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June 20, 2024

Received
JUN 22 2024
State of Indiana

Mr. Mark Derf
IDEM, OAQ
Technical Support and Modeling Section
100 North Senate Avenue
Mail Code 61-50 IGCN 1003
Indianapolis, IN 46204-2251

RE: 2023 Emission Statement for BCI Solutions, Inc.
Plant ID: 099-00001

Dear Mr. Derf:

Enclosed, please find the 2023 Air Emission Statement Certification (AES-01 Form) for BCI Solutions, Inc. located at 500 N. Baltimore Street, Bremen, Indiana 46506. The detailed emissions information has been submitted using IDEM's online Emission Inventory Tracking System (EMITS) reporting system.

If you have any questions regarding this submittal, please contact me at (317) 654-5640 or John Kolar, BCI Solutions at (574) 546-2411.

Sincerely,
Keramida Inc.

A handwritten signature in cursive script that reads 'Kathy Moore'.

Kathy Moore
Vice President Air Services

Enclosure

INCREASING OUR CLIENTS' PROFITABILITY THROUGH SMART CONSULTING™

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Indiana Office of Air Quality
 Technical Support and Modeling Section - Mail Code 1114
 100 E. Senate Avenue
 Indianapolis, IN 46204-2251
 Telephone: (317) 233-0178 or
 Toll Free: 1-800-451-6027 x30178 (within Indiana)
<http://www.emissions.IN.gov/>



JUN 22 2024

State of Indiana

Instructions:

- This is a required form for each air emission statement as well as any modifications.
- The certification supplied with a source's permit may be used in lieu of this form.
- "Responsible Official" has the same meaning as defined in 326 IAC 2-7-1 (35), and is usually designated in the General Information section of the permit.

Part A: Contact Information

Part A is intended to provide basic information about the company submitting an Air Emission Statement and information on the Air Emission Statement preparer in case there is a question about the report.

1. Company Name: BCI Solutions, Inc.		2. Source ID: 099-00001	
3. Mailing Address: 500 N. Baltimore Street			
City: Bremen	State: IN	ZIP Code: 46506	
4. Name of Emission Statement Preparer: Kathy Moore			
5. Title of Emission Statement Preparer: (optional): Vice President Air Services			
6. Telephone Number: (317) 654-5640		7. Facsimile Number (optional):	
8. Electronic Mail Address (optional): kmoore@keramida.com			

Part B: Emissions Summary

Part B is intended to aid in the review of data and to collect information about billable hazardous air pollutants

Emissions Statement Pollutants (Plant Wide)	Tons Emitted
Carbon Monoxide (CO)	61.0258
Lead (PB)	0.0072
Nitrogen Dioxide (NO2)	0.3846
Particulate Matter <10 Microns (PM10)	17.1201
Particulate Matter <2.5 Microns (PM2.5)	13.4788
Sulfur Dioxide (SO2)	0.5092
Volatile Organic Compounds (VOC)	8.5555

Part 70 Permit Billable Hazardous Air Pollutants (Plant Wide)	Tons Emitted
Tetrachloroethylene (Perc) (CAS#127184)	
Chlorine (CAS# 7782505)	
Hydrochloric Acid (CAS# 7647010)	
Hydrofluoric Acid (CAS# 7664393)	
Methyl Chloroform or 1,1,1-Trichloroethane (CAS# 71556)	
Methylene Chloride or Dichloromethane (CAS# 75092)	
Phosphine (CAS# 7803512)	
Mercury and Mercury Compounds (CAS#7439976 and TRI ID N458)	

Part C: Signature of Responsible Official

I hereby certify that the information in this emission statement is accurate based on reasonable estimates using data available to the preparers and on a reasonable inquiry into records and persons responsible for the operation of the source, and is true, accurate, and complete.

Jordan Brown
 Name of Responsible Official (typed or printed)

Executive Vice President
 Title of Responsible Official

Signature of Responsible Official

6/19/2024
 Date (month, day, year)

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Facility Emissions Overview		
Pollutant	Pollutant Description	Emissions (Tons)
CO	Carbon Monoxide	61.0258
7439921	Lead	0.0072
NOX	Nitrogen Oxides	0.3846
PM10-FIL	Primary PM10, Filterable Portion Only	17.1201
PM25-FIL	Primary PM2.5, Filterable Portion Only	13.4788
SO2	Sulfur Dioxide	0.5092
VOC	Volatile Organic Compounds	8.5555

