March 21, 1991
- BAAQMD microfiche review of ABI's compliance records

Plant# 62
American Brass and Iron Foundry

Curr,Arch,Fut? c
Pl, S, or AD? s

S# (@=all): @

Sources:

1 Cupola
MTGL/SEC-FURN> Cupola furnace, Burns Coke, 80MM BTU/hr max

2 Vibrating Tubular Shakeout
Misc MTGL/PRI, Gravel/sand, 143 tons/hr max, 4 days/wk

3 SAND MULLER
MTGL/SEC> Sand handling, Gravel/sand, 120 tons/hr max

4 WHEELABRATOR SHOT BLAST CLEANING MACHINE
MTGL/SEC> Cleaning, chemical, Gray iron, Gravel/sand

5 SHOT BLAST CLEANING MACHINE
MTGL/SEC> Cleaning, chemical, Gray iron, Gravel/sand

7 AUTOMATIC POURING FURNACE
Metal Melting Furnace, 1500K BTU/hr max, Natural gas

8 AUTOMATIC POURING FURNACE
Metal Melting Furnace, 1500K BTU/hr max, Natural gas

9 AUTOMATIC POURING FURNACE
Metal Melting Furnace, 1500K BTU/hr max, Natural gas

10 AUTOMATIC POURING FURNACE
Metal Melting Furnace, 2MM BTU/hr max, Natural gas

11 FECOR CUPOLA HOT BLAST
Metal Melting Furnace, 13700K BTU/hr max, Multifuel

13 DIP TANK
Dipping, 30K gal/yr solvent, Multi-coatings

14 DIP BARREL
Dipping, 20.35 gal/yr solvent, Asphalt, Asphalt emulsion

15 8000 GAL. SOLVENT STORAGE TANK
Underground tank, 8K gal, Trichloroethane, 1,1,1-, Hydrocarbon

17 12000 GAL STORAGE TANK
Fixed roof tank, 12K gal, Aluminum, Asphalt, 12 ft diam

19 GASOLINE DISPENSING ISLAND
Service Station G6323, 1 gasoline nozzles, Vehicle

20 Cold Cleaner
Solvent cleaning, 120 gal/yr net solvent, 59 deg F

21 Sand Cooler

Plant# 62
American Brass and Iron Foundry

Curr,Arch,Fut? c
Pl, S, or AD? a

AD# (@=all): @

Abatement Devices:

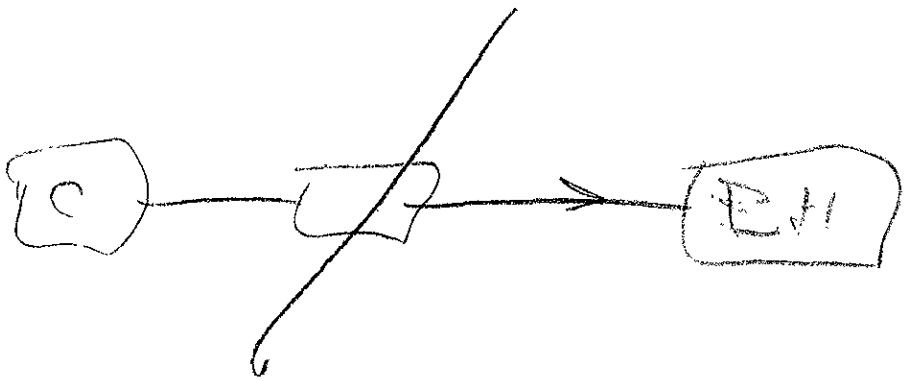
1 BAGHOUSE
Baghouse, Shaking

6 WET SCRUBBER
Scrubber

7 Hydro-Static Precipitator
Scrubber

8 Afterburner
Direct Flame Afterburner

9 Aspirated Cartridge Dust Collector
Absolute Dry Filter



:db sp 15485

```
       Application: 15485          <<archived application record>>
             Plant #: 62
        Plant name: American Brass and Iron Foundry
          Location: 7825 San Leandro St, Oakland, CA  94621
   UTM coordinates: 571.06(Lon)   4178.1(Lat)
           Contact: E SCHMIDT
      Company name: AMERICAN BRASS & IRON FOUNDRY
   Mailing address: ,
             Phone:
          Received: 08/06/73 . . Completeness review due by: 09/05/73
 Final disposition: A/C granted  09/19/73
            Source: S-8888; (description not available)
Estimated Start-up: 12/31/59
 Final disposition: P/O issued, 09/19/73      <<archived>>
```

what is this?

```
list application NUMBER >> 15992

       Application: 15992          <<archived application record>>
             Plant #: 62
        Plant name: American Brass and Iron Foundry
          Location: 7825 San Leandro St, Oakland, CA  94621
   UTM coordinates: 571.06(Lon)   4178.1(Lat)
           Contact: WIXSON,D.
      Company name: AMERICAN BRASS & IRON FOUNDRY
   Mailing address: ,
             Phone:
          Engineer: Peter F Hess   [191]
          Received: 10/08/76 . . Completeness review due by: 11/07/76
 Final disposition: A/C granted  01/18/78
            Source: S-8888; (description not available)
Estimated Start-up: 12/31/59
 Final disposition: P/O issued, 01/18/78      <<archived>>
```

what is this?

```
list application NUMBER >> 26778

       Application: 26778          <<archived application record>>
             Plant #: 62
        Plant name: American Brass and Iron Foundry
          Location: 7825 San Leandro St, Oakland, CA  94621
   UTM coordinates: 571.06(Lon)   4178.1(Lat)
           Contact: DONALD J. WIXSO
      Company name: AMERICAN BRASS & IRON FOUNDRY
   Mailing address: ,
             Phone:
          Engineer: Herbert C Johnson   [200]
          Received: 12/28/78 . . Completeness review due by: 01/27/79
        Filing fee: $100
       Initial fee: $500
 Final disposition: A/C granted  11/30/79
               RFP: Yes

Net Emissions Change Attributable to this A/C
Effective date of change  11/30/79     Entry date  10/17/80

                                lbs/day
                                annual average
```

	lbs/day annual average
particulates	17.00
organics(precursor)	.00
nitrogen oxides	.00
sulfur dioxide	.00
carbon monoxide	.00
organics(non-precursor)	.00

<18> Source: S-22; Menerail Wheelabrator shet blast machine <<a>>

Codes: NEW/NON
Estimated Start-up: 04/30/90
Final disposition: P/O issued, 11/30/79 <<archived>>

---

list application NUMBER >> 30465

Application: 30465 <<archived application record>>
Plant #: 62
Plant name: American Brass and Iron Foundry
Location: 7825 San Leandro St, Oakland, CA 94621
UTM coordinates: 571.06(Lon) 4178.1(Lat)
Project title: Replace cupola
Contact: Ewald Schmidt,Plant Mgr
Company name: American Brass and Iron Foundr
Mailing address: 7825 San Leandro St, Oakland, CA 94621
Phone: (415) 632-3467
Engineer: Mohamad R Moazed [307]
Received: 10/24/84 . . Completeness review due by: 11/23/84
Incomplete: 11/12/84 . . . . . Cancellation due by: 01/11/85
Re-activated: 11/29/84 . . Completeness review due by: 12/29/84
Complete: 11/29/84 . . . . . Evaluation due by: 01/28/85
A/C: 12/13/84 . . . . . Expiration due by: 12/13/86
Filing fee: $100
Initial fee: $0
Billed: $100 11/12/84
Final disposition: A/C granted 12/24/84
RFP: Yes

Net Emissions Change Attributable to this A/C
Effective date of change 12/11/84 Entry date 12/19/84

	lbs/day annual average
particulates	.00
organics(precursor)	.00
nitrogen oxides	.00
sulfur dioxide	.00
carbon monoxide	.00
organics(non-precursor)	.00

Source: S-1; Cupola <<c>>
Codes: REP/NON
Estimated Start-up: 05/27/85
Actual Start-up: 05/27/85
Final disposition: P/O issued, 07/31/85 <<archived>>

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list application NUMBER >> 31342

