

PM
11-7-89
St. Louis, MO

File Copy
AC 16-170990-95



ANHEUSER-BUSCH COMPANIES

November 7, 1989

Mr. Clair H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
NOV 9 1989
DER BAUM

Re: **Anheuser-Busch, Inc.**
Jacksonville Brewery
Anaerobic Treatment Facility

Dear Mr. Fancy:

The information presented below is submitted in support of the air permit application for the referenced project. This information is submitted in response to your 30 October, 1989 request.

The table entitled, "Maximum Emissions Increase Due to the Project" (copy attached), in the Emissions Data section of the application, presents the maximum emissions associated with combustion of 100 percent of the biogas produced, regardless of which source fires this fuel.

Combustion of the entire annual production of biogas, i.e., 292 million cubic feet, will result in 37.2 tons of SO₂ emissions. Since the existing boilers, the existing duct burners, and the proposed flare all have the rated capacity to individually fire the entire annual production of biogas, their maximum potential annual emissions due to biogas firing are 37.2 tons each. Therefore, the net increase in SO₂ emissions from the project will be 37.2 tons per year.

"Emission Summaries..." tables from the application (copies attached) present the maximum potential emissions due to firing all combinations of fuels for which permits are requested for each existing and proposed source.

Each existing boiler has the capacity to fire the entire annual production of biogas. Thus, total annual emissions are the same whether biogas is fired in one boiler or all four boilers.

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If you have any questions on this information, please call me
at (314) 577-4162.

Sincerely,

ANHEUSER-BUSCH COMPANIES, INC.



Dean E. Pusch
Sr. Environmental Scientist

DEP:cd

Attach.

DEP1107

BT/CHF

Teresa Heron

Steve Pacc. BESD

Mort Benjamin - NEDIT.

} 11-9-89 RAN

JACKSONVILLE BREWERY - ANAEROBIC TREATMENT FACILITY

MAXIMUM EMISSIONS INCREASES DUE TO THE PROJECT

	tons/yr
PM/PM-10 (a)	1.1
NOx (a)	20.8
CO (b)	76.5
VOC (b)	3.7
SO2 (a)	37.2
H2S (c)	0.04

-
- (a) combustion of all biogas produced in new flare
 - (b) combustion of 12 MM Btu/hr biogas in new boiler (73.6 t/yr), and remaining volume in existing boilers, duct burner, and/or flare (2.9 t/yr)
 - (c) from vent gas scrubbing; maximum short-term emissions are 0.05 lb/hr

**JACKSONVILLE BREWERY - ANAEROBIC TREATMENT FACILITY
EMISSIONS SUMMARY - EXISTING POWER BOILERS**

	<u>oil</u>	natural <u>gas</u>	<u>biogas</u>	biogas <u>& oil</u>	biogas & <u>natural gas</u>
PM/PM-10					
lb/hr (a)	9.2	0.5	1.0	9.2	1.0
ton/yr (a)	40.3	2.2	1.1	36.3	3.2
total ton/yr (b)	84.8	8.4	1.1	75.1	9.0
NOx					
lb/hr (a)	36.8	24.3	18.4	36.8	24.3
ton/yr (a)	161.2	106.4	20.8	161.5	120.3
total ton/yr (b)	338.7	424.9	20.8	316.3	418.2
CO					
lb/hr (a)	3.1	3.3	4.9	4.9	4.9
ton/yr (a)	13.6	14.5	5.5	17.4	19.1
total ton/yr (b)	28.3	58.5	5.5	30.2	60.2
VOC					
lb/hr (a)	0.2	0.3	1.0	1.0	1.0
ton/yr (a)	0.9	1.3	1.1	1.9	2.3
total ton/yr (b)	3.5	5.2	1.1	4.2	6.0
SO2					
lb/hr (a)	144.4	0.1	73.7	144.4	73.7
ton/yr (a)	632.5	0.3	37.2	589.1	37.5
total ton/yr (b)	1332.0	1.2	37.2	1199.5	38.3

[a] Each of four boilers.

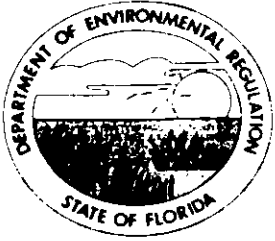
[b] Total for four boilers

**JACKSONVILLE BREWERY - ANAEROBIC TREATMENT FACILITY
EMISSIONS SUMMARY - EXISTING DUCT BURNER**

	<u>natural gas</u>	<u>biogas</u>	<u>biogas & natural gas</u>
PM/PM-10			
lb/hr	0.2	0.4	0.4
ton/yr	0.9	1.1	1.4
NOx			
lb/hr	3.8	7.2	7.2
ton/yr	16.6	20.8	26.5
CO			
lb/hr	1.5	1.9	1.9
ton/yr	6.6	5.5	7.8
VOC			
lb/hr	0.2	0.4	0.4
ton/yr	0.9	1.1	1.4
SO2			
lb/hr	0.03	28.9	28.9
ton/yr	0.13	37.2	37.2

