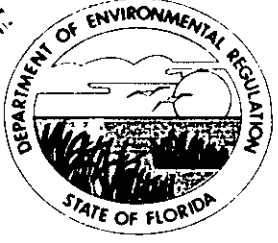


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# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400  
Bob Martinez, Governor Dale Twachtman, Secretary John Shearer, Assistant Secretary

January 19, 1990

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. John P. Wilchek  
Anheuser-Busch, Inc.  
202-4, One Busch Place  
St. Louis, MO 63118

Dear Mr. Wilchek:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permits to construct an anaerobic pretreatment facility at the Anheuser-Busch, Inc.'s existing beer brewery facility in Jacksonville, Duval County, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Regulation.

Sincerely,

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

CHF/TH/plm

Attachments

- c: Dean E. Pusch, Anheuser-Busch, Inc.
- Charles M. Nolan, P.E.
- Ron Roberson, BESD
- Andy Kutyna, NE District

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of  
Application for Permits by:

Anheuser-Busch, Inc.  
One Busch Place (202-4)  
St. Louis, Missouri 63118

DER File No. AC 16-170992  
thru -170995

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INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (copies attached) for the proposed project as detailed in the applications specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Anheuser-Busch, Inc., applied on September 12, 1989, to the Department of Environmental Regulation for permits to construct an anaerobic pretreatment facility at the Anheuser-Busch, Inc.'s existing beer brewery facility in Jacksonville, Duval County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

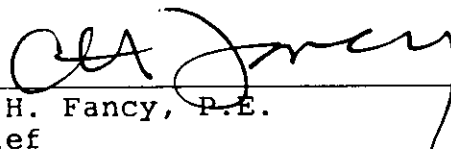
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



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

Copies furnished to:

Dean E. Pusch, Anheuser-Busch, Inc.  
Charles M. Nolan, P.E.  
Ron Roberson, BESD  
Andy Kutyna, NE District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 1-22-90.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

Kym Ober  
Clerk

1-22-90  
Date

State of Florida  
Department of Environmental Regulation  
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue permits to Anheuser-Busch, Inc., 202-4, One Busch Place, St. Louis, MO 63118 to construct an anaerobic pretreatment facility at their existing beer brewery facility in Jacksonville, Duval County, Florida. A determination of Best Available Control Technology (BACT) was required for the wastewater boiler. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the

Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Department of Environmental Regulation  
Northeast District  
3426 Bills Road  
Jacksonville, Florida 32207

Bio-Environmental Services Division  
421 W. Church Street, Suite 412  
Jacksonville, Florida 32202

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation  
and  
Preliminary Determination

Anheuser-Busch Companies  
Duval County  
Jacksonville, Florida

Anaerobic Pretreatment Facility

<u>File No.</u>	<u>Source</u>
AC 16-170992	12MMBTU/hr Wastewater Boiler
AC 16-170993	Flare
AC 16-170994	Back-up Flare
AC 16-170995	Scrubber

Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation

January 19, 1990



## I. SYNOPSIS OF APPLICATION

### I.1 Applicant Name and Address

Anheuser-Busch, Inc.  
202-4 One Busch Place  
St. Louis, MO 63118

### I.2 Reviewing and Process Schedule

Date of Receipt of Applications: September 19, 1989 and November 9, 1989.

30 days of Receipt of Application: Incompleteness letter dated October 30, 1989.

Response to Incompleteness Letter: Company's letter dated November 9, 1989 and additional information received on December 11, 1989.

Applications Completeness Date: November 9, 1989.

## II. FACILITY INFORMATION

### II.1 Facility Location

Anheuser-Busch, Inc. is located at 111 Busch Drive in Jacksonville, Duval County, Florida. The UTM coordinates are Zone 17, 438.01 km East and 3366.79 km North.

### II.2 Standard Industrial Classification Code (SIC)

This facility is classified as follows:

Major Group No. 20 - Food and Kindred Products.