Application: 31342 <<archived application record>>

```
         Plant #: 62
      Plant name: American Brass and Iron Foundry
        Location: 7825 San Leandro St, Oakland, CA  94621
  UTM coordinates: 571.06(Lon)   4178.1(Lat)
    Project title: Vibrating tubular
          Contact: Donald J Wixson, Plant Engineer
     Company name: American Brass and Iron Foundr
  Mailing address: 7825 San Leandro St, Oakland, CA  94621
            Phone: (415) 632-3467 x
         Engineer: Mohamad R Moazed   [307]
         Received: 01/28/86 . . Completeness review due by: 02/27/86
       Incomplete: 01/29/86 . . . . .  Cancellation due by: 03/30/86
              A/C: 02/25/86 . . . . . .  Expiration due by: 02/25/88
      Filing fee: $100
     Initial fee: $0
Final disposition: A/C granted  02/25/86
             RFP: Yes

Net Emissions Change Attributable to this A/C
Effective date of change  02/25/86     Entry date  02/27/86

                          lbs/day
                          annual average
                          --------------
particulates                     .00
organics(precursor)              .00
nitrogen oxides                  .00
sulfur dioxide                   .00
carbon monoxide                  .00
organics(non-precursor)          .00

          Source: S-2; Vibrating Tubular Shakeout  <<c>>
           Codes: REP/NON
Estimated Start-up: 03/17/86
 Final disposition: P/O issued, 10/16/86      <<archived>>

list application NUMBER >>
```

```
Plant#                  62
                        American Brass and Iron Foundry

Curr,Arch,Fut?          c
Pl, S, or AD?           s

S# (@=all):             1

    1  Cupola
       MTGL/SEC-FURN> Cupola furnace, Burns Coke, 80MM BTU/hr max
          C574D080              /,A8,
          G3011135              /,A8,

Pl, S, or AD?           s

S# (@=all):             11

   11  FECOR CUPOLA HOT BLAST
       Metal Melting Furnace, 13700K BTU/hr max, Multifuel
          C4400098              /,P6,
          C4400189              /,P6,

Pl, S, or AD?
```

MTGL/SEC> Sand handling, Gravel/sand, 120 tons/hr max, 4 days/wk

TABLE I EMISSION RESULTS

Client: American Brass & Iron Foundry
Unit: Cupola, Baghouse Inlet
Date Tested: November 22, 1989

Test No.	1	2	3	Avg.
Time of Sampling	0913-1013	1110-1210	1300-1400	---
Stack Gas Temperature, °F	505	473	515	497
Stack Gas Velocity, Avg ft/sec	78	77	77.4	77.5
Stack Flow Rate, CFM	63835	63016	63344	63398
Stack Flow Rate, SDCFM	27288	27800	25571	26886
Oxygen, % Vol.	9.3	9.9	9.2	9.5
Carbon Dioxide, % Vol.	11.0	10.3	11.1	11.1
Moisture, % Vol.	22.2	21.7	25.2	23.0
Sample Volume, SDCF	16.50	16.29	15.39	16.06
Isokinetics, Avg. %	108	104	108	107
Arsenic Wt. micrograms total	12.00	13.99	11.63	12.54
Arsenic Concentration, ug/SDCF	0.727	0.859	0.756	0.781
Arsenic Emissions, g/hr	1.190	1.433	1.160	1.261
Beryllium Wt. micrograms total	0.121	0.184	0.195	0.167
Beryllium Concentration, ug/SDCF	0.007	0.011	0.013	0.010
Beryllium Emissions, g/hr	0.011	0.018	0.020	0.016
Cadmium Wt. micrograms total	26.97	37.37	74.07	46.14
Cadmium Concentration, ug/SDCF	1.634	2.294	4.813	2.914
Cadmium Emissions, g/hr	2.675	3.826	7.384	4.628
Chromium Wt. micrograms total	24.48	28.05	29.04	27.19
Chromium Concentration, ug/SDCF	1.483	1.722	1.887	1.697
Chromium Emissions, g/hr	2.428	2.872	2.895	2.732
Copper Wt. micrograms total	196.4	300.4	241.0	245.9
Copper Concentration, ug/SDCF	11.90	18.44	15.66	15.33
Copper Emissions, g/hr 6.362	19.48	30.76	24.02	24.75
Lead Wt. micrograms total	14,812	13,849	10,981	13,214
Lead Concentration, ug/SDCF	897.7	850.1	713.5	820.4
Lead Emissions, g/hr	1469	1418	1095	1327
Manganese Wt. micrograms total	1,757	2,236	2,365	2,119
Manganese Concentration, ug/SDCF	106.5	137.3	153.7	132.5
Manganese Emissions, g/hr	174.4	229.0	235.8	213.1

TABLE I EMISSION RESULTS (cont'd)

Mercury Wt. micrograms total	15.74	1.129	1.819	6.229
Mercury Concentration, ug/SDCF	0.95	0.069	0.118	0.379
Mercury Emissions, g/hr	1.555	0.115	0.181	0.617
Nickel Wt. micrograms total	9.697	10.68	9.16	9.845
Nickel Concentration, ug/SDCF	0.588	0.656	0.595	0.613
Nickel Emissions, g/hr	0.963	1.094	0.913	0.990
Selenium Wt. micrograms total	<0.12	0.184	0.260	0.188
Selenium Concentration, ug/SDCF	<0.007	0.011	0.017	0.012
Selenium Emissions, g/hr	<0.011	0.018	0.026	0.018
Zinc Wt. micrograms total	3,945	5,785	4,355	4,695
Zinc Concentration, ug/SDCF	239.1	355.1	283.0	292.4
Zinc Emissions, g/hr	391.5	592.3	434.2	472.7
Time of Sampling	1100-1120	1140-1200	1250-1310	---
Sample Volume, SDCF	0.317	0.408	0.330	0.351
Hydrogen Sulfide mg/sample	<0.1	<0.1	<0.1	<0.1
H_2S Concentration, ppmv	<7.9	<6.1	<7.6	<7.1
H_2S Emissions, lbs/hr	<1.16	<0.89	<1.11	<1.04

Time of Sampling	1447-1547
Sample Volume, SDCF	287
Stack Gas Temperature, °F	58.7
Stack Gas Velocity, Avg ft/sec	48040
Stack Gas Flowrate, CFM	25398
Oxygen, % vol	9.2
Carbon Dioxide, % vol	11.0
Moisture, % vol	24.9
Sample Volume, SDCF	15.33
Isokinetics, Avg %	107
Hexavalent Chromium Wt. micrograms total	<30
Hexavalent Chromium Concentration, ug/SDCF	<2
Hexavalent Chromium Emissions, g/hr	<3.0
Chromium Wt. micrograms total	240
Chromium Concentration, ug/SDCF	15.6
Chromium Emissions, g/hr	23.86

PRODUCTION LOG AND PRINCIPLE PARAMETERS.

TIME	CHG NO.	Previous Hour TONS Melted	SCFM AIR	ADDITIONAL O2
9:00 AM	35 FULL	—	10,000	APPROX. 2%
10:00 AM	40 ½ FULL	20?	10,000	APPROX 2%
11:00 AM	50 F	25	10,000	Approx 2%
12:10 PM	57 F	21	10,000	Approx 2%
1:10 PM	69 (-3 TONS)	24	10,000	Approx 2%
2:10 PM	75 -(8 TONS)	23	10,000	Approx 2%
3:05 PM stopped charging	84 F	24?	10,000	Approx 2%

GREG SIMMONS.

American Brass & Iron
Cupola Emission Factor Calculations

Calculations are based on data from Cupola stack test results performed by TMA/Norcal on 11/22/89.

Baghouse Efficiency

95% is the selected value for baghouse efficiency. This is derived from Compilation of Air Pollutant Emission Factors, AP-42. Published by U.S. Enviornmental Protection Agency.

The values is obtained by dividing the controlled value of particulates by the uncontrolled, then subtracting by 1 and multiplying by 100. Values taken from table 7.10-2.

E.g. $\left(1 - \frac{.7}{13.8}\right)(100) = \underline{95}$

I have submitted other documentation indicating a collection efficiency of 99.75 but have opted for the more conservative value.

