



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner



December 6, 2010

Ms. Jacqueline Hamel
General Manager
Anheuser-Busch, Inc.
221 Daniel Webster Highway, P.O. Box 610
Merrimack, NH 03054-0610

Re: On-Site Inspection Report

Dear Ms. Hamel:

The New Hampshire Department of Environmental Services, Air Resources Division ("DES") conducted a Full Compliance Evaluation at Anheuser-Busch, Inc. (A-B) in Merrimack, NH on September 15, 2010. Enclosed is a copy of the Inspection Report for your records.

Based on observations made during the site inspection and review of the information provided by A-B, the following deficiency was found:

- A-B has not been tracking and reporting the NG usage for the pilot light on the Flare. A-B should track the NG usage for the pilot light in the Flare and report usage in the Annual Emission Report starting with fiscal year 2010. A-B estimates that the pilot uses approximately 20 mmBtu per month which equates to 0.2353 mmcf per year.

If you have any questions, please feel free to contact me at (603) 271-0650 or Barbara Hoffman, Compliance and Enforcement Programs Manager, at (603) 271-7874.

Sincerely,

Greg Helve
Sr. Compliance Assessment Engineer
Air Resources Division

Enclosure: Anheuser-Busch, Inc. On-Site Full Compliance Evaluation
cc: Board of Selectmen-Merrimack



ON-SITE FULL COMPLIANCE EVALUATION

**Anheuser Busch, Inc.
221 Daniel Webster Highway
Merrimack, NH 03054**

Hillsborough County

AFS # 3301100017

**Inspected: September 15, 2010
Final Report: December 3, 2010**

Inspected and Prepared by:

**New Hampshire Department of Environmental Services
Air Resources Division
29 Hazen Dr., P.O. Box 95
Concord, New Hampshire 03302-0095**


A handwritten signature in black ink, appearing to read "Greg Helve".

**Greg Helve
Sr. Compliance Assessment Engineer**

I. Inspection

On September 15, 2010, the New Hampshire Department of Environmental Services, Air Resources Division (DES), completed an on-site full compliance evaluation (FCE) of Anheuser Busch, Inc. (A-B), located in Merrimack, NH. A-B was targeted for inspection based on DES inspection criteria, which specifies that a major source with a Title V Permit to Operate be inspected once every two years.

Inspection Date/Time:	September 15, 2010, 9am
Inspection Type:	On-Site Full Compliance Evaluation
Inspected by:	Greg Helve, Senior Compliance Engineer
Weather:	Sunny, 77 degF, wind-light and variable
Source Contacts:	Thomas Blake, EHS&S Environmental Manager
Last Inspection:	9/30/2008-DES Off-Site
Last Inspection Result:	No Issues noted
Permit Numbers:	<u>TV-OP-044</u> : Issued August 26, 2002, Last amendment March 27, 2009 and expired August 31, 2007, application shield applies. <u>TP-BP-0695</u> : Issued May 9, 2005 and expired November 30, 2007, application shield applies <u>TP-0013</u> : Issued October 7, 2009 and expires April 30, 2011 <u>ARD-00-001</u> : <u>VOC RACT</u> Order Issued April 15, 2002 <u>ARD-05-001</u> : <u>NOx RACT</u> Order Issued May 9, 2005

II. Facility/Process Description

A-B's Merrimack Brewery is a 1,000,000 square-foot facility built in 1970. Anheuser Busch has recently been purchased by InBev Sa located in Belgium. The Merrimack facility employs approximately 450 employees and operates 24 hours a day, seven days a week with 3 shifts. A-B is a Title V source due to the combustion pollutants it emits from its three boilers, and the VOC emissions, predominantly ethyl alcohol, from the brewing process, the bio energy recovery system and flare.

A-B produces beer from barley malt, cereal grains (adjuncts), water, hops, and yeast. The brewery has 4 process unit areas; grains handling, malt beverage production, utilities operations (steam and power plant), and a primary stage anaerobic wastewater treatment process (Bio Energy Recovery System, or BERS Process), which produces biogas for combustion in either Boiler 2 or 3, or in a flare in case one or both of the Boilers are unavailable. All areas emit one or more regulated pollutants.

