



South Coast Air Quality Management District



21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

August 7, 2015

Mr. Gerardo Rios
Chief - Permits Office
U. S. EPA, Region IX
75 Hawthorne Street, Air 3
San Francisco, CA 94105

Dear Mr. Rios:

**Subject: Anheuser-Busch, LLC, LA Brewery, Facility ID 16642
Title V Permit Revision, Application Number 572713**

Anheuser-Busch, LLC, LA Brewery, Facility ID 16642, needs to revise their Title V Facility Permit due to the installation of equipment for secondary and tertiary treatment of the effluent from the existing wastewater treatment system.

Anheuser-Busch is a beer brewing facility (SIC 2082), and is located at 15800 Roscoe Blvd, Van Nuys, CA 91406. The proposed permit revision is considered a "de minimis significant permit revision" to the facility's Title V Permit. Attached for your review are the evaluation and the proposed draft permit for the revision. With your expected receipt of the proposed draft Title V permit revision today, we will note that the EPA 45-day review period begins on August 7, 2015.

If you have any questions or need additional information regarding the proposed permit revision, please call Hassan Namaki at (909) 396-2699.

Very truly yours,

Mohan Balagopalan
Senior AQ Engineering Manager
Chemical, Mechanical, and Ports permitting

MB:SE:DG

Attachments



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION
PERMIT APPLICATION EVALUATION AND CALCULATIONS

PAGES: 24	PAGE: 1
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**RECLAIM/TV FACILITY PERMIT REVISION
EVALUATION FOR PERMIT TO CONSTRUCT**

APPLICANT'S NAME: ANHEUSER-BUSCH, LLC, LA BREWERY

CONTACT PERSON: ERICA NORD (818) 997-2740

MAILING ADDRESS: 15800 ROSCOE BLVD
VAN NUYS, CA 91406

EQUIPMENT ADDRESS: 15800 ROSCOE BLVD
VAN NUYS, CA 91406

APPLICATION: 572712, 572713

FACILITY ID: 16642 RECLAIM: YES (NOX & SOX) TITLE V: (YES)

APPLICATIONS:

APPL. No.	DESCRIPTION	PREVIOUS APPLICATION	PROCESS/SYSTEM	APPLICATION TYPE
572712	Secondary and Tertiary Wastewater Treatment System	N/A	7/3 7/4	Class I
572713	Reclaim/Title V Revision	N/A	N/A	Class III

BACKGROUND and PROJECT DESCRIPTION:

Anheuser-Busch, Facility ID 16642, is a RECLAIM/TV facility. The facility is located at 15800 Roscoe Boulevard in Van Nuys, CA California. The facility is located in an area zoned for mix residential/commercial use. Facility is installing secondary and tertiary treatment system, in addition to their current primary treatment equipment. The change to the facility permit under the above application is considered de minimis significant revision to the permit. The application will be processed as new construction for secondary treatment. As provided by the facility, the tertiary treatment system will include Reverse Osmoses and UV Oxidation system. Although the RO and UV Oxidation are not subject to AQMD permit requirements, they will be listed in the permit for clarification. The permit application will be processed as Permit to



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Construct. Process 7 includes the primary treatment system equipment including wastewater screening, equalization tanks, biogas reactors (digesters), biogas scrubber, odor control equipment, etc. The Primary Treatment System are described under system 1 and system 2 of the Process &. They will be listed in this evaluation to show how the new devices will be integrated with the existing equipment. The Secondary and Tertiary wastewater treatment (new additions) will be described under the same process (Process 7) under new systems (System 3 and System 4). System 3 will include all the devices for secondary treatment and system 4 will include devices for tertiary treatment. Wastewater treated includes mainly waste beer, tank rinses, container cleaning, wastewater generated from dewatering of waste yeast, floor rinse water and other brewery operations. No municipal wastewater of any type will be introduced to the wastewater treatment system.

The emissions associated with the proposed project are H2S and VOC. The permit applications for the project will be processed with requirements including source tests for VOC and H2S. Further, it will be required that facility perform frequently monitoring of H2S using calibrated handheld instruments (for detail on testing and monitoring please see permit conditions).

EQUIPMENT	DEVICE ID NO.	CONNECTED TO	RECLAIM SOURCE TYPE	EMISSIONS & REQUIREMENT	EQUIPMENT SPECIFIC CONDITIONS
Process 7: WASTEWATER TREATMENT SYSTEM					
System 1: Primary Treatment System					
SCREEN, CLASSIFYING, CLASSIFYING, WASTE WATER A/N: 380323	D224				
PROCESS TANK, PIT#1, WASTE WATER, 46000 GALS; WIDTH: 16 FT 6 IN; HEIGHT: 22 FT ; LENGTH: 17 FT A/N: 380323	D225				
PROCESS TANK, EQUILIZATION#1, WASTE WATER, 635000 GALS; DIAMETER: 60 FT; HEIGHT: 30 FT A/N: 380323	D226	C235			
PROCESS TANK, EQUILIZATION#2, WASTE WATER, 635000 GALS; DIAMETER: 60 FT; HEIGHT: 30 FT A/N: 380323	D227	C235			
DIGESTER, NO.1, WASTE WATER, 343000 GALS; DIAMETER: 33 FT; HEIGHT: 54 FT	D228	C235			



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A/N: 380323					
DIGESTER, NO.2, WASTE WATER, 343000 GALS; DIAMETER: 33 FT; HEIGHT: 54 FT A/N: 380323	D229	C235			
DIGESTER, NO.3, WASTE WATER, 343000 GALS; DIAMETER: 33 FT; HEIGHT: 54 FT A/N: 380323	D230	C235			
DIGESTER, NO.4, WASTE WATER, 343000 GALS; DIAMETER: 33 FT; HEIGHT: 54 FT A/N: 380323	D231	C235			
TANK, SURGE, BIOGAS A/N 290395	C260				
PROCESS TANK, WASTE WATER, EFFLUENT TANK, 15000 GALS; DIAMETER: 12 FT; HEIGHT: 17 FT A/N: 380323	D232				
PROCESS TANK, PIT#2, WASTE WATER, 46000 GALS; WIDTH: 16 FT 6 IN; HEIGHT: 22 FT ; LENGTH: 17 FT A/N: 380323	D233				
SUMP, WASTE WATER, WIDTH: 5 FT ; DEPTH: 12 FT; LENGTH: 7 FT A/N: 380323	D234				
BIOFILTER, TWO CELLS, EACH, WIDTH: 12 FT; LENGTH: 24 FT; FILTER THICKNESS: 4 FT; HEIGHT: 8 FT A/N: 381724	C235			H2S:6, NONE, 10.000 PPMV	D90.1, K67.5
Process 7: WASTEWATER TREATMENT SYSTEM					
System 2: Biogas Collection System					
STORAGE TANK, BIOGAS A/N: 380323	D262				
SCRUBBER, CHEMICAL, PACKED BED, BIOGAS, HYDROGEN	D299				C8.4, C10.1