Average tons/hr (test) = $\frac{\Sigma \text{ tons}}{\Sigma \text{ hrs}} = \frac{20 + 21 + 23}{3} = 21.3$

Calculations of Emission Factors in lbs/ton

Arsenic $1.26 \text{ g/hr} \times \frac{1}{454 \text{ g/lb}} \times \frac{1}{21.3 \text{ tons/hr}} = 1.3 \times 10^{-4} \text{ lbs/ton}$

Beryllium - $.016\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/HR} = 1.65 \times 10^{-6}\ lbs/TON$

Cadmium - $1.628\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/HR} = 4.79 \times 10^{-4}\ lbs/TON$

Chromium - $2.732\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/HR} = 2.82 \times 10^{-4}\ lbs/TON$

Copper - $24.75\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/HR} = 2.6 \times 10^{-3}\ lbs/TON$

Lead - $1327\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/HR} = .137\ lbs/TON$

Manganese - $213.1\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/HR} = 2.2 \times 10^{-2}\ lbs/TON$

Mercury - $.617\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/HR} = 6.4 \times 10^{-5}\ lbs/TON$

Nickel - $.990\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ TONS/YR} = 1.02 \times 10^{-4}\ lbs/TON$

Selenium - $.018\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3}\ TONS/YR = 1.86 \times 10^{-6}\ lbs/TON$

$$\underline{\text{Zinc}} - 472.7\ g/HR \times \frac{1}{454\ g/lb} \times \frac{1}{21.3\ \text{TONS}/HR} = 4.88 \times 10^{-2}\ lbs/\text{TON}$$

$$\underline{H_2S} - < 1.04\ lbs/HR \times \frac{1}{21.3\ \text{TONS}/HR} = < 4.88 \times 10^{-2}\ lbs/\text{TON}$$

CUPOLA EMISSION FACTORS

ELEMENT	lbs/TON
ARSENIC	1.3×10^{-4}
BERYLLIUM	1.65×10^{-6}
CADMIUM	4.79×10^{-4}
CHROMIUM	2.82×10^{-4}
COPPER	2.6×10^{-3}
LEAD	1.37×10^{-1}
MANGANESE	2.2×10^{-2}
MERCURY	6.4×10^{-5}
NICKEL	1.02×10^{-4}
SELENIUM	1.86×10^{-6}
ZINC	4.88×10^{-2}
H_2S	$< 4.88 \times 10^{-2}$

AIR POLLUTION CONTROL EQUIPMENT

DAILY CHECK LIST

CHECK THAT:

REMARKS:

1)	AFTER BURNERS ON AND OPERATING CORRECTLY.	ok
2)	CHARGING DOORS OPERATING CORRECTLY.	ok
3)	CUPOLA CAP DOWN AND WATER SEAL OPERATING.	ok
4)	QUENCHER PUMP AND SPRAYS OPERATING CORRECTLY.	ok
5)	QUENCHER CONTROLLER HAS NEW CHART AND IS OPERATING.	ok
6)	DAMPER CONTROLS ARE FUNCTIONING (OPEN & CLOSE).	ok
7)	CROSS-OVER LOW TEMP ALARM IS FUNCTIONING.	ok
8)	BAG HOUSE HIGH PRESSURE ALARM IS FUNCTIONING.	
9)	ALL BAGS IN BAG HOUSE FOR LEAKS (RECORD ON BAG CHECKLIST ANY LEAKING BAGS OR CAPS).	
10)	ALL SHAKER MECHANISMS ARE FUNCTIONING.	8 Shakers no [illegible]
11)	ANY STRUCTURAL LEAKS IN DUCT, FAN, OR MANIFOLD.	Fan Leaks repaired [illegible] See 17-manifold [illegible]

DATE: 2-1-78 MECHANIC'S SIGNATURE: [illegible]

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79-922 VN# 1255 7/13/79 DHPC & ENFORCEMENT
79-922 VN# 1286 7/19/79

FILED
SEP 14 1979
AUG 31 1979

MUNICIPAL COURT OAKLAND
PIEDMONT JUDICIAL DISTRICT
GEORGE R. DICKEY, CLERK
By Deputy
M. JACKSON

JOHN F. POWELL, Counsel
RICHARD W. GRIEVES, Assistant Counsel
THOMAS H. CRAWFORD, Assistant Counsel
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109
Telephone: (415) 771-6000

Attorneys for Bay Area Air Quality Management District

MUNICIPAL COURT OF THE STATE OF CALIFORNIA
ALAMEDA COUNTY
OAKLAND-PIEDMONT JUDICIAL DISTRICT

BAY AREA AIR POLLUTION CONTROL DISTRICT FOR THE PEOPLE OF THE STATE OF CALIFORNIA,

Plaintiff,

v.

THE AMERICAN BRASS & IRON FOUNDRY, a corporation

Respondent,

Docket No. 348866

COMPLAINT FOR CIVIL PENALTIES

Plaintiff alleges that:

1. Plaintiff is a public agency empowered to adopt orders, regulations and rules pertaining to the control of air pollution and through its Air Pollution Control Officer to enforce said orders, regulations and rules.

2. Defendant, The American Brass & Iron Foundry, a corporation authorized to conduct business in California with its principal place of business and foundry located at 7825 San Leandro Street, Oakland, California.

3. Defendant, at its cupola baghouse at said foundry in Oakland, California on September 13, 1978, and March 14, 1979 did intentionally and/or negligently cause, let, permit, suffer or

OCT 23 1979

allow for more than three minutes in one hour the emission of a gas stream containing air contaminants as dark or darker in shade as that designated as Number 1 on the Ringelmann Chart published by the United State Bureau of Mines Circular 7718 or of equivalent opacity all in violation of §3110 of Regulation 2 of the Bay Area Air Pollution Control District.

4. Plaintiff issued against defendant for said unlawful excessive emissions Notices of Violation Numbers 1254, 1255, and 1268, copies of which are attached hereto as Exhibits A, B, and C, respectively, and incorporated herein by reference as though fully set forth.

5. Pursuant to California Health and Safety Code §42402 defendant is liable for a civil penalty of $500 for each said violation.

WHEREFORE, plaintiff demands judgment as follows:

1. Pursuant to California Health and Safety Code §42402 civil penalties of $1,500;

2. Cost of suit:

3. Such other and further relief as the Court deems proper.

DATED: August 30, 1979

JOHN F. POWELL, Counsel

Thomas H. Crawford

THOMAS H. CRAWFORD
Attorney for Plaintiff
Assistant Counsel

District Counsel
Bay Area Air Pollution
Control District
939 Ellis Street
San Francisco, California 94109
Telephone: 771-6000

BEFORE THE HEARING BOARD
OF THE
BAY AREA AIR POLLUTION CONTROL DISTRICT
STATE OF CALIFORNIA

NO. 342

AIR POLLUTION CONTROL OFFICER OF THE BAY AREA AIR POLLUTION CONTROL DISTRICT, Complainant, vs. THE AMERICAN BRASS & IRON FOUNDRY, a California corporation, Respondent.	CONDITIONAL ORDER FOR ABATEMENT

The above-entitled matter came on regularly to be heard on June 12, 1969, having been continued from June 10, 1969; Matthew S. Walker, District Counsel, appeared for the Air Pollution Control Officer; Burnhill, Rode, Moffitt and Moore, John F. Buono, Jr., Esq., appeared for the respondent. It was stipulated in open hearing that a conditional order for abatement may be made as is hereinafter set forth.

CONDITIONAL ORDER FOR ABATEMENT

The American Brass & Iron Foundry, its associates, agents, servants, employees, aiders, and abettors, are required to cease and desist from all further operation of its foundry at 7825 San Leandro Street, city of Oakland, County of Alameda, unless in full compliance with all of the following conditions:

CUPOLA AUXILIARIES

Caps

1. A designated person shall check for leaks from the cupola cap at the beginning of each shift before the cupola is placed on stream.

2. Any leaking cap must be repaired before the next start up of the cupola.

3. The condition of the seal shall be checked weekly.

Doors

1. The company shall study the design of the charging door with special reference to malfunctions and operating problems, and submit a copy of the report as to improved design or improved hardware to the District.

2. Any leaking door must be repaired before the next start up of the cupola.

3. An operating check shall be made on the conditions of the doors hourly during cupola operation, and any problems, difficulties, or needed maintenance shall be reported to the responsible supervisor immediately.

4. The mechanical condition of the doors shall be checked at least twice each week.

BAGHOUSE OPERATION

1. An operating check shall be made on the condition of the baghouse at least three times each day, and any problems or needed maintenance shall be reported to the responsible supervisor immediately.

2. Broken or leaking bags shall be replaced as soon as possible, but in no case later than mid-shift shutdown if discovered in the morning, or when the cupola is shut down and before it is placed in operation if discovered in the afternoon.

3. The company shall enter into a special bag replacement program:

   (a) Eighty new bags now on order will be installed in two 40-bag sections of the baghouse as soon as delivered.

   (b) New bags will be installed in two 40-bag sections of the baghouse each month until all 440 bags have been replaced.

(c) Bags that burst or fail will be replaced as necessary and examined to determine whether age and use cause bursting or failing bags.

(d) When 25 percent of the bags in any section have burst or failed because of deterioration, all of the bags in that section will be replaced with new bags.

(e) A complete record of new bag installations, including all dates and places of installation, shall be kept and shall be available for inspection by the District at any time.

