

IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

CHUCK GIPP, DIRECTOR | BRUCE TRAUTMAN, DEPUTY DIRECTOR

Memo: Title V Emission Fees & Budget 2016 - 2018

From: Catharine Fitzsimmons, Air Quality Bureau Chief
To: Title V Fee Workgroup
Date: ~~September 15, 2016~~ September 16, 2016 revision
Purpose: This memo is meant to provide a review of the Title V Emission Fee expenses from fiscal year (FY) 2016, and to introduce the first draft of the FY 2018 budget and revenues. FY 2018 begins July 1, 2017.

2016 Budgetary Assumptions

The fiscal year (FY) 2016 Title V Fund budget (including the Title V emissions account and the Title V application account) established shortly after SF 488 (86th GA, 2015) was signed into law. The budget assumed that the first half of the fiscal year, July – December 2015, would be funded by traditional funding streams like the Title V emission fee. The second half of the year, January – June 2016, was budgeted to be funded in part by the new fees established under the Title V Application account (455B.133B) and the Air Quality Fund (455B.133C).

2016 Actual Expenses and Revenue

This information represents 6.5 months of pre-SF 488 funding and the first 5.5 months of implementing two new fees funding the review and issuance of Title V operating permits, and Major Source construction permits. All three of these budgets and revenue streams will be discussed here. This period, and FY 2017, represent a transition period for applicants and DNR staff alike. These two new fee programs began January 15, 2016. Unfortunately, the large number of projects in-house on January 14th (now referred to as “back-log” projects) and anticipated expenses to issue those permits were not all included in the budget that was set in June 2016. By March an evaluation indicated the possibility of a Title V Fund deficit of almost \$700,000. This was due to several factors:

- 1) Higher than expected personnel costs were received mid-year from the Department of Management (DOM).
- 2) The FY 2016 budget was planned with the assumption that fees would be collected on applications submitted on January 2, 2016 and thereafter. Fee collection did not begin until January 15, 2016, resulting in an additional \$82,000 of charges to the Title V emissions fee account for continuing work on in-house projects.
- 3) The FY 2016 budget was planned with the assumption that fees would be collected for work on all construction and Title V operating permit applications, including those already in-house on January 2, 2016. Based on feedback from stakeholders in the fee advisory groups, the fees were triggered only for applications received on or after January 15, 2016.
- 4) In the weeks prior to January 15, record numbers of construction permit applications and early submittals of Title V initial/renewal applications were received to avoid the new fees, resulting in a backlog of 126 construction permit projects and 64 initial/renewal Title V applications. Working on the principle of first in, first

out, meant the majority of staff time was spent reviewing and issuing the back log of permits. This significantly reduced expected revenues for the major source construction permit application accounts and the Title V operating permit application accounts while at the same time increasing expenses from the Title V emissions fee account. The unbudgeted Title V emissions fee expenses are summarized in Table 1 below.

Table 1: Title V Emission Fee - Program Expenses for January – June 2016

| Title V EI Expenses | January 1, 2016 - January 14, 2016 | January 15, 2016 - June 30, 2016 | January – June 2016 Total |
|-------------------------|------------------------------------|----------------------------------|---------------------------|
| Construction Permitting | \$39,000 | \$311,000 | \$350,000 |
| Dispersion Modeling | \$8,000 | \$66,000 | \$74,000 |
| Title V Permitting | \$35,000 | \$335,000 | \$370,000 |
| Total | \$82,000 | \$712,000 | \$794,000 |

Despite arriving at the middle of the year with a projected deficit, a significant amount of the deficit was eliminated by leaving positions unfilled, and eliminating one position. Preliminary FY 2016 year end information (Table 2) indicates that the Title V fund would have a deficit of approximately \$517,000. This deficit carries-forward to the following fiscal year “on the books,” but in fact was offset by Title V emission fee submissions prior to the end of the fiscal year, and collection of major source construction permit application fees in arrears.