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SULFIDE, WIDTH: 5 FT; HEIGHT:
10 FT; LENGTH: 7 FT

A/N: 380323

FUGITIVE EMISSIONS,
COMPRESSORS, BIOGAS

D263

A/N: 380323

Process 7: WASTEWATER TREATMENT SYSTEM

System 3: Secondary Treatment System

S1.1

TANK, DISSOLVED AIR
FLOATATION (DAF), 65000 GALS;
WIDTH: 17 FT; HEIGHT: 10 FT;
LENGTH: 51 FT

D938

D28.2

A/N 572712

AIR BLOWER, DAF, ONE, 1 HP, 10
SCFM

D939

A/N 572712

TANK, HOLDING, CENTRATE, 1,250
GALS; DIAMETER: 6 FT; HEIGHT:
8 FT;

D940

A/N 572712

TANK, STORAGE AND FEED,
SODIUM HYPOCHLORITE, 660 GALS

D941

A/N 572712

TANK, AERATION, 920,000 GALS;
DIAMETER: 72 FT; HEIGHT: 30 FT

D942

H2S: 1.5 PPMV (5)

A433.3, C12.1,
D28.1, D28.2,
D90.2

A/N 572712

AIR BLOWERS, AERATION, 3
TOTAL, 150 HP EACH, ONE
STANDBY, WITH TOTAL OF 3,760
SCFM AIR FLOW

D943

A/N 572712

TANK, MEMBRANE, NO. 1,
COVERED, 23,000 GALS; WIDTH: 9
FT; HEIGHT: 11 FT; LENGTH: 31 FT

D944

H2S: 1.5 PPMV (5)

A433.2, D90.4

A/N 572712

TANK, MEMBRANE, NO. 2,
COVERED, 23,000 GALS; WIDTH: 9
FT; HEIGHT: 11 FT; LENGTH: 31
FT,

D945

H2S: 1.5 PPMV (5)

A433.2, D90.4



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A/N 572712					
TANK, MEMBRANE, NO. 3, COVERED, 23,000 GALS; WIDTH: 9 FT; HEIGHT: 11 FT; LENGTH: 31 FT A/N 572712	D946			H2S: -1.5 PPMV (5)	A433.2, D90.4
AIR BLOWERS, MEMBRANE, 4 TOTAL, 30 HP EACH, ONE STANDBY, WITH TOTAL AIR FLOW OF 1,785 SCFM A/N 572712	D947				
TANK, SLUDGE, 12,000 GALS; DIAMETER: 12 FT; HEIGHT: 14 FT; ENCLOSED WITH PASSIVE VENT STACK A/N 572712	D948			H2S: 10 PPMV (5)	A433.4, D90.5
PRESS, DEWATERING, SLUDGE, WITH CENTRATE COLLECTION SUMP A/N 572712	D949				
Process 7: WASTEWATER TREATMENT SYSTEM					
System 4: Tertiary Treatment System					
TANK, REVERSE OSMOSIS BUFFER TANK, 30,000 GALS; DIAMETER: 16 FT; HEIGHT: 20 FT A/N 572712	D950				
REVERSE OSMOSIS SYSTEM WITH 54 MEMBRANE TUBES AND 3 PUMPS, EACH 75 HP A/N 572712	D951				
TANK, ADVANCED OXIDATION BUFFER TANK, 30,000 GALS; DIAMETER: 16 FT; HEIGHT: 20 FT A/N 572712	D952				
UV OXIDATION SYSTEM A/N 572712	D953				

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Existing permit conditions for the Primary Treatment including Bio Gas System, and Facility-Wide permit conditions:

F24.1 Accidental release prevention requirements of Section 112(r)(7):

- a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
- b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

C8.4 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 30 gpm.

The operator shall use a flow meter or pressure gauge with a pump flow curve correlating line pressure to flow rate to determine the flow rate. The operator shall determine and record the parameter being monitored once every 24 hours.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D299]

C10.1 The operator shall use this equipment in such a manner that the pH being monitored, as indicated below, is maintained between 8 and 11 of the pH scale.

To comply with this condition, the operator shall install and maintain a(n) pH meter to accurately indicate the pH in the scrubber recirculation line.

The operator shall also install and maintain a device to continuously record the parameter being measured.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D299]

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D90.1 The operator shall periodically monitor the H2S concentration at the outlet of the biofilter according to the following specifications:

The operator shall use Draeger Tube (or equivalent) at the biofilter screen port to monitor the parameter.

The operator shall monitor once every day.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C235]

K67.5 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Daily H2S concentration measured by Draeger Tube or (equivalent)

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C235]

New conditions for the Secondary and Tertiary treatment system:

FACILITY CONDITIONS:

F2.1 The operator shall limit emissions from this facility as follows:

Contaminant	Limit	Concentration
H2S	Less than	30 PPB over an one hour average period

For the purpose of this condition 30 ppb is the H2S concentration at the facility perimeter.

[CCR Title17Section70200, 9-17-1969]

SYSTEM CONDITIONS:

S1.1 The operator shall limit the material processed to no more than 1.6 MM gallons per day.

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For the purpose of this condition, material processed shall be defined as brewery wastewater treated.