Group No. 208 - Beverages

Industry No. 2082 - Malt Beverages

### II.3 Facility Category

The Anheuser-Busch brewery is classified as a major emitting facility. Total permitted emissions for this anaerobic facility shall not be allowed to exceed in tons per year the following amounts: 1.1 particulate matter (PM/PM<sub>10</sub>), 20.8 nitrogen oxides, 37.2 sulfur dioxide, 76.5 carbon monoxide, 3.7 volatile organic compounds, 0.04 hydrogen sulfide.

### III. PROJECT DESCRIPTION

An anaerobic pretreatment facility has been proposed for the Anheuser-Busch brewery in Jacksonville, Florida. This system will treat brewery process wastewater and discharge effluent to the city's sewage treatment plant. The anaerobic process generates a by product combustible gas (biogas) that Anheuser-Busch proposes to combust in new and existing fuel-fired sources at the brewery. The pretreatment facility will also include a chemical wet scrubber to treat any unused biogas and prevent the release of odors from the process area.

### IV. PROCESS DESCRIPTION

#### Biogas Combustion

The applicant's intent is to utilize the maximum quantity of biogas to offset fuel consumption in new and existing combustion sources. The existing sources include the brewery boilers, currently permitted to fire natural gas and fuel oil, and the cogeneration system duct burner which is permitted to fire natural gas. New sources are a boiler and flares. No biogas will be used to fire the cogeneration system turbine.

Preliminary design indicates that the most feasible approach is to tie the biogas into the natural gas feed line to these sources. As biogas contains less methane than natural gas, combustion controls will be needed to accept the low-BTU fuel mixture. Each of these sources may burn the total volume of biogas at any time.

A new boiler, capable of firing 12 million BTU's per hour of biogas or natural gas, will be used to generate steam which will be utilized to maintain proper wastewater temperature.

Under certain conditions such as excess biogas production, insufficient steam demand, and mechanical malfunction, it may be necessary to direct biogas flow to a flare. Based upon data from similar treatment installations, the amount of biogas flared may be 10-20% of that produced. However, on a short-term basis, all of the biogas produced may need to be flared. The flare system will contain two flares and incorporate auto-ignition.

#### Biogas Storage

Detailed strategy for biogas utilization in the various combustion sources has not been completed. The current conceptual design, as stated above, involves injection of biogas as produced into the natural gas feeder lines, thus creating a blend of the two gases. There is a small gasholder, which acts both as a surge and back-pressure vessel, providing several minutes detention time for biogas. The maximum hourly combustion

of biogas equals the maximum hourly production rate of the anaerobic treatment facility.

An optional design scenario would incorporate storage of biogas and fuel sequencing so that gases can be burned individually rather than together and at rates greater than the biogas production rate. With storage, there would be the capability to operate each combustion source on biogas up to its rated capacity. This strategy would generate higher emissions. However, the annual combustion of biogas will remain constant with or without the storage capability.

#### Vent Scrubber

The Anaerobic process converts all forms of sulfur in the waste into the reduced sulfide form. Depending upon the reactor's pH and Henry's law constant, a certain amount of hydrogen sulfide ( $H_2S$ ) will be released from solution into the biogas. Based upon chemical equilibria and empirical observations, the  $H_2S$  content of biogas will average 0.18% (wt). All biogas is collected under pressure (approx. 0.5 psi) within the anaerobic reactor.

Occasionally the anaerobic reactors may over-pressurize, venting biogas into the tank head space. For this reason, the reactor headspace, as well as other tanks and sumps in the system, are vented to an odor control scrubber. The wet scrubber is an atomization type and includes dual reaction chambers. The scrubbing mist is an aqueous solution of sodium hydroxide (NaOH) and sodium hypochlorite (NaOCl) formulated to neutralize and oxidize  $H_2S$ . The spent solution will be discharged along with the treated effluent.

#### Process Monitoring

The anaerobic process is very stable with  $H_2S$  concentrations in the produced gas remaining constant over a 24-hour period. The stability of the process allows an instantaneous sample to be representative of conditions that persist for a much longer duration. Anheuser-Busch will track short-term sulfur dioxide emissions by monitoring daily biogas production and obtaining an  $H_2S$  grab sample every 24 hours. These data will be utilized to determine compliance with short-term and long-term  $SO_2$  emission limits.