Table 2. Title V Fund FY 2016 Preliminary Summary

| <u>Title V Emission Account</u> | <u>FY 2016 Budget</u> | <u>FY 2016 Year End</u> |
|------------------------------------|-----------------------|-------------------------|
| Balance forward | \$792,290 | \$792,290 |
| Fund interest | \$15,000 | \$28,285 |
| Under and over payments | -\$41,467 | -\$12,503 |
| Title V fees | \$7,832,393 | \$7,832,393 |
| <i>annual tons</i> | <i>140,568</i> | <i>140,568</i> |
| <i>\$/ton</i> | <i>\$56.00</i> | <i>\$56.00</i> |
| Emission Revenue | \$8,598,216 | \$8,640,465 |
| Emission Expenditures | \$9,296,629 | \$9,091,159 |
| Emission Revenues - Expenditures | -\$698,413 | -\$450,694 |
| <hr/> | | |
| <u>Title V Application Account</u> | <u>FY 2016 Budget</u> | <u>FY 2016 Year End</u> |
| Application Revenue | \$424,560 | \$15,975 |
| Application Expenditures | \$432,245 | \$82,155 |
| Application Revenue - Expenditures | -\$7,685 | -\$66,180 |
| <hr/> | | |
| | <u>FY 2016 Budget</u> | <u>FY 2016 Year End</u> |
| <u>Title V Fund Balance</u> | -\$706,098 | -\$516,874 |

In Progress FY 2017

Since the start of FY 2017 (July 1, 2016) the Bureau received additional grant funds (Aug. 1) from EPA that will fund processing of the remaining construction permit projects (21 as of 9-13-16) received prior to January 15, 2016.

On-going processing of Title V operating permit applications received prior to January 15, 2016 (backlog), is anticipated to result in the expenditure of more Title V emissions fees than anticipated. As a result, the Title V application fee revenue is anticipated to be lower than budgeted because operating permit writers continue to process the pre-January 15 (backlog) applications. Again, following our procedures to process applications on a first in/first out principle, the Title V Fund deficit may grow in FY 2017. However, to the extent possible, this will be minimized by careful project scheduling.

FY 2018 Draft Budget and Calendar Year 2016 Emissions Projections

In the accompanying spreadsheets you will find information on each of the three sources of funding provided by Title V facilities: Title V Emission Fees, Title V Application Fees, and Major Source Construction Permit Application Fees. For each expenditure category, separate columns list: FY 2016 Actual expenditures, FY 2017 Budget, Status Quo 2018 Budget, Adjusted 2018 Draft Budget, and a column showing the difference between the Status Quo 2018 Budget and the Adjusted 2018 Draft Budget. The Status Quo 2018 Budget represents the FY 2017 budget with cost increases for staff and contracts at 4.0%. The Adjusted 2018 Draft Budget is an initial budget proposal that will move more staffing resources out of the Title V Emissions Fee funded activities, and into the fee for service activities of Title V application review, and Major Source construction permit application review. FY 2017 still represents a transition year of processing a significant number of backlog permits. We will make every effort to eliminate excess costs, and to efficiently issue backlog and all other permits to reduce costs to applicants. The following paragraphs address the Adjusted Draft 2018 Budgets.

Title V Emission Fee Account Budgets. For the Title V Emission Fee Account, employees (FTE, or full time equivalents) are proposed to be redistributed from 50.59 FTE in FY 2016 down to 34.25 in FY 2018. This will be accomplished by shifting those staff resources away from the backlog of projects, which will be eliminated for major source construction permitting. The number of Title V FTE's working on backlog and modifications will decrease by one in the FY 2018 draft. In addition, per employee costs are proposed to be re-allocated across accounts to better represent where expenses occur.