Grains Handling

The grains handling area includes equipment for unloading, storing, and conveying grains received by the facility, and milling and weighing of the grains prior to being introduced into the mash cookers. The facility uses baghouses for the collection and transfer of particulate matter generated by the grains handling activities. The collective emissions from the baghouses are less than 1,000 pounds

per year, and are not considered pollution control equipment, but part of the process. The baghouses in the Diatomaceous Earth Process, which are used in unloading, storing, and conveying diatomaceous earth to the brewing process, and in the Alternate Chill-Proofing Process, are also consider process equipment and not pollution control equipment.

Malt Beverage Production

During the brewing process, the milled grains are blended with water and heated in mash cookers, generating volatile organic compounds (VOCs) emissions. Cooking converts complex grain starches to fermentable sugars. Cooked mash is transferred to two lauter turns, where spent grains are separated from the resulting liquid, or wort. A small amount of VOCs is emitted. The wort is then transferred to one of the two brew kettles, where hops are added and the wort is boiled, generating more VOCs.

After brewing, hot wort is cooled to "pitching" (yeast addition) temperature. The wort is sent to cold wort settlers, where "cold break" trub (coagulated protein) settles out. The trub is flushed out of the bottom of the tank and the cold wort is pumped to fermentation tanks. Fermentation is initiated by yeast addition. Yeast converts fermentable sugars in the wort to primarily ethanol and carbon dioxide. In some cases, fermentation is done as a two-step process, or "primary" and "secondary" fermentations. Sometimes both steps occur in the same fermentation tank or sometimes the liquid is transferred, after primary fermentation, to a different tank for secondary fermentation. In secondary fermentation, beechwood chips are added to aid in the natural fermentation process by providing increased surface area for yeast suspension. Beechwood chips are about an inch and a half wide by a foot long and removed and cleaned and reused in the process. After the "secondary" fermentation is complete, the beer is decanted off and transferred to the finishing area.

Ancillary Operations

The yeast is transferred from the yeast brinks, which are tanks where the yeast is stored under controlled conditions, to the fermentation tanks. The yeast can be reused in a limited number of consecutive fermentations before it begins to degrade and change product flavor. Spent yeast from the fermentation process is collected and either returned to the yeast brink for reuse, or sent to the spent yeast brink.

The beechwood chips are reused several times in the process after thorough cleaning and sterilization. First, the chips are removed from the chip tanks and placed in cylindrical "torpedo" vessels. Then, the chips are washed with water to remove excess yeast. After the chips have been used several times, the chips are discarded in the spent beechwood chip dumpster.

Packaging Operations

After finishing, the beer is sent to packaging where bottles, cans, and kegs are filled. The bottle and can filling process is similar - the container is first filled with carbon dioxide (CO₂) which is displaced as beer flows into the container. Prior to closing, any oxygen is purged from the headspace of the container with a small CO₂ or water jet. Kegs are similarly filled through a single valve, with an initial fill of CO₂ followed by the product.

Emissions (CO₂ and ethanol) occur during the filling process. The CO₂ displaced during filling

contains a small amount of ethanol due to contact with the beer. Floor drains beneath the fillers remove spilled beer. However, ethanol is emitted from this process loss. Returnable bottles are washed in a soaker to remove old labels and to clean, rinse, and sterilize them prior to reuse. Ethanol may be emitted from volatilization of any beer remaining in the bottles.

Packaging operations have 2 bottle lines, 2 can lines, and 1 draft or keg line. Maximum potential annual beer production at the facility is 4,500,000 barrels packaged. The highest annual amount of beer packaged to date has been 3,400,000 barrels.

All products except draft products are pasteurized destroying organisms that could affect beer quality. The pasteurizers gradually heat up the product in its containers, maintain the appropriate temperature for a specified time, and gradually cool the product down. Small amounts of ethanol may be emitted from the pasteurizers due to container breakage. Because draft products are not intended to have the shelf life of bottles and cans, and are expected to be consumed shortly after production, they are filtered to remove undesirable organisms, rather than pasteurized.

