
MWBR1	TYPE III	9/29/1992	LAYNE	903.60	900.60	818.60	85.0	N/A	8-12	65.0	20	0.01	62.0	60.0	BEDROCK	1230247.0	300278.5
MWBR3	TYPE III	9/30/1992	LAYNE	865.70	865.50	702.98	162.7	N/A	4-12	62.5	OPEN	N/A	N/A	N/A	BEDROCK	1229242.3	299881.4
MWBR5	TYPE III	10/6/1992	LAYNE	903.10	900.90	794.10	109.0	N/A	4-8	85.0	OPEN	N/A	N/A	N/A	BEDROCK	1230277.5	300286.1
MWBR6	TYPE III	2/8/1993	LAYNE	879.60	879.40	750.60	129.0	N/A	8-12	89.0	OPEN	N/A	N/A	N/A	BEDROCK	1229266.6	299669.3
RW1	TYPE II	4/17/1994	LAYNE	933.60	934.19	883.60	50.0	NO	12	20.0	30	0.02	16.0	14.0	SAPROLITE	1230534.5	301650.7
RW3	TYPE II	8/9/1993	ENV. EX.	900.40	901.10	855.40	45.0	NO	12	15.0	30	0.01	13.0	11.0	SAPROLITE	1230193.0	300262.8
RW4	TYPE II	4/22/1994	LAYNE	907.70	908.10	855.70	52.0	NO	12	22.0	30	0.02	15.0	14.0	SAPROLITE	1229971.5	300939.3
RW5	TYPE II	4/13/1994	LAYNE	901.30	902.30	851.30	50.0	NO	12	20.0	30	0.02	16.0	15.0	SAPROLITE	1229668.3	300437.9
RW6	TYPE II	12/7/1992	LAYNE	909.60	909.10	878.60	31.0	NO	18	11.0	20	0.02	9.0	7.5	SAPROLITE	1229378.3	300540.5
RW7	TYPE II	7/14/1994	LAYNE	866.60	866.80	806.60	60.0	NO	14	20.0	40	0.02	18.0	16.5	SAPROLITE	1229360.9	299944.2
RW8	TYPE II	11/20/1997	ENV. EX.	905.90	906.00	873.65	32.3	YES	10	12.0	20	0.02	10.0	7.5	SAPROLITE	1229497.3	300603.8
RW9	TYPE II	11/17/1997	ENV. EX.	901.50	901.20	870.50	31.0	YES	10	11.0	20	0.02	9.0	7.0	SAPROLITE	1229572.2	300517.1
RW10	TYPE II	11/12/1997	ENV. EX.	901.70	901.80	871.21	30.5	YES	10	11.0	20	0.02	9.0	7.0	SAPROLITE	1229600.9	300461.1
RW11	TYPE II	11/11/1997	ENV. EX.	900.50	900.50	859.98	40.5	YES	10	10.0	30	0.02	8.0	6.0	SAPROLITE	1229773.1	300550.4
RW13	TYPE II	11/19/1997	ENV. EX.	887.60	887.50	864.37	23.2	YES	10	8.0	15	0.02	6.5	4.0	SAPROLITE	1229337.9	300289.1
RW14	TYPE II	12/28/2011	KILMAN	931.20	931.70	888.04	43.2	YES	10	22.0	20	0.01	19.0	17.0	SAPROLITE	1230345.3	301356.6
RW15	TYPE II	12/29/2011	KILMAN	931.10	931.70	883.44	47.7	YES	10	28.0	20	0.01	25.0	22.0	SAPROLITE	1230336.1	301363.8
PZM1A	TYPE II	10/29/1996	ENV. EX.	934.30	934.50	907.70	26.6	NO	2	22.0	5	0.01	20.0	18.0	SAPROLITE	1230555.5	301669.6
PZM1B	TYPE II	10/29/1996	ENV. EX.	934.30	934.50	911.30	23.0	NO	2	18.0	5	0.01	15.5	10.0	SAPROLITE	1230550.1	301675.9
PZM3A	TYPE II	10/28/1996	ENV. EX.	903.00	900.00	875.70	27.3	NO	2	18.6	5	0.01	12.6	8.5	SAPROLITE	1230206.0	300254.5
PZM3B	TYPE II	10/28/1996	ENV. EX.	902.90	900.00	878.40	24.5	NO	2	19.5	5	0.01	15.0	8.0	SAPROLITE	1230219.8	300255.1
PZM4A	TYPE II	10/28/1996	ENV. EX.	910.30	907.80	893.29	17.0	NO	2	9.3	5	0.01	6.0	2.0	SAPROLITE	1229975.7	300926.3
PZM4B	TYPE II	10/28/1996	ENV. EX.	909.70	907.00	891.85	17.9	NO	2	10.0	5	0.01	7.0	4.0	SAPROLITE	1229994.7	300930.4

TABLE 6-2: WELL CONSTRUCTION AND SURVEY INFORMATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL ID	WELL TYPE	DATE INSTALLED	DRILLER	ELEVATION PVC CASING (ft NGVD)	PAD ELEVATION (ft NGVD)	ELEVATION WELL BOTTOM (ft NGVD)	TOTAL WELL DEPTH (ft bgs)	AUGER REFUSAL	AUGER DIAMETER (in)	DEPTH TO SCREEN (ft)	SCREEN LENGTH (ft)	SLOT SIZE (in)	DEPTH TO SAND (ft)	DEPTH TO BENTONITE (ft)	GEOLOGIC UNIT MONITORED	WELL COORDINATES	
																NORTHING	EASTING
																(State Plane, ft)	
PZM5A	TYPE II	10/28/1996	ENV. EX.	905.30	902.40	869.13	36.2	NO	2	28.0	5	0.01	25.0	20.0	SAPROLITE	1229659.9	300443.6
PZM5B	TYPE II	10/28/1996	ENV. EX.	905.00	902.30	868.87	36.1	NO	2	28.4	5	0.01	25.0	20.0	SAPROLITE	1229671.1	300451.8
PZM6A	TYPE II	10/28/1996	ENV. EX.	911.80	908.80	874.41	37.4	NO	2	30.0	5	0.01	25.0	20.0	SAPROLITE	1229383.1	300551.4
PZM6B	TYPE II	10/28/1996	ENV. EX.	912.00	909.00	873.61	38.4	NO	2	30.0	5	0.01	25.0	20.0	SAPROLITE	1229381.8	300566.5
PZM8A	TYPE II	11/24/1997	ENV. EX.	909.30	906.60	876.62	32.7	NO	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1229488.6	300610.9
PZM8B	TYPE II	11/24/1997	ENV. EX.	907.90	905.10	875.15	32.8	NO	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1229505.9	300587.1
PZM9A	TYPE II	11/21/1997	ENV. EX.	904.60	901.70	872.60	32.0	YES	8	19.0	10	0.01	17.0	15.0	SAPROLITE	1229585.6	300526.0
PZM9B	TYPE II	11/21/1997	ENV. EX.	904.90	901.70	873.13	31.8	YES	8	19.0	10	0.01	17.0	15.0	SAPROLITE	1229591.9	300533.2
PZM10A	TYPE II	11/21/1997	ENV. EX.	904.70	901.80	871.62	33.1	YES	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1229594.7	300474.0
PZM10B	TYPE II	11/21/1997	ENV. EX.	904.30	901.50	871.43	32.9	NO	8	20.0	10	0.01	17.0	15.0	SAPROLITE	1229586.4	300488.6
PZM11A	TYPE II	11/24/1997	ENV. EX.	903.40	900.60	870.49	32.9	NO	8	10.0	20	0.01	18.0	6.0	SAPROLITE	1229764.4	300541.7
PZM11B	TYPE II	11/21/1997	ENV. EX.	903.20	900.60	870.51	32.7	NO	8	10.0	20	0.01	8.0	6.0	SAPROLITE	1229783.5	300572.2
PZM12A	TYPE II	11/21/1997	ENV. EX.	903.00	900.30	870.04	33.0	NO	8	10.0	20	0.01	8.0	6.0	SAPROLITE	1229798.1	300592.6
PZM12B	TYPE II	11/21/1997	ENV. EX.	900.80	899.20	868.01	32.8	NO	8	10.0	20	0.01	8.0	6.0	SAPROLITE	1229826.2	300589.3
PZM13A	TYPE II	11/24/1997	ENV. EX.	890.50	887.70	865.07	25.4	YES	8	13.0	10	0.01	11.0	9.0	SAPROLITE	1229346.6	300282.6
PZM13B	TYPE II	11/24/1997	ENV. EX.	890.80	888.10	867.80	23.0	YES	8	13.0	10	0.01	11.0	9.0	SAPROLITE	1229356.8	300275.5

Notes:
1) bgs = below ground surface
2) in = inches
3) ft = feet
4) N/A = Not Available
5) NGVD = National Geodetic Vertical Datum
6) NM = Not Measured
7) PWR = Partially Weathered Rock
8) Type II wells are constructed with a single casing
9) Type III wells are constructed with a double casing.

Prepared by/Date: AWE/10-19-2021
Checked by/Date: MPL/10-19-2021

TABLE 6-3: SUMMARY OF TOP OF BEDROCK ELEVATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

BORING NUMBER	GROUND SURFACE ELEVATION	DEPTH TO TOP OF ROCK	TOP OF ROCK ELEVATION
MW1D	932.38	65.50	866.88
MW2DR	916.04	39.50	876.54
MW4D	908.01	35.20	872.81
MW6D	904.30	43.80	860.50
MW7D	900.67	47.50	853.17
MW8D	890.30	39.50	850.80
MW9D	880.07	48.30	831.77
MW12D	906.83	38.10	868.73
MW15D	918.97	49.00	869.97
MW16D	911.38	31.40	879.98
MW17D	910.86	34.40	876.46
MW18D	901.47	34.60	866.87
MW19D	906.91	43.20	863.71
MW20D	879.99	40.10	839.89
MW21D	872.09	40.60	831.49
MW22D	902.65	43.80	858.85
MW23D	913.55	40.70	872.85
MW24D	926.05	38.50	887.55
MW25D	920.93	40.80	880.13
MW26D	931.63	45.60	886.03
MW27D	910.99	29.30	881.69
MW28D	908.23	28.80	879.43
MW29D	903.31	21.50	881.81
MW30D	925.54	27.80	897.74
MW31D	925.57	37.00	888.57
MW32D	920.45	45.00	875.45
MW33D	936.78	30.00	906.78
MW34D	938.59	35.00	903.59
MW35D	919.97	24.00	895.97
MW36S	940.97	25.00	915.97
MW36D	941.07	40.40	900.67
MW37D	932.23	63.00	869.23
MW38D	962.46	52.00	910.46
MW39D	927.72	35.20	892.52
MW40D	938.09	26.00	912.09
MW41D	938.10	28.00	910.10
MW44D	888.05	39.50	848.55
MWOS1D	869.11	30.00	839.11
MWOS2D	884.75	28.50	856.25
MWOS3D	866.25	44.80	821.45
MWOS4D	879.05	45.00	834.05
MWOS5D	876.89	70.00	806.89
MWOS6D	861.65	36.20	825.45
MWOS7D	894.63	19.00	875.63
MWOS8D	873.83	42.00	831.83
C1	922.00	74.60	847.40
C2	939.00	144.00	795.00
C3	878.00	125.00	753.00

Note:
1. Data source: 2014 PCC Permit Renewal Application.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 6-4: GROUNDWATER ELEVATION DATA, MARCH 2023
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL NUMBER	DATE	WELL CASING ELEVATION (feet)	DEPTH TO WATER BELOW CASING (feet)	WATER TABLE ELEVATION (feet MSL)	TOTAL WELL DEPTH (feet)	DEPTH TO SCREEN (feet)	SCREEN LENGTH (feet)	MONITORED UNIT
MW26D	3/13/2023	935.50	17.81	917.69	45.6	35.1	10	SAPROLITE
MW27D	3/13/2023	912.30	4.78	907.52	29.3	18.8	10	SAPROLITE
MW41D	3/13/2023	938.20	15.01	923.19	28.0	18.0	10	SAPROLITE
MW73S	3/13/2023	938.30	14.80	923.50	28.9	18.0	10	SAPROLITE
MW75S	3/13/2023	938.30	17.85	920.45	30.3	20.0	10	SAPROLITE
MW76S	3/13/2023	938.10	20.39	917.71	30.4	20.0	10	SAPROLITE
MW76D	3/13/2023	938.10	19.93	918.17	45.0	35.0	10	SAPROLITE
MW77S	3/13/2023	937.80	15.30	922.50	29.7	20.0	10	SAPROLITE
MW77D	3/13/2023	938.20	15.38	922.82	41.0	20.0	10	SAPROLITE
MW78S	3/13/2023	938.40	18.94	919.46	29.9	20.0	10	SAPROLITE
MW79S	3/13/2023	938.30	22.83	915.47	30.3	20.0	10	SAPROLITE
MW80S	3/13/2023	938.10	16.30	921.80	30.3	20.0	10	SAPROLITE
MW81S	3/13/2023	938.20	15.25	922.95	30.3	20.0	10	SAPROLITE
MW82S	3/13/2023	934.30	15.25	919.05	26.3	20.0	10	SAPROLITE
MW82D	3/13/2023	934.30	14.93	919.37	34.0	24.0	10	SAPROLITE
MW83S	3/13/2023	934.10	11.41	922.69	25.8	20.0	10	SAPROLITE
MW83D	3/13/2023	934.20	11.58	922.62	41.0	31.0	10	SAPROLITE/PWR
MW85D	3/13/2023	938.30	15.72	922.58	45.0	40.0	5	PWR
MW86D	3/13/2023	938.20	16.58	921.62	40.0	35.0	5	SAPROLITE
MW87D	3/13/2023	938.30	17.99	920.31	45.0	43.0	2	PWR
MW88D	3/13/2023	937.90	15.15	922.75	35.0	33.0	2	PWR
MW89D	3/13/2023	938.30	17.14	921.16	35.0	33.0	2	PWR
RW14	3/13/2023	931.20	20.99	910.21	43.2	22.0	20	SAPROLITE
RW15	3/13/2023	931.10	15.15	915.95	47.7	28.0	20	SAPROLITE
MW2SR	3/14/2023	918.60	5.52	913.08	13.5	2.5	10	SAPROLITE
MW2DR	3/14/2023	918.40	6.90	911.50	39.5	29.5	10	SAPROLITE
MW4SR	3/14/2023	909.80	22.29	887.51	28.0	18.0	10	SAPROLITE
MW7D	3/14/2023	903.30	14.22	889.08	47.5	37.0	10	SAPROLITE
MW13S	3/13/2023	952.50	15.28	937.22	25.0	15.0	10	SAPROLITE
MW17D	3/14/2023	912.60	25.74	886.86	34.4	24.0	10	SAPROLITE
MW19S	3/14/2023	906.90	23.60	883.30	31.2	20.8	10	SAPROLITE
MW19D	3/14/2023	907.00	23.74	883.26	43.2	32.8	10	SAPROLITE
MW20D	3/13/2023	880.00	7.37	872.63	40.1	29.6	10	SAPROLITE
MW21D	3/14/2023	871.90	2.86	869.04	40.6	30.2	10	SAPROLITE
MW24D	3/13/2023	926.20	27.50	898.70	38.5	28.0	10	SAPROLITE
MW27S	3/13/2023	914.20	5.80	908.40	11.7	1.3	10	SAPROLITE
MW28S	3/14/2023	909.60	5.82	903.78	12.7	2.3	10	SAPROLITE
MW31D	3/14/2023	928.80	33.82	894.98	37.0	27.0	10	SAPROLITE
MW32S	3/14/2023	922.70	25.18	897.52	35.0	25.0	10	SAPROLITE
MW36D	3/13/2023	941.00	13.38	927.62	40.4	35.0	5	SAPROLITE
MW37D	3/13/2023	932.40	5.68	926.72	63.0	53.0	10	SAPROLITE
MW39D	3/14/2023	927.90	22.93	904.97	35.2	25.0	10	SAPROLITE
MW40D	3/13/2023	938.70	12.97	925.73	26.0	16.0	10	SAPROLITE
MW42S	3/14/2023	891.70	19.24	872.46	25.5	15.5	10	SAPROLITE
MW43S	3/14/2023	881.60	8.11	873.49	22.0	6.8	10	SAPROLITE
MW44S	3/14/2023	890.70	5.50	885.20	19.0	7.2	10	SAPROLITE
MW44D	3/14/2023	890.80	5.66	885.14	39.5	29.5	10	SAPROLITE
MW45S	3/14/2023	898.00	8.33	889.67	16.3	4.0	10	SAPROLITE
MW48S	3/14/2023	898.40	1.16	897.24	21.0	5.0	15	SAPROLITE
MW49S	3/14/2023	901.20	3.46	897.74	14.0	4.0	10	SAPROLITE
MW50S	3/14/2023	898.50	1.69	896.81	15.0	5.0	10	SAPROLITE
MW51S	3/14/2023	929.10	13.03	916.07	21.1	8.5	10	SAPROLITE
MW52S	3/14/2023	929.90	12.90	917.00	19.5	6.5	10	SAPROLITE
MW54S	3/14/2023	895.90	7.75	888.15	17.9	5.0	10	SAPROLITE
MWOS1S	3/14/2023	868.60	3.77	864.83	15.0	5.0	10	SAPROLITE
MWOS3D	3/14/2023	865.80	4.09	861.71	44.8	35.0	10	SAPROLITE
MWOS5D	3/13/2023	877.10	10.82	866.28	70.0	60.0	10	SAPROLITE
MWOS6D	3/14/2023	861.70	4.42	857.28	36.2	26.2	10	SAPROLITE
MWOS7D	3/14/2023	894.30	6.70	887.60	19.0	9.0	10	SAPROLITE
MWOS8D	3/14/2023	874.10	9.88	864.22	42.0	32.0	10	SAPROLITE
MWBR3	3/14/2023	865.70	5.39	860.31	162.7	62.5	OPEN	BEDROCK
MWBR6	3/13/2023	879.60	11.11	868.49	129.0	89.0	OPEN	BEDROCK