Group ID: 001 Me		Group Description: MELTING DEPARTMENT	
Percent Quarterly Throughput			
Winter: 24	Spring: 24	Summer: 25	Fall: 27
Days Per Week: 5	Weeks Per Year: 50	Hours Per Day: 20	Hours Per Year: 5000
Process ID: 01		Process Description: CUPOLA	
SCC:	30400301	Stack:	1
	Secondary Metal Production	Description:	CUPOLA
	Grey Iron Foundries	Stack Type:	Vertical
	Cupola	Height:	77
Heat Content:	1	Diameter:	2.5
Sulfur Content:	0	Temperature:	180
Ash Content:	0	Velocity:	58
Throughput:	6302 Tons	Gas Flow:	17000
Material:	Metal	Input/Output:	Process Material Used (Input)

Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
CO	EPA Emission Factor	145	95	22.8448
NOX	EPA Emission Factor	0.1	0	0.3151
PM10-FIL	EPA Emission Factor	12.4	98	0.7814
PM25-FIL	EPA Emission Factor	11.6	98	0.7310
SO2	EPA Emission Factor	1.2	90	0.3781
VOC	EPA Emission Factor	0.18	95	0.0284
7439921	EPA Emission Factor	0.1	98	0.0063

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Process ID: 02		Process Description: CHARGE HANDLING		
SCC:	30400315	Stack:	0	
	Secondary Metal Production	Description:	Charge Handling	
	Grey Iron Foundries	Stack Type:	Fugitive	
	Charge Handling	Height:	0	
Heat Content:	1	Diameter:	0	
Sulfur Content:	0	Temperature:	0	
Ash Content:	0	Velocity:	0	
Throughput:	13235 Tons	Gas Flow:	0	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
PM10-FIL	EPA Emission Factor	0.36	90	0.2382
PM25-FIL	EPA Emission Factor	0.3	90	0.1985
Process ID: 03		Process Description: INDUCTION FURNACE #1		
SCC:	30400303	Stack:	2b	
	Secondary Metal Production	Description:	INDUCTION FURNACE #1	
	Grey Iron Foundries	Stack Type:	Vertical	
	Electric Induction Furnace	Height:	41	
Heat Content:	1	Diameter:	6	
Sulfur Content:	0	Temperature:	75	
Ash Content:	0	Velocity:	63.80	
Throughput:	3466.5 Tons	Gas Flow:	108000	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
PM10-FIL	EPA Emission Factor	0.86	97	0.0447
PM25-FIL	EPA Emission Factor	0.8421	97	0.0438
7439921	EPA Emission Factor	0.009	97	0.0005

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Process ID: 04		Process Description: INDUCTION FURNACE #2		
SCC:	30400303	Stack:	2c	
	Secondary Metal Production	Description:	INDUCTION FURNACE #2	
	Grey Iron Foundries	Stack Type:	Vertical	
	Electric Induction Furnace	Height:	41	
Heat Content:	1	Diameter:	6	
Sulfur Content:	0	Temperature:	75	
Ash Content:	0	Velocity:	63.8	
Throughput:	3466.5 Tons	Gas Flow:	108000	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
PM10-FIL	EPA Emission Factor	0.86	97	0.0447
PM25-FIL	EPA Emission Factor	0.8421	97	0.0438
7439921	EPA Emission Factor	0.009	97	0.0005
Process ID: 05		Process Description: DUCTILE IRON INOCULATION		
SCC:	30400321	Stack:	2a	
	Secondary Metal Production	Description:	DUCTILE IRON INOCULATION	
	Grey Iron Foundries	Stack Type:	Vertical	
	Magnesium Treatment	Height:	41	
Heat Content:	1	Diameter:	6	
Sulfur Content:	0	Temperature:	75	
Ash Content:	0	Velocity:	63.80	
Throughput:	6933 Tons	Gas Flow:	108000	
Material:	Gray Iron	Input/Output:	Process Material Produced (Output)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
PM10-FIL	EPA Emission Factor	1.656	97	0.1722
PM25-FIL	EPA Emission Factor	1.476	97	0.1535