The operator shall install and maintain a totalizing flow meter to indicate the wastewater supplied to the secondary treatment system.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 7, System 3]

DEVICE CONDITIONS:

A. Emission Limits

A433.2 The operator shall limit the sulfur emissions as follows:

Contaminant	Measured as	Concentration limit
Total sulfur	H2S	1.5 ppmv

For the purpose of this condition, the concentration limit shall be based on the H2S monitored weekly in the membrane tank vent stack as required by condition D90.4.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

[Devices subject to this condition: D944, D945, D946]

A433.3 The operator shall limit the sulfur emissions as follows:

Contaminant	Measured as	Concentration limit
Total sulfur	H2S	1.5 ppmv

For the purpose of this condition, the concentration limit shall be based on the H2S concentration measured in source tests, using Emission Isolation Flux Chamber tests, and monitored weekly as required by condition D90.2.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

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[Devices subject to this condition: D942]

A433.4 The operator shall limit the sulfur contaminant as follow:

Contaminant	Measured as	Concentration limit
Total sulfur	H2S	10 ppmv

For the purpose of this condition, the concentration limit shall be based on the H2S monitored daily in the vent stack of the sludge tank as required by condition D90.5.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

[Devices subject to this condition: D948]

C. Throughput or Operating Parameter Limits

C12.1 The operator shall use this equipment in such a manner that the Dissolved Oxygen (DO) being monitored as indicated below is greater than 0.1 parts per million (ppm) by mass.

The operator shall install and maintain a DO meter to accurately measure and record the:

1. DO

of the wastewater in the aeration tank. In addition, the operator shall keep records, in a manner approved by the District, for this parameter.

To comply with this condition the DO levels shall be continuously measured and recorded (at least one data point per hour). The electronic data recorded shall be maintained for minimum of 30 consecutive days of operation.

The DO monitoring system shall be equipped with an automatic alarms system for low DO levels with set points to be determined prior to issuance of the final Permit to Operate for the equipment.

The operator shall calibrate the DO meters when the monitoring system alarms the operator that calibration is required. The calibration shall be performed per manufacturer specifications.



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[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: D942]

D. Monitoring/Testing Requirements

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the H₂S emissions at the outlet.

The test shall be conducted using Emission Isolation Flux Chamber tests as approved by SCAQMD. A source test protocol shall be submitted to the SCAQMD permit engineer no later than 90 days after steady state operation of the equipment is reached.

The test shall be conducted within 90 days after the approval of the test protocol, unless otherwise approved in writing by the SCAQMD.

The test shall be conducted to determine the H₂S emission concentration and rate when the equipment is operating under normal operating conditions. The wastewater flow rate of the wastewater shall be recorded during the source tests. Two copies of the source test report shall be submitted to the SCAQMD within 45 days after the tests.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

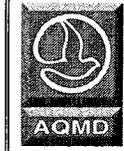
[Devices subject to this condition: D942]

D28.2 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the VOC emissions at the outlet.

A speciated analysis shall be conducted for organic compounds using GC/MS.

The test shall be conducted using Emission Isolation Flux Chamber tests as approved by SCAQMD. A source test protocol shall be submitted to the SCAQMD



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permit engineer no later than 90 days after steady state operation of the equipment is reached.

The test shall be conducted within 90 days after the approval of the protocol, unless otherwise approved in writing by the SCAQMD.

The test shall be conducted to determine the VOC emission concentration and rate when the equipment is operating under normal operating conditions. The wastewater flow rate shall be recorded during the tests. Two copies of the source test report shall be submitted to the SCAQMD within 45 days after the tests.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

[**RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002**]

[Devices subject to this condition: D938, D942]

D90.2 The operator shall periodically monitor the H₂S concentration at locations above the wastewater level, at or below the rim of the aeration tank to show compliance with the 1.5 ppmv H₂S concentration limit as described in condition A433.3 according to the following specifications:

The operator shall monitor at two locations at or below the rim of the aeration tank, using the access platforms located 180 degrees apart.

The operator shall monitor once every week.

The operator shall use a handheld instrument to monitor the parameter.

The monitoring instrument shall have a detection limit of 10% or lower than the concentration limit of the parameter being monitored. The monitoring instrument shall be calibrated in accordance with the manufacturer's guidelines.

To comply with this condition, the operator shall record the parameter being monitored every week.

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition: D942]



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D90.4 The operator shall periodically monitor the H₂S concentration at a location inside the membrane's vent stack to show compliance with the 1.5 ppmv H₂S concentration limit as described in condition A433.2 according to the following specifications:

The operator shall monitor inside the vent stack located on the membrane tank.

The operator shall monitor once every week.

The operator shall use a handheld instrument to monitor the parameter.

The monitoring instrument shall have a detection limit of 10% or lower than the concentration limit of the parameter being monitored. The monitoring instrument shall be calibrated in accordance with the manufacturer's guidelines.

To comply with this condition, the operator shall record the parameter being monitored every week.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D944, D945, D946]

D90.5 The operator shall periodically monitor the H₂S concentration at a location inside the vent stack of the sludge storage tank to show compliance with the 10 ppmv H₂S concentration limit as described in condition A433.4 according to the following specifications:

The operator shall monitor inside the vent stack of the sludge storage tank.

The operator shall monitor once every day.

The operator shall use a handheld instrument to monitor the parameter.

The monitoring instrument shall have a detection limit of 10% or lower than the concentration limit of the parameter being monitored. The monitoring instrument shall be calibrated in accordance with the manufacturer's guidelines.

To comply with this condition, the operator shall record the parameter being monitored every day.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

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[Devices subject to this condition: D948]

APPLICATION 572713 (RECLAIM/TV REVISION):

Application 572713 is for RECLAIM/TV. A copy of the evaluation and facility permit will be included in this permit application. The emission rates if any, will not be populated under this application. Any emissions will be tagged to the basic equipment that is being installed under this revision.

APPLICATION 572712, SECONDARY AND TERTIARY WASTEWATER TREATMENT:

The secondary and tertiary wastewater treatment system will include the equipment described above. Facility states treatment beyond primary will allow the facility to reclaim the wastewater to be used in their boilers and cooling towers. A tertiary treatment (reverse osmoses and UV treatment) will allow to further treat the wastewater for groundwater injection. The major equipment in secondary treatment include an Aeration tank, Bio membrane tanks, sludge holding tank, and a dewatering press. A DAF will be installed to further reduce suspended solid. The DAF will be installed ahead of anaerobic digesters.