TABLE 6-4: GROUNDWATER ELEVATION DATA, MARCH 2023
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL NUMBER	DATE	WELL CASING ELEVATION (feet)	DEPTH TO WATER BELOW CASING (feet)	WATER TABLE ELEVATION (feet MSL)	TOTAL WELL DEPTH (feet)	DEPTH TO SCREEN (feet)	SCREEN LENGTH (feet)	MONITORED UNIT
MW18D	3/14/2023	903.90	15.99	887.91	34.6	24.1	10	SAPROLITE
MW18S	3/14/2023	903.80	15.50	888.30	20.8	10.3	10	SAPROLITE
MW20S	3/13/2023	880.30	7.02	873.28	15.5	5.1	10	SAPROLITE
MW26S	3/13/2023	935.50	17.20	918.30	21.9	11.5	10	SAPROLITE
MW28D	3/14/2023	909.80	5.52	904.28	28.8	18.4	10	SAPROLITE
MW32D	3/14/2023	922.60	25.70	896.90	45.0	35.0	10	SAPROLITE
MW35D	3/14/2023	922.30	20.49	901.81	24.0	14.0	10	SAPROLITE
MW36S	3/13/2023	940.90	12.77	928.13	25.0	15.0	10	SAPROLITE
MW53S	3/14/2023	904.20	11.45	892.75	20.8	8.0	10	SAPROLITE
MW90D	3/14/2023	861.20	7.65	853.55	27.3	17.3	10	SAPROLITE
MW91D	3/14/2023	873.80	13.80	860.00	37.4	27.4	10	SAPROLITE
MW92D	3/14/2023	931.40	41.52	889.88	42.0	32.0	10	SAPROLITE
MW93D	3/14/2023	905.00	22.39	882.61	35.5	25.0	10	SAPROLITE
MWOS1D	3/14/2023	868.80	4.04	864.76	30.0	20.0	10	SAPROLITE
MWOS2D	3/14/2023	886.90	9.38	877.52	28.5	18.8	10	SAPROLITE
MWOS2S	3/14/2023	887.10	9.20	877.90	16.0	6.0	10	SAPROLITE
MWOS3S	3/14/2023	866.20	4.20	862.00	15.0	5.0	10	SAPROLITE
MWOS4D	3/14/2023	879.10	8.75	870.35	45.0	35.0	10	SAPROLITE
MWOS4S	3/14/2023	878.60	DRY	DRY	16.0	6.0	10	SAPROLITE
MWBR1	3/14/2023	903.60	16.70	886.90	85.0	65.0	20	BEDROCK
MWBR5	3/14/2023	903.10	16.23	886.87	109.0	85.0	OPEN	BEDROCK

Notes:
1) bgs = below ground surface
2) in = inches
3) ft = feet
4) N/A = Not Available
5) NGVD = National Geodetic Vertical Datum
6) NM = Not Measured
7) PWR = Partially Weathered Rock

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 6-5: SUMMARY OF HYDRAULIC CONDUCTIVITY DATA -- SLUG TEST METHOD
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL NO.	TEST INTERVAL (FEET)	MATERIAL TESTED	% FINES[1]	COEFFICIENT OF HYDRAULIC CONDUCTIVITY (K^2) (FEET/MINUTE)
9D	37.8 - 47.8	sand[3]	25.8	3.4×10^{-5}
9S	3.2 - 13.0	sand	N/A[4]	3.4×10^{-3}
12D	27.7 - 37.7	sand[3]	20.8	5.0×10^{-4}
12S	2.5 - 12.5	sand[3]	22.6	3.0×10^{-3}
13S	15.0 - 25.0	sand	N/A[4]	1.8×10^{-3}
15D	39.0 - 49.0	sand[3]	17.8	2.0×10^{-4}
15S	9.7 - 19.7	sand	N/A[4]	5.3×10^{-3}
21D	30.2 - 40.2	sand	N/A[4]	6.4×10^{-4}
21S	4.9 - 14.9	sand	N/A[4]	1.9×10^{-3}
27D	18.8 - 28.8	sand	N/A[4]	7.5×10^{-4}
		Geometric Mean		**8.9×10^{-4}**

1. Calculated using Bouwer and Rice Method.
2. Percent of soil sample passing a #200 sieve (i.e., clay and silt).
3. Grain size analyses performed on soil samples collected from the test interval of the well.
4. N/A = not analyzed.
5. Data source: 2014 PCC Permit Renewal Application.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 6-6: SUMMARY OF HYDRAULIC CONDUCTIVITY -- PACKER TEST METHOD
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

BORING	TEST INTERVAL DEPTH (FT)	GAUGE PRESSURE (PSI)	COEFFICIENT OF HYDRAULIC CONDUCTIVITY (CM/SEC)	COEFFICIENT OF HYDRAULIC CONDUCTIVITY (FT/MIN)
C-1	26.5 - 39.1	5	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		10	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		15	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
	35.5 - 48.1	10	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		15	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		20	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
	48.1 - 60.7	10	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		20	1.2×10^{-5}	2.4×10^{-5}
		30	1.6×10^{-4}	3.2×10^{-4}
	60.7 - 73.3	15	3.6×10^{-4}	7.1×10^{-4}
		25	3.2×10^{-4}	6.3×10^{-4}
		35	2.8×10^{-4}	5.5×10^{-4}
C-2	85.1 - 97.7	25	7.8×10^{-4}	1.5×10^{-3}
		35	7.2×10^{-4}	1.4×10^{-3}
	97.8 - 110.4	15	6.9×10^{-4}	1.4×10^{-3}
		35	5.8×10^{-4}	1.1×10^{-3}
		55	5.1×10^{-4}	1.0×10^{-3}
	106.4 - 119.0	20	7.9×10^{-4}	1.6×10^{-3}
		40	6.8×10^{-4}	1.3×10^{-3}
	119.0 - 131.6	25	3.6×10^{-5}	7.1×10^{-5}
		45	3.6×10^{-5}	7.1×10^{-5}
		65	3.2×10^{-5}	6.3×10^{-5}
	130.6 - 143.2	25	2.0×10^{-5}	3.9×10^{-5}
		50	2.0×10^{-5}	3.9×10^{-5}
		75	1.9×10^{-5}	3.7×10^{-5}
C-3	80.5 - 93.1	25	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		35	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		45	1.1×10^{-6}	2.2×10^{-6}
	85.2 - 97.8	25	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		35	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		45	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
	97.8 - 110.4	25	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		40	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		55	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
	110.4 - 123.0	25	$<1 \times 10^{-7}$	$<2 \times 10^{-7}$
		45	3.5×10^{-6}	6.9×10^{-6}
			Geometric Mean	**9.0×10^{-6}**

Note:
1. Data source: 2014 PCC Permit Renewal Application.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 7-1: ABSTRACT HISTORY OF GROUNDWATER INVESTIGATIONS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

DOCUMENT TITLE/ PREPARED BY:	DATE ON COVER	DOCUMENT PURPOSE	CONCLUSIONS OR CONTENT
Groundwater Assessment Report for Volatile Organic Compounds by Special Environmental Services (SES)	October 26, 1990, revised March 14, 1991	To evaluate source and extent of low levels of Perchloroethene (PCE) and Trichloroethene (TCE) discovered in groundwater onsite.	Solvent released from Solid Waste Management Unit (SWMU) 49, a degreasing unit operated in the 1950's, was the sole source of VOCs in groundwater; that there are no other active releases of VOCs at the time of the report; and, that vertical downward migration of VOCs is naturally controlled by the top of the competent bedrock.
Assessment of Potential Sources of Release of Volatile Organic Compounds, by SES	July, 1991	In response to a letter from EPD, suggesting that the polishing pond and settling pond, both in use onsite at that time, may be sources of VOCs, since the water in the ponds contained VOCs.	The degreasing operation (SWMU 49) is the only source of VOC contamination in groundwater; and that the settling and polishing ponds are not sources of VOC contamination. Includes design recommendations for a series of nine recovery wells to remediate contaminated groundwater. Includes recommendations to contain contaminated spring issuing from hillside behind the plant. The spring collection system is now known as the Hillside Spring/Low Point Connector. By June 1992, a total of 88 Type II groundwater monitoring wells had been installed at the facility.
RCRA Facility Assessment by EPD	September 1991	Preliminary phase of RCRA corrective action program with objective to clean up releases to the environment of hazardous waste or hazardous constituents. The program applies to all operating, inactive, or closed facilities that treat, store or dispose of hazardous waste and which are thereby required to obtain a RCRA permit.	A list of each SWMU and what is known about any releases at the site.
Groundwater Assessment and Corrective Action Plan Volatile Organic Compounds in Groundwater by SES	August, 1991	A revision to Groundwater Assessment Report for Volatile Organic Compounds, submitted March 1991. It includes additional information gathered during the Assessment study submitted in July 1991.	This report reinforces conclusions presented in Groundwater Assessment Report for Volatile Organic Compounds, July 1991, and introduces new data particularly in the area of groundwater modeling performed. Includes a more detailed Corrective Action Plan involving recovery wells.
RCRA Part B Permit Application for Post-Closure Care prepared by Law Environmental	1992	To assemble and organize all environmental data available for the site, in compliance with 40 CFR Part 264 facility permitting requirements.	Section A: Part A Permit Application Section B: Facility description Section C: Waste Characterization Section E: Groundwater monitoring Section I: Closure and Post Closure Care Plans for CrOH Landfill, CrOH Sludge Sand Drying Beds & Surface Impoundment Unit, ALOH Land Treatment Unit, and Tank Farm Unit Section K: Certification Statement Section L: Description of SWMUs at the Bon L facility, releases at the facility, and sampling and analytical data collected in verification of all SWMUs and AOCs. Sections D,F,G, H do not apply to this facility and Section J lists laws that don't apply as well.
Post Closure Care Permit HW-087(D) issued by Georgia EPD	April, 1992	Defines operating conditions at the Newnan Facility	Permittee must comply with the Georgia Hazardous Waste Management Act and the Rules for Hazardous Waste Management, Chapter 391-3-11, including certain portions of the Federal Hazardous Waste Regulations 40 CFR 260-279 and 124.
Bedrock Groundwater Investigation Report. By EMCON Southeast, Inc.	November 1992, Revised April 1993	To complete the horizontal and vertical definition of the plume of VOC contamination through the installation and sampling of six bedrock monitoring wells on or near the facility.	PCE occurs in the uppermost portions of the bedrock and partially weathered rock in the mid-sections of the contaminant plume, in the areas of wells BR-1, BR-4, BR-5, and BR-3. The report also concludes that mineral Springs Branch acts as a hydrogeologic boundary in both the saprolite and bedrock.