All beer cartons and boxes are pre-printed at a vendor's facility prior to use at the Merrimack Brewery. The Packaging Lines use adhesives for cartons and cases of beer. Beer bottles either have a pre-printed paper label applied with an adhesive or a pre-printed plastic label applied with an adhesive. Ink is used to apply the date of manufacture on the bottle and can labels or onto the kegs. Beer cartons and boxes of beer have an alcohol-based ink used to apply the date of manufacture to the carton or box. Ink usage is tracked and emissions accounted for in the annual emission statement.

During this inspection, nothing the inspector saw or the material received was stated to be confidential by A-B.

III. Emission Unit Identification and Operating Conditions

Table 1 contains the permitted devices used at the facility.

Table 1– Significant Activities and Operating Limits			
Device	Size	Permit Conditions	Reported Operations
EU01 – Babcock & Wilcox Boiler #1	138 MMBtu/hr (#6 fuel oil) 142 MMBtu/hr (NG)	Maximum combined annual gross heat input of 2,560,000 MMBtu from #6 fuel oil and natural gas. (Any biogas combusted is not included in this limit).	2009 – 54,862 gal #6 fuel oil 2009 – 77.199 MMcf NG 2008 – 1,416 gal #6 fuel oil 2008– 75.798 MMcf NG
EU02 – Babcock & Wilcox Boiler #2	138 MMBtu/hr (#6 fuel oil) 142 MMBtu/hr (NG)		2009 – 235,699 gal #6 fuel oil 2009 – 126.301 MMcf NG 2009– 26.811 MMcf biogas 2008– 700 gal #6 fuel oil

Table 1– Significant Activities and Operating Limits

Device	Size	Permit Conditions	Reported Operations
			2008– 198.333 MMcf NG 2008 – 40.818 MMcf biogas
EU03 – Babcock & Wilcox Boiler #3	138 MMBtu/hr (#6 fuel oil) 142 MMBtu/hr (NG)	Maximum combined annual gross heat input of 2,560,000 MMBtu from #6 fuel oil and natural gas. (Any biogas combusted is not included in this limit).	2009 – 298,508 gal #6 fuel oil 2009 – 145.411 MMcf NG 2009– 39.055 MMcf biogas 2008– 6,759 gal #6 fuel oil 2008– 199.532 MMcf NG 2008 – 34.224 MMcf biogas
EU01, EU02 and EU03 combined annual fuel usage (MMBtu/year) NOT including biogas			2009 – 450,025.90 MMBtu 2008 – 494,781.36 MMBtu
EU04 – Malt Beverage Production (VOC emissions)	N/A		37.6 lbs VOCs per 1000 barrels of beer per month
EU05 – Grains Handling Systems (includes grain unloading and transfer, dust collection, vacuum, and residuals)		60,000 lbs grain/ hour (525,600,000 lb/yr)	2009 – 113,660,644 lbs grain/year 2008 – 120,040,757 lbs grain/year
EU06 – Emergency Generator	125,000 gal #6 fuel oil	500 hours per month; 25 tons NOx per consecutive 12-month period	2009 – 14.5 hours 2008 – 17.1 hours
EU07 – Diatomaceous Earth (DE) Process (includes body feed tank and silo)	N/A	Must operate with filter receiver at all times to control particulate	Operated within Permit conditions
EU08 – Alternative Chilling Process (ACP) System	N/A		Operated within Permit conditions

Table 1– Significant Activities and Operating Limits			
Device	Size	Permit Conditions	Reported Operations
Annual Beer Production (barrels)	Maximum potential production is 4,500,000 barrels packaged /yr		2009 – 3,034,200 barrels 2008 – 2,993,533 barrels

Although allowed by both Temporary Permits, A-B does not burn any self-generated specification used oil. A-B ships its spent grain out as animal feed and the grain remains wet throughout the handling process. A-B recovers 190-proof alcohol from the waste beer through distillation and transports it by truck for off-site use. A-B has not had any problems with fugitive dust during any of the on-site evaluations and DES stack test observations. A-B operates one emergency generator which it tests regularly for periods of 15 minutes to an hour.