The tertiary system includes Reverse Osmoses (RO) buffer tank, RO system, Advanced Oxidation buffer tank, and Advanced Oxidation system. A sodium hypochlorite (bleach) tank is used to introduce bleach to wastewater to prevent growth of organism in wastewater.

The typical emissions included in wastewater treatment plant are mainly VOC and H₂S. For this project it is expected most of the VOC emissions will be emitted from DAF and aeration tank, and H₂S emission from aeration tank, membrane tanks, sludge storage tank, and sludge dewatering operations. It should be noted that VOC emissions from this size wastewater treatment system is low. But odorous air contaminant is associated with wastewater treatment works, especially for wastewater treatment system with anaerobic digestion processes, and treatment works with open tanks.

EMISSION CALCULATION:

The VOC emissions associated with brewery are ethanol, aldehydes, ethyl acetate and traces of other VOCs. There are no air emission test results on hand for a system that is being proposed by Anheuser. Anheuser does not digest biosolids; contrary they remove grain size biosolids in screening equipment ahead of primary treatment system. The proposed DAF is to remove as much suspended solids as possible prior to digester tanks. The removal is performed to minimize introduction of solid into reverse osmosis system. However, the wastewater will

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contain BOD and dissolved sulfur. During anaerobic digestion BOD is reduced significantly, but the sulfur converts into H₂S or converted sulfate in wastewater.

The effluent from digester will be pumped into the proposed aeration tank. The purpose of the aeration tank is to further reduce organics and H₂S. This is achieved by adding a series of micro organism to wastewater further digesting organics and sulfur compounds. Digestion process depletes the oxygen in the water. Therefore air is pumped into aeration tank to supply the necessary oxygen for the digestion process to continue in oxygen rich environment. There are no concrete data available for such system for breweries, or generally, aeration of wastewater that has gone through anaerobic digestion first. Anheuser recently installed such wastewater treatment system in one of their facility located in Baldwinsville New York, but air emission testing have been limited to hand held equipment testing for H₂S and VOC using draeger tubes and FID. Facility states that the preliminary monitoring indicate minimal VOC and H₂S. Anheuser estimate the VOC emissions from the aeration tank will be about 0.06 lb/day for 1.5 MGD of wastewater flow. Also they have provided monitoring of H₂S for similar aeration tank using draeger tube with detection level of 0.1 ppm. Anheuser states that monitoring have shown no detect for H₂S above the aeration tank.

Initially facility requested H₂S emission concentration limits of 3 ppmv for aeration tank, 3 ppmv for membrane tanks, and 10 ppmv in the headspace gas of sludge storage tank. Although air is pumped into aeration tanks and membrane tanks, no air is supplied to the sludge storage tank. The vapor leaving the sludge through the vent stack is due displaced air when transferring sludge into tank. As stated earlier no control equipment is associated with any of the proposed equipment. Another potential source of H₂S is the sludge dewatering operations. The dewatering is performed in an open lot using a belt press.

Initial evaluation of the permit application, which also includes odor analysis at the fence line and the receptors, it was determined the proposed H₂S limits will cause H₂S concentrations above 8 PPB for the nearest worker receptor (La Brea Bakery). Facility was informed of the limits that will keep the H₂S below 8 PPB for the nearest receptor. Anheuser agreed with lower limits for the sources that will keep the concentration of H₂S below 8 ppb for the nearest receptor. Facility has expressed confidence that the H₂S emitted from aeration tank and other equipment will be below the thresholds limits of 1.5 ppm for aeration tank and membrane tanks, and 10 ppm in the head space of the sludge storage tank.

Operating schedule:

The wastewater treatment system will operate 24 hrs per day and 7 days per week.

VOC Emissions:



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For this project the emissions of concern are the VOC and H2S. VOC is a criteria pollutant and H2S is an air contaminant with nuisance potentials. The maximum allowed VOC before triggering offset is 0.41 lb/day. It should be noted that no control equipment has been proposed for any of the equipment in this project.

After construction and the source tests, the VOC emissions may be revised based on the source test results. If the tests show the total VOC is greater than 0.41 lb/day, facility will need to provide ERC to offset emissions.

POLLUTANT	UNCONTROLLED		CONTROLLED		CONTROLLED	
	MAXIMUM LB/HR	MAXIMUM LB/DAY	MAXIMUM LB/HR	MAXIMUM LB/DAY	30-DAY AVG LB/DAY	ANNUAL LB/YEAR
VOC	0.017	0.41	0.017	0.41	0.41	149.24

For the proposed equipment, VOC is associated with DAF unit and Aeration tanks. It will be required that these equipment to be tested for VOC emissions. Emission Isolation Flux Chamber tests will be required for emission tests for DAF and Aeration tanks.

H2S Emissions:

H2S air emission is associated with aeration tank, membrane tank, sludge storage tank, and belt press dewatering equipment. H2S not only has potential for nuisance, it's a toxic compound as well. It will be required that a flux chamber test procedures to be used to determine the H2S concentration for aeration tank. Among the equipment above, aeration tank has potential for the highest emission rates and then are the membrane tanks (please see below for emission rates). Initial equipment specification provided described the membrane tanks as open tanks. Therefore the modeling was performed assuming open top tanks. But at a later date facility indicated that the membrane tanks are covered and each tank vents through a stack. Although this does not change the emission rates from the tanks, the modeling would have predicted higher dispersion and lower ground level concentrations, if the tanks would have been treated as point sources.

The following data was used to calculate H2S emissions from the equipment.

Aeration tank:

The air flow to aeration tank is 3760 scfm. For 3 ppmv H2S, the emission rate is:

- Tank dimension: 72' diameter x 30 ft H.
- Water level: 2' below the surface



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Air Flow : 3760 cfm
H2S concentration: 1.5 ppmv

$$\begin{aligned} \text{H2S} &= (3760 \text{ scfm})(1.5 \text{ ppm})(34 \text{ lb H2S/lb-mole})(1 \text{ lb-mole}/385 \text{ scf})(60 \text{ min/hr}) \\ &= \mathbf{0.030 \text{ lb/hr}} \end{aligned}$$

Membrane tank:

Tank dimension: 31' L x 9' W x 11' H. (total of three tanks side by side)
Water level: 2' below the surface
Air Flow : 1785 cfm
H2S concentration: 1.5 ppmv

$$\begin{aligned} \text{H2S} &= (1785 \text{ scfm})(1.5 \text{ ppm})(34 \text{ lb H2S/lb-mole})(1 \text{ lb-mole}/385 \text{ scf})(60 \text{ min/hr}) \\ &= \mathbf{0.014 \text{ lb/hr}} \end{aligned}$$

As stated earlier in modeling we assumed open tanks, but the tanks are closed and each is vented through an stack venting the air supplied to tanks.

