



SHORTCHANGING THE CLEAN AIR ACT:
AN ANALYSIS OF STATE REVENUES LOST DUE TO LOW
EMISSION FEES

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Summary

State agencies are responsible for most of the day to day work required under the federal Clean Air Act, such as monitoring emissions, developing air quality plans, and writing and enforcing permits for major sources of air pollution. To ensure that resources are available for these tasks, the law requires states to collect emission fees from the largest polluters.

Unfortunately, the fees assessed by many states fall well below the minimum standards required under Section 502(b)(3) of the Clean Air Act (*see* Appendix A), according to a review of available data by the Environmental Integrity Project (“EIP”). EIP’s analysis identified seventeen states that may be losing a combined total of more than \$50 million in revenue for Clean Air Act programs a year, because their emission fees are set below federal standards. More specifically:

- The U.S. Environmental Protection Agency (“EPA”) determined that states should assess a minimum fee of \$39.48 per ton in 2006 for each of the following pollutants: sulfur dioxide (SO₂), nitrogen oxide (NO_x), smog forming volatile organic compounds (VOCs), particulate matter, and hazardous air pollutants. The fees are to be assessed on at least the first 4,000 tons of emissions of each pollutant, according to the Clean Air Act.
- EIP analyzed seventeen states in which fees fell below the federal minimum, either because the states set lower emission fees (e.g., \$25 per ton instead of \$39.48 per ton) or set a ceiling on the amount that could be collected from each polluter that was lower than the federal standard.
- EIP compared the emission fees that states are supposed to collect under federal law for three pollutants – SO₂, NO_x, and VOCs – with the amounts that can be collected under the lower state fee structures. Using this data, Appendix C indicates that the lower fees are costing the states at least \$60 million in revenue that could otherwise be used to monitor air emissions, hire inspectors, and develop and enforce regulations needed to meet federal air quality standards.
- States with the most significant potential for lost revenue include Louisiana (-\$10.4 million); Texas (-\$6.6 million); North Carolina (-\$5.7 million); and Florida (-\$4.6 million). At least eight of the seventeen states analyzed collect half or less than half of the revenue that could be realized under the federal minimum standard, including Louisiana (32%), Arizona (34%), Colorado (34%), and South Dakota (36%) (*See* Appendix C).
- Although detailed data is not presented in this report, EIP’s analysis suggests that at least fourteen other states may have fee structures that do not meet federal minimum standards.

One of two things happens when emission fees collected from the biggest sources of air pollution are not adequate to cover the cost of implementing the Clean Air Act: either state agencies are left without the resources to get the job done, or the public has to pick up the tab for a program that polluters are supposed to pay for under the law. The Clean Air Act allows states to assess fees below the minimum standards, but only where the USEPA makes a specific finding that lower fees will provide enough resources to cover program costs. EPA should evaluate state Title V programs, and require revisions where states lack resources and emission fees do not meet the minimum federal requirements set forth under Section 502(b)(3) of the Clean Air Act. Many states may need to assess fees that are higher than the minimum federal fees to help cope with a growing workload, and a few states have already done so.

EIP used the most recent national emission inventory data available to compare Title V fees that could be assessed under state laws with the minimum fees required under Section 502(b)(3) of the Clean Air Act in 2006. Because the analysis is limited to three pollutants, it may overstate or understate revenues in some cases. For example, Colorado and Louisiana assess much higher fees for hazardous air pollutants, which could help to offset some of the revenues lost through the very low fees both states collect for emissions of “criteria” pollutants like SO₂, NO_x, and VOCs. Some states also collect administrative or processing fees that are not based on emissions, although these are typically too low to make up for revenue lost through inadequate emission fees. EIP’s analysis is based on fees in effect in 2006, and does not address more recent changes.

On the other hand, EIP’s report may understate revenue losses, because it is limited to three pollutants, and does not take into account the impact of low emission fees for other pollutants, like particulate matter (PM) and hazardous air pollutants (which were excluded from EIP’s analysis because emissions data for these two pollutants was not readily available). Notwithstanding federal requirements, some states do not assess any emission fees at all for hazardous air pollutants (HAPS). EIP’s analysis also excluded emissions from smaller sources that could be subject to Title V emission fees.