DATED: JUN 12 1980

J. JOSEPH SULLIVAN

J. Joseph Sullivan, Chairman

E. SPENCER BODINE

E. Spencer Bodine, Vice Chairman

JOSEPH G. HUNTER

Joseph G. Hunter, Member

INSPECTION REPORT

F-6

COMPANY American Brass & Iron
ADDRESS 2825 San Leandro St.
CITY Oakland ZIP 94621
SOURCE # CDS Inspection PLT# 62 []SFD
CONTACT Don Wixson
TITLE Plant Engineer TEL.(415) 632-3467
MAILING ADDRESS [X]SAME
CITY ZIP

TO:	INIT.	DAT
SUPV.		
	RN.	
FILM		

Intro. On this date RT along with Mohamad Mozed (E-307), contacted Don Wixson, Plant Eng. and together inspected company's sources. Besides being an inspection for compliance status it was also a P.O. inspection for plant's cupola. Plant replaced cupola at the end of December 1984.

Statement: Mr. Wixson stated there is a problem balancing the air flow in cupola system and that they are experimenting with best combustion for this source.

Observations: No excessive emissions were observed during inspection.

Conclusion/Recommendation: Since the last CDS (2-2-84) no complaints or breakdowns were reported. As of this date all sources are in compliance.

[] CON. ON REVERSE SIDE

V.N.# REG. RULE SECTION
V.N.# REG. RULE SECTION
DATE OF INSPECTION 1/30/85 HOURS 1000 - 1115
INSPECTOR [signature] INSPECTOR # 351
DATE OF REPORT / / [X]SAME AS INSPECTION

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CDS ENGINEERING EVALUATION
American Brass & Iron Foundry
Plant No. 62
Oakland, CA

BACKGROUND

The American Brass and Iron Foundry (AB&I) was inspected on January 23, 1986 by the District Inspector J. Simon and I for CDS inspection.

The AB&IF produces primarily cast iron pipes and fittings. Raw materials such as scrap steel, old engine blocks, etc. are fed to the cupola furnace and melted with layers of coke and other additives. The emissions from cupola is abated by an afterburner and a multi-chamber baghouse. The cupola was replaced due to deterioration. The new cupola is an identical replacement except has a higher afterburner zone for better combustion.

PERMIT REVIEW

AB&I currently has 16 sources of which 14 have permits to operate and two are exempt.

SOURCE TEST REVIEW

A source test has been conducted by the District on 2/14/85.

VIOLATION REVIEW

AB&I has a history of several violation notices which most of them are due to the big failure in the cupola's baghouse. Due to the frequent bag failure at the baghouse, AB&I is considering to try fiberglass bags with air cleaning method. For complete VN history see the enforcement files.

COMPLIANCE & CONCLUSION

The AB&I Foundry in Oakland was inspected by the District Inspector J. Simon and I and was found to be in compliance with applicable District Regulation 6, Rule 301 and 311. Coating samples were taken from the metal dip tank to determine compliance with Regulation 8, Rule 19.

M. MOAZED
AQEII
January 31, 1986

INSPECTORS REPORT VN# PF02 PAGE 1

On 3/26/87 R/I issued VN# PF02 for the violation of Reg 6-301 for visible emissions. At 1500 hrs. R/I noticed black visible emissions from American Brass. A PER was taken at 1501 hrs. The readings taken ranged from a Ringlemann 3 to 4½ for n½ minutes. The emissions continued and R/I went to investigate. The readings had to be taken behind a house due to the sun's position. After the readings were taken R/I drove around to find that the emissions were from the wet scrubber which was sited in July 1986. R/I first met with [illegible] Williams, Asst to Plant Engineer, who found James Ray, Maintenance Engineer. The water level in the scrubber was low so that the dust from the sand handling units were being blown out. The control box which regulates the water level had become dirty. Once the box was hosed down with water and the water level rose, the emissions stopped at 1530 hrs. To prevent this, the control box is to be cleaned everyday. It was forgotten that morning.

R/I recommends penalty

[illegible] PF4
3/27/87

[illegible] 4-7-

INSPECTORS REPORT VN# 13503 **PAGE** 1

3/05/87 R/I met with Lawson Williams, Assistant to the Plant Engineer, to issue
13503 for the violation of Reg 6-301 for visible emissions.
3/04/87 R/I was leaving the Oakland Airport heading toward Hwy 880 when she
noted excessive visible emissions from the cupola at American Brass at 1507 hrs.
...tly after Darryl Nelson had also noticed the visible emissions from the freeway. A
R was taken for 14 1/4 min and the Ringelmann readings ranged from 2 1/2 to 3.
... emissions were coming from the cupola dryer. R/I spoke to both Lawson and Peter
...salves, person in charge of the cupola, the next day. Both were unaware of the
...ation or of any problem. R/I described the situation to them and the only possible
...use was that the damper on the baghouse was closed. The cupola was down
...d the damper was closed and when the cupola was started, someone forgot to
...n the damper. Later R/I spoke to Lou Wilson, Plant Engineer, and found out that
... compressor temp was too high and the damper kept closing due to too much
...ater in the air lines. Problem corrected and on 3/05/87 no visible emissions
...re seen.
I recommends penalty.

[signature] 354
3/26/87

[initials] 3/31/87

This is a true copy of the document created or acquired in the regular course
business. The document was microfilmed & the resulting copy was produced in

INSPECTORS REPORT

On 8/5/86 RIT met with Ellis Schott, Maintenance, to issue VN#16850 for the violation of District Reg 6-301, excessive emissions from their baghouse.

While driving on San Leandro St, RIT saw visible emissions coming from the baghouse which is the abatement device for the cupola. RIT then proceeded to Isuzu Truck service which is across the railroad the railroad tracks behind American Brass to take a PER. The reading of a B2 was recorded for 9½ minutes starting at 1515 hrs. RIT then went to American Brass to speak to Don Dixson, Plant Engineer. Don had left for the day so RIT met with Ellis Schott. Ellis replied that he didn't notice any smoke when he went to the baghouse after seeing RIT's car on the property. RIT replied that the PER was taken prior to his arrival on their property. RIT then advised him of their conditional order of abatement issued on their baghouse and that it was still in effect. Also, RIT would like to see their maintenance records when she returns in Sept.

RIT recommends penalty for the violation of Reg 6-301.

RLT. 9-2-86

From: DAPCO

BAY AREA AIR QUALITY MANAGEMENT
939 Ellis Street
San Francisco, California

Please note and transmit to necessary enforcement personnel.

P. Hess 10-27-88

10/27/88 Some file

October 25, 1988

TO: Peter Hess, Deputy APCO P. Hess Concur 10-25-88

FROM: Tom Crawford, Assistant Counsel TC

SUBJECT: American Brass and Iron Foundry

Query: Whether the Conditional Order for Abatement dated June 12, 1969 is still in effect.

Answer: No.

Reason: The source operations giving rise to the order for abatement have ceased. The old cupola and related baghouse operations were replaced by a new cupola and baghouse and operate under permit 30465 issued by BAAQMD on July 31, 1985.

Additional Comments:

The original conditional order for abatement was drawn in very broad terms. I question whether it would be interpreted to survive after the prescribed conditions for source operations had been met. Whether or not the owner against whom the conditional order was issued must seek from the Hearing Board a termination order is moot, because of the permit to operate the replacement source.

rb/AMBRASS.mem

DISTRIBUTION:
ORIGINAL — S. T. Files
WHITE — Firm
BLUE — Engineering
GREEN — Enforcement
PINK — Requester
YELLOW — Source Inventory

BAY AREA
A... POLLUTION CONTROL DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771 6000

SUMMARY OF SOURCE TEST RESULTS

JUN 20 197

Report No. 75091
Test Date: Feb. 20, 1975
Test Times: Run A: 1107-1310
Run B:
Run C:

SOURCE INFORMATION

Firm Name and Address
American Brass & Iron Foundry
7825 San Leandro Street
Oakland, Ca.

Firm Representative and Title
Mr. Don Wixson
Plant Engineer
Phone No. 632-3467
Source: Iron Cupola

Conditions During Tests
Normal

Reg. No 00125 BEC: 113

Operates 8 hr/day & 250 days/yr

Operating Parameters The iron cupola operates at about 125 tons per day charged. The charge is approximately 89% scrap iron and 11% coke.

BAAPCD REPRESENTATIVES

Source Test Engineers
T. Perardi
G. Pend

Engineering Division

Enforcement Division
H C J
IC R / L F

Test Requested by:
B. Liston

Test Results and Comments

	Test Run A
Stack Volume Flowrate, SDCFM	30,700*
Stack Gas Temperature, °F., Avg.	475
Water Content, Volume %	25
Oxygen, Volume %	15.7
Carbon Dioxide, Volume %	6.3
Carbon Monoxide, ppm	1930
Carbon Monoxide, lbs/hr.	262
Total Nitrogen Oxides, ppm	14.3
Total Nitrogen Oxides, lbs/hr.	3.2

*Stack flowrate was estimated from blower horsepower, static pressure in the duct, and 25% water content.