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Group ID: 002		Group Description: MOLDING DEPARTMENT		
Percent Quarterly Throughput				
Winter: 25	Spring: 23	Summer: 24	Fall: 28	
Days Per Week: 5	Weeks Per Year: 50	Hours Per Day: 20	Hours Per Year: 5000	
Process ID: 01		Process Description: POURING/CASTING HUNT #1		
SCC:	30400320	Stack:	3,4,5	
	Secondary Metal Production	Description:	HUNTER #1 - Pouring and Cooling	
	Grey Iron Foundries	Stack Type:	Vertical	
	Pouring/Casting	Height:	33	
Heat Content:	1	Diameter:	3.15000009536743	
Sulfur Content:	0	Temperature:	97	
Ash Content:	0	Velocity:	72.5	
Throughput:	3927 Tons	Gas Flow:	34000	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
NOX	EPA Emission Factor	0.01	0	0.0196
PM10-FIL	EPA Emission Factor	2.06	0	4.0448
PM25-FIL	EPA Emission Factor	1.84	0	3.6128
SO2	EPA Emission Factor	0.02	0	0.0393
VOC	EPA Emission Factor	0.14	0	0.2749
Process ID: 04		Process Description: POURING/CASTING HUNT #2		
SCC:	30400320	Stack:	6,7,8	
	Secondary Metal Production	Description:	HUNTER #2 - Pouring and Cooling	
	Grey Iron Foundries	Stack Type:	Vertical	
	Pouring/Casting	Height:	30	
Heat Content:	1	Diameter:	3	
Sulfur Content:	0	Temperature:	94	
Ash Content:	0	Velocity:	66.02	
Throughput:	3927 Tons	Gas Flow:	28000	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
NOX	EPA Emission Factor	0.01	0	0.0196
PM10-FIL	EPA Emission Factor	2.06	0	4.0448
PM25-FIL	EPA Emission Factor	1.84	0	3.6128
SO2	EPA Emission Factor	0.02	0	0.0393
VOC	EPA Emission Factor	0.14	0	0.2749

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Process ID: 05		Process Description: POURING/CASTING HUNT #5		
SCC:	30400320	Stack:	9,10	
	Secondary Metal Production	Description:	HUNTER #5 - Pouring and Cooling	
	Grey Iron Foundries	Stack Type:	Vertical	
	Pouring/Casting	Height:	30	
Heat Content:	1	Diameter:	2.5	
Sulfur Content:	0	Temperature:	100	
Ash Content:	0	Velocity:	37	
Throughput:	225.98 Tons	Gas Flow:	10897	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
NOX	EPA Emission Factor	0.01	0	0.0011
PM10-FIL	EPA Emission Factor	2.06	0	0.2328
PM25-FIL	EPA Emission Factor	1.84	0	0.2079
SO2	EPA Emission Factor	0.02	0	0.0023
VOC	EPA Emission Factor	0.14	0	0.0158
Process ID: 06		Process Description: POURING/CASTING HUNT #6		
SCC:	30400320	Stack:	9,10b	
	Secondary Metal Production	Description:	HUNTER #6 - Pouring and Cooling	
	Grey Iron Foundries	Stack Type:	Vertical	
	Pouring/Casting	Height:	30	
Heat Content:	1	Diameter:	2.5	
Sulfur Content:	0	Temperature:	100	
Ash Content:	0	Velocity:	37	
Throughput:	225.98 Tons	Gas Flow:	10897	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
NOX	EPA Emission Factor	0.01	0	0.0011
PM10-FIL	EPA Emission Factor	2.06	0	0.2328
PM25-FIL	EPA Emission Factor	1.84	0	0.2079
SO2	EPA Emission Factor	0.02	0	0.0023
VOC	EPA Emission Factor	0.14	0	0.0158

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Process ID: 07		Process Description: POURING/CASTING SINTO #1		
SCC:	30400320	Stack:	111213	
	Secondary Metal Production	Description:	SINTO- Pouring and Cooling	
	Grey Iron Foundries	Stack Type:	Vertical	
	Pouring/Casting	Height:	30	
Heat Content:	1	Diameter:	2.5	
Sulfur Content:	0	Temperature:	73	
Ash Content:	0	Velocity:	63	
Throughput:	4421 Tons	Gas Flow:	19000	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
NOX	EPA Emission Factor	0.01	0	0.0221
PM10-FIL	EPA Emission Factor	2.06	0	4.5536
PM25-FIL	EPA Emission Factor	1.84	0	4.0673
SO2	EPA Emission Factor	0.02	0	0.0442
VOC	EPA Emission Factor	0.14	0	0.3095
Process ID: 08		Process Description: CASTING SHAKEOUT		
SCC:	30400331	Stack:	2e	
	Secondary Metal Production	Description:	SHAKEOUT	
	Grey Iron Foundries	Stack Type:	Vertical	
	Casting Shakeout	Height:	41	
Heat Content:	1	Diameter:	6	
Sulfur Content:	0	Temperature:	75	
Ash Content:	0	Velocity:	63.80	
Throughput:	12727 Tons	Gas Flow:	108000	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
CO	State/Local Emission Factor	6	0	38.181
PM10-FIL	EPA Emission Factor	2.24	97	0.4276
PM25-FIL	EPA Emission Factor	1.34	97	0.2558
VOC	EPA Emission Factor	1.2	0	7.6362

