

DEPT. OF ENVIRONMENTAL QUALITY

Date: December 21, 2016

To: Appropriations Committee Members of the Legislature

From: Kevin Stoner, Air Quality Division Administrator – NDEQ

RE: State Fiscal Year 2016 Air Quality Permit Program Report

Enclosed please find a copy of the Air Quality Permit Program Emission Fee Appropriations Report for State Fiscal Year 2016. This report was prepared in accordance with § 81-1505.04.

If you have any questions regarding this report, please feel free to contact me at (402) 471-4299.

Enc. 1

Air Quality Permit Program Emission Fee Appropriations Report

Presented to
Appropriations Committee
of the
Legislature

By the Department of Environmental Quality



December 21, 2016

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Introduction

The Department of Environmental Quality submits this report to the members of the Appropriations Committee of the Nebraska Legislature, pursuant to Neb. Rev. Stat. §81-1505.04, as amended. This report details all direct and indirect program costs incurred during the State Fiscal Year 2016 (SFY 2016) in carrying out the air quality permit program. The permit program is the result of the Federal Clean Air Act Amendments of 1990 (CAAA) and the passage of LB1257 (1992) by the Nebraska Legislature. The Department is required to establish and implement a comprehensive operating permit program for major sources of certain air pollutants. The Federal program is referred to as the Title V program. The State of Nebraska's "Title V program" is often referred to as the Class I program.

Pursuant to the provisions of §81-1505.04, the Department is required to collect an annual fee on the emissions from major sources of air pollution in an amount sufficient to cover the costs of the implementation of the permit program. The statute provides flexibility to develop and adjust the fee according to Federal regulation or "as required to pay all reasonable direct and indirect costs of developing and administering the air quality permit program." The State's Payroll and Financial Center system is utilized to document time and resources spent on the program. The purpose of this report is to document the revenue generated from emission fees and identify costs associated with the program. In addition, as required by statute, this report identifies the costs incurred by the Department to administer the program for each major source and each primary activity not specific to a major source.

Emerging Issues

A. National Ambient Air Quality Standards and Cross-State Pollution

The Clean Air Act requires EPA to review the National Ambient Air Quality Standards (NAAQS) every five years. These standards are set to protect public health, welfare and the environment. Currently, Nebraska is in attainment (compliance) with all six pollutant standards. There are standards for ozone (O₃), lead (Pb), particulate matter (PM), carbon monoxide (CO), nitrogen oxides (NOx), and sulfur oxides (SO_x). EPA finalized revisions to the proposed ozone standard on October 1, 2015, lowering the primary and secondary standards to 70 ppb (8-hr average). Currently, all Nebraska monitors record levels in attainment with the revised standard.

Nebraska continues to maintain its attainment status with all of the pollutant standards. Looking forward, as the NAAQS continue to be lowered by EPA for $PM_{2.5}$, lead, NO_x , SO_x , and ozone, ensuring the attainment status is maintained may prove to be challenging. Should Nebraska become non-attainment (not comply) with a NAAQS, the State must develop a strategy to return to compliance typically within 3 to 5 years and sustain on-going compliance. A non-attainment designation would potentially make it difficult for existing industry to expand and dissuade new industry from coming into the impacted parts of the state.

Furthermore, emissions from one state can sometimes cause or contribute to air pollution issues in a downwind state. This is the fundamental basis of the cross-state air pollution rule (CSAPR) which EPA proposed in 2010 and finalized during the summer of 2011 to address 2008 ozone standards and PM_{2.5} issues. EPA named Nebraska as a state that has an impact on Wisconsin and their ability to maintain compliance with the 24-hour PM_{2.5} standard. The Nebraska Attorney General's office joined a lawsuit against EPA in District Court challenging the CSAPR rule. The CSAPR rule was to take full effect January 1, 2012; however, on December 30, 2011, the Court stayed CSAPR pending the court's resolution of the petitions for review. In April 2014, the United States Supreme Court upheld the CSAPR rule. The stay was lifted in October 2014; therefore, implementation began in 2015. As such, the electric

generating facilities in Nebraska had to comply with the sulfur dioxide and nitrogen dioxide emission caps beginning in 2015. With the revisions to the ozone standard in 2015, EPA began the process of the second phase of the CSAPR rule to address ozone. EPA issued a final rule in September 2016 for CSAPR implementation that affected 22 states in the eastern U.S. Nebraska is not affected by this rulemaking.