Source Test Team Leader	Date	Approved — Chief of Source Test	Date
T. E. Perardi		Gale G. Karels	

INSPECTORS REPORT C.D.S.

ROUTING		
	INIT.	DATE
1.		6/15/77
2. C-5		6/16/77
3.		
4.		
5.		
6. ENF. FILES		

☐ V.N.# _____ CO. CODE _____

☐ U/B # _____

☑ GENERAL

DATE OF INSP. 6/8/77 HR. 0900/1000

DATE OF REPORT 6/9/77

INSPECTOR L.T. FISCHER

PHOTO. ROLL #

EXP. #

UMST 3 per P.I. & judgment

COMPANY AMERICAN BRASS & IRON ☐ SFD TEL. 632-3467

MAILING ADDRESS 7825 SAN LEANDRO ST. OAKLAND, CALIF.

SOURCE LOCATION ☑ SAME

SOURCE OPERATION FOUNDRY

CONTACT DON WILSON TITLE PLT. ENGINEER.

OFFICE MEMORANDUM:

TO: J. SZWAJA I-14.

FROM: L.T. FISCHER I-33

SUBJECT: ABT PLANT STATUS

1. I VISITED SUBJECT PLANT 6/8/77 TO CHECK PLANT STATUS WITH REGARD TO CASE SUMMARY DATED JAN. 17, 1975. PLANT STATUS IS AS FOLLOWS:

1. A-5 & A-6 PIPE MACHINES HAVE BEEN DISCONTINUED.
2. MOST OF DUST HAS BEEN CONFINED EACH END'S.
3. NEW CHARGING DOOR'S HAVE BEEN INSTALLED SEVERAL TIMES ON CUPOLA.
4. CREEK OVER GUILLOTINE ETC. HAS BEEN REMOVED FROM CUPOLA #2, & CUPOLA #2 IS OUT OF SERVICE.
5. NEW DUCT WORK FROM CUPOLA TO BAG HOUSE HAS BEEN INSTALLED.
6. PRESSURE GAGE HAS BEEN INSTALLED AT.

61 (5/27/76)

☑ SEE OVERSIDE

BAG HOUSE.

7. 17 SECTIONS OF BAG HOUSE ARE NOW IN OPERATION TOTAL OF 680 BAGS.

8. 40 TON HOLDING FURNACE IS NOW IN OPERATION MAKING IT POSSIBLE TO MELT IRON AT A CONSTANT RATE.

9. CUPOLA IS NOW BEING MONITORED AT ALL TIMES AT THE CONTROL CENTER WITH AN ALARM SYSTEM.

10. ONE EMPLOYEE IS DESIGNATED FOR EACH SHIFT TO CHECK ALL POTENTIAL EMISSIONS AT LEAST FOUR TIMES A SHIFT, AND REPORTS ARE LOGGED & FILED FOR INSPECTION.

11. A NEW HYDROSTATIC AUTO CLAVE HAS BEEN INSTALLED TO TAKE CARE OF THE DESMATIC SYSTEM. BAAPCD APPLICATION #15992 NOV. 2[illegible], 1975.

THIS UNIT IS OPERATING, BUT ACCORDING TO DON WIXON HAS NOT BEEN INSPECTED BY BAAPCD ENGRS., BECAUSE THEY ARE STILL HAVING THE DUCT PLUG ON OCASIONS, SOME BUGS HAVE TO BE WORKED OUT.

TO DATE NO PERMIT TO OPERATE HAS BEEN ISSUED.

THE FOLLOWING ARE FUTURE IMPROVEMENTS TO BE MADE PER. DON WIXON & EWALD SCHMIDT

1. A WATER WELL HAS BEEN DRILLED AT THE BACK OF ABBI PROPERTY, TO INCREASE THE WATER SUPPLY, FOR CLEAN UP & PLANT USE.

INSPECTORS REPORT CONTINUED: (4)

DON WILSON STATED THEY ARE STILL WAITING DELIVERY OF A PUMP.

2. WHEN NEW WELL IS IN OPERATION, SPRAY NOZZELS WILL BE INSTALLED TO SPRAY WATER ON THE BUCKET ELEVATOR AT THE COKE UNLOADER TO ELIMINATE EXCESSIVE DUST.

IN CONCLUSION IT IS OF THE OPINION THAT AT TIME OF VISIT, THE PLANT LOOKED TO BE IN COMPLIANCE. HOWEVER AT TIME OF VISIT NO SOURCE TEST OR ENGINEERS EVALUATION HAD BEEN MADE.

B. G. Gunther 6/9/77

EF-61A (cont'd) pm 5/1/72

: R. Staehli RD 6-29-77

H. Brinkley

6/29/77

om: J. Szwaja

bject: American Brass and Iron Co. Oakland, Calif.

Attached is a plant status report and summary of violations issued
1976 and 1977. You note that there were three v.n.'s issued during each
the two years mentioned, for the cupola and/or baghouse.

During these two years, there were five v.n.'s issued for excessive
issions from the disamatic unit. However, this unit has been completely
ebuilt and is now controlled by a rotoclone. Only the last of these five
.n.'s were issued since the unit was rebuilt, and that one was shortly
fter the construction was completed. The problem has been resolved, and
he unit operates well in compliance now.

On June 8, 1977, L. Fischer did a complete plant inspection in order
o determine if all the conditions contained in the 1/28/75 Grieves memo
ere being complied with. The inspection resulted in a conclusion that they
re.

In view of this information, I don't feel that any inforcement action
s warranted at this time. The plant is kept under close surveillance and
ill continue to be. My recommendation is that we take no further action
ow, and complete another plant status report within a year.

Concur 6-29-77

JSzwaja

BAY AREA AIR POLLUTION CONTROL DISTRICT
STATE OF CALIFORNIA
939 ELLIS STREET • SAN FRANCISCO CA. 94109
EN. 1-3200

NOTICE OF VIOLATION No. 2745

DATE OF VIOLATION 2/6 1978 AT 1450 PM

NAME A-B-S-T

STREET 7825 SAN LEANDRO ST

CITY OAKLAND CALIF. STATE ZIP

DID UNLAWFULLY: CAUSE, PERMIT, SUFFER, ALLOW, MAINTAIN

AT SAME CITY

THE FOLLOWING OFFENSE:

☐ OPEN FIRE IN VIOLATION OF REGULATION 1 CONSISTING OF

☑ VISIBLE EMISSIONS IN VIOLATION OF REGULATION 2 SECTION 3110

FROM SOURCE OPERATION Cupola BAG House

EMISSION EXIT POINT BAG House Roof

☐ EMISSIONS IN VIOLATION OF REGULATION 3 SECTION

FROM SOURCE OPERATION

EMISSION EXIT POINT

☐ APR 3 1978

ISSUED TO Don Wilson TITLE Plt. Engr

➡ ADVISE US IN WRITING WITHIN 10 DAYS OF THE CORRECTIVE ACTION YOU HAVE TAKEN TO PREVENT CONTINUED OR RECURRENT VIOLATION YOUR RESPONSE DOES NOT PRECLUDE THE POSSIBILITY OF FURTHER LEGAL ACTION

X Donald J. Wilson
SIGNATURE OF PERSON RECEIVING NOTICE

SIGNING THIS NOTICE IS NOT AN ADMISSION OF GUILT

R. J. Lucas 2/6/78 1510 PM
NOTICE ISSUED BY DATE TIME

☐ NOTICE ISSUED BY CERTIFIED MAIL

©L BAAPCD P-84 (4-74)

VN# [illegible]

PLUME EVALUATION RECORD

UB# ______

FIRM'S NAME A B & I Co. DATE 3/7/78

ADDRESS 7825 San Leandro St Oakland CA

SOURCE OPERATION Cupola

EMISSION POINT Cupola Charging Doors TYPE ☑ A ☐ B

OBSERVATION POSITION & DISTANCE West Approx. 500 yds

TIME START 0850AM TIME STOP 0904AM

Min.	0	15	30	45	Min.	0	15	30	45
0850	2 1/2	3	3	3		Still			
51	2 3/4	3	2 3/4	3		In			
52	3 1/2	3	2 3/4	3		Progress			
53	2 1/2	3	3	3					
54	3	2 3/4	3	3					
55	2	2 1/2	3	2 3/4					
56	3	3 1/2	3	2 3/4					
57	2 3/4	3	2 3/4	3					
58	3	2 3/4	2 3/4	3					
59	2 3/4	3	2 3/4	2 3/4					
0900	3	3 1/2	3 1/2	3 1/2					
01	3	3 1/2	3	2 3/4					
02	2 3/4	2 3/4	3	3					
03	3	3 1/2	3 1/2	3 1/2					
04	3	3	3 1/2	3 1/2					