The report compares state fees collected on three pollutants to the minimum fees established for the same three pollutants by the USEPA. Total Title V revenues collected by states will be somewhat higher, since they will include fees for PM and HAPs, and from smaller sources. Please note that these additional pollutants and sources are also subject to federal fees; had they been included in our analysis, the gap between what states actually collect and the revenues that could be collected under the federal minimum fees would be even greater.

Finally, Title V fees cover a wide array of program expenses (e.g., monitoring stations, air quality planning, and small business stationary source assistance programs) and are not limited to the cost of processing permits for major sources. But the emission fees do not cover all programs, and federal grants must remain a critical source of support for state clean air programs.

Background

Title V of the Clean Air Act requires major sources of pollution to obtain permits that limit emissions of the most noxious pollutants (*see* Appendix A). These facilities, which include power plants, refineries, cement kilns, incinerators, and chemical plants, are regulated because they contribute disproportionately to air pollution that threatens the public health and environment. For example, SO₂ is a primary source of the fine particle emissions, which, according to the Harvard School of Public Health and the EPA, contribute to several million asthma attacks and tens of thousands of premature deaths from heart and lung disease every year. The White House Office of Management and Budget reported to Congress in 2006 that each ton of SO₂ released to the atmosphere ends up costing the public health an estimated \$7300.

Clean Air Act Establishes Minimum Fees

States issue virtually all permits for large sources under the Clean Air Act, and bear most of the burden for monitoring emissions, conducting inspections, and taking enforcement action. Recognizing that these responsibilities impose significant costs, Congress required states to assess fees for the major sources required under Title V, and established minimum expectations for the amount to be collected. For example, Section 502(b)(3)(B)(1) of the 1990 Clean Air Act amendments require states to assess fees of at least \$25 per ton of emissions of all hazardous air pollutants, and all criteria pollutants except carbon monoxide, including SO₂, NO_x, VOCs, and particulate matter (PM). The law requires that the fee be indexed for inflation by the EPA, and the minimum fee for September 2005 through August 2006, after this inflation adjustment, was set at \$39.48 per ton.¹ The fee must be applied to at least the first 4,000 tons of each pollutant emitted, although states have the authority to raise both the fee and the amount of tons upon which it is collected.

The law allows states to increase the fee beyond the minimum amount to “reflect the reasonable costs of the permit program.” But states can reduce the fee below the \$39.48 baseline only if they demonstrate to EPA that the lower amount covers, “all reasonable (direct and indirect) costs required to develop and administer the permit program.” Some states have chosen to assess lower fees on a per ton basis, but without limiting the tonnage subject to the fee. In such cases, the total amount recovered can occasionally be higher than the minimum assessed under EPA’s formula for the largest polluters, such as power plants.²

¹ Memorandum from Jeff Herring, Operating Permits Group, ITPID, OAQPS, U.S. Environmental Protection Agency, to Operating Permit Contacts Regions I-X, Calculation of the Part 70 Presumptive Minimum Fee Effective from September 2005 through August 2006 (Sept. 19, 2005) (available at, http://www.epa.gov/air/oaqps/permits/fee70_2006.pdf). The minimum fee for September 2005 through August 2006 was \$39.48 per ton.

² For example, Wisconsin has a fee of \$35.71 per ton, but Wisconsin uses a cap of 5,000 tons per pollutant. Therefore they can assess fees of up to \$714,200 per facility, \$82,340 higher than the EPA total fee. *See* http://dnr.wi.gov/org/aw/air/emission/emission_summary/emission_summary_general_air_billable.htm.