Title V Emission Fee Account Revenue Projections. The Adjusted 2018 Draft Budget reflects the possibility of revenue deficiencies. However, new one-time federal funds, and wrapping up backlog projects will help to achieve a positive ending balance in FY 2017. In the accompanying draft FY2018 Title V Emission Fee Account budget and revenue projection, *the emissions estimate that is being used is simply a back-calculation of the budget divided by the current Title V emission fee rate of \$67.50.* **The department is seeking input on the most appropriate methodology to accurately predict what the emissions will likely be for calendar year 2016. Below, after the discussion on the draft budgets, you will find three emission prediction methods that are currently under review.** Reminder: Calendar year (CY) 2016 emissions will be used as the basis for emission fees payable by July 1, 2017, for fiscal year (FY) 2018.

Title V Application Fee Account Budgets. One FTE will be moved from the Emissions Fee account to the Title V Application Fee account as the backlog permit numbers decrease. Staff with greater experience will be assigned complex backlog projects to move them along more quickly, hence the lower personnel cost shown between Status Quo and Adjusted Draft, even with the change in FTE numbers. Per employee costs are, as mentioned earlier, being reallocated to match expenses.

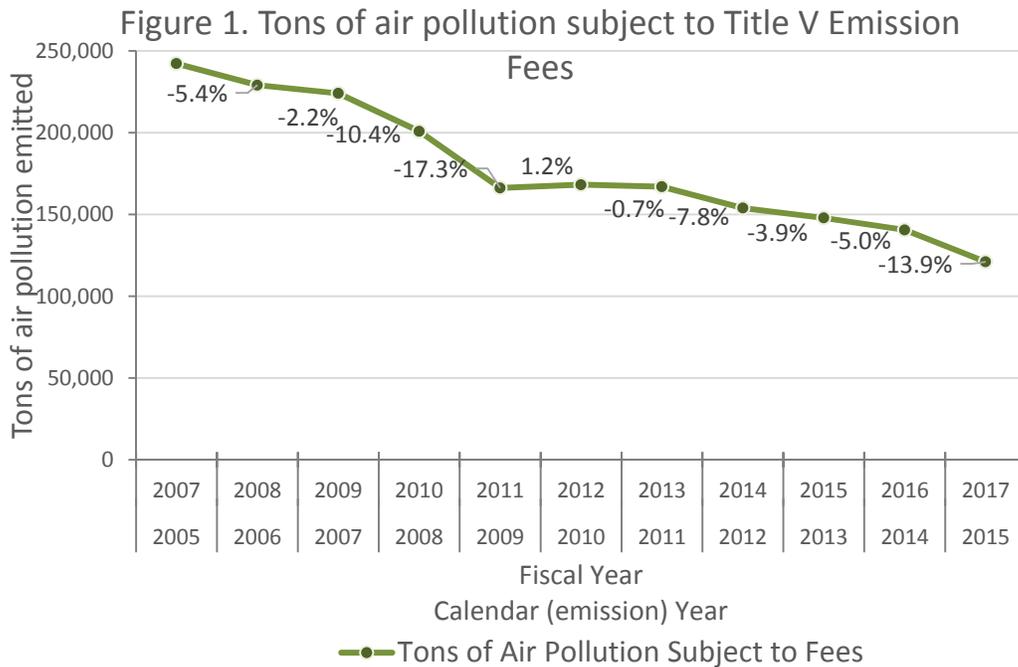
Title V Application Fee Account Revenue Projections. Projections are based on the increased number of FTE that will be assigned to reviewing applications and issuing Title V Permits.

Major Source Construction Permit Application Fee Budgets. One and one-half FTE will be moved from the Emission Fee account to the Major Source Application Fee account as the backlog is eliminated. As per the other accounts per employee costs are adjusted.

Major Source Construction Permit Application Fee Revenue Projections. Revenue projections are based primarily on the projection of the elimination of the backlog of projects, and the continued application of new streamlined permitting methods.

Projecting Emissions – Input Needed!

Emissions subject to the Title V Emissions Fee dropped by 13.9 percent (Figure 1) from calendar year 2014 to 2015.