#### V. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Rules 17-2 and 17-4.

The Anheuser-Busch, Inc. brewery is located in Jacksonville (Duval County) approximately 7 km North of an area designated as nonattainment for particulate matter (PM). Particulate matter is emitted at the brewery from four oil-fired boilers, grain and dust handling systems, and spent grain drying operation. Duval County is also classified as a nonattainment area for ozone (F.A.C. Rule 17-2.410), Unclassified for PM<sub>10</sub> and sulfur dioxide (F.A.C. Rule 17-2.430), and attainment for all the other criteria pollutants (F.A.C. Rule 17-2.420).

The proposed project, construction of the anaerobic pretreatment facility, is exempt from review under F.A.C. Rule 17-2.500, Prevention of a Significant Deterioration (PSD), and F.A.C. Rule 17-2.510, New Source Review for Nonattainment Areas, because the modification does not result in a significant emission increase of any criteria pollutants. The maximum emission increases due to the project are below the PSD significant level (F.A.C. Table 500-1). The proposed emission increases for each pollutant are listed in Table 1, Summary of Emissions. A PSD review including modeling for NO<sub>2</sub> was previously conducted for the cogeneration project (gas turbine and duct burner).

The proposed anaerobic pretreatment facility will be the first project at the brewery since PSD review PSD-FL-115. Any future emission increases within 5 years of this modification will be counted as part of the contemporaneous emission change.

This proposed project shall be permitted under Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements. The proposed source shall comply with F.A.C. Rules 17-2.620(1) and (2), General Pollutant Emission Limiting, and F.A.C. Rule 17-2.610, General Particulate Emission Limiting Standards.

## VI. SOURCE IMPACT ANALYSIS

### VI.1 Emission Limitations

The operation of the anaerobic pretreatment facility will produce emissions of particulate matter (PM/PM-10), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic compound (VOC), and hydrogen sulfide (H<sub>2</sub>S).

Table 1 shows the proposed increase in emissions due to this project along with contemporaneous emission increases that have occurred at the brewery during the last 5 years.

Odors will be controlled by an odor control scrubber system. Combustion of the entire annual production of biogas (292 million cubic feet) will result in 37.2 tons of SO<sub>2</sub> emissions. Therefore, the net increase in SO<sub>2</sub> emissions from the

project will be 37.2 tons per year. Since the existing boiler, the existing duct burner, and the proposed flares all have the rated capacity to individually fire the entire annual production of biogas, their maximum SO<sub>2</sub> potential annual emissions due to biogas firing are 37.2 tons each. Thus, total annual emissions are the same whether biogas is fired in one boiler or all four boilers.

## VI.2 Air Quality Analysis

From a technical review of the application, the Department has determined that the installation and operation of this source will not have a detrimental impact on Florida's ambient air quality.

## VII. CONCLUSION

Based on the information provided by Anheuser-Busch Companies, the Department has reasonable assurance that the installation of the proposed source, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.



A handwritten signature, possibly "J. G. Thomas", is written over a circular stamp. Below the signature, the date "01/22/90" is handwritten.

Note: Existing construction permits AC 16-119130 for the four B & W boilers and AC 16-119132 for the duct burner were modified to reflect the combustion of biogas on these sources. The Department's letter dated January 19, 1990 shall be attached to the above mentioned permits and shall become a part of these permits.

Table 1  
Summary of Emissions

Source	Pollutant (tons per year)				
	NOx	CO	SO <sub>2</sub>	PM/PM-10	VOC
PSD-FL-115					
Turbine	(a)	16.3	0.3	2.3	2.7
Duct Burner	(a)	6.4	0.1	0.9	1.0
Anaerobic Treatment Project					
Proposed Emissions (b)	<u>20.8</u>	<u>76.5</u>	<u>37.2</u>	<u>1.1</u>	<u>3.7</u>
Total Increase	20.8	99.2	37.6	4.3	7.4
PSD Significant (c)					
Emissions Rate	40	100	40	25/15	40

a) Previously permitted under PSD review for NOx and AC 16-119131 and AC 16-119132 requirements in October 3, 1986 and modified in April 23, 1987.

b) Maximum emission increase due to project.

c) Table 500-2, Chapter 17-2 F.A.C.