A-B’s 2008 through 2009 reported annual emissions (in tons) are detailed in Table 2.

Table 2 – Annual Emissions (tons per year)						
	TSP	SO₂	NO_x	CO	VOC	RTAPs
Permit Limits						
2009	5.13	51.06	48.83	1.37	46.39	1.42
2008	1.97	5.97	42.72	0.41	46.31	9.98

IV. Control Equipment

The devices and/or processes identified in Table 3 are considered pollution control equipment or techniques for each identified emissions unit:

Table 3 – Pollution Control Equipment Identification		
Pollution Control Equipment Number	Description of Equipment	Emission Unit Number
PCE01	Alternative Low NOx Burners on Boiler No. 1	EU01
PCE02	Alternative Low NOx Burners on Boiler No. 2	EU02
PCE03	Alternative Low NOx Burners on Boiler No. 3	EU03
PCE04	Dust Collection Systems Filter Receivers (GM-1)	EU05
PCE05	Grains Unloading System Filter Receiver (GU-1)	EU05
PCE06	Grains Transfer System Filter Receiver (GT-1)	EU05
PCE07	Vacuum Cleaning System Filter Receiver and	EU05

Table 3 – Pollution Control Equipment Identification		
Pollution Control Equipment Number	Description of Equipment	Emission Unit Number
	Cyclones (GAV-1)	
PCE08	Residuals Building Dust Filter Receiver (GDT-1)	EU05
PCE09	DE Body Feed Tank Filter Receiver (BF-1)	EU07
PCE10	DE Silo Filter Receiver (DES-1)	EU07
PCE11	ACP Filter Receiver (ACP-1)	EU08

A-B operates the pollution control equipment associated with the BERS Process shown in Table 4.

Table 4 – Pollution Control Equipment for BERS Process			
Pollution Control Device	Description of Equipment	Pollutant Controlled	Emission Unit
Open Flare	Backup control device for biogas from BERS	RTAPs in biogas	BERS Process
Packed Bed Scrubber	Off-gases from headspace in BERS process digesters	H ₂ S	BERS Process

V. Stack Criteria

Table 5 lists the stack criteria for the significant devices at the facility. No changes have been made since the last modeling of emissions.

Table 5 – Stack Criteria				
Stack Number	Stack Number	Minimum Stack Height (feet) Above Ground Level	Maximum Stack Diameter (feet)	Minimum Stack Flow Rate (ACFM)
ST01	ST01	53	5	47,000
ST02	ST02	53	5	47,000
ST03	ST03	53	5	47,000
ST04-HSL-1	EU04	24	0.67	0
ST04-TA-1	EU04	79	1.5	0
ST04-TA-2	EU04	79	1.5	0
ST04-TA-3	EU04	79	1.5	0
ST04-SF-1	EU04	121	1.5	0
ST04-SF-2	EU04	96.1	1.5	0
ST04-CW-1	EU04	112	1.5	0
ST04-KEGLN80	EU04	24	0.33	0
ST05-GM-1 (includes GAV-1 and GDT-1)	EU05	122	1.5	0
ST05-GU-1	EU05	30.5	0.83	0
ST05-GT-1	EU05	28.5	0.5	0
	Flare	25.0	0.5	855 (max)
	Scrubber	15.0	2.0	4,000 (max)

VI. Compliance With Permitting Requirements

CHAPTER Env-A 400 Acid Deposition Control Program

This chapter applies to those sources that emitted 100 tons or more of SO₂ per year on average during the period of 1979 through 1982. A-B is one of these sources. In accordance with Env-A 403.01, the average emission rate of any source subject to this rule shall not exceed 1.6 lb/MMBtu of SO₂, which is equivalent to combusting #6 fuel oil with 1.5% sulfur by weight and 75% of the baseline average emission rate for these sources. The average emission rate is calculated by using the annual fuel usage data, and applying the AP-42 factors for SO₂ emissions and reported fuel sulfur content for each fuel to calculate the pounds of SO₂ emitted per year. In A-B's case, it has been steadily increasing its use of natural gas and biogas, which are much lower in sulfur content, and reducing its combustion of higher sulfur-content #6 fuel oil. The average emissions per heat input is calculated by dividing the total annual SO₂ emissions by the annual heat input rate. Results of A-B's average emission rate calculations are shown in Table 6.