The decrease in emissions from the electricity generating unit (EGU) sector continued from 2014 to 2015 (Table 3). This trend is expected to continue due to the increase in the use of wind energy. The impact that this shift in energy production has had on baseload fossil fuel use by EGUs is not yet fully understood, which has increased the complexity of forecasting future year tonnages.

Table 3. Emissions (tons) subject to fees

| Sectors | CY14 | CY15 |
|--------------------|----------------|----------------|
| EGU | 74,839 | 59,609 |
| Food & Grain | 27,319 | 25,933 |
| Manufacturing | 19,135 | 17,352 |
| Pipeline | 8,933 | 8,438 |
| Ethanol | 5,153 | 4,753 |
| Cement | 4,639 | 4,346 |
| Other | 551 | 621 |
| Grand Total | 140,568 | 121,051 |

Some alternative methods for estimating emissions for CY 2016 (FY 2018)

Method 1. Incorporates estimates of emissions reductions based on: estimates of emissions reductions in the non EGU sector based on permitting, and using the first two quarters of EGU actual emissions and substituting the values from the last two quarters of the prior year.

| Sector Analysis | Tons subject to fees |
|--|----------------------|
| CY 15 Emissions | 121,051 tons |
| Non EGU sector | -6,000 tons |
| EGU sector CAMD 2016 Quarters 1 + 2 + Substitute CAMD 2015 Quarters 3 + 4 | -9,000 tons |
| CY 16 Emissions Estimate: | 106,051 tons |

Method 2. Incorporate estimates of emissions reductions based on: estimates of emissions reductions in the non EGU sector based on permitting, and use the first two quarters of EGU actual emissions and substituting the same data for the last two quarters of 2016.

| Sector Analysis | Tons subject to fees |
|--|----------------------|
| CY 15 Emissions | 121,051 tons |
| Non EGU sector | -6,000 tons |
| Multiply EGU sector CAMD 2016 Quarters 1 + 2 by 2 | -15,000 tons |
| CY 16 Emissions Estimate: | 100,051 tons |

Method 3. Calculates the average emissions change from prior years. For example, Prior # of Years Averaged = 4yr, shows that annually since calendar year 2011, emissions reductions averaged 7.6% per year. If the emissions reduction from calendar year 2015 to 2016 was 7.6%, then the predicted emissions would be 111,871 tons.

| Prior # of Years Averaged | Average Annual change | Predicted Tonnage |
|---------------------------|-----------------------|-------------------|
| 0yr (2015) | 0.0% | 121,051 |
| 1yr | -13.9% | 104,244 |
| 2yr | -9.4% | 109,636 |
| 3yr | -7.6% | 111,871 |
| 4yr (example) | -7.6% | 111,795 |
| 5yr | -6.3% | 113,475 |
| 6yr | -5.0% | 114,978 |
| 7yr | -6.8% | 112,862 |
| 8yr | -7.2% | 112,319 |
| 9yr | -6.7% | 112,993 |
| 10yr (2005-2014) | -6.5% | 113,140 |

In Summary. A range of possible tons for the 2016 emissions reporting year and the associated Title V fee that would result in a balanced FY 2018 Title emissions fee account (cost center 7230) are summarized in Table 4.

Table 4. Calculation of tons and fees to arrive at Adjusted 2018 Draft Budget fee revenue of \$7,775,812 (corrected)

| Emissions subject to fees (tons) | Fee per ton |
|----------------------------------|-------------|
| 115,197 | \$ 67.50 |
| 114,000 | \$ 68.21 |
| 112,000 | \$ 69.43 |
| 110,000 | \$ 70.69 |
| 108,000 | \$ 72.00 |
| 106,000 | \$ 73.36 |
| 104,000 | \$ 74.77 |
| 102,000 | \$ 76.23 |
| 100,000 | \$ 77.76 |
| 98,000 | \$ 79.35 |
| 96,000 | \$ 81.00 |
| 94,000 | \$ 82.72 |