Emissions of Hydrogen Sulfide (H<sub>2</sub>S) shall not exceed 0.05 lb/hr and 0.04 ton/yr. The acceptable ambient concentration of 100 ppb (140 ug/m<sup>3</sup>) 8 hours and 23.8 ppb (33.3 ug/m<sup>3</sup>) 24 hours for hydrogen sulfide shall not be exceeded.

Best Available Control Technology (BACT) Determination  
Anheuser-Busch, Inc.  
Duval County

The applicant plans to install and operate a 12.0 MMBtu/hr wastewater boiler at their facility in Jacksonville, Florida. The boiler, which will fire natural gas or biogas, is scheduled to operate 8,760 hours per year.

BACT Determination Requested by the Applicant:

The applicant has requested that natural gas or biogas with a maximum H<sub>2</sub>S concentration of 4,000 ppm by weight be used.

BACT Determination by DER:

The amount of particulate and sulfur dioxide emissions emitted from the boiler shall be limited by the firing of natural gas or biogas containing no more than 4,000 ppm of H<sub>2</sub>S by weight.

BACT Determination Rationale:

Sulfur in fuel is a primary air pollution concern, in that most of the fuel sulfur becomes SO<sub>2</sub> and particulate emissions from fuel burning are related to the sulfur content. The firing of natural gas or biogas containing no more than 4,000 ppm H<sub>2</sub>S shall be BACT for the boiler. The emissions of sulfur dioxide from natural gas combustion is negligible. The level of sulfur in the proposed biogas is equivalent to residual oil with a sulfur content of 0.72 percent, which would be considered BACT.

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E., BACT Coordinator  
Department of Environmental Regulation  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Recommended by:

Approved by:

\_\_\_\_\_  
C. H. Fancy, P.E., Chief  
Bureau of Air Regulation

\_\_\_\_\_  
Dale Twachtmann, Secretary  
Dept. of Environmental Regulation

\_\_\_\_\_  
Date 1990

\_\_\_\_\_  
Date 1990



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

<b>PERMITTEE:</b>	<b>Permit Number:</b> AC 16-170992
Anheuser-Busch, Inc.	<b>Expiration Date:</b> October 30, 1991
One Busch Place (202-4)	<b>County:</b> Duval
St. Louis, Missouri 63118	<b>Latitude/Longitude:</b> 26°43'03"N 81°29'49"W
	<b>Project:</b> Anaerobic Pretreatment
	<b>Facility:</b> 12 MMBtu/hr Wastewater Boiler

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the installation of a 12 MMBtu/hr wastewater boiler. This boiler will be fired with natural gas and/or biogas and is part of an anaerobic pretreatment facility at the Anheuser-Busch, Incorporated's existing beer brewery located in Jacksonville, Duval County, Florida. The UTM coordinates of this site are zone 17, 437.9 km E and 3366.8 km N.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DER application Form 17-1.202(1) and letter dated September 12, 1989.
2. DER letter dated October 30, 1989.
3. Company letters dated November 7, 1989 and December 5, 1989.



PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170992  
Expiration Date: October 30, 1991

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170992  
Expiration Date: October 30, 1991

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170992  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170992  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

Wastewater Boiler, 12 MMBtu/hr Heat Input

1. The maximum allowable emissions from burning the entire annual production of 292 million cubic feet of biogas shall not exceed the following limits:

<u>Pollutant</u>	<u>Lbs Per Hour</u>	<u>Tons Per Year</u>	<u>Emission Factors</u>
PM/PM <sub>10</sub>	1.0	1.1	0.005 lb/MMBtu
NO <sub>x</sub>	18.4	20.8	0.1 lb/MMBtu
CO	21.7	76.5	1.4 lb/MMBtu
VOC	1.6	3.7	0.016 lb/MMBtu
SO <sub>2</sub>	73.7	37.2	0.76 lb/MMBtu
H <sub>2</sub> S	0.05	0.04	

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170992  
Expiration Date: October 30, 1991

SPECIFIC CONDITIONS:

2. Maximum H<sub>2</sub>S content in the biogas shall not exceed 0.40%.
3. Visible emissions shall not exceed 20 percent opacity.
4. This source shall be allowed to operate continuously (8760 hrs/yr).
5. Pursuant to F.A.C. Rule 17-2.620(2), objectionable odors are prohibited from this facility.
6. The maximum emission rates for the 12 MMBtu/hr wastewater boiler shall not exceed any of the following limits:

<u>Pollutant</u>	<u>Emission Rate</u>	
	<u>lb/hr</u>	<u>TPY</u>
PM/PM <sub>10</sub>	0.1	0.3
Sulfur Dioxide	9.1	18.0
Nitrogen Oxides	1.2	5.3
Volatile Organic Compounds	0.2	0.8
<u>Carbon Monoxide</u>	<u>10.0</u>	<u>73.6</u>

7. Before this construction permit expires the boiler shall be tested for sulfur dioxide, hydrogen sulfide, carbon monoxide, visible emissions and nitrogen oxides. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference methods which are described in Appendix A of 40 CFR 60.

- a. Method 1. Sample and Velocity Traverses.
- b. Method 2. Volumetric Flow Rate.
- c. Method 3. Gas Analysis.
- d. Compliance with the opacity limitation shall be determined by EPA Reference Method 9, Visual Determination of Opacity of Emission from Stationary Sources.
- e. Compliance with the sulfur dioxide emission limit shall be determined by calculations based on fuel analysis (ASTM D1552) for sulfur content.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170992  
Expiration Date: October 30, 1991

**SPECIFIC CONDITIONS:**

- f. Compliance with the allowable emission limit for nitrogen oxides shall be determined by using EPA Reference Method 7, Determination of Nitrogen Oxide Emissions from Stationary Sources.
  - g. Compliance with the hydrogen sulfide emission shall be determined by using EPA Reference Method 15, Determination of Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide Emission for Stationary Sources.
  - h. Compliance with the carbon monoxide emission shall be determined by using EPA Reference Method 10, Determination of Carbon Monoxide Emissions from Stationary Sources.
8. Tests results will be the average of 3 valid runs. The boiler shall be tested while burning biogas. The emission limits shall not exceed the rates specified in Specific Condition No. 1. The Bio-Environmental Services Division shall be notified at least 15 days in advance of the compliance test. The test will be conducted within 90-100% of permitted capacity.
9. This source shall comply with all applicable provisions of Chapter 17-2 F.A.C. and Chapter 403 Florida Statutes.
10. Upon obtaining a permit to operate, the permittee shall be required to submit annual reports on the actual parameters and emissions from this source. Annual reports shall be sent to the Bio-Environmental Services Division (BESD) in Jacksonville.
11. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
12. An application for an operation permit must be submitted to the Bio-Environmental Services Division office in Jacksonville at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

PERMITTEE:  
Anheuser-Busch, Inc.

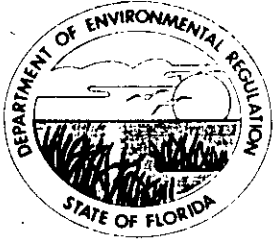
Permit Number: AC 16-170992  
Expiration Date: October 30, 1991

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1990

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

---

Dale Twachtman, Secretary



# 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

**PERMITTEE:**  
Anheuser-Busch, Inc.  
One Busch Place (202-4)  
St. Louis, Missouri 63118

Permit Number: AC 16-170993  
Expiration Date: October 30, 1991  
County: Duval  
Latitude/Longitude: 30°26'08"N  
81°38'32"W

Project: Backup Biogas Flare  
Anaerobic Pretreatment Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of biogas flare (100% efficiency). This flare is part of an anaerobic pretreatment facility at the Anheuser-Busch, Incorporated's existing beer brewery located in Jacksonville, Duval County, Florida. The UTM coordinates of this site are zone 17, 437.65 km E and 3366.8 km N.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DER application Form 17-1.202(1) and letter dated September 12, 1989.
2. DER letter dated October 30, 1989.
3. Company letters dated November 7, 1989 and December 5, 1989.



PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170993  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170993  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170993  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170993  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

1. The maximum allowable emissions from burning the entire annual production of 292 million cubic feet of biogas shall not exceed the following limits:

<u>Pollutant</u>	<u>Lbs Per Hour</u>	<u>Tons Per Year</u>	<u>Emission Factors</u>
PM/PM <sub>10</sub>	1.0	1.1	0.005 lb/MMBtu
NO <sub>x</sub>	18.4	20.8	0.1 lb/MMBtu
CO	21.7	76.5	1.4 lb/MMBtu
VOC	1.6	3.7	0.016 lb/MMBtu
SO <sub>2</sub>	73.7	37.2	0.76 lb/MMBtu
H <sub>2</sub> S	0.05	0.04	

2. Maximum H<sub>2</sub>S content in the biogas shall not exceed 0.40%.

3. This source shall be allowed to operate continuously, 8,760 hrs/yr.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170993  
Expiration Date: October 30, 1991

**SPECIFIC CONDITIONS:**

4. Opacity shall not exceed 5%. Emissions from the flare shall not exceed the following limits:

<u>Pollutant</u>	<u>Tons Per Year</u>	<u>Lbs Per Hour</u>
PM/PM <sub>10</sub>	1.1	0.6
NO <sub>x</sub>	20.8	11.2
CO	5.5	3.0
VOC	1.1	0.6
SO <sub>2</sub>	37.2	44.9

5. This source shall meet applicable specification requirements (60.18) of the general provisions 40 CFR 60, General Control Device Requirements.

6. Before this construction permit expires, this source shall be tested for visible emissions (VE). Compliance with the opacity limitation shall be determined by EPA reference Method 9, Visual Determination of Opacity of Emissions from Stationary Sources. The BESD's office shall be notified at least 15 days in advance of the compliance test.

7. Pursuant to Rule 17-2.620(2), F.A.C., objectionable odors are prohibited from this facility.

8. An operation and maintenance plan shall be submitted to the BESD office to assure that the system operates efficiently.

9. The maximum heat input shall not exceed 59.1 MMBtu/hr. Maximum biogas combustion shall not exceed 78,000 cu. ft. per hour. Maximum biogas heating value shall not exceed 750 Btu per cu. ft. Maximum biogas combustion for the whole anaerobic pretreatment facility shall not exceed 292 million cu. ft. per year.

10. This source shall comply with all applicable provisions of Chapter 17-2, F.A.C. and Chapter 403, F.S.

11. Upon obtaining a permit to operate, the permittee shall be required to submit annual reports on the actual parameters (flow rate, combustion efficiency, pressure drop, flame length, net heating value of gas, velocity, etc.) and emissions from this source. Annual reports shall be sent to the Bio-Environmental Services Division (BESD) in Jacksonville.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170993  
Expiration Date: October 30, 1991

**SPECIFIC CONDITIONS:**

12. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

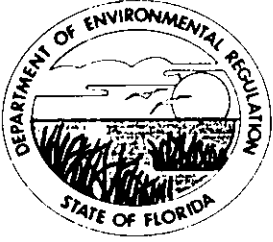
13. An application for an operation permit must be submitted to the BESD office in Jacksonville at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1990

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION**

---

Dale Twachtmann, Secretary



# 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

**PERMITTEE:**  
Anheuser-Busch, Inc.  
One Busch Place (202-4)  
St. Louis, Missouri 63118

Permit Number: AC 16-170994  
Expiration Date: October 30, 1991  
County: Duval  
Latitude/Longitude: 30°26'08"N  
81°38'32"W  
Project: Biogas Flare  
Anaerobic Pretreatment Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of biogas flare (100% efficiency). This flare is part of an anaerobic pretreatment facility at the Anheuser-Busch, Incorporated's existing beer brewery located in Jacksonville, Duval County, Florida. The UTM coordinates of this site are zone 17, 437.65 km E and 3366.8 km N.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DER application Form 17-1.202(1) and letter dated September 12, 1989.
2. DER letter dated October 30, 1989.
3. Company letters dated November 7, 1989 and December 5, 1989.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170994  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.



PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170994  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170994  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170994  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

1. The maximum allowable emissions from burning the entire annual production of 292 million cubic feet of biogas shall not exceed the following limits:

<u>Pollutant</u>	<u>Lbs Per Hour</u>	<u>Tons Per Year</u>	<u>Emission Factors</u>
PM/PM <sub>10</sub>	1.0	1.1	0.005 lb/MMBtu
NO <sub>x</sub>	18.4	20.8	0.1 lb/MMBtu
CO	21.7	76.5	1.4 lb/MMBtu
VOC	1.6	3.7	0.016 lb/MMBtu
SO <sub>2</sub>	73.7	37.2	0.76 lb/MMBtu
H <sub>2</sub> S	0.05	0.04	

2. Maximum H<sub>2</sub>S content in the biogas shall not exceed 0.40%.

3. This source shall be allowed to operate continuously, 8,760 hrs/yr.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170994  
Expiration Date: October 30, 1991

SPECIFIC CONDITIONS:

4. Opacity shall not exceed 5%. Emissions from the flare shall not exceed the following limits:

<u>Pollutant</u>	<u>Tons Per Year</u>	<u>Lbs Per Hour</u>
PM/PM <sub>10</sub>	1.1	0.6
NO <sub>x</sub>	20.8	11.2
CO	5.5	3.0
VOC	1.1	0.6
SO <sub>2</sub>	37.2	44.9

5. This source shall meet applicable specification requirements (60.18) of the general provisions 40 CFR 60, General Control Device Requirements.

6. Before this construction permit expires, this source shall be tested for visible emissions (VE). Compliance with the opacity limitation shall be determined by EPA reference Method 9, Visual Determination of Opacity of Emissions from Stationary Sources. The BESD's office shall be notified at least 15 days in advance of the compliance test.

7. Pursuant to Rule 17-2.620(2), F.A.C., objectionable odors are prohibited from this facility.

8. An operation and maintenance plan shall be submitted to the BESD office to assure that the system operates efficiently.

9. The maximum heat input shall not exceed 59.1 MMBtu/hr. Maximum biogas combustion shall not exceed 78,000 cu. ft. per hour. Maximum biogas heating value shall not exceed 750 Btu per cu. ft. Maximum biogas combustion for the whole anaerobic pretreatment facility shall not exceed 292 million cu. ft. per year.

10. This source shall comply with all applicable provisions of Chapter 17-2, F.A.C. and Chapter 403, F.S.

11. Upon obtaining a permit to operate, the permittee shall be required to submit annual reports on the actual parameters (flow rate, combustion efficiency, pressure drop, flame length, net heating value of gas, velocity, etc.) and emissions from this source. Annual reports shall be sent to the Bio-Environmental Services Division (BESD) in Jacksonville.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170994  
Expiration Date: October 30, 1991

**SPECIFIC CONDITIONS:**

12. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

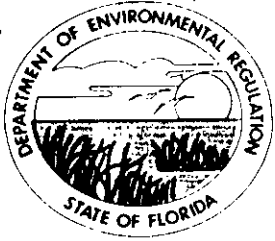
13. An application for an operation permit must be submitted to the BESD office in Jacksonville at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1990

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

---

Dale Twachtman, Secretary



# Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**  
Anheuser-Busch, Inc.  
One Busch Place (202-4)  
St. Louis, Missouri 63118

Permit Number: AC 16-170995  
Expiration Date: October 30, 1991  
County: Duval  
Latitude/Longitude: 30°26'08"N  
81°38'32"W

Project: Anaerobic Pretreatment  
Facility Hydrogen Sulfide (H<sub>2</sub>S)  
Scrubber to control odor and H<sub>2</sub>S  
emissions from the Reactor, Equali-  
zation Tank and Settling Basins.

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of scrubber (99% efficiency) to control odor and H<sub>2</sub>S emissions from the Reactor, Equalization Tank and Settling Basins, to be operated at the anaerobic pretreatment facility at the Anheuser-Busch, Incorporated's existing beer brewery located in Jacksonville, Duval County, Florida. The UTM coordinates of this site are Zone 17, 437.65 km E and 3367.01 km N.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DER application Form 17-1.202(1) and letter dated September 12, 1989.
2. DER letter dated October 30, 1989.
3. Company letters dated November 7, 1989 and December 5, 1989.