PLUME COLOR & BACKGROUND USED Grayish/White Cupola

APPROX. STACK HEIGHT FROM GROUND LEVEL 100' FEET

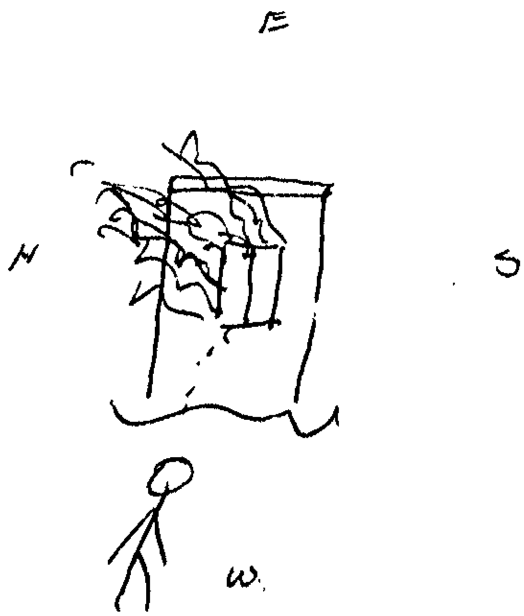
WEATHER Partly Overcast

PLUME WET* ☐ DRY ☐

*RELATIVE HUMIDITY @ ______ HRS.

WET BULB ______ % R.H.
DRY BULB ______

WIND FROM S/E MPH 5-8



Indicate North by →

NOTES Business still in progress when [illegible] entered Plant to issue Notice.

WET PLUME RECORDING EXAMPLE AT STACK 5 / 1¼ RESIDUAL

PHOTOS ROLL ______ #s
PICTURE ______ #s

R# 1¼ THRU 3 12 1/4 MIN.
R# 3¼ THRU 5 2 3/4 MIN.
TOT 1¼ THRU 5 15 MIN.

EXCESSIVE PLUME 1st OBSERVED AT 0850AM. LAST OBSERVED AT 0904AM. Still in progress

[illegible signature]
OBSERVER

☑ SEE REV.

BAAPCD F-86
(5-27-76)

INSPECTORS REPORT: VN# 2747

CONTACT Don Wixson TITLE Plt. Engr. UB#

	Routing Init.	Date
1.		
2.		
3.		
4.		
Enf. 5. Files		

#I R/I noted heavy emissions from the cupola charging doors at ABAT, while traveling North East on Hegenberger Road in Oakland.

#II R/I took a 15 min per line 2 1/2 thru 3 1/2 see attached. Emissions were still in progress when R/I entered the ABAT plant to issue a VN.

#III R/I contacted Don Wixson Plt. Engr. for ABAT. He stated no report was made to BAAQMD about any problems.

He also stated it was almost impossible to operate with zero emissions from the bag house and the charging doors, when the cupola melt load's vary.

He said they either have a clean bag house or clean charging door.

He also said he can operate the cupola dampers manually, and the emission from the charging doors stop, but then when this is done, the temperature in the after burners drops below 1400°F, and the bag house will have emissions.

R/I told Mr. Wixson they should either apply for a variance, or contact an engineering firm to evaluate the whole operation.

DATE OF PER 3/7/7

INSPECTORS NAME L. A. Fishner I-31 DATE OF REPORT 3/8/

F-86A

INSPECTORS REPORT CONTINUED: UNIT-775 PAGE 3

#1 WHILE TRAVELING NORTH ON HUGHESBERGER ROAD #1 NOTED SMOKE COMING FROM THE CUPOLA ON BAG HOUSE AT SUBTEC CO.

#2 #1 WENT TO THE S/W SIDE OF THE BAG HOUSE AND BEGAN A PEP 15 MIN. READ 0% - 3. THE EMISSIONS WERE STILL IN TROUBLE WHEN #1 ENTERED THE SUBTEC PLANT TO ISSUE A V.E.

#3 #1 TALKED TO DON WIXOM PLANT ENGR WITH ABBT CO..

HE STATED THEY WERE HAVING PROBLEMS WITH THE NEW CONTROLS THAT WERE INSTALLED ON THE CUPOLA AFTER BURNERS. THEY WEREN'T BRINGING THE AFTER-BURNERS UP TO THE PROPER HEAT, RESULTING IN UNBURNED HYDROCARBONS AND SMOKE BEING TRANSMITTED TO THE BAGHOUSE.

HE STATED THEY HAD TO REVERT TO MANUAL OPERATION OF THE GAS FLOW AND DAMPERS ETC..

HE STATED EWALD SCHMIDT PLT. SUPT., AND SOME OF THE CONTROL PEOPLE WHO INSTALLED THE EQUIPT. WERE WORKING ON THE PROBLEM.

HE STATED HE WAS SURE IF HE COULD GET THE AFTER BURNERS UP TO PROPER TEMPERATURE, THE PROBLEM WOULD END. HE ALSO STATED THEY WERE WAITING ON SHIPMENT OF A GAS REGULATOR VALVE THAT WHEN INSTALLED WILL PROVIDE CONSTANT GAS FLOW TO THE AFTER BURNERS, RESULTING IN CONSTANT TEMPERATURE. MR WIXOM AND THE #1 WENT OUT TO THE BAGHOUSE, AND HE AGREED THE EMISSIONS WERE IN VIOLATION OF REG. 2.

F-61A (cont'd) 5/1/72

INSPECTORS REPORT CONTINUED: V.N. # 2745 PAGE 4

HE ALSO STATED THAT HE AND THE CONTROL PEOPLE WOULD KEEP WORKING ON THE PROBLEM UNTIL IT WAS SOLVED.

B. F. Fowler 3/7/72

F-61A (cont'd) pm 5/1/72

THE AMERICAN BRASS & IRON FOUNDRY
7825 San Leandro Street · Oakland, CA 94621 · (415) 632-3467

March 13, 1978

MAR 14

Bay Area Air Pollution Control Dist.
939 Ellis Street
San Francisco, Ca. 94109

Dear Sirs:

The cause of visible emissions, (Violation #2746), from the cupola baghouse was insufficient temperature above the cupola doors. Since the temperature was low, combustion of the hydrocarbons emitting from the charge did not occur. Ultimately, the hydrocarbons were emitted from the baghouse.

As we have indicated, in response to Violation #2745, we are working on our afterburner system. As of this date the work has not been completed. However, we do believe that the present afterburner system is sufficient for air pollution control. But it does require a greater vigilance on our part in order to maintain the temperature when cupola operation becomes necessarily intermittent, (cupola operation depends on production requirements.)

In summary, temperature fluctuations occur when cupola operation becomes intermittent and since the afterburners are not working at peak efficiency, manual operation (of baghouse damper) becomes necessary in order to minimize the temperature drop. We believe we can stay within the District's regulations by exercising alertness and manually controlling the baghouse damper.

Sincerely,

Don Wixson

Don Wixson
Plant Engineer

AB&I
THE AMERICAN BRASS & IRON FOUNDRY
7825 San Leandro Street · Oakland, CA 94621 · (415) 632-3467

April 5, 1978

Bay Area Air Pollution Control Dist.
939 Ellis Street
San Francisco, Calif. 94109

Dear Sirs:

As you are aware we have been experiencing difficulties with the operation of our afterburners. The latest violation (#2747) again was a result of an afterburner problem. This time, we could not light the afterburner for several hours in the morning. As a result the unburned hydrocarbons condensed on the filter bags and when the temperature increased in the baghouse, the hydrocarbons vaporized and were emitted thru the bags.

We normally would have called in an upset condition, however, we understand that recourse has been rescinded.

Our problems with the afterburners began in January following modifications on the system for flame safety and modulating control. These changes were undertaken to up date our system with regard to safety and energy conservation. After the alterations were made we had difficulty lighting the afterburners and then keeping them lit after they were started. In order to keep them lit we had to run them at less then capacity. As a result, they were not able to maintain the proper temperatures for combustion.

We further modified the system as of March 26. The afterburners have been operating satisfactorily since these latest changes, and we anticipate no further troubles with the system.

We have also added more monitoring and alarm equipment so that our personnel will be more aware of the status of the system. This equipment includes: (1) A temperature recorder and low temperature alarm for the afterburners, (2) A lamp that indicates that afterburners are functioning, (3) Pressure gage for baghouse pressure.

These latest modifications have cost approximately $3,500.00. The price is noted so as to inform you of our sincere effort to correct our problems and to prevent their reoccurrence.

April 5, 1978

We fully expect to remain within the District's Regulations and anticipate no more problems except, of course, those due to unforseen breakdowns.