Table 6 – Average SO₂ Emissions	
Year	Average SO₂ Emissions (lb SO₂/MMBtu heat input)
Regulatory Limit	1.6
2009	0.200
2008	0.021

CHAPTER Env-A 500 - Standards Applicable to Certain New or Modified Facilities and Sources of Hazardous Air Pollutants

A-B is not a new source, has not made any modifications, and, therefore, is not subject to any of the New Source Performance Standards (“NSPS”) specified in Env-A 503.01. While the Facility emits small amounts of Hazardous Air Pollutants (“HAPs”), these HAPs are not regulated by 40 CFR 61, as incorporated by reference in Env-A 504.01. A-B is not subject to Env-A 505.01 as it is a source category not covered by this section. See Section XV for further discussion.

CHAPTER Env-A 600 - Statewide Permit System

A-B is currently operating under the conditions of Title V Permit TV-OP-044 (the Title V Permit) issued on August 26, 2002 (amended on December 5, 2007 and on March 27, 2009), Temporary Permit TP-BP-0695 issued on May 9, 2005 (reissued on September 8, 2006) and Temporary Permit TP-0013 issued on October 7, 2009. The Title V Permit expired on August 31, 2007. The Temporary Permit TP-BP-0695 expired on November 30, 2007. A-B submitted a renewal application on February 26, 2007 and, therefore, has application shield until a new Title V permit is issued. The Temporary Permit TP-BP-0695 was issued to allow for the construction and operation of the BERS Process, which is a wastewater pretreatment process that uses anaerobic reactors, or digesters, to reduce the biological oxygen demand (BOD) of the wastewater leaving the brewery and sent to the Town of Merrimack’s wastewater system. The BERS process produces biogas, primarily methane, to supplement the #6 fuel oil and natural gas being combusted by Boilers #2 and #3, or by the flare if no boiler is available. Off-gases from the digester tank headspace are collected and treated in a packed-bed scrubber to neutralize and oxidize odor-causing constituents of the off-gases, primarily small amounts of hydrogen sulfide.

In addition to allowing for installation of the BERS process, the Temporary Permit TP-BP-0695 includes the additional Reasonably Available Control Technology (RACT) requirements for NO_x emissions that were originally specified in NO_x RACT Order ARD-05-001 issued by DES on May 9, 2005. These are described in more detail under Part Env-A 802 – Testing and Monitoring for Stationary Sources.

Temporary Permit TP-0013 was issued to restrict the sulfur content in the fuel oil to 0.3% maximum to avoid the possibility of exceeding the NAAQS limit for SO₂ and to allow the slow combustion of the remaining 1% sulfur fuel oil on-site with natural gas. The remaining 1% sulfur fuel oil was to be totally consumed by December 31, 2010. A-B stated in a letter to DES, dated October 26, 2009, that all of the fuel oil having a sulfur content of 1% had been consumed and/or removed from its site as of August 28, 2009.

CHAPTER Env-A 606 - Air Pollution Dispersion Modeling Impact Analysis Requirements

The last modeling was performed in March 2009. AERMOD was used to predict the maximum impacts for all pollutants from A-B using a maximum of 0.3% sulfur content in the fuel oil. Impacts were compared to NAAQS and Class II increments and no exceedances were predicted.

Part Env-A 618 & 619 – Additional Requirements in Non-Attainment Areas and the New Hampshire Portion of the Northeast Ozone Transport Region & Prevention of Significant Deterioration (PSD) of Air Quality Permit Requirements

A-B is located in Hillsborough County, NH, which is designated as non-attainment for ozone. In addition, the State of New Hampshire is in the Northeast Ozone Transport Region. A-B is considered a major source for SO₂ and NO₂ for PSD purposes. A-B is considered a major source SO₂ and NO_x for NSR purposes. A-B has not made any modifications during the review period that would trigger a new source or PSD review.