**JACKSONVILLE BREWERY - ANAEROBIC TREATMENT FACILITY
EMISSIONS SUMMARY -NEW BOILER AND FLARE**

		<u>Boiler</u>		<u>Flare</u>
		<u>natural gas</u>	<u>biogas</u>	<u>biogas</u>
PM/PM-10	lb/hr	0.1	0.1	0.6
	ton/yr	0.4	0.3	1.1
NOx	lb/hr	1.7	1.2	11.2
	ton/yr	7.4	5.3	20.8
CO	lb/hr	0.4	16.8	3.0
	ton/yr	1.8	73.6	5.5
VOC	lb/hr	0.03	0.2	0.6
	ton/yr	0.13	0.8	1.1
SO2	lb/hr	0.01	9.1	44.9
	ton/yr	0.04	18.0	37.2



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

October 30, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Dean E. Pusch, Environmental Scientist
Anheuser-Busch, Inc.
202-4. One Busch Place
St. Louis, MO

Dear Mr. Pusch:

Re: Completeness Review for the Anerobic Treatment Facility

The Department has reviewed your applications for permits to construct an anaerobic treatment facility at the Anheuser-Busch, Inc. brewery in Jacksonville, Duval County, Florida. We need more information to process these applications. Please complete the applications by supplying the information requested below:

The SO₂ emission increase due to the burning of bio-gas on the proposed flare, wastewater boiler, and the existing duct burner is over the significance emission rate (F.A.C. Table 500-2). Please confirm the emission increase of this pollutant from each of these sources. If the net SO₂ increase is over the significant emission rate of 40 TPY, the project is subject to a prevention of significance deterioration (PSD) review for this pollutant (SO₂). Please provide the information required by F.A.C. Rule 17-2.500.

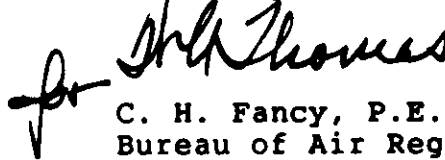
It is not clear if other fuels will be burned with the bio-gas (eg. bio-gas and oil, and bio-gas and natural gas burning) for the four existing boilers and the duct burner. Are you seeking permits for the above mentioned fuel combinations? Please explain.

The table entitled: Emission Summary - Existing Power Boilers., list the same emission for one and for the four (4) boilers. Is only one of the four boilers operating at any one time? Please explain.

Mr. Dean E. Pusch
Page Two
October 30, 1989

If you have any questions about the data requested, please call
Teresa M. Heron at (904)488-1344 or write to me at the above
address.

Sincerely,

A handwritten signature in cursive script, appearing to read "C. H. Fancy".

C. H. Fancy, P.E.
Bureau of Air Regulation

CHF/TH/t

cc: J. Cole, NE District
D. Hall, BESD

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 Mr. Dean E. Pusch
 Environmental Scientist
 Anheuser-Busch, Inc.
 202-4 One Busch Place
 St. Louis, MO 63118-1852

4. Article Number
 P 938 762 730

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee agent and DATE DELIVERED

5. Signature - Address
 X

6. Signature - Agent
 X *Dean E. Pusch*

7. Date of Delivery

8. Addressee's Address ONLY if requested and fee paid

ST. LOUIS, MO 63118-1852

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

938 762 730
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sent to	
Mr. Dean E. Pusch, Anheuser-Busch, Inc.	
Street and No. 202-4 One Busch Place	
P.O., State and ZIP Code St. Louis, MO 63118-1852	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom Date and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 11-1-89	
Permit: AC 16-170990-, -91 -92, -93, -94, -95	

PS Form 3800, June 1985



ANHEUSER-BUSCH COMPANIES

RECEIVED
DER - MAIL ROOM

1989 OCT -3 AM 10: 56

September 28, 1989

Ms. Patricia G. Adams
Florida Department of Environ-
mental Regulation
Air Pollution Control
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Ms. Adams:

Enclosed please find a check for \$1300 to cover the additional fee requirement for processing of the previously submitted construction permit application for an anaerobic treatment facility at the Anheuser-Busch, Inc. brewery in Jacksonville. This check, plus the check for \$2200 submitted with the application, brings the total submittal for processing of this application to \$3500.

Sincerely,

ANHEUSER-BUSCH COMPANIES

Dean E. Pusch
Sr. Environmental Scientist
(314) 577-4162

DEP:cd
Enclosure

DEP928-1

1031