Sincerely,

Don Wixson

Don Wixson
Plant Engineer

8 VNS
As per attached Exhibits A through H

1. ~~APCO~~
2. ~~DAF~~
3. ENFORCEMENT

FILED
OCT 25 1978

FILED
OCT 20 1978
MUNICIPAL COURT OAKLAND
PIEDMONT JUDICIAL DISTRICT
GEORGE R. DICKEY, CLERK
By Deputy W. JACKSON

JOHN F. POWELL, Counsel
RICHARD W. GRIEVES, Assistant Counsel
THOMAS H. CRAWFORD, Assistant Counsel
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109
Telephone: (415) 771-6000

Attorneys for Bay Area Air Quality Management District

MUNICIPAL COURT OF THE STATE OF CALIFORNIA
ALAMEDA COUNTY
OAKLAND-PIEDMONT JUDICIAL DISTRICT

BAY AREA AIR POLLUTION CONTROL DISTRICT FOR THE PEOPLE OF THE STATE OF CALIFORNIA,

Plaintiff,

v.

THE AMERICAN BRASS & IRON FOUNDRY, a corporation

Respondent.

NO. 335968

COMPLAINT FOR CIVIL PENALTIES

Plaintiff alleges that:

FIRST CAUSE OF ACTION

1. Plaintiff is a public agency empowered to adopt orders, regulations and rules pertaining to the control of air pollution and through its Air Pollution Control Officer to enforce said orders, regulations and rules.

2. Defendant, The American Brass & Iron Foundry, a corporation authorized to conduct business in California with its principal place of business and foundry located at 7825 San Leandro Street, Oakland, California.

3. Defendant, at its cupola baghouse at said foundry in Oakland, California on January 11, 1978, February 6, 1978,

February 24, 1978, April 10, 1978 and September 13, 1978 did intentionally and/or negligently cause, let, permit, suffer or allow for more than three minutes in one hour the emission of a gas stream containing air contaminants as dark or darker in shade as that designated as Number 1 on the Ringelmann Chart published by the United States Bureau of Mines Circular 7718 or of equivalent opacity all in violation of §3110 of Regulation 2 of the Bay Area Air Pollution Control District.

4. Plaintiff issued against defendant for said unlawful excessive emissions Notices of Violation Numbers 2744, 2745, 2746, 7724, and 1254 copies of which are attached hereto as Exhibits A, B, C, D and E, respectively, and incorporated herein by reference as though fully set forth.

5. Pursuant to California Health and Safety Code §42402 defendant is liable for a civil penalty of $500 for each said violation.

SECOND CAUSE OF ACTION

1. Plaintiff incorporates herein as though fully set forth all the allegations contained in Paragraphs 1 and 2 of the First Cause of Action.

2. Defendant, from its cupola charging doors at said foundry, on March 7, 1978 and September 13, 1978 did intentionally and/or negligently cause, let, permit, suffer, or allow for more than three minutes in one hour the emission of a gas stream containing air contaminants as dark or darker in shade as that designated as Number 1 on the Ringelmann Chart published by the

United States Bureau of Mines Circular 7718 or of equivalent opacity all in violation of §3110 of Regulation 2 of the Bay Area Air Pollution Control District.

3. Plaintiff issued against defendant for said unlawful excessive emissions Notices of Violation Numbers 2747 and 1255, copies of which are attached hereto as Exhibits F and G, respectively and incorporated herein by reference as though fully set forth.

4. Pursuant to California Health and Safety Code §42402 defendant is liable for a civil penalty of $500 for each said violation.

THIRD CAUSE OF ACTION

1. Plaintiff incorporates herein as though fully set forth all the allegations contained in Paragraphs 1 and 2 of the First Cause of Action.

2. Defendant, from its cupola cap at said foundry, on October 5, 1978 did intentionally and/or negligently cause, let, permit, suffer, or allow for more than three minutes in one hour the emission of a gas stream containing air contaminants as dark or darker in shade as that designated as Number 1 on the Ringelmann Chart published by the United States Bureau of Mines Circular 7718 or of equivalent opacity all in violation of §3110 of Regulation 2 of the Bay Area Air Pollution Control District.

3. Plaintiff issued against defendant for said unlawful excessive emissions Notice of Violation Number 1257, a copy of which is attached hereto as Exhibit H and incorporated herein by reference as though fully set forth.

4. Pursuant to California Health and Safety Code §42402 defendant is liable for civil penalty of $500 for each said violation.

WHEREFORE, plaintiff demands judgment as follows:

1. Pursuant to California Health and Safety Code §42402 civil penalties of $3,500;

2. Costs of suit;

3. Such other and further relief as the Court deems proper.

DATED: October 19, 1978

JOHN F. POWELL, Counsel

Thomas H. Crawford

Thomas H. Crawford
Assistant Counsel
Attorney for Plaintiff

MON 3-3-3

ENVIRONMENTAL PROTECTION AGENCY

REGION IX

SURVEILLANCE AND ANALYSIS DIVISION

IP INSPECTION REPORT

Facility: American Brass and Iron Foundry
7825 San Leandro Street
Oakland, California 94621
Tel: (415)632-3467

Date of Inspection: June 6, 1979

Investigators: Robert L. Bishop
Gary Lavagnino
Richard Taft

CDS No.: 00500

Purpose

This report documents an air pollution inspection conducted at American Brass and Iron (ABI) Foundry in Oakland, California on June 6, 1979. The purpose of this inspection was to determine the compliance status of the facility with the Federally approved California State Implementation Plan.

Inspection Summary

The EPA investigators, accompanied by Mr. Louis T. Fischer, of the Bay Area Air Quality Management District (BAAQMD) arrived at the ABI facility on June 6, 1979 at approximately 10:15 a.m. EPA credentials were presented to Mr. Don Wixson, ABI Plant Engineer, and the purpose of the inspection was explained to him. A meeting followed in which the plant operation and control equipment were discussed. Mr. Wixson then accompanied the EPA investigators on an inspection tour of the facility. The inspection was concluded at approximately 12:45 p.m. Table I summarizes compliance determinations made as a result of the inspection. Commentary to clarify sections of the table is as follows:

(A) Visible emissions were observed emanating from the ABI cupola baghouse on 3 consecutive days at approximately the same time each day.

. Wed (6/6) - visible emissions were observed by the EPA inspectors shortly after they had completed an inspection of the ABI facilities (about 1:05 p.m.). However, by the time they were in a position to record readings, according to EPA Method 9, the visible emissions had ceased. Mr. Wixson later stated that the visible emissions occurred as a result of the startup of the cupola furnace, which had been shutdown for repair work earlier that morning. (The launder, which transfers molten metal from the cupola to the holding furnace, had been clogged).

. Thurs (6/7 - visible emissions greater than 30% opacity were observed by both the EPA and the District inspectors while driving by ABI facilities at approximately 12:20 p.m., shortly after an inspection of another foundry. Upon completion of a recording of the visible emissions at 12:47 p.m. the inspectors notified Mr. Ellis Shott, ABI Maintenance Supervisor. → Mr. Shott stated that "they were having afterburner problems". The BAAQMD issued ABI a NOV on 6-8-79. (VEO record is attached).

. Fri (6/8) - visible emissions were observed emanating from the cupola baghouse and were recorded for approximately 19 minutes commencing at 12:25 p.m. (VEO record is attached). After completion of the readings, Mr. Wixson was notified. He reiterated that the baghouse was over 15 years old and consequently, readings (such as those just taken) were fairly frequent.

Mr. Wixson had stated previously (6/6/79) that the cupola baghouse mechanical shaking system had not functioned correctly for a long time and consequently, it had been disconnected. Present practice is to have a maintenance person shake the bags by hand each evening. Mr. Wixson had also stated previously that difficulties with the baghouse were compounded by problems with the cupola afterburner. ABI is having difficulty in keeping the afterburner in operation and a consultant from Brantley Instruments Inc. is presently investigating the problem for ABI. ABI suspects that operating changes in pressure and velocity in the upper cupola cause puffs of air which moves the afterburner flame out of sight of the safety scanner. When the scanner does not detect a flame, the gas supplied to the afterburner is immediately shut down. The resultant decrease in upper cupola temperature allows the baghouse to operate at a lower temperature than normal (which is usually between 300-400°F.) Consequently, HC vapors, which normally would combust in the afterburner section, condense as an oily film on the inside of the baghouse bags. When the afterburner is again ignited, the baghouse temperature rises, causing the deposited HC to vaporize and discharge to the atmosphere. According to Mr. Wixson, whenever this sequence of events occurs, visible emissions can be observed.