TABLE 7-1: ABSTRACT HISTORY OF GROUNDWATER INVESTIGATIONS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

DOCUMENT TITLE/ PREPARED BY:	DATE ON COVER	DOCUMENT PURPOSE	CONCLUSIONS OR CONTENT
Stage I PCE/TCE Source Area Investigation Report at the William L Bonnell Company, Inc. By EMCON Southeast, Inc.	January, 1993	To more accurately define the source of groundwater contamination suspected to emanate from the area of SWMU 49.	Accurately delineated the location and layout of the former vapor degreasing unit (SWMU 49) discussed in 1991; strengthened the earlier conclusion that the degreasing unit was the sole source of VOC contamination; eliminated other suspected sources known at the time; and concluded that rapid remediation of the contamination associated with the closed degreasing unit would be highly advisable.
Feasibility & Corrective Action Plan, by EMCON Southeast, Atlanta SE, Revised by Thomas W Watson, Inc.	March 1993	Outlines the steps required to meet the clean-up objectives for corrective action of groudwater stated in 40 CFR 264.100 (a) using acceptable engineering methods. It address the releases known from the HWMU as well as those SWMUs known to have contributed to the VOC plume on site.	Section 1: A brief site background Section 2: Summary of Monitoring well construction Section 3: Aquifer and well testing Section 4: Groundwater modeling and draw-down analysis Section 5: Corrective action discussing various remediation alternatives. Operation and maintenance, monitoring criteria, remediation plans, termination criteria, schedule of implementation, and financial assurance requirements.
RCRA Facility Investigation Workplan by EMCON Southeast, Inc.	December 1993	Site Characterization activities required under the Part B Permit	A summary of waste in each SWMU and known release at the site and approximate location of each. The technical approach of the remediation of each SWMU is given.
RCRA Facility Investigation Report by EMCON Southeast, Inc.	July 1994	Required by Sect IV of HW-087 permit dated 9/28/92, amended 9/28/93 to show the nature and extent of releases	For SWMUs, a description is given, constituents of concern listed, sampling purposes, methodology and results are given, nature and extent of contamination is described, risk is listed, and recommendations are made for certain SWMU's.
PCE Degreaser Corrective Action Plan and Vapor Extraction System Design Report, by EMCON SE	November, 1994	To initiate remediation of SWMU 49	Further delineates the location of the former degreasing unit; determines that no signicant sources of solvent or sludge were found below the containment structure of the former degreasing area; describes the installation and operation of a soil vapor extraction system (SVE), and describes recommended SVE shutdown criteria.
Solid Waste Management Units 7 and 46 Bioremediation System Pilot Test Report prepared by Thomas W. Watson, Inc.	May 1997.	To evaluate the potential for remediation of soil and groundwater affected by a solvent spill related to the Tank Farm Unit.	That in-situ bioremediation of the site was appropriate. Provided design recommendations for the system. Construction was completed in December, 1997. System operations began in January 1998. As-built drawings of the system, and monitoring reports were submitted to EPD in Semi-Annual Groundwater Monitoring and Remediation Report, March, 1998. since installation, the system has operated continuously. Soil and groundwater contamination attributable to the former tank farm unit has been greatly reduced in the interim.
Closure and Post-Closure Care Plan for the Tank Farm Unit prepared by Thomas W. Watson, Inc.	May 1997.	To close the Tank Farm Unit, no longer in use.	The report describes closure of a 5,000-gallon waste solvent accumulation tank (SWMU 7), and a 10,000-gallon tank formerly used to store virgin toluene and xylenes (SWMU 46). The report combines SWMUs 7 and 46 into a regulated unit called the Tank Farm Unit (TFU). The Closure and Post Closure Care Plan was approved by EPD in September 30, 1997. Based upon the closure and post-closure care plan approved by EPD, Zimmerman Technical Services, Inc. designed a system for the in-situ bioremediation of soils affected by a solvent spill related to the Tank Farm Unit (SWMUs 7 & 46).
Tank Farm Unit Closure Certification, by Thomas W. Watson, Inc.	Submitted to EPD in July, 1998.	Certify that the Tank Farm Unit was closed according to the plan approved by EPD on September 30, 1997.	The document certifies that the unit was closed in accordance with the Closure Plan for the unit as approved by EPD on September 30, 1997. The document further certifies that a surveyed plat of the property has been filed with Coweta County, and with the City of Newnan, GA, per requirements of 40 CFR, Part 264.116.

TABLE 7-1: ABSTRACT HISTORY OF GROUNDWATER INVESTIGATIONS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

DOCUMENT TITLE/ PREPARED BY:	DATE ON COVER	DOCUMENT PURPOSE	CONCLUSIONS OR CONTENT
Final Closure Procedures, Former PCE/TCE Degreasing Unit, Solid Waste Management Unit 49, prepared by Thomas W. Watson, Inc.	November 1998. A revised version was resubmitted to EPD in January 2000, following system shutdown and removal.	To determine the effectiveness of the SVE system, and follow through with system shutdown, if appropriate.	Data collected in 1997 thru 1998 concluded that: the SVE system had remediated soil contamination below the documented target level; groundwater in the area had been remediated; and that levels of VOCs in soil vapors recovered by the SVE system, plotted vs. time, had become asymptotic. The report recommended that the system be shut down and removed.
RCRA Part B Permit Application for Post-Closure Care prepared by Law Environmental	August 2003	Permit had expired	Renewed in 2004
Site Permit HW-087(D) issued by Georgia EPD	April 2004	Renewal of permit.	Permit In Place
Assessment of In-Situ Remediation Technolgies, Interim Report. Prepared by TWSquared.	April 2007	Interim Status Report to be submitted to Georgia EPD.	To initiate injection testing of permanganate and EHC at specified locations on property.
Class 3 Permit Modification Request Prepared by Bon L Manufacturing and TWSquared.	July 2007	To add 1,1-dichloroethane , and vinyl chloride to certain tables, to install two new monitoring wells; and to revise the Weekly Groundwater Recovery Well And Treatment System Checklist	Permit Issued
Pilot Test Report by TWSquared	June 19, 2009	Benchmark as of cover date.	Permanganate injections are effective. Distribution of the solution may require numerous injection points. Effects of EHC less definitive. Adopt sodium permanganate rather than potassium permanganate.
Groundwater Assessment and Remediation, Bon L Manufacturing Company, Main Plant Building Prepared by TWSquared	May 2010	Report of investigation to document plume assessment as of cover date.	The plume extent has been documented to the point that groundwater remediation can be implemented.
Permit Modification Request prepared by TWSquared	December 11, 2012	Request for modifications to existing site permit.	Contents include: Request to add In-Situ Chemical Oxidation (ISCO) to Remediation Plan; Addendum to Site Feasibility and Corrective Action Plan describing plan for ISCO; requests to modify sampling and analytical plan to concentrate on monitoring of groundwater remediation and include less frequent sampling of specific wells; request to extend interval of App IX monitoring from annual to every 4 years; request to abandon specific wells.
Revision 3 to the October 11, 2012 Class 3 Permit Modification Request prepared by Bon L Manufacturing, TWSquared, and EPS	August 14, 2013	Request for modifications to existing site permit.	Contents include: request to add In-Situ Chemical Oxidation (ISCO) to remedial approach including a CAP describing planned ISCO; request permanant closure of several monitoring wells; request to revise monitoring parameters based on upon source of contamination; request to change frequency of sampling for monitoring wells; request to change frequency of sampling for App. IX in POC wells; request to modify purging and sampling procedures; and to request to revise certain permit conditions.
Post Closure Care Permit Renewal Application prepared by Bon L Manufacturing, TWSquared, and EPS	October 16, 2013	Request for PCC Permit Renewal	Updating the 2003 PCC Permit Renewal Application including revisions to Section E and the Feasibility and CAP in accordance with Revision 3 to the October 11, 2012 Class 3 Permit Modification Request and the subsequent draft revised PCC Permit, which was presented for public comment in September 2013.
Post Closure Care Permit Renewal Application Revision 1 prepared by Bon L Manufacturing and EPS	June 19, 2014	Request for PCC Permit Renewal	Revision of the October 2013 PCC Permit Renewal Application requesting minor changes to the December 2013 Revised PCC Permit.

TABLE 7-1: ABSTRACT HISTORY OF GROUNDWATER INVESTIGATIONS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

DOCUMENT TITLE/ PREPARED BY:	DATE ON COVER	DOCUMENT PURPOSE	CONCLUSIONS OR CONTENT
Post Closure Care Permit Renewal Application Revision 2 prepared by Bon L Manufacturing and EPS	August 4, 2014	Request for PCC Permit Renewal	Revision of the October 2013 PCC Permit Renewal Application requesting minor changes to the December 2013 Revised PCC Permit.
Site Permit HW-087(D) issued by Georgia EPD	September 29, 2014	Renewal of permit.	Permit In Place
Groundwater Risk Assessment prepared by Bon L Manufacturing and Amec Foster Wheeler	March 11, 2016	Baseline risk assessment and calculated remedial goal options to aid design of the groundwater remedy and the long-term groundwater monitoring program at the facility.	Evaluation for occupational and residential receptors (though site will remain as industrial land use). Groundwater land use control recommended and monitoring goals were developed.
RCRA/NPDES Compliance Strategy Report prepared by Bon L Manufacturing and Amec Foster Wheeler	January 17, 2017	Prepared to present a strategy to eliminate NPDES discharge of treated groundwater and industrial wastewater while maintaining effective corrective action under PCC permit HW-087(D).	Recommended overall strategy to eliminate NPDES discharge and will prepare an Interim Corrective Measure work plan to perform the required modifications.
Request for Temporary Authorization prepared by Bon L Manufacturing and Amec Foster Wheeler	October 20, 2017	Prepared to present a strategy to initiate the implementation of the updated SWMU 49 CAP ahead of the upcoming RCRA Part B Permit Modification.	Provided updated strategy to address the SWMU 49 PCE plume including temporary shutdown of the groundwater treatment system and implementation of ISBR in the downgradient portion of the SWMU 49 PCE plume.
SWMU 49 Corrective Action Plan prepared by Bon L Manufacturing and Amec Foster Wheeler	October 20, 2017	Revise SWMU 49 Corrective Action strategy.	Revise corrective action strategy to discontinue groundwater extraction and ex-situ treatment and implement an in-situ strategy including chemical oxidation and bioremediation.
Class 3 Permit Modification Request, Post Closure Care Permit prepared by Bon L Manufacturing and Wood	5/7/2018, revised September 14, and December 18, 2018	Prepared to modify the existing Post Closure Care Permit	Modify Permit to, among other requests, incorporate the Remedial Goal Options as Groundwater Protection Standards contained in the March 11, 2016 (Revised June 30, 2016) Groundwater Risk Assessment into the Permit.
Site Permit HW-087(D) issued by Georgia EPD	April 19, 2019	Modified Permit to enhance monitoring and corrective action of contaminanted groundwater at facility.	Modified Permit conditions for post-closure care and corrective action for five closed hazardous waste management units.

PREPARED BY/DATE: AWE/03-06-2020
CHECKED BY/DATE: MPL/03-06-2020

TABLE 7-2: GROUNDWATER MONITORING PROGRAM UNDER 2019 PCC PERMIT
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Unit	Background Well	POC Wells	Annual Analysis	Semi-Annual Analysis
AlOH Land Treatment Unit	MW13S	MW42S MW43S MW44D MW44S MW45S	Appendix IX	PCE, TCE, cis-1,2-DCE, 1,1-DCE, vinyl chloride, chromium* and nickel*, ethyl benzene, toluene, total xylenes
CrOH Landfill	MW13S	MW4SR MW17D MW19S	Appendix IX	
Hazardous Waste Management Area	MW13S	MW2SR MW48S MW49S MW50S	Appendix IX	
Tank Farm Unit	MW13S	MW51S MW52S	Appendix IX	Toluene, ethylbenzene, total xylenes, PCE and TCE

Note:
* - Chromium and nickel sampled for at select POC wells on an annual basis.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 7-3: 2019 PERMIT TABLES I, II, III AND IV
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

2019 PERMIT TABLE I: GROUNDWATER PROTECTION STANDARD

AlOH Land Treatment Unit, CrOH Landfill, and Hazardous Waste Management Area (CrOH Sand Drying Bed and Surface Impoundment Unit) - Interior Monitoring Wells

HAZARDOUS CONSTITUENTS	CONCENTRATION LIMITS (mg/l)
VOCs	
tetrachloroethene (PCE)	0.31
trichloroethene (TCE)	0.014
cis-1,2-dichloroethene	0.16
vinyl chloride	0.002

2019 PERMIT TABLE II: GROUNDWATER PROTECTION STANDARD

AlOH Land Treatment Unit, CrOH Landfill, and Hazardous Waste Management Area (CrOH Sand Drying Bed and Surface Impoundment Unit) - Perimeter Monitoring Wells

HAZARDOUS CONSTITUENTS	CONCENTRATION LIMITS (mg/l)
VOCs	
tetrachloroethene (PCE)	0.005
trichloroethene (TCE)	0.005
cis-1,2-dichloroethene	0.07
vinyl chloride	0.002
1,1-dichloroethene (1,1-DCE)	0.007

2019 PERMIT TABLE III: GROUNDWATER PROTECTION STANDARD
Tank Farm Unit - Perimeter Monitoring Wells

HAZARDOUS CONSTITUENTS	CONCENTRATION LIMITS (mg/l)
VOCs	
ethylbenzene	0.002
tetrachloroethene (PCE)	0.005
toluene	0.002
trichloroethene (TCE)	0.005
total xylene	0.005

2019 PERMIT TABLE IV: GROUNDWATER PROTECTION STANDARD
Special Conditions Wells
(MW2SR, MW17D, MW42S, and MW45S)

HAZARDOUS CONSTITUENTS	CONCENTRATION LIMITS (mg/L)
Metals	
chromium	0.05
nickel	0.02

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 7-4: 2019 PERMIT TABLE V, MONITORING WELL SAMPLING AND ANALYSIS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

MONITORING WELL	SAMPLING FREQUENCY							
	Annual Basis	Semi-Annual Basis	MAINTENANCE ONLY	APPENDIX IX	TABLE I	TABLE II	TABLE III	TABLE IV
MW13S		X		X		X	X	
*MW2SR		X		X	X			X
MW4SR		X		X	X			
*MW17D		X		X		X		X
MW19S		X		X	X			
MW42S	X			X				X
MW43S				X				
MW44D				X				
MW44S				X				
MW45S	X			X				X
MW48S				X				
MW49S		X		X	X			
MW50S		X		X	X			
MW51S		X		X			X	
MW52S		X		X			X	
MW28D		X			X			
MW2DR	X				X			
MW7D	X				X			
MW19D		X			X			
MW20D	X					X		
MW21D	X					X		
MW24D	X					X		
MW27S		X			X			
MW31D		X			X			
MW32S		X			X			
MW36D	X					X		
MW37D	X					X		
MW39D	X					X		
MW40D		X			X			
MW54S	X				X			
MWOS1S		X				X		
MWOS3D		X			X			
MWOS5D		X				X		
MWOS6D		X				X		
MWOS7D	X					X		
MWOS8D	X					X		
MWBR3	X				X			
MWBR6	X					X		
MW18D			X					
MW18S			X					
MW20S			X					
MW26D			X					
MW26S			X					
MW27D			X					
MW28S			X					
MW32D			X					
MW35D			X					
MW36S			X					
MW41D			X					
MW53S			X					
MW73S			X					
MW75S			X					
MW76D			X					
MW76S			X					
MW77D			X					
MW77S			X					
MW78S			X					
MW79S			X					
MW80S			X					
MW81S			X					

TABLE 7-4: 2019 PERMIT TABLE V, MONITORING WELL SAMPLING AND ANALYSIS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

MONITORING WELL	SAMPLING FREQUENCY							
	Annual Basis	Semi-Annual Basis	MAINTENANCE ONLY	APPENDIX IX	TABLE I	TABLE II	TABLE III	TABLE IV
MW82D			X					
MW82S			X					
MW83D			X					
MW83S			X					
MW85D			X					
MW86D			X					
MW87D			X					
MW88D			X					
MW89D			X					
MW90D			X					
MW91D			X					
MW92D			X					
MW93D			X					
MWOS1D			X					
MWOS2D			X					
MWOS2S			X					
MWOS3S			X					
MWOS4D			X					
MWOS4S			X					
MWBR1			X					
MWBR5			X					

