NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

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TOM SKIBITSKI
Acting Director
Resource Protection Division

Certified Mail – Return Receipt Request

February 11, 2013

Mr. Rod Tweet, President
1814 Second Street
Second Street Brewery
Santa Fe, NM 87505

RE: Industrial Stormwater Inspection; SIC 2082; NPDES Compliance Evaluation Inspection; Second Street Brewery; NPDES Permit NMU001845; January 31, 2013

Dear Mr. Tweet:

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB), conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas, for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with the requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report and required to correct any problems noted during the inspection and modify your operational and/or administrative procedures, as appropriate. Further you are encouraged to notify, in writing, both USEPA (Diana McDonald, USEPA [6EN-WM], 1445 Ross Avenue, Dallas Texas 75202) and NMED (at the address above) regarding modifications and compliance issues.

The NPDES Stormwater Multi-Sector General Permit (MSGP) for industrial activities was re-issued on September 29, 2008. The MSGP, fact sheet and other information in the industrial stormwater program can be accessed at http://cfpub2.epa.gov/npdes/stormwater/msgp.cfm.

If you have any questions about this inspection report, please do not hesitate to contact me at (505) 827-1041.

Sincerely,

/s/ Sandra Gabaldon

Sandra Gabaldón
Surface Water Quality Bureau

Cc: Carol Peters-Wagnon, (6EN-WM), USEPA, by email
Rashida Bowlin, (6EN-AS), USEPA, by email
Diana McDonald, (6EN-WM), USEPA, by email
Hannah Branning, (6EN-WC), USEPA, by email
Darlene Whitten-Hill, (6EN-AS), USEPA, by email
District II, NMED, by email

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

1	2	3	NPDES	11	12	yr/mo/day	17	18	Inspec. Type	19	Inspector	20	Fac Type
Transaction Code													
N	5	N	MU0018451			130131			~		S		2

Remarks: BEVERAGES

67	Inspection Work Days	69	70	Facility Evaluation Rating	71	BI	72	QA	73	74	75	Reserved	80
			4			N		N					

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*
SECOND STREET BREWERY
1814 Second Street
Santa Fe, NM 87505
SANTA FE COUNTY

Entry Time /Date
1330 Hours / 01-31-2013

Permit Effective Date
9-29-2008

Exit Time/Date
1350 Hours / 01-31-2013

Permit Expiration Date
9-29-2013

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Mr John Walker, (505) 982-3030

Name, Address of Responsible Official/Title/Phone and Fax Number
ROD TWEET, PRESIDENT / (505) 660-8437
1814 Second Street
Santa Fe, NM 87505

Contacted
Yes * No

Other Facility Data

GPS:
35°39'43.69" N
-105°57'54.28" W

SECTOR U, SUBSECTOR U2
SIC 2082

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

U	Permit	N	Flow Measurement	S	Operations & Maintenance	N	CSO/SSO
U	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
N	Effluent/Receiving Waters	N	Laboratory	U	Storm Water		Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Sandra Gabaldón */s/ Sandra Gabaldon*	NMED/SWQB/(505) 827-1041 / (505) 827-0160	February 8, 2013
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
Richard Powell */s/ Richard Powell*	NMED/SWQB/ (505) 827-2798 / (505) 827-0160	February 8, 2013

Second Street Brewery
NPDES Compliance Evaluation Inspection
NPDES Permit NMU001845
Inspection Date: January 31, 2013

Further Explanations

Introduction:

On January 31, 2013, a Compliance Evaluation Inspection (CEI) was conducted at Second Street Brewery, located at 1814 Second Street, Santa Fe, New Mexico in Santa Fe County by Sandra Gabaldón and Daniel Valenta, of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). The purpose of this inspection is to document the facility's status regarding the National Pollutant Discharge Elimination System (NPDES) permit requirements for stormwater discharges associated with industrial activities under 40 CFR 122.26 and the industrial stormwater Multi-Sector General Permit (MSGP). Second Street Brewery is classified as a beverages manufacturer (see Standard Industrial Classification [SIC] code 2082) that meets the description in Sector U, Subsector U2 of the MSGP.