(B) Visible emissions were also observed on 6/8/79 at 1:40 p.m. emanating from two baghouses controlling particulate emissions from cleaning operations. Readings were recorded for emissions from baghouse #2 (as shown in figure 1.) The EPA inspectors informed Mr. Wixson that visible emission readings were being recorded. He immediately had operations shut down and the baghouses were inspected. Baghouses #2 and #3 (figure #1) were found to have broken bags which were then replaced.

TABLE I

Inspection Summary Table

American Brass & Iron Foundry
Oakland, CA

June 1979

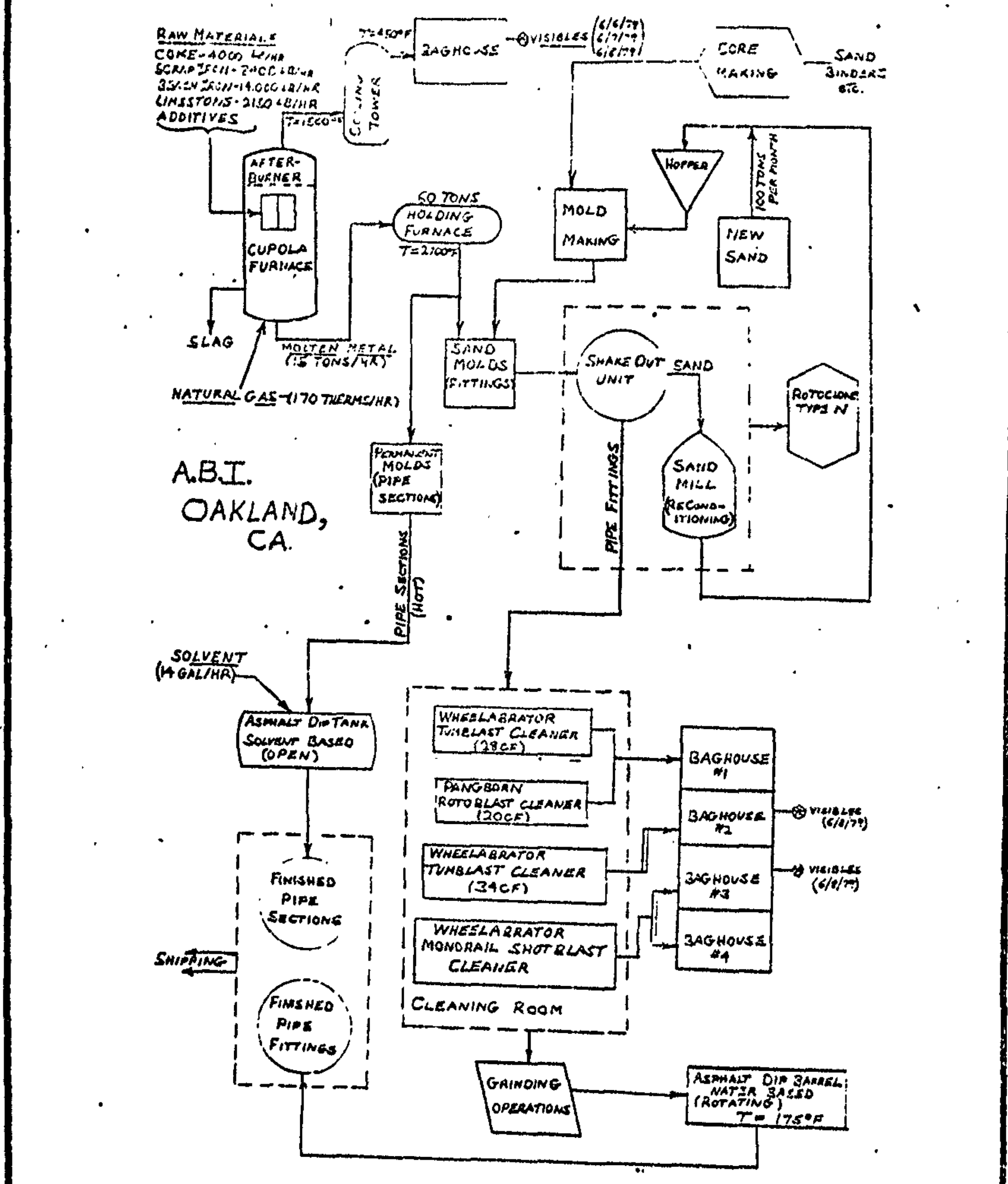
Emission Point or Process	Applicable Rule and Requirements	Emission Estimates Observations
(A) BAGHOUSE servicing CUPOLA FURNACE	BAAQMD RULE 3110 opacity not to exceed 20% (Ringleman 1 equivalent) for more than 3 minutes.	6/7/79 - Visible emissions of 20-40% observed for almost ten minutes (VEO sheet attached).
(B) BAGHOUSE (#2) servicing Wheel-abrator Tumblast cleaning machine	Same as Above	6/8/79 - Visible emissions of 20-40% observed for six minutes (VEO sheet attached).

Process Description

ABI is a gray iron foundry which produces primarily cast iron pipe and pipe fittings. The process is diagramed in Figure 1 and all air pollution control equipment is indicated. Raw materials are fed to a cupola furnace in layers consisting of coke (from Japan), beach iron (a type of pig iron cast in Sweden), scrap steel (primarily old engine blocks), returns (from the casting process), limestone, and other additives. The charge is melted in the cupola and then transferred through a launder to a channel induction holding furnace before pouring. Production rate of gray cast iron is approximately 15 tons per hour.

After the castings are poured and cooled the sand cast molds (for pipe fittings) are transferred to a shakeout unit where the sand and castings are separated. The sand is reconditioned and returned to hoppers for use in other molds (approximately 100 tons of sand per month are lost in the process and must be replaced). The cast fittings are then conveyed to cleaning units where they are cleaned by shotblast machines, ground, and finished before being coated with a hot (water based) asphalt mixture for rust protection. The piping sections are cast in permanent metal molds, bypass the cleaning process, and are conveyed directly to a dip tank area where they are coated with a solvent based asphalt mixture. (The solvent is a petroleum hydrocarbon fraction blend).

In a separate process, sand cores are made for use in the molds with phenolic resins primarily used as binders.



	Environmental Protection Agency Surveillance & Analysis Division Region IX San Francisco	ABI OAKLAND CA PROCESS FLOW DIAGRAM
	Robert L. [illegible] (6/29/79)	Figure No. 1

Source History

BAAQMD files indicate that 56 NOVs have been issued to ABI since April, 1973. 35 of these NOVs were for excess visible emission from either the cupola baghouse or the cupola loading doors. 30 of these 35 NOVs have been cited in civil actions as indicated below. Another 14 NOVs were issued for visible emissions from a cyclone/dusthouse system which is no longer operational. The remaining NOVs were issued for various other process malfunctions.

March 18, 1974 - BAAQMD filed a Complaint for Civil Penalties No. 277723 against ABI with the Municipal Court of the State of California in and for the County of Alameda for 10 incidents of excess visible emissions. A settlement was reached on 12/2/74 for $4,800.

May 20, 1974 - BAAQMD performed a source test on ABI foundry roof emission points (windows, vents, ect.). Particulate emissions were found to exceed limits of BAAQMD Regulation 2 Section 6112 and a NOV was issued on 7/25/74. The process and control equipment responsible for the excessive particulate matter (a pipe making machine and a cyclone/dusthouse system) were removed from service in late 1974.

May 19, 1975 - BAAQMD filed a Complaint for Civil Penalties No. 464711-7 with the Superior Court of the State of California in and for the County of Alameda for 13 incidents of excess visible emissions. A settlement was reached on 3/3/76 for $2,000.

June 6, 1975 - BAAQMD performed a source test on the ABI cupola furnace as a special project for source inventory information. The source test location was situated in the duct below the blower and the baghouse. Samples of CO, SO_2, NO_x, and O_2 were obtained. However, particulate matter was not sampled. Instead, an estimate was made using EPA AP42 emission factors, since the cupola baghouse opens to the atmosphere without a stack or any other concentrated emission point for sampling purposes.

September 7, 1978 - A letter of complaint was sent to EPA regarding frequent observations of "acrid and voluminous air pollution" emanating from ABI facilities. (letter is retained in EPA S&A files)

October 20, 1978 - BAAQMD filed a Complaint for Civil Penalties No. 335968 against ABI with the Municipal Court of the State of California in and for the County of Alameda for 7 incidents of excess visible emissions. The case is currently pending, and awaiting a trial date.

February 26, 1979 - BAAQMD conducted a formal inspection of ABI's facilities. All operations and equipment were found to be in compliance.

March 8, 1979 - BAAQMD granted ABI an Authority to Construct No. 26778 for a new Monorail Wheelabrator Shot-Blast Cleaning System with a baghouse. A source test may be required by the District when construction is complete, if observation of the device in operation appears to warrant it.