Note:
1. * Table IV - Constituents for metals will be sampled annually for the following monitoring wells:
MW2SR, MW17D, MW42S and MW45S.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 7-5: RECENT GROUNDWATER METAL RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Well	Date	Chromium (mg/L)	Nickel (mg/L)	Arsenic (mg/L)	Zinc (mg/L)	Barium (mg/L)
GWPS		**0.05**	**0.02**	**0.02**	**0.05**	**1**
AlOH LTU						
Maximum		**BDL**	**BDL**	**BDL**	**BDL**	**28.5**
MW42S	3/22/2021	BDL	BDL	NA	NA	NA
MW42S	4/18/2022	BDL	BDL	BDL	BDL	28.5
MW42S	3/17/2023	BDL	BDL	NA	NA	NA
MW43S	3/25/2021	BDL	BDL	BDL	BDL	21.0
MW44S	3/16/2021	BDL	BDL	BDL	BDL	17.3
MW44D	3/15/2023	BDL	BDL	BDL	BDL	27.6
MW45S	3/25/2021	BDL	BDL	BDL	BDL	19.7
MW45S	4/14/2022	BDL	BDL	NA	NA	NA
MW45S	3/17/2023	BDL	BDL	NA	NA	NA
TFU						
Maximum		**BDL**	**BDL**	**37.8**	**BDL**	**71.0**
MW51S	4/19/2022	BDL	BDL	BDL	BDL	71.0
MW52S	3/19/2021	BDL	BDL	22.2	BDL	45.5
MW52S	3/15/2023	BDL	BDL	35.5	BDL	37.4
MW52S	9/21/2022	NA	NA	37.8	NA	NA
MW52S	9/19/2023	NA	NA	37.6	NA	NA
CrOH LF						
Maximum		**BDL**	**BDL**	**BDL**	**BDL**	**97.6**
MW4SR	3/23/2021	BDL	BDL	BDL	BDL	97.6
MW4SR	4/14/2022	BDL	BDL	BDL	BDL	45.6
MW17D	3/23/2021	BDL	BDL	NA	NA	NA
MW17D	4/13/2022	BDL	BDL	NA	NA	NA
MW17D	3/14/2023	BDL	BDL	BDL	BDL	60.4
HWMA						
Maximum		**BDL**	**BDL**	**BDL**	**BDL**	**61.8**
MW2SR	3/25/2021	BDL	BDL	BDL	BDL	22.3
MW2SR	4/13/2022	BDL	BDL	NA	NA	NA
MW2SR	3/17/2023	BDL	BDL	NA	NA	NA
MW48S	4/18/2022	BDL	BDL	BDL	BDL	15.6
MW49S	3/15/2023	BDL	BDL	BDL	BDL	12.0
MW50S	3/18/2021	BDL	BDL	BDL	BDL	61.8
Background						
Maximum		**BDL**	**BDL**	**BDL**	**84.0**	**77.2**
MW13S	3/18/2021	BDL	BDL	BDL	80.4	74.2
MW13S	4/20/2022	BDL	BDL	BDL	80.9	77.2
MW13S	3/17/2023	BDL	BDL	BDL	84.0	72.9

BDL = Below Detection Limit

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/03-05-2024

TABLE 7-6: RECENT TOLUENE, ETHYLBENZENE AND TOTAL XYLENES RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Well	Date	Toluene µg/L	Ethylbenzene µg/L	Xylenes, Total µg/L
Tank Farm Unit POC Wells				
GWPS		**2**	**2**	**5**
Maximum		**4.4**	**49.8**	**47.3**
MW51S	3/17/2021	BDL	**22.2**	BDL
MW51S	9/28/2021	BDL	**3.55**	BDL
MW51S	4/19/2022	**4.4**	**49.8**	**47.3**
MW51S	9/22/2022	BDL	**9.1**	**6.9**
MW51S	3/20/2023	BDL	**5.5**	BDL
MW51S	9/19/2023	BDL	BDL	BDL
MW52S	3/22/2021	BDL	BDL	BDL
MW52S	9/28/2021	BDL	BDL	BDL
MW52S	4/14/2022	BDL	BDL	BDL
MW52S	9/21/2022	BDL	BDL	**11.6**
MW52S	3/15/2023	BDL	BDL	BDL
MW52S	9/19/2023	BDL	BDL	BDL
Background				
MW13S	3/22/2021	BDL	BDL	BDL
MW13S	9/28/2021	BDL	BDL	BDL
MW13S	4/20/2022	BDL	BDL	BDL
MW13S	9/21/2022	BDL	BDL	BDL
MW13S	3/17/2023	BDL	BDL	BDL
MW13S	9/21/2023	BDL	BDL	BDL

BDL = Below Detection Limit
NA = Not Analyzed

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/03-04-2024

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
PCE Plume Definition Wells						
Maximum		**65.7**	**4.5**	**BDL**	**BDL**	**BDL**
MW2DR	3/17/2021	4.0	BDL	BDL	BDL	NA
MW2DR	4/13/2022	5.5	BDL	BDL	BDL	NA
MW2DR	3/20/2023	5.9	BDL	BDL	BDL	NA
MW2DR	3/25/2024	13.3	BDL	BDL	BDL	NA
MW7D	3/17/2021	BDL	BDL	BDL	BDL	NA
MW7D	4/14/2022	BDL	BDL	BDL	BDL	NA
MW7D	3/20/2023	BDL	BDL	BDL	BDL	NA
MW7D	3/25/2024	BDL	BDL	BDL	BDL	NA
MW19D	3/17/2021	37.1	BDL	BDL	BDL	NA
MW19D	9/28/2021	42.4	BDL	BDL	BDL	NA
MW19D	4/14/2022	32.7	BDL	BDL	BDL	NA
MW19D	9/22/2022	32.1	BDL	BDL	BDL	NA
MW19D	3/20/2023	27.8	BDL	BDL	BDL	NA
MW19D	9/20/2023	34.0	BDL	BDL	BDL	NA
MW19D	3/25/2024	33.9	BDL	BDL	BDL	NA
MW19D	10/23/2024	28.8	BDL	BDL	BDL	NA
MW20D	3/16/2021	2.0	BDL	BDL	BDL	BDL
MW20D	4/20/2022	BDL	BDL	BDL	BDL	BDL
MW20D	3/14/2023	BDL	BDL	BDL	BDL	BDL
MW20D	3/20/2024	2.9	BDl	BDL	BDL	BDL
MW21D	3/17/2021	BDL	BDL	BDL	BDL	BDL
MW21D	4/14/2022	BDL	BDL	BDL	BDL	BDL
MW21D	3/14/2023	BDL	BDL	BDL	BDL	BDL
MW21D	3/22/2024	BDL	BDL	BDL	BDL	BDL
MW24D	3/17/2021	BDL	BDL	BDL	BDL	BDL
MW24D	4/12/2022	BDL	BDL	BDL	BDL	BDL
MW24D	3/20/2023	BDL	BDL	BDL	BDL	BDL
MW24D	3/22/2024	BDL	BDL	BDL	BDL	BDL
MW27D	3/17/2021	41.3	BDL	BDL	BDL	NA
MW27D	9/28/2021	47.5	BDL	BDL	BDL	NA
MW27D	4/12/2022	40.7	BDL	BDL	BDL	NA
MW27D	9/20/2022	61.2	BDL	BDL	BDL	NA
MW27D	3/13/2023	52.9	BDL	BDL	BDL	NA
MW27D	9/18/2023	54.4	BDL	BDL	BDL	NA
MW27D	3/18/2024	65.7	BDL	BDL	BDL	NA
MW27D	10/22/2024	65.6	BDL	BDL	BDL	NA
MW27S	3/17/2021	35.9	BDL	BDL	BDL	NA
MW27S	9/28/2021	31.0	BDL	BDL	BDL	NA
MW27S	4/12/2022	29.1	BDL	BDL	BDL	NA
MW27S	9/21/2022	42.6	BDL	BDL	BDL	NA
MW27S	3/20/2023	35.3	BDL	BDL	BDL	NA
MW27S	9/19/2023	51.7	BDL	BDL	BDL	NA
MW27S	3/25/2024	58.2	BDL	BDL	BDL	NA
MW27S	10/22/2024	62.0	BDL	BDL	BDL	NA
MW28S	3/17/2021	BDL	BDL	BDL	BDL	NA
MW28S	9/28/2021	BDL	BDL	BDL	BDL	NA
MW28S	4/14/2022	BDL	BDL	BDL	BDL	NA
MW28S	9/22/2022	BDL	BDL	BDL	BDL	NA
MW28S	3/20/2023	BDL	BDL	BDL	BDL	NA
MW28S	9/21/2023	6.8	4.5	BDL	BDL	NA
MW28S	3/25/2024	BDL	BDL	BDL	BDL	NA
MW28S	10/24/2024	4.8	BDL	BDL	BDL	NA
MW31D	3/18/2021	28.5	BDL	BDL	BDL	NA
MW31D	9/29/2021	40.1	BDL	BDL	BDL	NA
MW31D	4/19/2022	31.0	BDL	BDL	BDL	NA
MW31D	9/21/2022	27.0	BDL	BDL	BDL	NA

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
MW31D	3/16/2023	34.2	BDL	BDL	BDL	NA
MW31D	9/20/2023	30.8	BDL	BDL	BDL	NA
MW31D	3/20/2024	39.6	BDL	BDL	BDL	NA
MW31D	10/24/2024	30.3	BDL	BDL	BDL	NA
MW32S	3/17/2021	13.1	BDL	BDL	BDL	NA
MW32S	9/29/2021	8.49	BDL	BDL	BDL	NA
MW32S	4/14/2022	5.9	BDL	BDL	BDL	NA
MW32S	9/21/2022	36.0	BDL	BDL	BDL	NA
MW32S	3/20/2023	12.5	BDL	BDL	BDL	NA
MW32S	9/20/2023	34.9	BDL	BDL	BDL	NA
MW32S	3/25/2024	11.7	BDL	BDL	BDL	NA
MW32S	10/23/2024	32.7	BDL	BDL	BDL	NA
MW36D	3/17/2021	BDL	BDL	BDL	BDL	BDL
MW36D	4/14/2022	BDL	BDL	BDL	BDL	BDL
MW36D	3/20/2023	BDL	BDL	BDL	BDL	BDL
MW36D	3/20/2024	BDL	BDL	BDL	BDL	BDL
MW37D	3/17/2021	BDL	BDL	BDL	BDL	BDL
MW37D	4/14/2022	BDL	BDL	BDL	BDL	BDL
MW37D	3/20/2023	BDL	BDL	BDL	BDL	BDL
MW37D	3/20/2024	BDL	BDL	BDL	BDL	BDL
MW39D	3/17/2021	3.5	BDL	BDL	BDL	BDL
MW39D	4/14/2022	2.7	BDL	BDL	BDL	BDL
MW39D	3/20/2023	2.9	BDL	BDL	BDL	BDL
MW39D	3/25/2024	3.4	BDL	BDL	BDL	BDL
MW40D	3/16/2021	8.0	BDL	BDL	BDL	NA
MW40D	9/27/2021	7.14	BDL	BDL	BDL	NA
MW40D	4/11/2022	5.6	BDL	BDL	BDL	NA
MW40D	9/19/2022	5.3	BDL	BDL	BDL	NA
MW40D	3/13/2023	7.3	BDL	BDL	BDL	NA
MW40D	9/18/2023	5.1	BDL	BDL	BDL	NA
MW40D	3/18/2024	11.6	BDL	BDL	BDL	NA
MW40D	10/24/2024	6.6	BDL	BDL	BDL	NA
MW54S	3/17/2021	BDL	BDL	BDL	BDL	NA
MW54S	4/13/2022	BDL	BDL	BDL	BDL	NA
MW54S	3/20/2023	BDL	BDL	BDL	BDL	NA
MW54S	3/25/2024	BDL	BDL	BDL	BDL	NA
MWBR3	3/17/2021	BDL	BDL	BDL	BDL	NA
MWBR3	4/14/2022	BDL	BDL	BDL	BDL	NA
MWBR3	3/20/2023	BDL	BDL	BDL	BDL	NA
MWBR3	3/22/2024	BDL	BDL	BDL	BDL	NA
MWBR6	3/17/2021	BDL	BDL	BDL	BDL	BDL
MWBR6	4/14/2022	BDL	BDL	BDL	BDL	BDL
MWBR6	3/14/2023	BDL	BDL	BDL	BDL	BDL
MWBR6	3/22/2024	BDL	BDL	BDL	BDL	BDL
MWOS1S	3/19/2021	BDL	BDL	BDL	BDL	BDL
MWOS1S	9/28/2021	BDL	BDL	BDL	BDL	BDL
MWOS1S	4/18/2022	BDL	BDL	BDL	BDL	BDL
MWOS1S	9/22/2022	BDL	BDL	BDL	BDL	BDL
MWOS1S	3/16/2023	BDL	BDL	BDL	BDL	BDL
MWOS1S	9/20/2023	BDL	BDL	BDL	BDL	BDL
MWOS1S	3/21/2024	BDL	BDL	BDL	BDL	BDL
MWOS1S	10/23/2024	BDL	BDL	BDL	BDL	BDL
MWOS3D	3/18/2021	17.3	BDL	BDL	BDL	NA
MWOS3D	9/28/2021	21.0	BDL	BDL	BDL	NA
MWOS3D	4/18/2022	16.9	BDL	BDL	BDL	NA
MWOS3D	9/22/2022	16.7	BDL	BDL	BDL	NA
MWOS3D	3/16/2023	15.4	BDL	BDL	BDL	NA
MWOS3D	9/20/2023	15.7	BDL	BDL	BDL	NA