B. Greenhouse Gas Permitting

As a result of a U.S. Supreme Court decision (U.S. vs. Massachusetts), the EPA was required to evaluate whether greenhouse gas emissions (GHG) were endangering the public health and, if so, whether such emissions from vehicles significantly contributed to such endangerment. Therefore, EPA has been working on a path of GHG emission regulation under the structure of the Clean Air Act. EPA promulgated a mandatory reporting rule for sources with emissions over 25,000 tons per year (EPA runs this reporting program, not the state). Reporting began in 2011 on calendar year 2010 emissions.

EPA also promulgated GHG permitting rules under the Title V operating permit program and the federal prevention of significant deterioration (PSD) permit program in June 2010. EPA expected states to incorporate the revised rules into their programs by January 2, 2011. Nebraska adopted these revised rules at the December 2010 Environmental Quality Council (EQC) hearing. In June 2014, the U.S. Supreme Court partially overturned the GHG permitting rules. The Court said that EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is subject to federal permitting rules. A source must otherwise be subject due to other pollutants. EPA is planning to revise the GHG permitting rules in the future pursuant to the U.S. Supreme Court decision.

C. Clean Power Plan

In June 2014, EPA proposed a rule, referred to as the Clean Power Plan (CPP), pursuant to Section 111(d) of the Clean Air Act that would require states to develop plans for regulating carbon dioxide from existing power plants. The rule was finalized in August 2015. The CPP established state-specific interim and final goals, based on emission performance rates for fossil fuel-fired electric generating units and each state's mix of power plants. The goals were expressed in two ways—rate-based and mass-based— either of which could be used by the state in its plan. In February 2016, the Supreme Court stayed enforcement of the CPP pending the outcome of litigation in the U.S. Court of Appeals for the D.C. Circuit. The Court heard arguments in September 2016 and the decision is pending.

Definitions

For the purposes of this report, the following definitions have been used:

<u>Chargeable emissions:</u> The total tonnage of regulated pollutants emitted from a major source up to and including any applicable caps. A cap of 4,000 tons per regulated pollutant applies to all major sources. A cap of 400 tons per pollutant applies to mid-size electrical generation facilities that are not under jurisdiction of a local air program and that have a nameplate capacity of between 70 and 115 megawatts.

Class I – Major Source: An air emissions source permitted to emit annually 100 tons or more of PM10, CO, NOx, SOx, or VOC; 10 tons or more of any single HAP; 25 tons of any combination of HAPs. Until the US Supreme Court partially overturned the GHG permitting rule June 2014, a source with emissions of 100 tons or more of greenhouse gases on a mass basis and 100,000 tons of carbon dioxide equivalents were also considered major sources. The Court ruled that EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is subject to federal permitting rules. Such sources with emissions above the thresholds are required to obtain a Class I operating permit. Some other source categories are required to obtain a Class I operating permit due to other federal requirements.

<u>Class II – Synthetic Minor Source:</u> A source that has a potential to emit to be a major source, but through enforceable limits has lowered its potential to emit to below the major source thresholds. A synthetic minor source must either obtain a Class II permit or qualify for the Low Emitter program. Synthetic minor sources are not assessed emission fees.

<u>Compliance Assurance:</u> Assuring compliance includes activities such as conducting facility inspections, responding to complaints, stack test observations, file reviews, voluntary compliance and enforcement.