VII. Compliance with Permit Fee System

CHAPTER Env-A 700 – Permit Fee System

Part Env-A 705 – Emission-Based Fees

A-B has paid its emission-based fees through the 2009 calendar year. See Appendix A for details on emission-based fee payments.

VIII. Source Testing and Monitoring

CHAPTER Env-A 800 - Testing and Monitoring Procedures

Part Env-A 802 – Testing and Monitoring for Stationary Sources

The Title V Permit requires A-B to calibrate its fuel metering devices at least once annually, to visually inspect and replace fabric filters on all of its dust collection and filtration systems as needed, and to perform annual visual inspections of each stack, process unit, and fuel burning device. A-B certifies compliance with these permit requirements in the annual compliance certification, and it includes the computerized work orders for these activities in its semi-annual permit deviation and monitoring (SA PD/M) report.

A-B is required to perform stack emissions testing of Boilers #1, #2 and #3 to demonstrate compliance with the emission standards specified in the Reasonably Available Control Technology (RACT) requirements for NO_x in Env-A 1211. The NO_x RACT Order (ARD-05-001) requires Boilers #1, #2 and #3 to comply with the RACT standard of 0.4 lb/MMBtu when combusting #6 fuel oil. The Temporary Permit TP-BP-0695 included additional testing requirements and a lower emission standard of 0.25 lb/MMBtu for Boilers #1, #2 and #3 when combusting natural gas or a combination of natural gas and biogas, and set a limit of 0.68 lb/MMBtu from the biogas flare. The Temporary Permit TP-BP-0695 allows the co-firing of #6 fuel oil with on-site-generated specification used oil and/or biogas, subject to the NO_x RACT limit of 0.4 lb/MMBtu. Finally, in addition to requiring A-B to test all 3 boilers when burning #6 fuel oil and #6 fuel oil with biogas on a 3-year frequency, the Temporary Permit TP-BP-0695 requires one of the 3 boilers to be tested every 3 years

when firing natural gas and natural gas with biogas, such that every 3 years a different boiler will be tested.

A-B last performed emissions testing on the boilers on October 19, 2009 for boiler #1 and December 17, 2009 for boilers #2 and #3. All devices complied with the applicable emission standards in the Title V and Temporary Permits (see Table 7).

IX. Compliance with Recordkeeping and Reporting

CHAPTER Env-A 900 - Owner or Operator Recordkeeping and Reporting Obligations

Env-A 902 Availability of Records

During a review of the records, A-B demonstrated that it maintains records for a minimum of 5 years in either paper or electronic format.

Env-A 903 General Recordkeeping for Combustion Devices

A-B demonstrated through electronic data that the required monthly fuel use records are being tracked.

Env-A 904.02 General VOC Recordkeeping

A-B demonstrated through electronic data that the VOC information required by Table 7, Items 8 and 9 is being tracked.

Env-A 907 – General Reporting Requirements

The Full Compliance Evaluation Records Review is included in Appendix A to this report. The appendix lists all the reports that were received and reviewed in order to complete this compliance evaluation. The records review attachment includes a determination of each report's timeliness with regard to the required submittal date, and if the report was acceptable in terms of its content. A-B maintains all of the records required by the Title V and the Temporary Permits in paper or electronic format. A-B has submitted all reports required by the permits. See the Appendix A for a full list of reports submitted by A-B. ***A-B has not been tracking and reporting the NG usage for the pilot light on the Flare. A-B should track the NG usage for the pilot light in the Flare and report usage in the Annual Emission Report starting with fiscal year 2010. A-B estimates that the pilot uses approximately 20 mmBtu per month which equates to 0.2353 mmcf per year.***

Env-A 911 – Recordkeeping and Reporting Requirements for Permit Deviations

A-B is aware of the recordkeeping and reporting requirements for Permit Deviations and has submitted five deviations during this inspection period. Two deviations were for late report submittals due to a misunderstanding of reporting requirements, two were for minor H₂S releases during widespread, weather related, power outages that caused the flare to be inoperable and one was

for not performing the boiler tune-ups and flare inspections in the time frame specified by the Permit. The deviations were reported as required and have been corrected.