Emission Fees in Most States Are Below the EPA Minimum

EIP used emission inventory data to compare potential revenues from state fee systems to those that would be realized if federal minimum fees were in effect. EIP's analysis focused on eighteen states for which data was readily available. The methodology is described in detail below. This closer analysis revealed three main methods of undercharging that all result in dramatic amounts of potential revenue from fees lost:

- Most of the states that fall short charge less than the statutory minimum of \$39.48 per ton. When multiplied by the tonnage cap (4,000 tons per pollutant), these fee systems fall well short of the minimum targets set by the EPA. In some cases, emission rates appear to have never been indexed for inflation. For example, major sources of the criteria pollutants in Florida are charged no more than \$25 per ton, about 60% of the federal minimum fee of \$39.48. Thus, a large facility in Florida emitting 4,000 tons of sulfur dioxide to the atmosphere would be assessed only \$100,000 in emission fees, compared to the \$160,000 that would be collected if the Federal standard were in effect. This translates to an estimated loss of almost \$4.6 million in annual fees (based on 2002 emission inventory data) for just SO₂, NO_x, and VOC's (*see Appendix C*). Colorado charges a fee of less than \$25, and in 2002 lost potential revenue of at least \$3.3 million on the same three pollutants (*see Appendix C*). Perhaps the most dramatic potential loss comes from Louisiana, which only charges \$12.83 per ton, a fee that meant a potential loss of \$10.4 million in 2002 (*see Appendix C*). Many of these states charge administrative, processing, or other fees. Some also have high fees for hazardous pollutants, but it is unlikely that these make up for the millions lost through low fees on criteria pollutants.³
- A few states set a cap on the total fee amount that can be collected from any one facility that, in some cases, holds fees to less than one third of the federal minimum. For example, Indiana's cap, combined with the lower fee, caused the state to lose potential revenue of \$4.1 million in 2002 (*see Appendix C*). These facility-wide fee limits not only deprive states of needed revenue for Clean Air Act programs, they allow the biggest polluters to escape their fair share of responsibility for program costs. In cases such as Indiana, the percentage of potential revenue lost may be underreported. If other pollutants were taken into consideration, along with SO₂, NO_x, and VOCs, the state's fee would remain at the level of the cap while the EPA minimum fee would increase, causing a greater calculated potential revenue loss.

³ North Dakota is one of the states that assess a fee well below the federal minimum. However, their system differs slightly from the federal system for large power plants. While the federal system has a 4,000 ton cap per pollutant per facility, North Dakota has a 4,000 ton cap per pollutant per facility, except if the facility has a large boiler, in which case, each boiler has a 4,000 ton cap per pollutant. This effectively raises the cap to 8,000 tons per pollutant for the largest sources of pollution in the state. Ultimately, the state still collects less than half of the fees it should collect under the federal system (*see Appendix C*).

- While federal rules provide for the collection of fees on at least 4,000 tons of emissions of *each* of the four criteria pollutants, Michigan assess fees only on the first 4,000 tons of the combined total for *all* criteria pollutants, or 1,000 tons per pollutant. As a result, even though Michigan has a per/ton fee higher than that of the EPA (Michigan's per ton fee is \$45.24), the state collects some of the lowest emission fees in the U.S. from power plants and other large polluters within their borders. Michigan lost an estimated \$3.79 million in potential revenue in 2002 (*see* Appendix C). While Michigan does have a complex system that generates revenue from smaller sources and large administrative fees from certain polluters, it is not clear that it fully compensates for the potential revenue lost due to the 1,000 ton/pollutant cap.

Methodology

In order to determine which states fall below the EPA minimum, the codes and regulations of forty eight states and two California Air Quality Management Districts were surveyed. If the information was not readily found in the state's code or regulations available online, or the fee had to be calculated by yearly determinations made by an agency, then the state's website was searched, often yielding information on both the fee per ton and other information on their Title V program. If the fees per ton were still unable to be found, then the state agency charged with setting the fee was contacted either via email or telephone. Information about emission fees available online was verified by direct contact with state agencies, when possible.

The potential revenue lost by charging below the statutory minimum was calculated from the annual emissions data for SO₂, NO_x, and VOCs. This data was collected from the states using their most recent public emission inventory, or from the EPA, using the National Emission Inventory for 2002, when the data was not readily available from the state. A facility's emissions of each pollutant were included in the analysis only if they equaled or exceeded 100 tons per year, to avoid including any minor sources in the analysis (Title V emission fees are collected from major sources).

Emissions of SO₂, NO_x and VOCs (i.e., not counting CO or PM) from the selected sources were totaled, and then multiplied by each state's fee, taking into account any limitations (e.g., for Indiana, revenues are limited to \$187,500 per facility, and Michigan limits fees to the first 4,000 tons of all emissions combined).