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
MWOS3D	3/20/2024	17.9	BDL	BDL	BDL	NA
MWOS3D	10/23/2024	16.6	BDL	BDL	BDL	NA
MWOS5D	3/17/2021	BDL	BDL	BDL	BDL	BDL
MWOS5D	9/29/2021	BDL	BDL	BDL	BDL	BDL
MWOS5D	4/14/2022	BDL	BDL	BDL	BDL	BDL
MWOS5D	9/22/2022	BDL	BDL	BDL	BDL	BDL
MWOS5D	3/14/2023	BDL	BDL	BDL	BDL	BDL
MWOS5D	9/20/2023	BDL	BDL	BDL	BDL	BDL
MWOS5D	3/22/2024	BDL	BDL	BDL	BDL	BDL
MWOS5D	10/23/2024	BDL	BDL	BDL	BDL	BDL
MWOS6D	3/19/2021	BDL	BDL	BDL	BDL	BDL
MWOS6D	9/28/2021	BDL	BDL	BDL	BDL	BDL
MWOS6D	4/19/2022	BDL	BDL	BDL	BDL	BDL
MWOS6D	9/22/2022	2.1	BDL	BDL	BDL	BDL
MWOS6D	3/16/2023	BDL	BDL	BDL	BDL	BDL
MWOS6D	9/20/2023	3.0	BDL	BDL	BDL	BDL
MWOS6D	3/22/2024	BDL	BDL	BDL	BDL	BDL
MWOS6D	10/23/2024	2.8	BDL	BDL	BDL	BDL
MWOS7D	3/17/2021	BDL	BDL	BDL	BDL	BDL
MWOS7D	4/14/2022	BDL	BDL	BDL	BDL	BDL
MWOS7D	3/20/2023	BDL	BDL	BDL	BDL	BDL
MWOS7D	3/22/2024	BDL	BDL	BDL	BDL	BDL
MWOS8D	3/19/2021	BDL	BDL	BDL	BDL	BDL
MWOS8D	4/19/2022	BDL	BDL	BDL	BDL	BDL
MWOS8D	3/16/2023	BDL	BDL	BDL	BDL	BDL
MWOS8D	3/21/2024	BDL	BDL	BDL	BDL	BDL
Wells in Reagent Injection Area						
Maximum		**21,800**	**485**	**2,680**	**343**	**NA**
MW26D	3/16/2021	9.0	BDL	2.3	BDL	NA
MW26D	9/27/2021	6.12	BDL	2.50	BDL	NA
MW26D	4/12/2022	5.6	BDL	2.1	BDL	NA
MW26D	9/19/2022	5.3	BDL	2.8	BDL	NA
MW26D	3/13/2023	7.2	BDL	2.5	BDL	NA
MW26D	9/18/2023	4.0	BDL	2.9	BDL	NA
MW26D	3/18/2024	4.8	BDL	2.9	BDL	NA
MW26D	10/22/2024	3.9	BDL	2.4	BDL	NA
MW41D	3/16/2021	2.6	BDL	BDL	BDL	NA
MW41D	9/27/2021	3.41	BDL	BDL	BDL	NA
MW41D	4/11/2022	2.1	BDL	BDL	BDL	NA
MW41D	9/19/2022	2.9	BDL	BDL	BDL	NA
MW41D	3/13/2023	2.6	BDL	BDL	BDL	NA
MW41D	9/18/2023	2.6	BDL	BDL	BDL	NA
MW41D	3/18/2024	2.1	BDL	BDL	BDL	NA
MW41D	10/21/2024	BDL	BDL	BDL	BDL	NA
MW73S	3/16/2021	BDL	BDL	BDL	BDL	NA
MW73S	9/27/2021	BDL	BDL	BDL	BDL	NA
MW73S	4/11/2022	BDL	BDL	BDL	BDL	NA
MW73S	9/19/2022	BDL	BDL	BDL	BDL	NA
MW73S	3/13/2023	BDL	BDL	BDL	BDL	NA
MW73S	9/18/2023	BDL	BDL	BDL	BDL	NA
MW73S	3/18/2024	BDL	BDL	BDL	BDL	NA
MW73S	10/21/2024	BDL	BDL	BDL	BDL	NA
MW75S	3/16/2021	4,180	183	180	BDL	NA
MW75S	9/27/2021	5,220	BDL	BDL	BDL	NA
MW75S	4/12/2022	2,920	135	131	BDL	NA
MW75S	9/19/2022	3,860	169	167	BDL	NA
MW75S	3/13/2023	2,450	116	112	BDL	NA
MW75S	9/18/2023	2,150	110	114	BDL	NA

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
MW75S	3/18/2024	2,400	136	139	BDL	NA
MW75S	10/21/2024	1,840	113	96.8	BDL	NA
MW76D	3/16/2021	22.9	BDL	BDL	BDL	NA
MW76D	9/27/2021	41.6	BDL	BDL	BDL	NA
MW76D	4/12/2022	37.2	BDL	BDL	BDL	NA
MW76D	9/19/2022	41.9	BDL	BDL	BDL	NA
MW76D	3/13/2023	77.4	BDL	BDL	BDL	NA
MW76D	9/18/2023	128	5.8	2.8	BDL	NA
MW76D	3/18/2024	195	3.1	BDL	BDL	NA
MW76D	10/21/2024	150	BDL	BDL	BDL	NA
MW76S	3/16/2021	237	164	77	5.3	NA
MW76S	9/27/2021	207	150	77.9	5.59	NA
MW76S	4/12/2022	195	134	63.2	BDL	NA
MW76S	9/19/2022	188	64.8	30.9	BDL	NA
MW76S	3/13/2023	197	30.6	11.9	BDL	NA
MW76S	9/18/2023	198	47.7	28.5	BDL	NA
MW76S	3/18/2024	56.9	2.3	2.5	BDL	NA
MW76S	10/21/2024	227	49.2	24.4	BDL	NA
MW77S	3/16/2021	3,410	BDL	179	BDL	NA
MW77S	9/27/2021	21,800	BDL	2,680	BDL	NA
MW77S	4/12/2022	3,320	BDL	203	BDL	NA
MW77S	9/19/2022	15,900	313	1,620	263	NA
MW77S	3/13/2023	10,500	BDL	338	BDL	NA
MW77S	9/18/2023	19,300	291	1,720	343	NA
MW77S	3/18/2024	5,810	159	740	159	NA
MW77S	10/21/2024	935	BDL	177	166	NA
MW77D	3/16/2021	984	BDL	BDL	BDL	NA
MW77D	9/27/2021	7,390	81.1	805	BDL	NA
MW77D	4/12/2022	3,370	BDL	BDL	BDL	NA
MW77D	9/19/2022	8,170	108	762	140	NA
MW77D	3/13/2023	13,100	BDL	822	BDL	NA
MW77D	9/18/2023	8,150	139	846	173	NA
MW77D	3/18/2024	19,800	375	1,360	BDL	NA
MW77D	10/21/2024	6,070	BDL	366	BDL	NA
MW78S	3/16/2021	202	BDL	BDL	BDL	NA
MW78S	9/27/2021	322	BDL	BDL	BDL	NA
MW78S	4/12/2022	166	4.3	3.8	BDL	NA
MW78S	9/19/2022	466	14.3	13.9	BDL	NA
MW78S	3/13/2023	314	7.6	6.1	BDL	NA
MW78S	9/18/2023	1,160	49.7	48.2	BDL	NA
MW78S	3/18/2024	500	14.6	12.3	BDL	NA
MW78S	10/21/2024	1,230	66.7	48.3	BDL	NA
MW79S	3/16/2021	64.8	2.4	2.1	BDL	NA
MW79S	9/27/2021	62.0	2.52	2.41	BDL	NA
MW79S	4/12/2022	50.1	2.3	2.4	BDL	NA
MW79S	9/20/2022	53.5	2.3	2.4	BDL	NA
MW79S	3/13/2023	58.2	2.0	2.1	BDL	NA
MW79S	9/18/2023	55.4	2.6	3.1	BDL	NA
MW79S	4/10/2024	44.4	2.6	2.4	BDL	NA
MW79S	10/21/2024	53.0	2.2	2.2	BDL	NA
MW80S	3/16/2021	BDL	285	438	156	NA
MW80S	9/27/2021	BDL	186	490	170	NA
MW80S	4/11/2022	BDL	69.7	453	179	NA
MW80S	9/20/2022	BDL	95.5	590	147	NA
MW80S	3/13/2023	BDL	36.9	422	99.2	NA
MW80S	9/18/2023	BDL	75.8	398	94.9	NA
MW80S	3/18/2024	BDL	91.7	439	101	NA
MW80S	10/21/2024	BDL	6.9	115	33.6	NA

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
MW81S	3/16/2021	1400	146	206	72.4	NA
MW81S	9/27/2021	1,610	BDL	BDL	BDL	NA
MW81S	4/11/2022	1,150	247	296	88.5	NA
MW81S	9/19/2022	1,010	205	218	75.6	NA
MW81S	3/13/2023	1,500	455	442	113	NA
MW81S	9/18/2023	887	189	219	83	NA
MW81S	3/18/2024	1,390	485	515	160	NA
MW81S	10/21/2024	226	BDL	BDL	BDL	NA
MW82D	3/16/2021	BDL	BDL	BDL	BDL	NA
MW82D	9/27/2021	BDL	BDL	BDL	BDL	NA
MW82D	4/12/2022	BDL	BDL	BDL	BDL	NA
MW82D	9/19/2022	BDL	BDL	BDL	BDL	NA
MW82D	3/13/2023	BDL	BDL	BDL	BDL	NA
MW82D	9/18/2023	BDL	BDL	BDL	BDL	NA
MW82D	3/18/2024	3.4	BDL	BDL	BDL	NA
MW82D	10/22/2024	10.4	BDL	BDL	BDL	NA
MW82S	3/16/2021	24.9	2.1	BDL	BDL	NA
MW82S	9/27/2021	40.0	3.05	2.33	BDL	NA
MW82S	4/12/2022	134	7.3	5.6	BDL	NA
MW82S	9/19/2022	145	5.7	4.9	BDL	NA
MW82S	3/13/2023	138	6.9	5.9	BDL	NA
MW82S	9/18/2023	252	8.8	7.9	BDL	NA
MW82S	3/18/2024	122	4.1	3.4	BDL	NA
MW82S	10/22/2024	181	9.6	8.1	BDL	NA
MW83S	3/16/2021	217	BDL	BDL	BDL	NA
MW83S	9/27/2021	251	BDL	3.12	BDL	NA
MW83S	4/13/2022	174	BDL	BDL	BDL	NA
MW83S	9/19/2022	186	BDL	BDL	BDL	NA
MW83S	3/13/2023	189	BDL	BDL	BDL	NA
MW83S	9/18/2023	193	BDL	BDL	BDL	NA
MW83S	3/18/2024	227	BDL	BDL	BDL	NA
MW83S	10/22/2024	156	BDL	BDL	BDL	NA
MW83D	3/16/2021	106	BDL	BDL	BDL	NA
MW83D	9/27/2021	177	BDL	BDL	BDL	NA
MW83D	4/13/2022	108	BDL	BDL	BDL	NA
MW83D	9/19/2022	131	BDL	BDL	BDL	NA
MW83D	3/13/2023	115	BDL	BDL	BDL	NA
MW83D	9/18/2023	161	BDL	BDL	BDL	NA
MW83D	3/18/2024	167	BDL	BDL	BDL	NA
MW83D	10/22/2024	126	BDL	BDL	BDL	NA
MW85D	3/16/2021	12	BDL	BDL	BDL	NA
MW85D	9/27/2021	909	6.10	6.41	BDL	NA
MW85D	4/12/2022	2,690	BDL	BDL	BDL	NA
MW85D	9/19/2022	5,340	BDL	BDL	BDL	NA
MW85D	3/13/2023	8,670	BDL	BDL	BDL	NA
MW85D	9/18/2023	9,190	BDL	110	BDL	NA
MW85D	3/18/2024	11,400	BDL	BDL	BDL	NA
MW85D	10/22/2024	6,760	BDL	105	BDL	NA
MW86D	3/16/2021	198	BDL	BDL	BDL	NA
MW86D	9/27/2021	198	2.70	2.43	BDL	NA
MW86D	4/11/2022	166	BDL	BDL	BDL	NA
MW86D	9/19/2022	247	BDL	BDL	BDL	NA
MW86D	3/13/2023	331	5.2	BDL	BDL	NA
MW86D	9/18/2023	612	11.5	BDL	BDL	NA
MW86D	3/18/2024	39.3	BDL	3.5	BDL	NA
MW86D	10/21/2024	2,120	50.2	46.0	BDL	NA
MW87D	3/16/2021	54.2	BDL	BDL	BDL	NA
MW87D	9/27/2021	40.7	BDL	BDL	BDL	NA

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
MW87D	4/12/2022	78.2	BDL	BDL	BDL	NA
MW87D	9/19/2022	54.0	BDL	BDL	BDL	NA
MW87D	3/13/2023	331	5.2	BDL	BDL	NA
MW87D	9/18/2023	49.6	BDL	BDL	BDL	NA
MW87D	3/18/2024	58.1	BDL	BDL	BDL	NA
MW87D	10/21/2024	111.0	BDL	BDL	BDL	NA
MW88D	3/16/2021	7,560	BDL	166	BDL	NA
MW88D	9/27/2021	12,900	BDL	BDL	BDL	NA
MW88D	4/12/2022	11,200	BDL	271	BDL	NA
MW88D	9/19/2022	10,400	BDL	403	BDL	NA
MW88D	3/13/2023	16,700	BDL	260	BDL	NA
MW88D	9/18/2023	12,700	309	620	BDL	NA
MW88D	3/18/2024	12,400	266	702	BDL	NA
MW88D	10/21/2024	2,200	BDL	BDL	BDL	NA
MW89D	3/16/2021	129	BDL	BDL	BDL	NA
MW89D	9/27/2021	129	BDL	BDL	BDL	NA
MW89D	4/12/2022	122	BDL	BDL	BDL	NA
MW89D	9/19/2022	68.8	BDL	BDL	BDL	NA
MW89D	3/13/2023	65.3	BDL	BDL	BDL	NA
MW89D	9/18/2023	95.7	BDL	BDL	BDL	NA
MW89D	3/18/2024	95.4	BDL	BDL	BDL	NA
MW89D	10/21/2024	95.1	BDL	BDL	BDL	NA
RW14	3/17/2021	340	BDL	BDL	BDL	NA
RW14	9/27/2021	389	BDL	BDL	BDL	NA
RW14	4/12/2022	305	BDL	BDL	BDL	NA
RW14	9/20/2022	384	BDL	BDL	BDL	NA
RW14	3/13/2023	320	BDL	BDL	BDL	NA
RW14	9/18/2023	369	BDL	BDL	BDL	NA
RW14	3/18/2024	307	BDL	BDL	BDL	NA
RW14	10/22/2024	284	BDL	BDL	BDL	NA
RW15	3/17/2021	49	BDL	BDL	BDL	NA
RW15	9/27/2021	18.0	BDL	BDL	BDL	NA
RW15	4/12/2022	14.7	BDL	BDL	BDL	NA
RW15	9/20/2022	60.3	BDL	BDL	BDL	NA
RW15	3/13/2023	54.0	BDL	BDL	BDL	NA
RW15	9/18/2023	58.5	BDL	BDL	BDL	NA
RW15	3/18/2024	68.6	BDL	BDL	BDL	NA
RW15	10/22/2024	53.6	BDL	BDL	BDL	NA
Hillside Spring						
Hillside Spring	9/19/2023	107	BDL	BDL	BDL	NA
Hillside Spring	3/18/2024	111	BDL	BDL	BDL	NA
Hillside Spring	10/22/2024	114	BDL	BDL	BDL	NA
AlOH LTU						
GWPS		**2**	**2**		**5**	
Maximum		**BDL**	**BDL**	**BDL**	**BDL**	**BDL**
MW42S	4/18/2022	BDL	BDL	BDL	BDL	BDL
MW43S	3/25/2021	BDL	BDL	BDL	BDL	BDL
MW44D	3/15/2023	BDL	BDL	BDL	BDL	BDL
MW44S	3/16/2021	BDL	BDL	BDL	BDL	BDL
MW45S	3/21/2024	BDL	BDL	BDL	BDL	BDL
CrOH LF						
GWPS		**2**	**2**		**5**	
Maximum		**15.8**	**8.6**	**22.6**	**BDL**	**BDL**
MW4SR	3/25/2021	BDL	BDL	19.6	BDL	NA
MW4SR	9/29/2021	BDL	BDL	21.4	BDL	NA
MW4SR	4/14/2022	BDL	BDL	22.6	BDL	NA
MW4SR	9/22/2022	BDL	BDL	18.3	BDL	NA
MW4SR	3/15/2023	13.2	3.7	9.7	BDL	NA