Sludge storage tank:

The tank has 12,000 gallons capacity and it is passively vented. Facility states material transfer in average is 50 gallons per minutes (gpm) and maximum of 120 gpm. Facility anticipates that the H2S in tank headspace to be 10 ppmv. Therefore average displaced air is 50 gpm and maximum is 120 gpm.

$$\begin{aligned} \text{H2S} &= (120 \text{ gpm})(60 \text{ min/hr})(1 \text{ cf}/7.48 \text{ gal})(10 \text{ ppm})(34 \text{ lb H2S/lb-mole})(1 \text{ lb-mole}/385 \text{ scf}) \\ &= \mathbf{0.00085 \text{ lb/hr}} \end{aligned}$$

Based on the H2S concentration above and the flow rates as provided, H2S hourly mass emission rate for the project is:

$$\begin{aligned} \text{H2S (project)} &= 0.03 \text{ lb/hr} + 0.014 \text{ lb/hr} + 0.00085 \text{ lb/hr} = \mathbf{0.04485 \text{ lb/hr}} \\ &= \mathbf{1.08 \text{ lb/day}} \end{aligned}$$

Ground level concentrations using 1.5 ppm H2S for Aeration tank and Membrane tank, and 10 ppm for Sludge storage tank.



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1-Hour Modeled Concentration at Fenceline

Tank	Concentration ug/m3	Concentration ppb
Membrane	2.73	1.97
Aeration	8.55	6.15
Sludge	0.03	0.02
Total	11.32	8.14

1-Hour Modeled Concentration at Worker Receptor

Tank	Concentration ug/m3	Concentration ppb
Membrane	1.84	1.32
Aeration	5.38	3.86
Sludge	0.03	0.02
Total	7.25	5.21

10-Minutes Estimated Concentration at Fenceline

Tank	Concentration ug/m3	Concentration ppb
Membrane	3.83	2.75
Aeration	11.98	8.61
Sludge	0.04	0.03
Total	15.85	11.39

10-Minutes Estimated Concentration* at Worker Receptor

Tank	Concentration ug/m3	Concentration ppb
Membrane	2.58	1.85
Aeration	7.53	5.41
Sludge	0.04	0.03
Total	10.15	7.29



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Annual Modeled Concentration at Fenceline

Tank	Concentration ug/m3	Concentration ppb
Membrane	0.27	0.19
Aeration	0.76	0.54
Sludge	0.01	0.01
Total	1.03	0.74

Annual Modeled Concentration at Worker Receptor

Tank	Concentration ug/m3	Concentration ppb
Membrane	0.16	0.12
Aeration	0.50	0.36
Sludge	0.01	0.01
Total	0.67	0.48

HEALTH RISK ASSESSMENT and ODOR ANALYSIS:

Nearest resident: 1450 ft
Nearest worker: 188 ft
Fenceline: 125.8 ft

California State Ambient Air Quality Standard limit for H2S is 30 ppb at the facility perimeter. This standard was adopted to protect against nuisance odor for the general public. The known odor threshold for H2S is 8 ppb. At 8 ppb H2S can be detected, however it can only be found annoying by few people among many.

ODOR ANALYSIS & HEALTH RISK ASSESSMENT:

A detail modeling was performed to assess the ground level concentrations at the fenceline, and nearest worker receptor. The nearest residential receptor is more than 1450 feet away and emission concentrations at such a distance, compared to nearest worker, are insignificant.

It should be noted brewery wastewater does not contain toxic compounds that are generally associated with other industrial wastewater. The PTE for toxic VOCs are minimal and will not be included here. However, it is required of the facility to perform speciated tests for organics in off-gases from the equipment. The test results will be used to perform HRA for organic toxics during Permit to Operate evaluation if required. In current evaluation "Permit to

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Construct" the pollutant of concern is H2S. H2S is also toxic with high odor potentials. Odor analysis and HRA will only include H2S at this time.

The ground level concentrations determined in detail modeling in ug/m3 are converted to parts per billion (PPB) and they are tabulated above. The concentrations of interest are 1-hour average concentration at the fence line to show compliance with 30 PPB California State Ambient Air Quality Standard at the facility perimeter, 8 PPB for nearest receptor, and maximum and annual average concentration for the nearest receptors to calculate acute and chronic hazardous indexes.

The one hour concentration at the fence line is 8.14 ppb which is below 30 ppb California State Ambient Air Quality Standard. The 10-minutes estimated concentration for the worker receptor (La Brea Bakery) located about 188 feet from the project site is 7.29 PPB. This level is below the known odor recognition of 8 PPB. Given the facility operate within the limits specified above, the likelihood of odor nuisance is minimal.

Health Risk Assessment Results:

Using the one hour concentration and annual concentration obtained from detail model, a Tier-3 assessment shows HIA of 0.31 for the worker receptor.

RULE EVALUATION:

CEQA: California Environmental Quality Act (CEQA)
Facility has stated the addition of secondary and tertiary wastewater treatment to the existing equipment at the site does not trigger CEQA. South Coast Air Quality management District CEQA group has reviewed and determined that based on the information provided by the facility, the proposed project will not have any significant effect on the environment, therefore exempt from CEQA review.

Rule 212: Standards for Approving Permits:

For the purpose of this rule, a project requires notification if:

212(c)(1): There is increase in emissions or risk and there is K-12 school within 1000 ft from the facility.

212(c)(2): There is emission increase in excess of Rule 212(g) thresholds.



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212(c)(3)(a): Cancer risk equal or greater than 1 in a million for a facility with more than one permit unit, unless the total cancer risk for the facility is less than 10 in a million or a single permit unit with cancer risk equal or greater than 10 in a million.