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Process ID: 09		Process Description: SAND HANDLING		
SCC:	30400350	Stack:	2d	
	Secondary Metal Production	Description:	SAND HANDLING	
	Grey Iron Foundries	Stack Type:	Vertical	
	Sand Grinding/Handling	Height:	41	
Heat Content:	1	Diameter:	6	
Sulfur Content:	0	Temperature:	75	
Ash Content:	0	Velocity:	63.80	
Throughput:	62726 Tons	Gas Flow:	108000	
Material:	Sand	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
PM10-FIL	EPA Emission Factor	0.54	89.09	1.8477
PM25-FIL	EPA Emission Factor	0.1906	97.01	0.1787
Group ID: 003 CL		Group Description:CLEANING/FINISHING DEPARTMENT		
Percent Quarterly Throughput				
Winter: 24	Spring: 24	Summer: 25	Fall: 27	
Days Per Week: 6	Weeks Per Year: 50	Hours Per Day: 20	Hours Per Year: 6000	
Process ID: 01		Process Description: CASTINGS FINISHING		
SCC:	30400340	Stack:	15	
	Secondary Metal Production	Description:	GRINDING/FINISHING	
	Grey Iron Foundries	Stack Type:	Vertical	
	Grinding/Cleaning	Height:	35	
Heat Content:	1	Diameter:	4	
Sulfur Content:	0	Temperature:	75	
Ash Content:	0	Velocity:	27.20	
Throughput:	7231 Tons	Gas Flow:	20000	
Material:	Metal	Input/Output:	Process Material Used (Input)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
PM10-FIL	EPA Emission Factor	1.7	97.01	0.1838
PM25-FIL	EPA Emission Factor	0.6	97	0.0651

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Process ID: 02		Process Description: SHOT BLAST	
SCC:	30400340	Stack:	15b
	Secondary Metal Production	Description:	SHOTBLASTING
	Grey Iron Foundries	Stack Type:	Vertical
	Grinding/Cleaning	Height:	35
Heat Content:	1	Diameter:	4
Sulfur Content:	0	Temperature:	75
Ash Content:	0	Velocity:	27.20
Throughput:	10409 Tons	Gas Flow:	20000
Material:	Metal	Input/Output:	Process Material Used (Input)

Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
PM10-FIL	EPA Emission Factor	1.7	97.01	0.2645
PM25-FIL	EPA Emission Factor	0.6	97.01	0.0934

Group ID: 004 CO **Group Description: CORE MAKING DEPARTMENT**

Percent Quarterly Throughput

Winter: 22 **Spring: 26** **Summer: 22** **Fall: 30**
Days Per Week: 5 **Weeks Per Year: 50** **Hours Per Day: 20** **Hours Per Year: 5000**

Process ID: 02		Process Description: SHELL CORES	
SCC:	30400370	Stack:	17
	Secondary Metal Production	Description:	SHELL CORE MACHINES
	Grey Iron Foundries	Stack Type:	Vertical
	Shell Core Machine	Height:	20
Heat Content:	1	Diameter:	2.5
Sulfur Content:	0	Temperature:	75
Ash Content:	0	Velocity:	16.98
Throughput:	2.74 Tons	Gas Flow:	5000
Material:	Cores	Input/Output:	Process Material Produced (Output)

Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
NOX	EPA Emission Factor	0.5	0	0.0007
PM10-FIL	State/Local Emission Factor	0.54	0	0.0007
PM25-FIL	State/Local Emission Factor	0.54	0	0.0007
SO2	EPA Emission Factor	0.32	0	0.0004
VOC	EPA Emission Factor	0.0008	0	0.0000

Facility Emission Detail

BCI Solutions, Inc

Plant ID:1809900001

Report for 2023

Location: 500 N Baltimore St,Bremen,46506

NAICS: 331511 Iron Foundries

Process ID: 09		Process Description: ISOCURE CORES		
SCC:	30400371	Stack:	16	
	Secondary Metal Production	Description:	ISOCURE CORE MACHINES	
	Grey Iron Foundries	Stack Type:	Vertical	
	Core Machines/Other	Height:	30	
Heat Content:	1	Diameter:	1	
Sulfur Content:	0	Temperature:	75	
Ash Content:	0	Velocity:	53.05	
Throughput:	20.79 Tons	Gas Flow:	2500	
Material:	Cores	Input/Output:	Process Material Produced (Outut)	
Pollutant	Emission Method	Emission Factor	Overall Ctrl Efficiency	Emissions(Tons)
NOX	EPA Emission Factor	0.5	0	0.0052
PM10-FIL	State/Local Emission Factor	0.54	0	0.0056
PM25-FIL	State/Local Emission Factor	0.54	0	0.0056
SO2	EPA Emission Factor	0.32	0	0.0033
VOC	EPA Emission Factor	0.0008	0	0.0000