<u>Direct costs:</u> Direct program costs are those costs incurred through the direct implementation of the Title V program. Examples include: costs of permit writing and review labor, staff development, training, inspector salaries and travel expenses, air monitoring equipment purchases, regulation development, small business assistance and computer modeling software purchases.

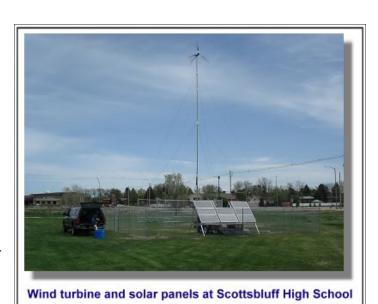
<u>Indirect costs:</u> Indirect costs are the programs share of costs incurred by the Department that benefit the entire agency. Examples include: building rent, costs of certain administrative labor such as the Director, the Deputy Directors, and general data management.

Low Emitter Source: A source that has a potential to emit to be a major source, but has demonstrated through records and emission inventories for at least 5 years a history of actual emissions not exceeding 50 percent of major source thresholds for regulated pollutants and that is not otherwise required to obtain a permit.

Non Source-Specific Costs: Those costs not specifically attributable to a single source. Examples include: resources required for review of federal regulations, resources required for participation in national organizations, small business assistance, labor for drafting a general air permit, and ambient air monitoring in areas of multiple sources.

Primary Activity: A main functional area of the air program. Examples of primary activities include: permitting, small business assistance, emission inventory, state regulation and program development, compliance assurance, federal policy and rulemaking, and acid rain.

Source-Specific Costs: Those costs specifically attributable to a single source. Examples include: labor for drafting an operating permit for a single source, labor for inspecting a single source, and cost of publishing a public notice for a permit.



Renewable Energy – The wind and sun power the NDEQ air quality monitoring station in Scottsbluff, NE.

Courtesy, Scottsbluff Star Herald.

Direct and Indirect Costs - SFY2016

A. Fees Assessed

2011

2012

2013

2014

2015

Major source emissions were first subject to fees for calendar year 1994 emissions. The following table details the fee rates for the last several years, the date those fees were due, how much was collected, and which fiscal year the fees were intended to fund.

Emission Fee Rate **Fee Due Date** Fiscal Year Fees **Inventory** Collected¹ per Ton of Funded Year **Pollutant** July 1, 2008 2007 \$57 \$2,326,284 SFY2009 2008 \$62 July 1, 2019 \$2,478,420 SFY2010 2009 \$70 July 1, 2010 SFY2011 \$2,666,552 2010 \$66 July 1, 2011 \$2,566,717 SFY2012

July 1, 2012

July 1, 2013

July 1, 2014

July 1, 2015

July 1, 2016

\$2,640,609

\$2,588,903

\$2,738,257

\$2,832,625

\$2,719,339

SFY2013 SFY2014

SFY2015 SFY2016

SFY2017

Table 1: Fees Collected

B. General Discussion of Program Costs

\$64

\$65

\$67

\$70

\$71

The Department's SFY2016 estimated expenditures (budget) was \$3,204,509 for the Title V program. The Department expended \$2,885,082 or approximately 90% of the budget. Table 2 provides a summary of SFY2016 expenditures within the Title V program by budget category.

Table 2: Title V Program Costs SFY2016 by Budget Category

(July 1, 2015 - June 30, 2016)

Category	Agency Program Costs
Personnel	\$ 1,530,777
Benefits	404,114
Contractual	49,023
Supplies	11,224
Other	137,448
Travel	27,363
Equipment	7,925
Total Direct Costs:	2,167,874
Total Indirect Costs:	717,208
Total Costs:	\$ 2,885,084

¹ Fees collected reflect late payment fees and updates to the emissions inventory that may have occurred after the initial submittal was filed.