X. Compliance with RACT

CHAPTER Env-A 1200 – Prevention, Abatement, and Control of Stationary Source Air Pollution

Part Env-A 1204 - Stationary Sources of Volatile Organic Compounds (VOCs)

DES issued VOC RACT Order ARD-00-001 to A-B on April 15, 2002. Those requirements are included in the Title V Permit. A-B is subject to the VOC RACT requirements of Env-A 1204.48 *Applicability Criteria for Miscellaneous and Multicategory Stationary VOC Sources*. A-B is required to follow production loss reduction activities as specified in the Title V Permit to minimize the loss of product and reduce emissions of VOCs. These activities include an information management system for maintenance and to track production data and process losses, a formal training plan for its employees, and a training manual for each piece of equipment it operates. A-B is required to limit its VOC emissions to less than 37.6 pounds per thousand bottles of beer packaged per calendar month. A-B has demonstrated compliance with recordkeeping and reporting (see Table 1).

Part Env-A 1211 - Nitrogen Oxides (NO_x)

As noted previously under Testing and Monitoring, A-B is subject to NO_x RACT and is required to perform compliance stack testing for NO_x every three years.

The results of the NO_x RACT testing in December 2009 are shown in Table 7.

Boiler Number	Operating Condition	NO_x Emissions (lb/MMBtu)	NO_x RACT Limit (lb/MMBtu)
Boiler #1	Firing #6 fuel oil only	0.273	0.40
Boiler #2	Firing #6 fuel oil only	0.277	0.40
Boiler #2	Firing #6 fuel oil and biogas	0.281	0.40
Boiler #2	Firing #6 natural gas only	0.160	0.25
Boiler #2	Firing #6 natural gas and biogas	0.149	0.25
Boiler #3	Firing #6 fuel oil only	0.293	0.4
Boiler #3	Firing #6 fuel oil and biogas	0.299	0.4

All boilers under all firing conditions complied with the limits for NO_x RACT.

CHAPTER Env-A 1300 – Nitrogen Oxides (NO_x) Reasonably Available Control Technology (RACT)

Effective October 31, 2010, requirements in Env-A 1211 were replaced by Env-A 1300.

XI. Compliance with Toxic Regulations

CHAPTER Env-A 1400 - Regulated Toxic Air Pollutants (RTAPs)

A-B calculates and submits the annual RTAP emissions in the annual emissions report. A-B reviews the RTAP impact annually and certifies compliance with Env-A 1400 in the annual compliance certification.

XII. Compliance with Fuel Regulations

CHAPTER Env-A 1600 - Fuel Specifications

A-B burns #6 fuel oil, natural gas, biogas and diesel fuel. A-B reports its fuel usage for each fuel-burning device in its annual emission reports. It reports monthly usage of each fuel, the heating value and the sulfur content. A-B demonstrated compliance with the 0.3% sulfur content of the #6 fuel oil by the retention of the fuel delivery slips containing the sulfur content.

XIII. Compliance with Process/Particulate/Opacity Regulations

CHAPTER Env-A 2000 - Fuel Burning Devices

Part Env-A 2002 – Operational Requirements

The Title V Permit limits the opacity from A-B's fuel burning devices to 40 percent. Compliance with this requirement was verified during this on-site evaluation. Observed opacity was less than 10%.

XIV. Compliance with other Miscellaneous Provisions

CHAPTER Env-A 2100 - Particulate Matter and Visible Emissions Standards

Parts Env-A 2102.03 & Env-A 2102.04 – Particulate Matter Emission Standards

The Permit specifies an emission rate of particulates for the non fuel burning devices (EU04, EU05, EU07 and EU08) and this can only be verified by stack testing. No stack testing has been required up to this time.

Part Env-A 2103.02 – Visible Emission Standards

A-B is required to comply with the 20% opacity standard for visible emissions for the fuel burning

devices (EU01, EU02, EU03 and EU06). Compliance with this requirement was confirmed during this on-site evaluation. There have been no complaints to DES of excessive visible emissions originating from A-B.