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
MW4SR	9/20/2023	15.8	6.4	3.8	BDL	NA
MW4SR	3/20/2024	15.6	8.6	3.4	BDL	NA
MW4SR	10/23/2024	5.8	6.7	5.9	BDL	NA
MW17D	3/23/2021	4.2	BDL	BDL	BDL	BDL
MW17D	9/29/2021	6.0	BDL	BDL	BDL	BDL
MW17D	4/13/2022	3.4	BDL	BDL	BDL	BDL
MW17D	9/21/2022	4.6	BDL	BDL	BDL	BDL
MW17D	3/14/2023	3.0	BDL	BDL	BDL	BDL
MW17D	9/20/2023	6.4	BDL	BDL	BDL	BDL
MW17D	3/19/2024	2.9	BDL	BDL	BDL	BDL
MW17D	10/23/2024	6.2	BDL	BDL	BDL	BDL
MW19S	3/25/2021	BDL	BDL	BDL	BDL	NA
MW19S	9/30/2021	BDL	BDL	BDL	BDL	NA
MW19S	4/19/2022	BDL	BDL	BDL	BDL	NA
MW19S	9/22/2022	BDL	BDL	BDL	BDL	NA
MW19S	3/16/2023	BDL	BDL	BDL	BDL	NA
MW19S	9/20/2023	BDL	BDL	BDL	BDL	NA
MW19S	3/19/2024	BDL	BDL	BDL	BDL	NA
MW19S	10/24/2024	BDL	BDL	BDL	BDL	NA
HWMA						
GWPS		**2**	**2**		**5**	
Maximum		**8.5**	**5.3**	**5.9**	**BDL**	**BDL**
MW2SR	3/24/2021	5.8	BDL	BDL	BDL	NA
MW2SR	9/28/2021	4.22	BDL	BDL	BDL	NA
MW2SR	4/13/2022	4.5	BDL	BDL	BDL	NA
MW2SR	9/21/2022	7.7	BDL	BDL	BDL	NA
MW2SR	3/17/2023	7.3	BDL	BDL	BDL	NA
MW2SR	9/20/2023	7.8	BDL	BDL	BDL	NA
MW2SR	3/20/2024	8.1	BDL	BDL	BDL	NA
MW2SR	10/24/2024	8.5	BDL	BDL	BDL	NA
MW48S	4/18/2022	BDL	BDL	5.9	BDL	BDL
MW49S	3/17/2021	BDL	BDL	2.5	BDL	NA
MW49S	9/28/2021	BDL	BDL	2.15	BDL	NA
MW49S	4/13/2022	BDL	BDL	2.2	BDL	NA
MW49S	9/22/2022	BDL	BDL	2.0	BDL	NA
MW49S	3/15/2023	BDL	BDL	BDL	BDL	NA
MW49S	9/20/2023	BDL	BDL	2.5	BDL	NA
MW49S	3/25/2024	BDL	BDL	2.1	BDL	NA
MW49S	10/24/2024	BDL	BDL	2.0	BDL	NA
MW50S	3/23/2021	BDL	BDL	5.9	BDL	NA
MW50S	9/28/2021	BDL	BDL	2.76	BDL	NA
MW50S	4/13/2022	5.7	5.3	4.9	BDL	NA
MW50S	9/22/2022	BDL	BDL	3.1	BDL	NA
MW50S	3/20/2023	BDL	2.8	5.5	BDL	NA
MW50S	9/20/2023	BDL	BDL	2.9	BDL	NA
MW50S	3/25/2024	BDL	BDL	2.4	BDL	NA
MW50S	10/24/2024	BDL	BDL	2.2	BDL	NA
TFU						
GWPS		**2**	**2**		**5**	
Maximum		**BDL**	**7.9**	**NA**	**NA**	**NA**
MW51S	3/17/2021	BDL	3.3	NA	NA	NA
MW51S	9/28/2021	BDL	3.85	NA	NA	NA
MW51S	4/19/2022	BDL	BDL	NA	NA	NA
MW51S	9/22/2022	BDL	7.9	NA	NA	NA
MW51S	3/20/2023	BDL	BDL	NA	NA	NA
MW51S	9/19/2023	BDL	6.3	NA	NA	NA
MW51S	3/20/2024	BDL	BDL	NA	NA	NA
MW51S	10/23/2024	BDL	BDL	NA	NA	NA

TABLE 7-7: RECENT PCE PLUME CONSTITUENTS RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

LOCATION	DATE	Tetrachloro-ethylene µg/L	Trichloro-ethylene µg/L	cis-1,2-Dichloroethylene µg/L	Vinyl chloride µg/L	1,1-Dichloroethene µg/L
MW52S	3/22/2021	BDL	BDL	NA	NA	NA
MW52S	9/28/2021	BDL	BDL	NA	NA	NA
MW52S	4/14/2022	BDL	BDL	NA	NA	NA
MW52S	9/21/2022	BDL	BDL	NA	NA	NA
MW52S	3/15/2023	BDL	BDL	NA	NA	NA
MW52S	9/19/2023	BDL	BDL	NA	NA	NA
MW52S	3/25/2024	BDL	BDL	NA	NA	NA
MW52S	10/24/2024	BDL	BDL	NA	NA	NA
Background						
MW13S	3/22/2021	BDL	BDL	BDL	BDL	BDL
MW13S	9/28/2021	BDL	BDL	BDL	BDL	BDL
MW13S	4/20/2022	BDL	BDL	BDL	BDL	BDL
MW13S	9/21/2022	BDL	BDL	BDL	BDL	BDL
MW13S	3/17/2023	BDL	BDL	BDL	BDL	BDL
MW13S	9/21/2023	BDL	BDL	BDL	BDL	BDL
MW13S	3/21/2024	BDL	BDL	BDL	BDL	BDL
MW13S	10/23/2024	BDL	BDL	BDL	BDL	BDL

BDL = Below detection limit
NA = Not Analyzed

Prepared by/Date: JPB/02-19-2024
Checked by/Date: MPL/02-22-2024

TABLE 7-8: RECENT SURFACE WATER RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SAMPLE LOCATION	DATE	Tetrachloro-ethylene	Trichloro-ethylene	cis-1,2-Dichloroethylene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L
SW01	3/24/2021	30.0	BDL	BDL	BDL
SW01	9/30/2021	35.0	BDL	BDL	BDL
SW01	4/15/2022	30.0	BDL	BDL	BDL
SW01	9/22/2022	27.8	BDL	BDL	BDL
SW01	3/21/2023	32.4	BDL	BDL	BDL
SW01	9/21/2023	37.9	BDL	BDL	BDL
SW01	3/25/2024	45.2	BDL	BDL	BDL
SW01	10/25/2024	31.2	BDL	BDL	BDL
SW03	3/24/2021	11.8	BDL	BDL	BDL
SW03	9/30/2021	12.2	BDL	BDL	BDL
SW03	4/15/2022	14.4	BDL	BDL	BDL
SW03	9/22/2022	8.8	BDL	BDL	BDL
SW03	3/21/2023	9.4	BDL	BDL	BDL
SW03	9/21/2023	10.4	BDL	BDL	BDL
SW03	3/25/2024	16.1	BDL	BDL	BDL
SW03	10/25/2024	13.9	BDL	BDL	BDL
SW05	3/24/2021	BDL	BDL	BDL	BDL
SW05	9/30/2021	BDL	BDL	BDL	BDL
SW05	4/15/2022	BDL	BDL	BDL	BDL
SW05	9/22/2022	BDL	BDL	BDL	BDL
SW05	3/21/2023	BDL	BDL	BDL	BDL
SW05	9/21/2023	BDL	BDL	BDL	BDL
SW05	3/25/2024	BDL	BDL	BDL	BDL
SW05	10/25/2024	BDL	BDL	BDL	BDL
SW06	3/24/2021	BDL	BDL	BDL	BDL
SW06	9/30/2021	BDL	BDL	BDL	BDL
SW06	4/15/2022	BDL	BDL	BDL	BDL
SW06	9/22/2022	BDL	BDL	BDL	BDL
SW06	3/21/2023	BDL	BDL	BDL	BDL
SW06	9/21/2023	BDL	BDL	BDL	BDL
SW06	3/25/2024	BDL	BDL	BDL	BDL
SW06	10/25/2024	BDL	BDL	BDL	BDL
SW08	3/24/2021	BDL	BDL	BDL	BDL
SW08	9/30/2021	BDL	BDL	BDL	BDL
SW08	4/15/2022	BDL	BDL	BDL	BDL
SW08	9/22/2022	BDL	BDL	BDL	BDL
SW08	3/21/2023	BDL	BDL	BDL	BDL
SW08	9/21/2023	BDL	BDL	BDL	BDL
SW08	3/25/2024	BDL	BDL	BDL	BDL
SW08	10/25/2024	BDL	BDL	BDL	BDL
SW09	3/24/2021	BDL	BDL	BDL	BDL
SW09	9/30/2021	BDL	BDL	BDL	BDL
SW09	4/15/2022	BDL	BDL	BDL	BDL
SW09	9/22/2022	BDL	BDL	BDL	BDL
SW09	3/21/2023	BDL	BDL	BDL	BDL
SW09	9/21/2023	BDL	BDL	BDL	BDL
SW09	3/25/2024	BDL	BDL	BDL	BDL

TABLE 7-8: RECENT SURFACE WATER RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SAMPLE LOCATION	DATE	Tetrachloro-ethylene	Trichloro-ethylene	cis-1,2-Dichloroethylene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L
SW09	10/25/2024	BDL	BDL	BDL	BDL
SW10	3/24/2021	BDL	BDL	BDL	BDL
SW10	9/30/2021	NS	NS	NS	NS
SW10	4/15/2022	BDL	BDL	BDL	BDL
SW10	9/22/2022	BDL	BDL	BDL	BDL
SW10	3/21/2023	BDL	BDL	BDL	BDL
SW10	9/21/2023	BDL	BDL	BDL	BDL
SW10	3/25/2024	BDL	BDL	BDL	BDL
SW10	10/25/2024	BDL	BDL	BDL	BDL
SW11	3/24/2021	BDL	BDL	BDL	BDL
SW11	9/30/2021	BDL	BDL	BDL	BDL
SW11	4/15/2022	BDL	BDL	BDL	BDL
SW11	9/22/2022	BDL	BDL	BDL	BDL
SW11	3/21/2023	BDL	BDL	BDL	BDL
SW11	9/21/2023	BDL	BDL	BDL	BDL
SW11	3/25/2024	BDL	BDL	BDL	BDL
SW11	10/25/2024	BDL	BDL	BDL	BDL
SW12	3/24/2021	BDL	BDL	BDL	BDL
SW12	9/30/2021	BDL	BDL	BDL	BDL
SW12	4/15/2022	BDL	BDL	BDL	BDL
SW12	9/22/2022	BDL	BDL	BDL	BDL
SW12	3/21/2023	BDL	BDL	BDL	BDL
SW12	9/21/2023	BDL	BDL	BDL	BDL
SW12	3/25/2024	BDL	BDL	BDL	BDL
SW12	10/25/2024	BDL	BDL	BDL	BDL
SW13	3/24/2021	BDL	BDL	BDL	BDL
SW13	9/30/2021	BDL	BDL	BDL	BDL
SW13	4/15/2022	BDL	BDL	BDL	BDL
SW13	9/22/2022	BDL	BDL	BDL	BDL
SW13	3/21/2023	BDL	BDL	BDL	BDL
SW13	9/21/2023	BDL	BDL	BDL	BDL
SW13	3/25/2024	BDL	BDL	BDL	BDL
SW13	10/25/2024	BDL	BDL	BDL	BDL
SW14	3/24/2021	BDL	BDL	BDL	BDL
SW14	9/30/2021	BDL	BDL	BDL	BDL
SW14	4/15/2022	BDL	BDL	BDL	BDL
SW14	9/22/2022	BDL	BDL	BDL	BDL
SW14	3/21/2023	2.4	BDL	BDL	BDL
SW14	9/21/2023	BDL	BDL	BDL	BDL
SW14	3/25/2024	2.3	BDL	BDL	BDL
SW14	10/25/2024	2.1	BDL	BDL	BDL
SW15	3/24/2021	BDL	BDL	BDL	BDL
SW15	9/30/2021	2.1	BDL	BDL	BDL
SW15	4/15/2022	2.1	BDL	BDL	BDL
SW15	9/22/2022	BDL	BDL	BDL	BDL
SW15	3/21/2023	2.8	BDL	BDL	BDL
SW15	9/21/2023	BDL	BDL	BDL	BDL

TABLE 7-8: RECENT SURFACE WATER RESULTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

SAMPLE LOCATION	DATE	Tetrachloro-ethylene	Trichloro-ethylene	cis-1,2-Dichloroethylene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L
SW15	3/25/2024	2.3	BDL	BDL	BDL
SW15	10/25/2024	2.4	BDL	BDL	BDL
SWPOND	3/24/2021	BDL	BDL	BDL	BDL
SWPOND	9/30/2021	BDL	BDL	BDL	BDL
SWPOND	4/15/2022	BDL	BDL	BDL	BDL
SWPOND	9/22/2022	BDL	BDL	BDL	BDL
SWPOND	3/21/2023	BDL	BDL	BDL	BDL
SWPOND	9/21/2023	BDL	BDL	BDL	BDL
SWPOND	3/25/2024	BDL	BDL	BDL	BDL
SWPOND	10/25/2024	BDL	BDL	BDL	BDL