To determine the amount that would be collected under the federal standard, emissions were multiplied by \$39.48 per ton, up to a total of 4,000 tons per pollutant, since federal law does not require that fees be assessed above that amount. Thus, a facility emitting 10,000 tons of sulfur dioxide would pay \$157,920, or 4,000 x \$39.48 per ton. Potential revenue applying the federal criteria was then compared to the revenue from various state fee systems.

Recommendations

EPA should undertake a more comprehensive evaluation to ensure that low emission fees are not weakening the Clean Air Act permit program or its enforcement. In addition to analyzing inspection and enforcement activity, EPA's audit should determine whether states with low emission fees have adequate resources to:

- Issue and renew Title V permits in a timely way, and with full opportunity for public participation;
- Measure emissions and review compliance data on a regular basis;
- Monitor pollution levels in neighborhoods near major sources, to determine their impact on air quality;
- Develop and implement the plans needed to meet federal deadlines for achieving air quality standards for ozone and fine particles;
- Administer small business stationary source technical and environmental compliance assistance programs.

States that choose to assess emission fees below the minimum established by EPA should be required to demonstrate that the revenues they collect are sufficient to carry out these obligations, as they are required to do under the Clean Air Act. (§501(b)(1)(B)(iv)).

Congress gave States the power to charge the largest sources of air pollution for the cost of issuing, monitoring, and enforcing Clean Air Act permits. States should not hesitate to exercise that power, and secure the resources they need to carry out these responsibilities.

Clean Air Act §502(b)
42 U.S.C. §7661a(b)

(b) Regulations

The Administrator shall promulgate within 12 months after November 15, 1990, regulations establishing the minimum elements of a permit program to be administered by any air pollution control agency. These elements shall include each of the following:

- (1) Requirements for permit applications, including a standard application form and criteria for determining in a timely fashion the completeness of applications.
- (2) Monitoring and reporting requirements.
- (3)(A) A requirement under State or local law or interstate compact that the owner or operator of all sources subject to the requirement to obtain a permit under this subchapter pay an annual fee, or the equivalent over some other period, sufficient to cover all reasonable (direct and indirect) costs required to develop and administer the permit program requirements of this subchapter, including section 7661f of this title, including the reasonable costs of—
 - (i) reviewing and acting upon any application for such a permit,
 - (ii) if the owner or operator receives a permit for such source, whether before or after November 15, 1990, implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),
 - (iii) emissions and ambient monitoring,
 - (iv) preparing generally applicable regulations, or guidance,
 - (v) modeling, analyses, and demonstrations, and
 - (vi) preparing inventories and tracking emissions.
- (B) The total amount of fees collected by the permitting authority shall conform to the following requirements:
 - (i) The Administrator shall not approve a program as meeting the requirements of this paragraph unless the State demonstrates that, except as otherwise provided in subparagraphs (ii) through (v) of this subparagraph, the program will result in the collection, in the aggregate, from all sources subject to subparagraph (A), of an amount not less than \$25 per ton of each regulated pollutant, or such

other amount as the Administrator may determine adequately reflects the reasonable costs of the permit program.

(ii) As used in this subparagraph, the term “regulated pollutant” shall mean (I) a volatile organic compound; (II) each pollutant regulated under section 7411 or 7412 of this title; and (III) each pollutant for which a national primary ambient air quality standard has been promulgated (except that carbon monoxide shall be excluded from this reference).

(iii) In determining the amount under clause (i), the permitting authority is not required to include any amount of regulated pollutant emitted by any source in excess of 4,000 tons per year of that regulated pollutant.

(iv) The requirements of clause (i) shall not apply if the permitting authority demonstrates that collecting an amount less than the amount specified under clause (i) will meet the requirements of subparagraph (A).

(v) The fee calculated under clause (i) shall be increased (consistent with the need to cover the reasonable costs authorized by subparagraph (A)) in each year beginning after 1990, by the percentage, if any, by which the Consumer Price Index for the most recent calendar year ending before the beginning of such year exceeds the Consumer Price Index for the calendar year 1989. For purposes of this clause—

(I) the Consumer Price Index for any calendar year is the average of the Consumer Price Index for all-urban consumers published by the Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year, and

(II) the revision of the Consumer Price Index which is most consistent with the Consumer Price Index for calendar year 1989 shall be used.