PERMITTEE:  
Anheuser-Busch, Inc.

Permit Number: AC 16-170995  
Expiration Date: October 30, 1991

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

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**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.



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The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and

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records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

1. The maximum allowable emissions from burning the entire annual production of 292 million cubic feet of biogas at the anaerobic pretreatment facility shall not exceed the following limits:

<u>Pollutant</u>	<u>Lbs Per Hour</u>	<u>Tons Per Year</u>	<u>Emission Factors</u>
PM/PM <sub>10</sub>	1.0	1.1	0.005 lb/MMBtu
NO <sub>x</sub>	18.4	20.8	0.1 lb/MMBtu
CO	21.7	76.5	1.4 lb/MMBtu
VOC	1.6	3.7	0.016 lb/MMBtu
SO <sub>2</sub>	73.7	37.2	0.76 lb/MMBtu
H <sub>2</sub> S	0.05	0.04	

2. Maximum H<sub>2</sub>S content shall not exceed 0.40%.

3. Maximum H<sub>2</sub>S emissions from this scrubber shall not exceed 0.05 lb/hr and 0.40 tons per year.

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**SPECIFIC CONDITIONS:**

4. Before this construction permit expires the scrubber shall be tested for hydrogen sulfide (H<sub>2</sub>S) except as provided under 40 CFR 60.8(b), the performance test shall be in accordance with EPA Method 15. Determination of Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide Emissions from Stationary Sources.

4. Jacksonville Bio-Environmental Service Division (BESD) shall be notified at least 15 days prior to source testing. Copies of the test report(s) shall be submitted to BESD within 45 days after completion of testing.

5. A pressure meter shall be installed on the scrubber system to measure the scrubbing liquid supply pressure. The pressure sensor or tap shall be located close to the scrubber liquid discharge point. The monitoring device is to be certified by the manufacturer to be accurate within  $\pm 15$  percent of design scrubbing liquid supply pressure.

6. This source is allowed to operate continuously, 8,760 hrs/yr.

7. In accordance with F.A.C. Rule 17-2.620(2), no person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

8. In accordance with F.A.C. Rule 17-2.240, Circumvention, no person shall circumvent any air pollution control device or allow the emissions or air pollutants without the applicable pollution control device operating properly.

9. This source shall comply with all applicable provisions of Chapter 17-2, F.A.C. and Chapter 403, Florida Statutes.

10. Upon obtaining a permit to operate, the permittee shall be required to submit annual reports on the actual parameters and emissions from this source. Annual reports shall be sent to the Bio-Environmental Services Division (BESD) in Jacksonville.

11. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

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**SPECIFIC CONDITIONS:**

12. An application for an operation permit must be submitted to the Bio-Environmental Services Division (BESD) office in Jacksonville at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1990

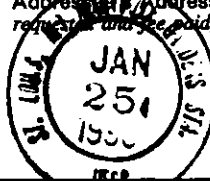
**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION**

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Dale Twachtman, Secretary

**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.    2.  Restricted Delivery (Extra charge)

<b>3. Article Addressed to:</b> Mr. John P. Wilchek Anheuser-Busch, Inc. 202-4, One Busch Place St. Louis, MO 63118	<b>4. Article Number</b> P 938 762 811 <b>Type of Service:</b> <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b>
<b>5. Signature - Address</b> X	<b>8. Addressee's Address (ONLY if restricted delivery is desired)</b> 
<b>6. Signature - Agent</b> X <i>Sally Schiefer</i> 1/25/90	
<b>7. Date of Delivery</b>	

PS Form 3811, Mar. 1988

\* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

P 938 762 811

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

Sent to Mr. Joh P. Wilchek, Anheuser-Busch, Inc	
Street and No. 202-4, One Busch Place	
P.O., State and ZIP Code St. Louis, MO 63118	
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: 1-22-90 Permit: AC 16-170992 thru 995	

PS Form 3800, June 1985