Upon arrival at 1330 hours on January 31, 2013 the inspectors met with John Walker, Brewer. The inspector, Ms. Gabaldón, presented her credentials, and explained the purpose of the inspection. The inspector informed Mr. Walker of the requirements of the Multi-Sector General Permit (MSGP).

Stormwater from this facility may discharge to the City of Santa Fe MS4, thence to the Santa Fe River in segment 20.6.4.98 of the State of New Mexico Standards for Interstate and Intrastate Surface Waters, New Mexico Administrative Code (NMAC). Designated uses include: irrigation, livestock watering, wildlife habitat, marginal warmwater aquatic life, primary contact.

This report is based on review of EPA's on-line notice of intent (NOI) database and on-site observation by NMED personnel along with verbal information provided by Mr. Walker and Mr. Rod Tweet, Owner.

Clean Water Act (CWA) and Industrial Stormwater Permit Requirements:

Section 301(a) of the Federal Water Pollution Control Act states that "*Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this ACT, the discharge of any pollutant by any person shall be unlawful.*" Federal regulations in 40 CFR part 122.21(a) Duty to Apply, states: "*Any person who discharges or proposes to discharge pollutants…must submit a complete application to the Director in accordance with this section and part 124 of this chapter.*"

USEPA's MSGP was re-issued on September 29, 2008, (Federal Register/Vol. 73, No. 189/Monday, September 29, 2008 pg. 56572). This replaced the 2000 MSGP which expired on October 30, 2005. Common requirements for coverage under an industrial stormwater permit include development of a written stormwater pollution prevention plan (SWPPP), implementation of control measures, and submittal of a request for permit coverage, usually referred to as the Notice of Intent (NOI). The SWPPP is a written assessment of potential sources of pollutants in stormwater runoff and control measures that will be implanted at your facility to minimize the discharge of these pollutants in runoff from the site.

The MSGP also requires monitoring to include visual and analytical data to determine the effectiveness of BMPs on site. For further information regarding the NPDES MSGP please visit EPA's website: www.epa.gov/npdes/stormwater and click on "industrial activity." Once you navigate to the MSGP on the website, you will also find various Fact Sheets for industrial activities. Breweries fall under Sector U. The Fact Sheet will provide further information regarding pollutants and requirements of the MSGP.

The brewing process involves malting of grain, milling and mashing, wort cooling and fermentation, packaging, and pasteurization. Below is a general description of the process. However, each brewery may incorporate different techniques which may be exclusive to their product. The following information is provided as background of the process and not intended to be all encompassing.

Malted barley is ground in a grinder so that the husk is left in tack while the rest becomes a powder, rich in enzymes and starch. The enzymes degrade the starch to sugar when they are in water. The product is then called "sweet wort" (pronounced wert). The wort is separated from the spent grains by straining through a porous filter. The grains are sparged with water in order to extract the maximum amount of usable materials.

Spent grains are collected and usually given to local farmers for animal feed.

Hops and sugars are added to the mixture. The wort is usually boiled for a set amount of time to inactivate the enzymes; sterilize and concentrate the mixture. Hops provide a bitter taste as well as an aroma to the beer.

The hopped wort is then cooled to further precipate out any proteins. This may last anywhere from two to sixteen days.

Yeast is then added to the fermentation tank to induce fermentation of sugar wort which is converted to $C0_2$, alcohol, and heat with new yeast cells.

Green beer (as it is known at this stage) is transferred to storage for a certain amount of time before filtration takes place. During storage, excess yeast along with suspended solids precipitate out as the beer matures and becomes saturated with $C0_2$. The mixture is filtered and a "bright" beer is produced. The spent filter slurry is removed from the tank for disposal. Disposal is often into septic tanks or municipal sewage systems.

After filtration, stabilizing agents, color and sugar may be added. The beer is then ready for packaging.

There are also supplementary materials such as Kieselguhr, caustic soda and detergents.

Kieselguhr, a siliceous soil, is used in filtering the beer to obtain clarity. The caustic soda (e.g., sodium hydroxide) is used for cleaning equipment. Detergents are also used for cleaning.