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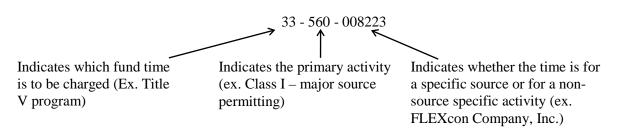
Primary Activity Costs

A. Payroll and Financial Center System

The Department is required to establish a system that provides reporting of resources expended on the primary components of the air quality program, as well as resources expended for each major source. Use of a tracking system commenced in July 1996.

Under the Payroll and Financial Center system, program activities are charged to the Title V (Class I) program, the "state" program, the Federal 103 program, or to the construction permit application fee program. The emission fees paid by major sources funds the Title V program. The "state" program refers to the 105 grant program which is funded by Federal funds and State general funds. The Federal 103 program is funded wholly by Federal funds and is utilized only for maintaining the PM_{2.5} (particulate matter with an aerodynamic diameter of less than 2.5 microns) ambient monitoring network. The construction permit application fee program was enacted by the Legislature during the 2004 session (LB449) and began January 1, 2005. When applying for an air quality construction permit, the owner or operator of the facility must submit an application fee. The fees collected under the construction permit program are used toward paying some of the costs of processing the application.

All time spent by staff on the Title V program is recorded as program activity on timesheets in the Payroll and Financial Center system. The Title V program includes activities associated with major sources and synthetic-minor sources. Permit, planning, and compliance program staff document time by primary activity and by specific source or non-source specific activities. An example of how the Title V program activities are tracked follows:



B. Costs by Primary Activity

The following table details the Title V air program costs for SFY2016 by primary activity:

Table 3: Costs by Primary Activity SFY2016 (July 1, 2015- June 30, 2016)

Time Tracking Code	Primary Activity	Agency Program Costs
001	Administration/Management	\$ 147,949
002	General Office	290,367
553	Air Emission Inventory	52,463
554	Air Ambient Monitoring	127,589
555	SIP (General Air Program)	327,841
559	Small Business Assistance	120,670
560	Air Class I - Title V Permit	538,337
561	Air Class II - Snyth Permit	245,844
562	Acid Rain Program	466
563	Air State Regs/Prog Devel	1,234
564	Air Fed Policy/Rule Making	27,934
565	Air Toxics	45
566	Other Air Permit - Burn/Min	2,701
567	Air - Compliance	804,676
568	Air - Complaints	6,178
569	Air NPR-No Permit Required	596
570	Air Low Emitters	22,617
	Other (non-specified)	167,577
	TOTAL	\$ 2,885,084

C. Costs Specific to Class I Major Sources

Table 4 contains the costs the agency incurred that were specific to individual Class I major sources.

Table 4: Costs by Class I Major Source SFY2016 (July 1, 2015 - June 30, 2016)

(11)					
Facility Name	Facility Location	Facility ID	Time Tracking Code	Total Agency Costs	
A-1 Fiberglass	Hastings	723	008366	\$ 384	
Abengoa Bioenergy Co, LLC	York	59094	008291	31,777	
Abengoa Bioenergy Co, LLC	Ravenna	77854	009013	3,134	
ADM Corn Processing	Columbus	39285	008206	53,617	
AGP Corn Processing	Hastings	62574	008236	2,376	
AGP Soy Processing	Hastings	72698	008794	12,846	
Archer Daniels Midland Co	Fremont	9169	008265	2,944	
Ash Grove Cement Co	Louisville	4129	004504	20,557	
Atlas Roofing Corporation	Mead	43396	008221	697	
BD Medical Systems	Columbus	38719	008383	6,775	
Bertrand Compressor Station	Loomis	88547	010189	861	
Bimbo Bakeries USA, Inc	Hastings	140	008474	125	
Bimbo Bakeries USA, Inc	Bellevue	59056	008471	1,980	
Burgess Well Company	Minden	27639	007332	364	
Butler County Landfill, Inc	David City	62743	008812	15,577	
Cargill Ag Horizons	Albion	1446	008310	1,290	
Cargill Inc Polyol Sweeteners	Blair	64401	008787	3,352	
Cargill Lactic Acid Plant	Blair	91164	010294	3,736	
Cargill Meat Solutions Corp	Schuyler	6272	008524	16,186	
Cargill, Inc	Blair	57902	008296	33,223	
Chief Ethanol Fuels, Inc	Hastings	58049	008315	12,709	
Clean Harbors Environmental Services, Inc	Kimball	58562	008319	43,214	
CNH Industrial America, LLC	Grand Island	24371	008395	19,613	
Columbus Terminal	Columbus	39527	008345	7,076	
Cornhusker Energy Lexington	Lexington	77755	009010	2,527	