XV. Compliance with Applicable Federal Rules

40 CFR 60 Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

This part is not applicable as all three boilers were constructed prior to the Subpart Db applicability date of June 19, 1984.

40 CFR 68 – Chemical Accident Prevention Provisions

This rule applies as A-B maintains quantities of ammonia over the applicability threshold. Compliance has been demonstrated by the submission of a Risk Management Plan on June 18, 1999 to EPA. A-B follows this plan.

40 CFR 82 – Protection of Stratospheric Ozone

A-B has demonstrated compliance by maintaining records of all work done on the chillers and the amounts of refrigerant added. A-B reports the amount of refrigerant added each year in the annual emission report.

XVI. Enforcement History and Status

DES ARD has no open enforcement actions against A-B. DES ARD has not taken any enforcement action against A-B in the time period covered by this compliance evaluation.

XVII. Conclusions and Recommended Actions

The following deficiency was noted during this on-site evaluation:

- A-B has not been tracking and reporting the NG usage for the pilot light on the Flare. A-B should track the NG usage for the pilot light in the Flare and report usage in the Annual Emission Report starting with fiscal year 2010. A-B estimates that the pilot uses approximately 20 mmBtu per month which equates to 0.2353 mmcf per year.

Appendix A: Full Compliance Evaluation Records Review

Facility: Anheuser-Busch, Inc.

Date of FCE: September 15, 2010

Reviewer: Greg Helve

Annual Emission Reports (incl. NOx, VOC etc.):

Reporting Period	When Rec'd	Report OK	In Database
2009	4/14/2010	Yes	Yes
2008	4/13/2009	Yes	Yes

Annual Emissions-Based Fee Payments:

Reporting Period	When Rec'd	In Database
2009	4/14/2010	Yes, in DES Emission Section's Spreadsheet
2008	4/13/2009	Yes, in DES Emission Section's Spreadsheet

TV Annual Compliance Certifications:

Reporting Period	When Rec'd	Report OK	In Database
2009	4/14/2010	Yes	Yes
2008	4/13/2009	Yes	Yes

TV Semi-Annual Permit Deviation and Monitoring Reports:

Reporting Period	When Rec'd *	Report OK	In Database
2010 1 st	10/15/2010	Yes	Yes
2009 2 nd	4/14/2010	Yes	Yes
2009 1 st	10/16/2009	Yes	Yes
2008 2 nd	4/13/2009	Yes	Yes
2008 1 st	10/16/2008	Yes	Yes

* Anheuser-Busch submits its SA PD/M reports, with the concurrence of DES, on the alternate schedule of no later than April 15 and October 15

Individual Permit Deviations Reports:

Occurrence Date	When Rec'd	Report OK	In Database
4/01/2008	5/21/2010	Yes	Yes
4/16/2008	5/21/2010	Yes	Yes
2/25/2010	2/26/2010	Yes	Yes
5/04/2010	8/26/2010	Yes	Yes
5/15/2010	6/17/2010	Yes	Yes

Quarterly Fuel Usage Reports:

Reporting Period	When Rec'd *	Report OK	In Database
2010 2 nd	7/12/2010	Yes	Yes
2010 1 st	6/18/2010 <i>Late</i>	Yes	Yes
2009 4 th	2/16/2010	Yes	Yes

Reporting Period	When Rec'd *	Report OK	In Database
2009 3 rd	11/16/2009	Yes	Yes
2009 2 nd	8/05/2009	Yes	Yes
2009 1 st	5/12/2009	Yes	Yes
2008 4 th	2/17/2009	Yes	Yes
2008 3 rd	10/22/2008	Yes	Yes
2008 2 nd	8/14/2008	Yes	Yes
2008 1 st	5/15/2008	Yes	Yes

* Required to be submitted to DES-ARD within 45 days after the end of the quarter being reported.

Stack Tests:

Stack Test Date	Device Tested	When Rec'd	Report OK	In Database
12/16/2009	Boiler #1-NOx RACT	2/12/2010	Yes	Yes
12/15/2009	Boiler #2-NOx RACT	2/12/2010	Yes	Yes
12/16/2009	Boiler #3-NOx RACT	2/12/2010	Yes	Yes