212(c)(3)(b): Quantities or concentrations of substances that pose a potential risk of nuisance.

Determination:

Public notification for this project is not required for the following reasons:

212(c)(1): There is no school within 1000 ft from the facility.

212(c)(2): The emission increases are less than the thresholds in Rule 212(g)

Please see table below for the emission rates.

Contaminant	Rule 212 (g) Daily Maximum lbs per Day	This project Daily Maximum Emission Increase lbs per/day
CO	220	0
NOX	40	0
PM10	30	0
ROG	30	<0.41
SOX	60	0
LEAD	3	N/A

212(c)(3)(a): Although carcinogen air emission data for the project is not available and increase in cancer risk can't be determined for the project at this time, it is expected that increase in cancer risk will be minimal (below 1 in million) for the project. The conclusion is based on the nature of wastewater treated and the level of expected VOC. Facility states that the total VOC emissions from the project including carcinogen emissions will be about 0.06 lb/day. Based on the above, the potential for increase in cancer risk greater than one in a million is minimal.



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212(c)(3)(b): Odor analysis shows that potential of H₂S at the fence line is 8.14 PPB averaged over one hour, and for the nearest worker receptor is 7.29 PPB estimated over 10 minutes. Based on this potential of nuisance is minimal.

Rule 401: Visible Emissions:
Visible emission from the project is not expected.

Rule 402: Public Nuisance:
A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

The odor analysis shows equipment operated in accordance with data provided and the permit conditions stated for the equipment, potential of nuisance is minimal.

Rule 404: Particulate Matter Concentration:
Particulate emissions from the operation of the equipment are not expected.

REGULATION XIII: New Source Review:

BACT: The emission of criteria pollutants are below 1 lb per day. Therefore BACT for criteria pollutant is not required. However given the source tests indicate VOC emissions over 1 lb/day, BACT/LAER will not be applicable because currently there are no atmospheric aeration tank that use any VOC control equipment.

Modeling: The emissions from the project are VOC and H₂S. Modeling for VOC is not required. H₂S has been modeled for Odor impact and the results were discussed earlier.

Offset: VOC is a criteria pollutant and subject to offset if greater than 0.41 lb/day. Facility estimates the VOC emissions to be 0.06 lb/day. Given the source tests result in emission rates greater than 0.41 lb/day, facility will need to provide ERC to offset emissions before issuance of Permit to Operate. Therefore offset is not required at this time.



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Rule 1401: New Source Review of Toxic Air Contaminants:

As discussed earlier, increase cancer risk potential is less than 1 in million, and HIA is 0.31 for the worker receptor. Compliance with this rule is expected.

Regulation XX: RECLAIM:

The facility is a NOX & SOX RECLAIM facility. There is no increase in NOX or SOX emission. Compliance is expected.

Regulation XXX: Title V Facilities:

Compliance is expected

CONCLUSIONS & RECOMMENDATIONS:

Emission calculations and equipment analysis show that the equipment above could operate in compliance with all the applicable Rules and requirement. Therefore a Permit to Construct for the project is hereby recommended.

Below is a general description of brewery operation. It is drafted for information purposes only.

General Brewery operation:

Anheuser-Busch uses conventional brewing techniques to produce beer. Manufacturing processes include transfer of raw materials via pneumatic conveying, formation of starches in cereal cooker, malt enzyme conversion in a mash mixer, wort filtration and sparging, decanting, fermentation, rinse, fill, packaging, pasteurization, boxing and shipping.

A conventional brewing facility consists of the following:

Storage Silos- The brewing process begins with the preparation of raw materials. Malted barley and corn grits are two of these materials. The raw materials are normally transported in rail car and unloaded at a grain unloading station. The grains are then conveyed to the dedicated storage silos where they are held until needed.

Malt Mill / Malt & Grit Scale Hoppers - The malted barley and corn grits are each conveyed separately to scale hoppers which weigh each material in the correct proportion for the particular product being produced. The malt goes through a preliminary step of milling prior to weighing. This milling process partially crushes the barley husk longitudinally to expose the inner portion of the kernel. This is done to enhance subsequent enzymatic activity.



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Mash Mixer and Lauter Tun (separation) - From the malt scale hopper and rice scale hopper, the milled malt and rice are conveyed to the mash mixer containing a measured amount of heated process water. After a programmed "rest" period to soak, the mash mixer is then heated to extract as much starch from the malt mixer and convert the starch to fermentable sugar. Water soluble materials are extracted from the grain mixture utilizing a Lauter-Tun process (filtration of the liquid portion of the mash). Additional heated water is supplied to the mash to extract sugars that may have remained in the mash. This process completes the extraction of the water soluble sugars (now called "wort") from the insoluble grains. The wort is transferred to the brew kettle. The remaining solid has no brewing value any more.

Brew Kettle- Once the wort is pumped into brew kettles, the solution is brought to boiling to ensure wort stabilization, flavor development and hop addition, and finally, to concentrate the wort solution through evaporation in preparation for fermentation process.

Hot Wort Tank / Wort Cooling- From The brew kettle, the hot wort is transferred to a closed, vertical tank where the trub (coagulate protein formed during the brew kettle operation) is allowed to settle out from the wort. The clear wort is drawn from the hot wort tank and pumped through wort cooler to cool the solution to the optimal temperature for wort aeration and yeast injection.

Wort Aeration / Yeast Injection- The cooled wort is aerated saturating the wort with oxygen which will enhance the fermentation process. Specific type and amount of yeast is then injected into the cooled wort for a particular product being produced.

Fermentation- Fermentation is the process in which the yeast converts the sugars in the wort to alcohol (ethanol) and CO₂ under controlled conditions. Fermentation is largely dependent upon the amount of nutrients present for the yeast, the type of yeast itself, and the processing conditions of the fermentation (time, temperature, pH, and volume of agitation). The CO₂ produced as a by-product in the fermentation process is collected, purified and stored for later injection into other brewery processes. The fermented beer/yeast mixture is pumped out of the fermenter through a transfer tank to the yeast centrifuge. Some yeast may be harvested from designated fermenters for reuse in subsequent fermentations.