BDL = Below detection limit
NS = Not Sampled

Prepared by/Date: MPL/03-03-2024
Checked by/Date: JMB/03-05-2024

TABLE 9-1: WELL CONSTRUCTION AND SURVEY INFORMATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL ID	WELL TYPE	DATE INSTALLED	DRILLER	ELEVATION PVC CASING (ft NGVD)	PAD ELEVATION (ft NGVD)	ELEVATION WELL BOTTOM (ft NGVD)	TOTAL WELL DEPTH (ft bgs)	AUGER REFUSAL	AUGER DIAMETER (in)	DEPTH TO SCREEN (ft)	SCREEN LENGTH (ft)	SLOT SIZE (in)	DEPTH TO SAND (ft)	DEPTH TO BENTONITE (ft)	GEOLOGIC UNIT MONITORED	WELL COORDINATES	
																NORTHING	EASTING
																(State Plane, ft)	
MW2SR	TYPE II	9/20/1990	LAYNE	918.60	917.90	905.10	13.5	NO	8	2.5	10		1.0	0.9	SAPROLITE	1230454.0	301086.6
MW2DR	TYPE II	9/20/1990	LAYNE	918.40	918.00	878.90	39.5	YES	8	29.5	10	0.01	19.0	16.0	SAPROLITE	1230451.6	301079.0
MW4SR	TYPE II	9/21/1990	LAYNE	909.80	907.80	881.80	28.0	NO	8	18.0	10	0.01	16.0	14.0	SAPROLITE	1229378.7	300519.6
MW7D	TYPE II	9/22/1989	ATEC	903.30	900.70	855.80	47.5	YES	8	37.0	10	0.01	34.0	30.0	SAPROLITE	1230256.8	300293.5
MW13S	TYPE II	11/29/1989	ATEC	952.50	950.40	927.50	25.0	NO	9	15.0	10	0.01	13.0	10.5	SAPROLITE	1231252.6	302075.1
MW17D	TYPE II	4/27/1990	LAYNE	912.60	911.10	878.20	34.4	YES	8	24.0	10	0.01	22.0	20.0	SAPROLITE	1229374.1	300619.6
MW18S	TYPE II	5/1/1990	LAYNE	903.80	901.70	883.00	20.8	NO	8	10.3	10	0.01	8.3	6.3	SAPROLITE	1229517.9	300563.4
MW18D	TYPE II	5/1/1990	LAYNE	903.90	901.80	869.30	34.6	YES	8	24.1	10	0.01	22.1	20.1	SAPROLITE	1229522.4	300563.3
MW19S	TYPE II	4/26/1990	LAYNE	906.90	907.00	875.70	31.2	NO	8	20.8	10	0.01	18.8	16.8	SAPROLITE	1229447.1	300351.6
MW19D	TYPE II	4/20/1990	LAYNE	907.00	907.10	863.80	43.2	YES	8	32.8	10	0.01	30.8	28.8	SAPROLITE	1229444.9	300355.3
MW20S	TYPE II	4/30/1990	LAYNE	880.30	880.40	864.80	15.5	NO	8	5.1	10	0.01	3.1	1.1	SAPROLITE	1229603.2	300053.8
MW20D	TYPE II	4/30/1990	LAYNE	880.00	880.30	839.90	40.1	YES	8	29.6	10	0.01	27.6	25.6	SAPROLITE	1229603.7	300048.9
MW21D	TYPE II	5/3/1990	LAYNE	871.90	871.90	831.30	40.6	YES	8	30.2	10	0.01	28.2	26.2	SAPROLITE	1229726.1	299864.9
MW24D	TYPE II	5/3/1990	LAYNE	926.20	926.20	887.70	38.5	YES	8	28.0	10	0.01	26.0	24.0	SAPROLITE	1229399.6	300956.0
MW26S	TYPE II	5/21/1990	LAYNE	935.50	935.90	913.60	21.9	NO	8	11.5	10	0.01	9.5	7.5	SAPROLITE	1230306.8	301422.0
MW26D	TYPE II	5/21/1990	LAYNE	935.50	935.90	889.90	45.6	YES	8	35.1	10	0.01	33.1	31.1	SAPROLITE	1230308.6	301420.3
MW27S	TYPE II	5/22/1990	LAYNE	914.20	911.50	902.50	11.7	NO	8	1.3	10	0.01	0.3	0.1	SAPROLITE	1230295.7	301218.2
MW27D	TYPE II	5/22/1990	LAYNE	912.30	911.50	883.00	29.3	YES	8	18.8	10	0.01	16.8	14.8	SAPROLITE	1230298.8	301222.0
MW28S	TYPE II	5/23/1990	LAYNE	909.60	908.20	896.90	12.7	NO	8	2.3	10	0.01	0.3	0.0	SAPROLITE	1230041.7	301034.9
MW28D	TYPE II	5/23/1990	LAYNE	909.80	908.20	881.00	28.8	YES	8	18.4	10	0.01	16.4	14.4	SAPROLITE	1230040.8	301039.3
MW31D	TYPE II	7/10/1990	LAYNE	928.80	925.80	891.80	37.0	YES	8	27.0	10	0.01	25.0	22.5	SAPROLITE	1229633.6	300729.8
MW32S	TYPE II	7/10/1990	LAYNE	922.70	920.80	887.70	35.0	NO	8	25.0	10	0.01	23.0	20.5	SAPROLITE	1229782.9	300704.5
MW32D	TYPE II	7/10/1990	LAYNE	922.60	920.90	877.60	45.0	YES	8	35.0	10	0.01	33.0	30.5	SAPROLITE	1229786.5	300704.9
MW35D	TYPE II	7/16/1990	LAYNE	922.30	920.40	898.30	24.0	YES	8	14.0	10	0.01	11.5	9.5	SAPROLITE	1229892.3	300933.7
MW36S	TYPE II	8/7/1990	LAYNE	940.90	940.90	915.90	25.0	NO	8	15.0	10	0.01	13.0	10.0	SAPROLITE	1231001.7	301953.5
MW36D	TYPE II	8/7/1990	LAYNE	941.00	941.00	900.60	40.4	YES	8	35.0	5	0.01	33.0	30.5	SAPROLITE	1230997.7	301957.4
MW37D	TYPE II	8/8/1990	LAYNE	932.40	932.50	869.40	63.0	YES	8	53.0	10	0.01	51.0	48.0	SAPROLITE	1230125.4	301763.9
MW39D	TYPE II	8/13/1990	LAYNE	927.90	928.00	892.70	35.2	YES	8	25.0	10	0.01	23.0	20.0	SAPROLITE	1229905.2	301235.6
MW40D	TYPE II	8/17/1990	SUNRISE	938.70	938.90	912.70	26.0	YES	8	16.0	10	0.01	14.0	11.0	SAPROLITE	1230812.2	301765.7
MW41D	TYPE II	8/17/1990	SUNRISE	938.20	938.50	910.20	28.0	YES	7	18.0	10	0.01	16.0	13.0	SAPROLITE	1230554.2	301593.0
MW42S	TYPE II	11/7/1990	LAYNE	891.70	889.10	866.20	25.5	NO	8	15.5	10	0.01	12.0	9.4	SAPROLITE	1229998.9	300027.0
MW43S	TYPE II	5/30/1990	LAYNE	881.60	879.00	859.60	22.0	NO	10	6.8	10	0.01	2.5	0.0	SAPROLITE	1230160.0	300050.0
MW44S	TYPE II	5/31/1990	LAYNE	890.70	888.20	871.70	19.0	NO	10	7.2	10	0.01	2.1	0.0	SAPROLITE	1230492.7	300105.4
MW44D	TYPE II	5/31/1990	LAYNE	890.80	888.10	851.30	39.5	YES	10	29.5	10	0.01	27.0	25.0	SAPROLITE	1230483.8	300105.1
MW45S	TYPE II	5/14/1992	LAYNE	898.00	895.40	881.68	16.3	NO	8	4.0	10	0.01	3.0	1.5	SAPROLITE	1230665.6	300199.8
MW48S	TYPE II	12/7/1995	KILMAN	898.40	896.30	877.40	21.0	NO	8	5.0	15	0.02	4.0	2.0	SAPROLITE	1230242.3	300747.8
MW49S	TYPE II	12/7/1995	KILMAN	901.20	898.70	887.20	14.0	YES	8	4.0	10	0.02	3.5	2.0	SAPROLITE	1230178.8	300781.2
MW50S	TYPE II	12/7/1995	KILMAN	898.50	895.70	883.50	15.0	YES	8	5.0	10	0.02	4.5	2.0	SAPROLITE	1230085.6	300817.6
MW51S	TYPE II	10/23/1997	ENV. EX.	929.10	926.40	907.97	21.1	YES	6	8.5	10	0.01	6.5	4.5	SAPROLITE	1230289.1	301318.7
MW52S	TYPE II	1/13/1997	ENV. EX.	929.90	927.40	910.40	19.5	YES	6	6.5	10	0.01	5.0	3.5	SAPROLITE	1230256.7	301328.5
MW53S	TYPE II	11/24/1997	ENV. EX.	904.20	901.40	883.45	20.8	NO	8	8.0	10	0.01	6.0	4.0	SAPROLITE	1229746.5	300486.6
MW54S	TYPE II	11/25/1997	ENV. EX.	895.90	893.10	878.03	17.9	NO	8	5.0	10	0.01	3.0	1.0	SAPROLITE	1230028.0	300287.0
MW73S	TYPE II	10/12/2006	PDMNT	938.30	938.50	909.37	28.9	NO	8	18.0	10	0.01	16.0	14.0	SAPROLITE	1230625.6	301622.5
MW75S	TYPE II	10/13/2006	PDMNT	938.30	938.60	907.97	30.3	NO	8	20.0	10	0.01	18.0	15.0	SAPROLITE	1230464.4	301477.3
MW76S	TYPE II	10/13/2006	PDMNT	938.10	938.30	907.73	30.4	NO	8	20.0	10	0.01	18.0	15.0	SAPROLITE	1230417.1	301417.7
MW76D	TYPE II	4/23/2012	PDMNT	938.10	938.40	893.10	45.0	YES	8	35.0	10	0.01	32.0	2.0	SAPROLITE	1230420.5	301423.1
MW77S	TYPE II	1/16/2007	PDMNT	937.80	938.40	908.07	29.7	NO	8	20.0	10	0.01	17.0	16.0	SAPROLITE	1230535.8	301559.5
MW77D	TYPE II	4/23/2012	PDMNT	938.20	938.40	897.20	41.0	YES	8	20.0	10	0.01	33.0	2.0	SAPROLITE	1230539.3	301562.9
MW78S	TYPE II	1/16/2007	PDMNT	938.40	938.60	908.51	29.9	NO	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1230439.5	301455.1
MW79S	TYPE II	3/5/2007	PDMNT	938.30	938.60	907.97	30.3	NO	8	20.0	10	0.01	17.5	16.0	SAPROLITE	1230472.5	301404.0

TABLE 9-1: WELL CONSTRUCTION AND SURVEY INFORMATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL ID	WELL TYPE	DATE INSTALLED	DRILLER	ELEVATION PVC CASING (ft NGVD)	PAD ELEVATION (ft NGVD)	ELEVATION WELL BOTTOM (ft NGVD)	TOTAL WELL DEPTH (ft bgs)	AUGER REFUSAL	AUGER DIAMETER (in)	DEPTH TO SCREEN (ft)	SCREEN LENGTH (ft)	SLOT SIZE (in)	DEPTH TO SAND (ft)	DEPTH TO BENTONITE (ft)	GEOLOGIC UNIT MONITORED	WELL COORDINATES (State Plane, ft)	
																NORTHING	EASTING
MW80S	TYPE II	3/6/2007	PDMNT	938.10	938.60	907.76	30.3	NO	8	20.0	10	0.01	17.5	16.0	SAPROLITE	1230560.6	301474.3
MW81S	TYPE II	3/6/2007	PDMNT	938.20	938.50	907.87	30.3	NO	8	20.0	10	0.01	17.5	16.0	SAPROLITE	1230564.5	301554.7
MW82S	TYPE II	3/7/2007	PDMNT	934.30	934.60	908.00	26.3	NO	8	20.0	10	0.01	14.3	16.0	SAPROLITE	1230420.4	301461.2
MW82D	TYPE II	4/23/2012	PDMNT	934.30	934.60	900.30	34.0	YES	8	24.0	10	0.10	22.0	2.0	SAPROLITE	1230414.4	301467.4
MW83S	TYPE II	3/7/2007	PDMNT	934.10	934.60	908.27	25.8	NO	8	20.0	10	0.01	14.3	16.0	SAPROLITE	1230475.0	301538.1
MW83D	TYPE II	1/11/2016	Atlas Geo	934.20	934.50	893.20	41.0	YES	8-8.25	31.0	10	0.01	28.0	21.0	SAPROLITE/PWR	1230466.8	301546.2
MW85D	TYPE III	10/26/2009	PDMNT	938.30	938.50	893.30	45.0	NO	10 to 4.5	40.0	5	0.01	38.0	36.0	PWR	1230553.5	301547.5
MW86D	TYPE III	10/27/2009	PDMNT	938.20	938.50	898.20	40.0	YES	10 to 4.5	35.0	5	0.01	33.0	30.0	SAPROLITE	1230493.3	301505.2
MW87D	TYPE III	12/29/2010	PDMNT	938.30	938.60	893.30	45.0	NO	10 to 4.5	43.0	2	0.01	41.0	38.0	PWR	1230472.8	301478.7
MW88D	TYPE III	12/29/2010	PDMNT	937.90	938.50	902.90	35.0	NO	10 to 4.5	33.0	2	0.01	30.0	28.0	PWR	1230555.3	301550.6
MW89D	TYPE III	1/11/2010	PDMNT	938.30	938.60	903.30	35.0	NO	10 to 4.5	33.0	2	0.01	31.0	29.0	PWR	1230471.1	301476.4
MW90D	TYPE II	9/20/2010	PDMNT	861.20	861.20	833.90	27.3	YES	8	17.3	10	0.01	15.0	13.0	SAPROLITE	1228839.8	299693.7
MW91D	TYPE II	9/20/2010	PDMNT	873.80	870.70	836.40	37.4	YES	8	27.4	10	0.01	25.0	23.0	SAPROLITE	1228828.0	299787.6
MW92D	TYPE II	9/21/2010	PDMNT	931.40	928.20	889.40	42.0	YES	8	32.0	10	0.01	30.0	28.0	SAPROLITE	1228872.9	300493.6
MW93D	TYPE II	9/21/2010	PDMNT	905.00	901.70	869.50	35.5	YES	8	25.0	10	0.01	23.0	21.0	SAPROLITE	1229054.9	300446.3
MWOS1S	TYPE II	7/9/1990	LAYNE	868.60	868.90	853.60	15.0	NO	8	5.0	10	0.01	4.0	2.0	SAPROLITE	1229431.6	299969.9
MWOS1D	TYPE II	7/9/1990	LAYNE	868.80	869.00	838.80	30.0	YES	8	20.0	10	0.01	17.5	15.5	SAPROLITE	1229434.9	299971.4
MWOS2S	TYPE II	7/11/1990	LAYNE	887.10	885.10	871.10	16.0	NO	8	6.0	10	0.01	5.0	3.0	SAPROLITE	1229356.6	300244.8
MWOS2D	TYPE II	7/11/1990	LAYNE	886.90	885.10	858.40	28.5	YES	8	18.8	10	0.01	17.0	14.7	SAPROLITE	1229355.7	300243.2
MWOS3S	TYPE II	7/12/1990	LAYNE	866.20	866.10	851.20	15.0	NO	8	5.0	10	0.01	4.0	2.0	SAPROLITE	1229234.4	299897.6
MWOS3D	TYPE II	7/12/1990	LAYNE	865.80	865.90	821.00	44.8	YES	8	35.0	10	0.01	32.5	14.5	SAPROLITE	1229237.4	299892.4
MWOS4S	TYPE II	7/12/1990	LAYNE	878.60	879.20	862.60	16.0	NO	8	6.0	10	0.01	4.5	2.0	SAPROLITE	1229148.9	300089.5
MWOS4D	TYPE II	7/12/1990	LAYNE	879.10	879.00	834.10	45.0	YES	8	35.0	10	0.01	33.0	30.5	SAPROLITE	1229151.0	300086.6
MWOS5D	TYPE II	7/19/1990	LAYNE	877.10	877.10	807.10	70.0	YES	8	60.0	10	0.01	57.5	55.0	SAPROLITE	1229244.2	299658.3
MWOS6D	TYPE II	11/6/1990	LAYNE	861.70	862.00	825.50	36.2	YES	8	26.2	10	0.01	22.5	20.0	SAPROLITE	1228927.5	299726.9
MWOS7D	TYPE II	11/5/1990	LAYNE	894.30	894.40	875.30	19.0	YES	8	9.0	10	0.01	6.5	4.5	SAPROLITE	1229212.3	300644.2
MWOS8D	TYPE II	10/4/1991	SUNRISE	874.10	874.10	832.10	42.0	YES	8	32.0	10	0.01	30.0	28.0	SAPROLITE	1228980.9	299878.4
MWBR1	TYPE III	9/29/1992	LAYNE	903.60	900.60	818.60	85.0	N/A	8-12	65.0	20	0.01	62.0	60.0	BEDROCK	1230247.0	300278.5
MWBR3	TYPE III	9/30/1992	LAYNE	865.70	865.50	702.98	162.7	N/A	4-12	62.5	OPEN	N/A	N/A	N/A	BEDROCK	1229242.3	299881.4
MWBR5	TYPE III	10/6/1992	LAYNE	903.10	900.90	794.10	109.0	N/A	4-8	85.0	OPEN	N/A	N/A	N/A	BEDROCK	1230277.5	300286.1
MWBR6	TYPE III	2/8/1993	LAYNE	879.60	879.40	750.60	129.0	N/A	8-12	89.0	OPEN	N/A	N/A	N/A	BEDROCK	1229266.6	299669.3
RW1	TYPE II	4/17/1994	LAYNE	933.60	934.19	883.60	50.0	NO	12	20.0	30	0.02	16.0	14.0	SAPROLITE	1230534.5	301650.7
RW3	TYPE II	8/9/1993	ENV. EX.	900.40	901.10	855.40	45.0	NO	12	15.0	30	0.01	13.0	11.0	SAPROLITE	1230193.0	300262.8
RW4	TYPE II	4/22/1994	LAYNE	907.70	908.10	855.70	52.0	NO	12	22.0	30	0.02	15.0	14.0	SAPROLITE	1229971.5	300939.3
RW5	TYPE II	4/13/1994	LAYNE	901.30	902.30	851.30	50.0	NO	12	20.0	30	0.02	16.0	15.0	SAPROLITE	1229668.3	300437.9
RW6	TYPE II	12/7/1992	LAYNE	909.60	909.10	878.60	31.0	NO	18	11.0	20	0.02	9.0	7.5	SAPROLITE	1229378.3	300540.5
RW7	TYPE II	7/14/1994	LAYNE	866.60	866.80	806.60	60.0	NO	14	20.0	40	0.02	18.0	16.5	SAPROLITE	1229360.9	299944.2
RW8	TYPE II	11/20/1997	ENV. EX.	905.90	906.00	873.65	32.3	YES	10	12.0	20	0.02	10.0	7.5	SAPROLITE	1229497.3	300603.8
RW9	TYPE II	11/17/1997	ENV. EX.	901.50	901.20	870.50	31.0	YES	10	11.0	20	0.02	9.0	7.0	SAPROLITE	1229572.2	300517.1
RW10	TYPE II	11/12/1997	ENV. EX.	901.70	901.80	871.21	30.5	YES	10	11.0	20	0.02	9.0	7.0	SAPROLITE	1229600.9	300461.1
RW11	TYPE II	11/11/1997	ENV. EX.	900.50	900.50	859.98	40.5	YES	10	10.0	30	0.02	8.0	6.0	SAPROLITE	1229773.1	300550.4
RW13	TYPE II	11/19/1997	ENV. EX.	887.60	887.50	864.37	23.2	YES	10	8.0	15	0.02	6.5	4.0	SAPROLITE	1229337.9	300289.1
RW14	TYPE II	12/28/2011	KILMAN	931.20	931.70	888.04	43.2	YES	10	22.0	20	0.01	19.0	17.0	SAPROLITE	1230345.3	301356.6
RW15	TYPE II	12/29/2011	KILMAN	931.10	931.70	883.44	47.7	YES	10	28.0	20	0.01	25.0	22.0	SAPROLITE	1230336.1	301363.8
PZM1A	TYPE II	10/29/1996	ENV. EX.	934.30	934.50	907.70	26.6	NO	2	22.0	5	0.01	20.0	18.0	SAPROLITE	1230555.5	301669.6
PZM1B	TYPE II	10/29/1996	ENV. EX.	934.30	934.50	911.30	23.0	NO	2	18.0	5	0.01	15.5	10.0	SAPROLITE	1230550.1	301675.9
PZM3A	TYPE II	10/28/1996	ENV. EX.	903.00	900.00	875.70	27.3	NO	2	18.6	5	0.01	12.6	8.5	SAPROLITE	1230206.0	300254.5
PZM3B	TYPE II	10/28/1996	ENV. EX.	902.90	900.00	878.40	24.5	NO	2	19.5	5	0.01	15.0	8.0	SAPROLITE	1230219.8	300255.1
PZM4A	TYPE II	10/28/1996	ENV. EX.	910.30	907.80	893.29	17.0	NO	2	9.3	5	0.01	6.0	2.0	SAPROLITE	1229975.7	300926.3
PZM4B	TYPE II	10/28/1996	ENV. EX.	909.70	907.00	891.85	17.9	NO	2	10.0	5	0.01	7.0	4.0	SAPROLITE	1229994.7	300930.4