Packaging materials may include non-returnable bottles, cans, crown corks, cardboard, plastic stretch and shrink wraps. Other general materials that might be used include glue (used for labels and cardboard boxes), and a range of additives such as enzymes, antioxidants, foam stabilizers and colloidal stabilizers (finings, silica, tannic acid).

There are a number of factors that influence to what extent microbreweries can affect water quality. Some of these factors include: geographic location, topography, hydrogeology, extent of impervious surfaces, type of ground cover, outdoor activities, the size of the facility, and the type and duration of precipitation events.

Common activities, pollutant sources and associated pollutants that may be found at a microbrewery such as this include:

Activity	Pollutant Source	Pollutant
Liquid storage containers (drums, carboys, and gallon jugs)	Outside containers	BOD, TSS, oil and greases, pH
	Open containers	
	External corrosion of the containers	
	Operator handling and transporting	
	Spills and leaks from damaged containers	
Solid storage containers (soils, holding bins, fiber drums, etc.)	Dust and particulates	BOD, TSS, pH
	Operator handling and transporting	
	Spills and leaks	
Air emissions	Oven emissions	BOD, TSS, oil and greases, pH
	Vents	
	Fine solids handling	
Solid waste	Dumpsters and trash cans	
Spent equipment, scraps, etc	BOD, TSS, oil and greases, pH, copper, manganese	
Wastewater	Treatment processes (e.g., hydraulic overflow)	BOD, TSS, oil and greases, pH, fecal coliform
	Outside piping and connections (couplings, flanges, hoses, valves, and pumps)	
Pest control	Outside application of pesticides, rodenticides, and insecticides	Miscellaneous insecticides, rodenticides, pesticides, etc., TKN
Illicit connections to the storm sewer	Process wastewaters	BOD, TSS, oil and greases, pH
	Process floor drains	
	Sanitary sewers	
	USTs	
Raw material unloading/ product loading	Container defects (bags, drums, bottles, crates)	Biochemical oxygen demand (BOD), total suspended solids (TSS), oil and grease, pH, nitrogen (TKN)
Raw material unloading/ product loading Liquid storage containers (i.e., above ground storage tanks)	Spills and leaks during unloading/loading (tanks, rail cars)	Biochemical oxygen demand (BOD), total suspended solids (TSS), oil and grease, pH, nitrogen (TKN) BOD, TSS, oil and greases, pH
	Failed connections (hoses and couplings)	
	Washdown of unloading/loading area	
	Failed piping and connections (couplings, flanges, hoses, and valves)	
Liquid storage containers (i.e., above ground storage tanks)	External corrosion and structural failure	BOD, TSS, oil and greases, pH
	Spills and overflows due to operator error	

Findings:

Your facility does not have permit coverage for the industrial activities associated with the beverage industry. You are encouraged to review the permit, complete your SWPPP and apply for coverage under the eNOI system.

However, your facility may qualify for the "no exposure" exclusion. Observations made by NMED indicate that all manufacturing is done indoors and loading and unloading of raw materials are done in such a way to minimize pollutants from leaving the site.

To obtain the conditional no exposure exclusion, you must submit a certification form attesting your facility meets the definition of "no exposure". EPA's certification form uses a series of yes/no questions on the nature of the industrial activities and conditions at your facility. You may only qualify for the no exposure exclusion if you answer "no" to all of the questions.

The purpose of the certification form is twofold: (1) to aid you in determining whether you have a condition of no exposure at your facility or site; (2) to furnish the necessary written certification that allows you to be relieved of permit obligations, provided you answer all of the questions in the negative.

If you answer "yes" to any of the questions about possible exposure, you must make the appropriate changes at the facility before you apply for the conditional exclusion. These changes must remove the particular material, process or activity from exposure to stormwater.

If you answer "no" to every question, you qualify for the no exposure exclusion. To complete the process, you must sign and submit the form through the eNOI (Notice of Intent) system.

This certification must be completed and submitted to EPA once every five years and can only be done so if the condition of no exposure continues to exist at your facility.

To file your No Exposure Certification, you can use the eNOI system at www.epa.gov/npdes/eNOI.