Yeast Filtration- Yeast is removed from the fermented beer and later sold as a by-product. In the meantime, the beer is further clarified by processing through the primary filter which will remove additional yeast and other suspended solids.

Aging- The beer is transferred to aging tanks where the beer is allowed to rest for flavor maturation, product stabilization and carbonation using the purified CO₂ produced during the fermentation process.

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Final Filtration- The alcohol content of the aged beer is adjusted with diluents and processed through final filtration and additional trap filter to remove any remaining suspended solids from the finished product. The finished beer is then transferred to the packaging supply tanks.

Packaging- Although not a brewing operation, the beer products is packaged through different packaging line, including bottles, cans and kegs. Anheuser uses diluted sodium hypochlorite to sterilize the packaging containers.

**FACILITY PERMIT TO OPERATE
 ANHEUSER-BUSCH LLC., (LA BREWERY)**

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR: ANHEUSER-BUSCH LLC., (LA BREWERY)

LEGAL OPERATOR (if different than owner):

EQUIPMENT LOCATION: 15800 ROSCOE BLVD
 VAN NUYS, CA 91406-1379

MAILING ADDRESS: 15800 ROSCOE BLVD
 VAN NUYS, CA 91406-1379

RESPONSIBLE OFFICIAL: LUIS CAYO

TITLE: GENERAL MANAGER

TELEPHONE NUMBER: (818) 908-4156

CONTACT PERSON: ERICA NORD

TITLE: EHS MANAGER

TELEPHONE NUMBER: (818) 997-2740

TITLE V PERMIT ISSUED: October 12, 2011

TITLE V PERMIT EXPIRATION DATE: October 11, 2016

TITLE V	RECLAIM
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YES	NOx:	YES
	SOx:	YES
	CYCLE:	1
	ZONE:	COASTAL

FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 7: BIO-ENERGY RECOVERY AND WASTEWATER TREATMENT SYSTEM					
System 3: Secondary Treatment System					S1.1
TANK, DISSOLVED AIR FLOATATION (DAF), WIDTH: 17 FT; HEIGHT: 10 FT; LENGTH: 51 FT A/N:	D938				D28.2
BLOWER, DAF, 10 CU.FT./MIN; 1 HP A/N:	D939				
TANK, HOLDING,CENTRATE, 1250 GALS; DIAMETER: 6 FT; HEIGHT: 8 FT A/N:	D940				
TANK, STORAGE AND FEED, SODIUM HYPOCHLORITE, 660 GALS A/N:	D941				
TANK, AERATION, 920,000 GALS; DIAMETER: 72 FT; HEIGHT: 30 FT A/N:	D942			H2S: 1.5 PPMV (5)	A433.3, C12.1, D28.1, D28.2, D90.2
BLOWER, AERATION, 3 TOTAL, 150 HP EACH, ONE STANDBY, WITH TOTAL OF 3,760 SCFM AIR FLOW A/N:	D943				
TANK, MEMBRANE, NO. 1, 23,000 GALS; WIDTH: 9 FT; HEIGHT: 11 FT; LENGTH: 31 FT A/N:	D944			H2S: 1.5 PPMV (5)	A433.2, D90.4
TANK, MEMBRANE, NO. 2, 23,000 GALS; WIDTH: 9 FT; HEIGHT: 11 FT; LENGTH: 31 FT A/N:	D945			H2S: 1.5 PPMV (5)	A433.2, D90.4

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (3) Denotes RECLAIM concentration limit
- (4) Denotes BACT emission limit
- (5) (5A) (5B) Denotes command and control emission limit
- (6) Denotes air toxic control rule limit
- (7) Denotes NSR applicability limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (9) See App B for Emission Limits
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 7: BIO-ENERGY RECOVERY AND WASTEWATER TREATMENT SYSTEM					
TANK, MEMBRANE, NO. 3, 23,000 GALS; WIDTH: 9 FT; HEIGHT: 11 FT; LENGTH: 31 FT A/N:	D946			H2S: 1.5 PPMV (5)	A433.2, D90.4
BLOWER, AERATION, 4 TOTAL, 30 HP EACH, ONE STANDBY, WITH TOTAL OF 1,785 SCFM AIR FLOW A/N:	D947				
TANK, SLUDGE, 12,000 GALS; DIAMETER: 12 FT; HEIGHT: 14 FT; ENCLOSED WITH PASSIVE VENT A/N:	D948			H2S: 10 PPMV (5)	A433.4, D90.5
PRESS, DEWATERING, SLUDGE, WITH CENTRATE COLLECTION SUMP A/N:	D949				
System 4: Tertiary Treatment System					
TANK, REVERSE OSMOSIS BUFFER TANK, 30,000 GALS; DIAMETER: 16 FT; HEIGHT: 20 FT	E950				
FILTER, REVERSE OSMOSIS SYSTEM, WITH 54 MEMBRANE TUBES AND 3 PUMPS, EACH 75 HP	E951				
TANK, ADVANCED OXIDATION BUFFER TANK, 30,000 GALS; DIAMETER: 16 FT; HEIGHT: 20 FT	E952				
OXIDIZER, UV OXIDATION SYSTEM	E953				

- * (1) (1A) (1B) Denotes RECLAIM emission factor
 (2) (2A) (2B) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit
 (4) Denotes BACT emission limit
 (5) (5A) (5B) Denotes command and control emission limit
 (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits
 (10) See section J for NESHAP/MACT requirements
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

**FACILITY PERMIT TO OPERATE
ANHEUSER-BUSCH LLC., (LA BREWERY)**

SECTION H: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**

**FACILITY PERMIT TO OPERATE
 ANHEUSER-BUSCH LLC., (LA BREWERY)**

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D945	1	7	3
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E951	2	7	4
E952	2	7	4
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FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F2.1 The operator shall limit emissions from this facility as follows:

Contaminant	Limit	Concentration
H2S	Less than	30 PPB over an one hour average period

For the purpose of this condition 30 ppb is the H2S concentration at the facility perimeter .

[CCR Title17Section70200, 9-17-1969]

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

SYSTEM CONDITIONS

S1.1 The operator shall limit the material processed to no more than 1.6 MM gallons per day.

FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, material processed shall be defined as brewery wastewater treated.

The operator shall install and maintain a totalizing flow meter to indicate the total wastewater supplied to the secondary treatment system.

The operator shall maintain daily records in a manner approved by the SCAQMD to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition : Process 7, System 3]

DEVICE CONDITIONS

A. Emission Limits

A433.2 The operator shall limit the sulfur emissions as follows:

Contaminant	Measured as	Concentration limit
Total sulfur	H2S	1.5 ppmv

For the purpose of this condition, the concentration limit shall be based on the H2S monitored weekly in the membrane tank vent stack as required by condition 90.4.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

[Devices subject to this condition : D944, D945, D946]

A433.3 The operator shall limit the sulfur emissions as follows:

Contaminant	Measured as	Concentration limit
-------------	-------------	---------------------

**FACILITY PERMIT TO OPERATE
 ANHEUSER-BUSCH LLC., (LA BREWERY)**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Total sulfur	H2S	1.5 ppmv
--------------	-----	----------

For the purpose of this condition, the concentration limit shall be based on the H2S concentration measured in source tests, using Emission Isolation Flux Chamber tests, and monitored weekly as required by condition D90.2.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

[Devices subject to this condition : D942]

A433.4 The operator shall limit the sulfur emissions as follows:

Contaminant	Measured as	Concentration limit
Total sulfur	H2S	10 ppmv

For the purpose of this condition, the concentration limit shall be based on the H2S monitored daily in the vent stack of the sludge tank as required by condition D90.5.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

[Devices subject to this condition : D948]

C. Throughput or Operating Parameter Limits

C12.1 The operator shall use this equipment in such a manner that the Dissolved Oxygen (DO) being monitored as indicated below is greater than 0.1 parts per million (ppm) by mass.

FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The operator shall install and maintain a DO meter to accurately measure and record the:

1. DO

of the wastewater in the aeration tank. In addition, the operator shall keep records, in a manner approved by the District, for this parameter.

To comply with this condition the DO levels shall be continuously measured and recorded (at least one data point per hour). The electronic data recorded shall be maintained for minimum of 30 consecutive days of operation.

The DO monitoring system shall be equipped with an automatic alarms system for low DO levels with set points to be determined prior to issuance of the final Permit to Operate for the equipment.

The operator shall calibrate the DO meters when the monitoring system alarms the operator that calibration is required. The calibration shall be performed per manufacturer specifications.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D942]

D. Monitoring/Testing Requirements

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted to determine the H₂S emissions at the outlet.

The test shall be conducted using Emission Isolation Flux Chamber tests as approved by SCAQMD. A source test protocol shall be submitted to the SCAQMD permit engineer no later than 90 days after steady state operation of the equipment is reached.

The test shall be conducted within 90 days after the approval of the test protocol, unless otherwise approved in writing by the SCAQMD.

The test shall be conducted to determine the H₂S emission concentration and rate when the equipment is operating under normal operating conditions. The wastewater flow rate of the wastewater shall be recorded during the source tests. Two copies of the source test report shall be submitted to the SCAQMD within 45 days after the tests.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

[RULE 1401, 9-10-2010; RULE 402, 5-7-1976]

[Devices subject to this condition : D942]

D28.2 The operator shall conduct source test(s) in accordance with the following specifications:

**FACILITY PERMIT TO OPERATE
ANHEUSER-BUSCH LLC., (LA BREWERY)**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted to determine the VOC emissions at the outlet.

A speciated analysis shall be conducted for organic compounds using GC/MS.

The test shall be conducted using Emission Isolation Flux Chamber tests as approved by SCAQMD. A source test protocol shall be submitted to the SCAQMD permit engineer no later than 90 days after steady state operation of the equipment is reached.

The test shall be conducted within 90 days after the approval of the protocol, unless otherwise approved in writing by the SCAQMD.

The test shall be conducted to determine the VOC emission concentration and rate when the equipment is operating under normal operating conditions. The wastewater flow rate shall be recorded during the tests. Two copies of the source test report shall be submitted to the SCAQMD within 45 days after the tests.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

[**RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1401, 9-10-2010**]

[Devices subject to this condition : D938, D942]

- D90.2 The operator shall periodically monitor the H2S concentration at locations above the wastewater level, at or below the rim of the aeration tank to show compliance with the 1.5 ppmv H2S concentration limit as described in condition A433.3 according to the following specifications:

FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The operator shall monitor at two locations at or below the rim of the aeration tank, using the access platforms located 180 degrees apart.

The operator shall monitor once every week.

The operator shall use a handheld instrument to monitor the parameter.

The monitoring instrument shall have a detection limit of 10% or lower than the concentration limit of the parameter being monitored. The monitoring instrument shall be calibrated in accordance with the manufacturer's guidelines.

To comply with this condition, the operator shall record the parameter being monitored every week.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D942]

D90.4 The operator shall periodically monitor the H₂S concentration at a location inside the membrane's vent stack to show compliance with the 1.5 ppmv H₂S concentration limit as described in condition A433.2 according to the following specifications:

The operator shall monitor inside the vent stack located on the membrane tank.

The operator shall monitor once every week.

The operator shall use a handheld instrument to monitor the parameter.

The monitoring instrument shall have a detection limit of 10% or lower than the concentration limit of the parameter being monitored. The monitoring instrument shall be calibrated in accordance with the manufacturer's guidelines.

To comply with this condition, the operator shall record the parameter being monitored every week.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

FACILITY PERMIT TO OPERATE ANHEUSER-BUSCH LLC., (LA BREWERY)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D944, D945, D946]

D90.5 The operator shall periodically monitor the H₂S concentration at a location inside the vent stack of the sludge storage tank to show compliance with the 10 ppmv H₂S concentration limit as described in condition A433.4 according to the following specifications:

The operator shall monitor inside the vent stack of the sludge storage tank.

The operator shall monitor once every day.

The operator shall use a handheld instrument to monitor the parameter.

The monitoring instrument shall have a detection limit of 10% or lower than the concentration limit of the parameter being monitored. The monitoring instrument shall be calibrated in accordance with the manufacturer's guidelines.

To comply with this condition, the operator shall record the parameter being monitored every day.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D948]