Facility Name	Facility Location	Facility ID	Time Tracking Code	Total Agency Costs
CW Burdick Gen Station	Grand Island	54712	008770	\$ 15,383
David City Municipal Power	David City	4016	008300	4,937
Don Henry Power Center	Hastings	58345	008530	1,651
Douglas Co Recycling Landfill	Bennington	62593	008467	811
Douglas County Landfill	Omaha	59516	008244	7,923
Dutton-Lainson Co	Hastings	125	008374	5,431
Endicott Clay Products	Endicott	27355	008389	19,765
Exmark Manufacturing Co	Beatrice	23151	009016	6,977
FLEXcon Company, Inc	Columbus	58429	008223	10,675
Flint Hills Resources Fairmont	Fairmont	86026	010000	26,163
G & P Development, Inc Landfill	Milford	45275	008825	14,521
Geneva Terminal	Geneva	22282	008343	23,165
Global Equipment Company, Inc	Norfolk	53804	008936	2,905
Grand Island Regional Landfill	Shelton	62812	008809	1,817
Green Plains Atkinson, LLC	Atkinson	86416	010027	3,054
Green Plains Central City, LLC	Central City	82836	009032	6,308
Green Plains Ord, LLC	Ord	85861	009091	3,632
Green Plains Wood River, LLC	Wood River	86000	009094	21,117
J Bar J Landfill	Ogallala	63354	008826	5,312
Koch Fertilizer Beatrice, LLC	Beatrice	23383	008411	4,984
Lon D Wright Power Plant	Fremont	48518	008350	10,561
Loveland Products, Inc	Fairbury	27086	008217	45
Magellan Pipeline Co, LP	Omaha	17738	008462	12,219
Magnolia Metal Corp	Auburn	36751	008465	3,406
Naturally Recycled Proteins	Wakefield	80265	009061	4,056
NatureWorks, LLC	Blair	69585	008857	1,733
Nebraska City Power Plant # 1	Nebraska City	37388	008353	311
Nebraska City Power Plant # 3	Nebraska City	64753	009004	5,891
NGPL Compressor Station #106	Beatrice	23034	008435	8,178