TABLE 9-1: WELL CONSTRUCTION AND SURVEY INFORMATION
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

WELL ID	WELL TYPE	DATE INSTALLED	DRILLER	ELEVATION PVC CASING (ft NGVD)	PAD ELEVATION (ft NGVD)	ELEVATION WELL BOTTOM (ft NGVD)	TOTAL WELL DEPTH (ft bgs)	AUGER REFUSAL	AUGER DIAMETER (in)	DEPTH TO SCREEN (ft)	SCREEN LENGTH (ft)	SLOT SIZE (in)	DEPTH TO SAND (ft)	DEPTH TO BENTONITE (ft)	GEOLOGIC UNIT MONITORED	WELL COORDINATES	
																NORTHING	EASTING
																(State Plane, ft)	
PZM5A	TYPE II	10/28/1996	ENV. EX.	905.30	902.40	869.13	36.2	NO	2	28.0	5	0.01	25.0	20.0	SAPROLITE	1229659.9	300443.6
PZM5B	TYPE II	10/28/1996	ENV. EX.	905.00	902.30	868.87	36.1	NO	2	28.4	5	0.01	25.0	20.0	SAPROLITE	1229671.1	300451.8
PZM6A	TYPE II	10/28/1996	ENV. EX.	911.80	908.80	874.41	37.4	NO	2	30.0	5	0.01	25.0	20.0	SAPROLITE	1229383.1	300551.4
PZM6B	TYPE II	10/28/1996	ENV. EX.	912.00	909.00	873.61	38.4	NO	2	30.0	5	0.01	25.0	20.0	SAPROLITE	1229381.8	300566.5
PZM8A	TYPE II	11/24/1997	ENV. EX.	909.30	906.60	876.62	32.7	NO	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1229488.6	300610.9
PZM8B	TYPE II	11/24/1997	ENV. EX.	907.90	905.10	875.15	32.8	NO	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1229505.9	300587.1
PZM9A	TYPE II	11/21/1997	ENV. EX.	904.60	901.70	872.60	32.0	YES	8	19.0	10	0.01	17.0	15.0	SAPROLITE	1229585.6	300526.0
PZM9B	TYPE II	11/21/1997	ENV. EX.	904.90	901.70	873.13	31.8	YES	8	19.0	10	0.01	17.0	15.0	SAPROLITE	1229591.9	300533.2
PZM10A	TYPE II	11/21/1997	ENV. EX.	904.70	901.80	871.62	33.1	YES	8	20.0	10	0.01	18.0	16.0	SAPROLITE	1229594.7	300474.0
PZM10B	TYPE II	11/21/1997	ENV. EX.	904.30	901.50	871.43	32.9	NO	8	20.0	10	0.01	17.0	15.0	SAPROLITE	1229586.4	300488.6
PZM11A	TYPE II	11/24/1997	ENV. EX.	903.40	900.60	870.49	32.9	NO	8	10.0	20	0.01	18.0	6.0	SAPROLITE	1229764.4	300541.7
PZM11B	TYPE II	11/21/1997	ENV. EX.	903.20	900.60	870.51	32.7	NO	8	10.0	20	0.01	8.0	6.0	SAPROLITE	1229783.5	300572.2
PZM12A	TYPE II	11/21/1997	ENV. EX.	903.00	900.30	870.04	33.0	NO	8	10.0	20	0.01	8.0	6.0	SAPROLITE	1229798.1	300592.6
PZM12B	TYPE II	11/21/1997	ENV. EX.	900.80	899.20	868.01	32.8	NO	8	10.0	20	0.01	8.0	6.0	SAPROLITE	1229826.2	300589.3
PZM13A	TYPE II	11/24/1997	ENV. EX.	890.50	887.70	865.07	25.4	YES	8	13.0	10	0.01	11.0	9.0	SAPROLITE	1229346.6	300282.6
PZM13B	TYPE II	11/24/1997	ENV. EX.	890.80	888.10	867.80	23.0	YES	8	13.0	10	0.01	11.0	9.0	SAPROLITE	1229356.8	300275.5

Notes:
1) bgs = below ground surface
2) in = inches
3) ft = feet
4) N/A = Not Available
5) NGVD = National Geodetic Vertical Datum
6) NM = Not Measured
7) PWR = Partially Weathered Rock
8) Type II wells are constructed with a single casing
9) Type III wells are constructed with a double casing.

Prepared by/Date: AWE/10-19-2021
Checked by/Date: MPL/10-19-2021

TABLE 9-2: PROPOSED 2024 PERMIT TABLE V, MONITORING WELL SAMPLING AND ANALYSI
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

MONITORING WELL	SA = Semi-annually / A = Annually				
	TABLE I	TABLE II	TABLE III	TABLE IV	MAINTENANCE ONLY
MW13S		SA	SA		
MW2SR	SA			A	
MW4SR	SA				
MW17D		SA		A	
MW19S	SA				
MW42S				A	
MW43S					
MW44D					
MW44S					
MW45S				A	
MW48S					
MW49S	SA				
MW50S	SA				
MW51S			SA		
MW52S			SA		
MW28D	SA				
MW2DR	A				
MW7D	A				
MW19D	SA				
MW20D		A			
MW21D		A			
MW24D		A			
MW27S	SA				
MW31D	SA				
MW32S	SA				
MW36D		A			
MW37D		A			
MW39D		A			
MW40D	SA				
MW54S	A				
MWOS1S		SA			
MWOS3D	SA				
MWOS5D		SA			
MWOS6D		SA			
MWOS7D		A			
MWOS8D		A			
MWBR3	A				
MWBR6		A			
MW18D					X
MW18S					X
MW20S					X
MW26D					X
MW26S					X
MW27D					X
MW28S					X

TABLE 9-2: PROPOSED 2024 PERMIT TABLE V, MONITORING WELL SAMPLING AND ANALYSI
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

MONITORING WELL	SA = Semi-annually / A = Annually				
	TABLE I	TABLE II	TABLE III	TABLE IV	MAINTENANCE ONLY
MW32D					X
MW35D					X
MW36S					X
MW41D					X
MW53S					X
MW73S					X
MW75S					X
MW76D					X
MW76S					X
MW77D					X
MW77S					X
MW78S					X
MW79S					X
MW80S					X
MW81S					X
MW82D					X
MW82S					X
MW83D					X
MW83S					X
MW85D					X
MW86D					X
MW87D					X
MW88D					X
MW89D					X
MW90D					X
MW91D					X
MW92D					X
MW93D					X
MWOS1D					X
MWOS2D					X
MWOS2S					X
MWOS3S					X
MWOS4S					X
MWOS4D					X
MWBR1					X
MWBR5					X

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 9-3: ANALYTICAL METHODS AND SAMPLING REQUIREMENTS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

PARAMETER	ANALYTICAL METHOD	CONTAINER TYPE	PRESERVATIVE	HOLDING TIME
Volatile Organic Componds	8260	40 mL Vial (3)	4°C±2°C HCl to pH < 2	14 Days
1,1-Dichloroethene				
cis-1,2-Dichloroethene				
Ethylbenzene				
Tetrachloroethene				
Toluene				
Total Xylene				
Trichloroethene				
Vinyl Chloride				
Metals				
Chromium	6010 or 6020	250 mL HDPE	HNO_3 to pH <2	180 Days
Nickel				

Current laboratory analytical methods are shown. During future groundwater monitoring events, analytical methods and associated containers and preservatives accepted by the EPD at that time will be used.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 9-4: PROPOSED 2024 GROUNDWATER PROTECTION STANDARDS
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

Table I: AlOH LTU, CROH LF, HWMA	
Constituent	2024 Permit Mod GWPS (mg/L)
Tetrachloroethene	0.31
Trichloroethene	0.014
cis-1,2-dichloroethene	0.16
Vinyl Chloride	0.002

Table II: AlOH LTU, CROH LF, HWMA	
Constituent	2024 Permit Mod GWPS (mg/L)
Tetrachloroethene	0.005
Trichloroethene	0.005
cis-1,2-dichloroethene	0.07
Vinyl Chloride	0.002
1,1-Dichloroethene	0.007

Table III: Tank Farm Unit	
Constituent	2024 Permit Mod GWPS (mg/L)
Tetrachloroethene	0.005
Trichloroethene	0.005
Toluene	0.002
Ethylbenzene	0.002
Total Xylene	0.005

Table IV: Special Conditions Wells	
Constituent	2024 Permit Mod GWPS (mg/L)
Chromium	0.05
Nickel	0.02

GWPS: Groundwater Protection Standard

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024

TABLE 9-5: BACKGOUND MEAN AND VARIANCE DATA (MW13S)
Bonnell Aluminum, Inc., Newnan, Georgia
PCC Permit Renewal Application, 2024

	pH	SPECIFIC CONDUCTANCE (umhos/cm)	TOTAL ORGANIC CARBON (mg/l)	TOTAL ORGANIC HALOGENS (ug/l)	REPORT NUMBER
	5.09	120.00	0.84	13.60	24687-10
	5.22	120.00	0.76	10.80	
	5.07	120.00	0.83	15.60	
	5.03	120.00	0.89	8.00	
	4.96	120.00	1.18	22.00	25692-10
	5.01	124.00	1.09	22.00	
	5.00	88.00	1.31	2.50	
	4.93	90.00	1.37	9.90	
	4.80	90.00	0.50	5.00	27498-10
	5.11	90.00	1.10	5.00	
	5.12	90.00	0.80	14.30	
	5.09	90.00	0.90	19.10	
	5.23	80.00	5.50	13.70	29539-7
	5.09	80.00	4.40	5.10	
	5.31	80.00	3.00	5.70	
	5.12	80.00	2.10	8.70	
Average	5.07	98.88	1.66	11.31	
Variance	0.01	299.98	1.92	35.93	

	BARIUM (mg/l)	CHROMIUM (mg/l)	CADMIUM (mg/l)	LEAD (mg/l)	NICKEL (mg/l)
	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	BDL	BDL	BDL
Average	BDL	BDL	BDL	BDL	BDL

	PCE (mg/l)	TCE (mg/l)	TOLUENE (mg/l)	ETHYL BENZENE (mg/l)	TOTAL XYLENES (mg/l)
	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	BDL	BDL	BDL
Average	BDL	BDL	BDL	BDL	BDL

Notes:
1. BDL - below detection limit
2. Data source: 2014 PCC Permit Renewal Application.

Prepared by/Date: MPL/02-18-2024
Checked by/Date: JMB/02-29-2024