Facility Name	Facility Location	Facility ID	Time Tracking Code	Total Agency Costs
NGPL Compressor Station #196	Syracuse	37669	008470	\$ 29,004
NNSWC Landfill	Clarkson	62779	008811	4,609
North Denver Station	Hastings	55721	008339	0
Northern Natural Gas Co	Beatrice	23382	008324	33,550
Northern Natural Gas Co	Palmyra	37514	008325	33,365
NPPD Beatrice Power Station	Beatrice	76739	009002	14,998
NPPD Canaday Station	Lexington	8512	008433	1,855
NPPD Gerald Gentleman Station	Sutherland	34385	008396	6,406
NPPD Hebron Peaking Unit	Hebron	58034	008708	8,306
NPPD McCook Peaking Unit	McCook	39986	008836	5,749
Nucor Corporation	Norfolk	35548	008406	18,521
Nucor Steel	Norfolk	35677	008267	12,395
Omaha Papillion Creek Waste	Omaha	57789	008436	3,227
OPPD Cass County Station	Plattsmouth	70919	008870	5,272
OPPD Nebraska City Station	Nebraska City	58343	008355	18,150
OPPD Sarpy County Station	Bellevue	42638	008241	5,424
Osceola Terminal	Osceola	58738	008482	8,469
Pacific Ethanol Aurora East	Aurora	59052	008424	8,514
Pacific Ethanol Aurora West	Aurora	87072	010151	56,055
Plainview Municipal Power Plant	Plainview	38561	008757	1,985
Platte Generating Station	Grand Island	58027	008771	5,072
Purac America Inc	Blair	64258	008451	3,050
Rockies Express Pipeline, LLC	Steele City	86963	010142	1,202
Sarpy County Sanitary Landfill	Springfield	48856	008828	1,327
TIGT Albion Compressor Station	Albion	1416	008475	2,819
TIGT Big Springs Station	Big Springs	56628	008297	5,531
TIGT Grand Island Compressor Station	Grand Island	24673	008479	3,252
TIGT Holdrege Compressor Station	Holdrege	38270	008476	7,855
TIGT Huntsman Station	Sidney	5456	008392	5,234

Facility Name	Facility Location	Facility ID	Time Tracking Code	Total Agency Costs
TIGT Lexington Compressor Station	Lexington	8669	008437	\$ 2,038
TIGT North Platte Compressor Station	North Platte	58735	008477	2,721
Tyson Fresh Meats, Inc	Dakota City	7339	008376	7,829
Tyson Fresh Meats, Inc	Lexington	8744	008432	4,590
Union Pacific Railroad	North Platte	60192	008481	601
Valero Renewable Fuels Co	Albion	85814	009089	2,313
Veyance Technologies, Inc	Norfolk	53867	008391	2,008
Wayne Municipal Power Plant	Wayne	47263	008426	823
Western Sugar Cooperative	Scottsbluff	44141	008225	15,836
Whelan Energy Center	Hastings	58048	008338	6,792

D. Sector-Specific Costs

The growth Nebraska has seen in the ethanol production sector has leveled off the last few years. Initially activities were associated with pre-construction permitting. Now that plants are built and operational, the work has shifted to compliance, operating permits, and enforcement activities. Most costs associated with administering the air program for ethanol production facilities are paid with Title V emission fees because facilities are either major or synthetic minor facilities. A small portion of the costs are paid with construction permit application fees. Ethanol plants are considered major or synthetic-minor for purposes of the air permit program. Table 5 details the amount of Title V funds that have been expended toward the ethanol sector since SFY2006:

Table 5: Title V Air Program Spending on the Ethanol Fuel Sector since SFY06

State Fiscal Year	Ethanol Sector Title V Spending	Percent of Total Title V Expenditures
SFY06	\$318,819	14%
SFY07	\$445,380	22%
SFY08	\$376,546	16%
SFY09	\$440,777	18%
SFY10	\$473,690	18%
SFY11	\$382,870	15%
SFY12	\$377,606	14%
SFY13	\$361,366	14%
SFY14	\$275,473	10%
SFY15	\$349,704	13%
SFY16	\$309,794	14%

Chart 1 illustrates the program costs by industry sector. The heavy and general industry category includes manufacturing facilities such as Nucor Steel, Omaha Steel Castings, and Valmont Industries. The food and meat processing sector includes bread manufacturing, meat packing, rendering, and pet food manufacturing. Incineration includes hospital waste incinerators, as well as the Clean Harbors facility in Kimball, Nebraska. Wastewater treatment plants (WWTPs) include those systems at municipalities. The "non-specific" category refers to costs associated with activities that are not associated with an individual source, but benefit a broad category of sources. Examples of "non-specific" activities include: ambient monitoring, rule development, data entry, outreach, and training. The program costs reflected in Chart 1 include those attributed to activities related to Class I major sources and Class II synthetic minor sources.