State Title V Fees State Fee Schedule

State Emission Fees Collected Under Title V for Criteria Air Pollutants*			
State	Fee Amount for CAPs (per ton)**	Tonnage Cap	Maximum Fee per Facility for CAPs***
Statutory Minimum	\$ 39.48	4,000 tons/pollutant	\$ 473,760.00
Alabama	\$ 23.50	4,000 tons/pollutant	\$ 282,000.00
Arizona	\$ 13.62	4,000 tons/pollutant	\$ 163,440.00
Colorado	\$ 13.54	4,000 tons/pollutant	\$ 162,480.00
Florida	\$ 25.00	4,000 tons/pollutant	\$ 300,000.00
Indiana	\$ 33.00	4,000 tons/pollutant	\$ 187,500.00
Kansas	\$ 25.00	4,000 tons/pollutant	\$ 300,000.00
Kentucky	\$ 31.79	4,000 tons/pollutant	\$ 381,480.00
Louisiana	\$ 12.83	4,000 tons/pollutant	\$ 153,960.00
Michigan	\$ 45.25	1,000 tons/pollutant	\$ 135,750.00
Mississippi	\$ 31.00	4,000 tons/pollutant	\$ 250,000.00
North Carolina	\$ 17.42	4,000 tons/pollutant	\$ 209,040.00
North Dakota	\$ 12.00	4,000 tons/pollutant	\$ 144,000.00
Oklahoma	\$ 24.20	4,000 tons/pollutant	\$ 290,400.00
South Dakota	\$ 6.10	None	N/A
Texas	\$ 30.90	4,000 tons/pollutant	\$ 370,800.00
West Virginia	\$ 21.54	4,000 tons/pollutant	\$ 258,480.00
Wyoming	\$ 25.00	4,000 tons/pollutant	\$ 300,000.00

*Only sulfur dioxide, nitrogen oxides, and volatile organic compounds were used in this report.

** This does not include any administrative, processing, or other associated fees. All fees are for 2006.

***Maximum fee is calculated by multiplying the state's tonnage cap for SO₂, NO_x, and VOCs by the state's fee per ton. This calculation was not made for states that do not have tonnage caps and for Indiana and Mississippi, as they cap the fee instead of the tons.

State Title V Fees Revenue Lost

State	Estimated EPA Fee	Estimated State Fee*	Potential Revenue Lost	Percentage of Fee Lost
Alabama	\$ 9,482,927.15	\$ 5,644,599.50	\$ 3,838,327.65	40%
Arizona	\$ 2,682,691.32	\$ 925,487.74	\$ 1,757,203.58	66%
Colorado	\$ 5,086,909.15	\$ 1,744,598.53	\$ 3,342,310.62	66%
Florida	\$ 12,687,343.24	\$ 8,034,031.94	\$ 4,653,311.30	37%
Indiana	\$ 13,670,769.33	\$ 9,545,459.90	\$ 4,125,309.43	30%
Kansas	\$ 6,247,996.44	\$ 3,956,431.38	\$ 2,291,565.06	37%
Kentucky	\$ 9,401,668.95	\$ 7,613,256.24	\$ 1,788,412.71	19%
Louisiana	\$ 15,546,793.64	\$ 5,052,314.14	\$ 10,494,479.50	68%
Michigan	\$ 9,315,494.01	\$ 5,519,314.06	\$ 3,796,179.95	41%
Mississippi	\$ 5,513,685.23	\$ 4,202,570.89	\$ 1,311,114.34	24%
North Carolina	\$ 10,286,897.78	\$ 4,538,950.34	\$ 5,747,947.44	56%
North Dakota	\$ 2,932,356.08	\$ 1,363,501.45	\$ 1,568,854.63	54%
Oklahoma	\$ 7,520,188.73	\$ 4,609,639.50	\$ 2,910,549.23	39%
South Dakota	\$ 695,039.38	\$ 249,693.80	\$ 445,345.58	64%
Texas	\$ 30,671,042.59	\$ 24,005,451.26	\$ 6,665,591.33	22%
West Virginia	\$ 7,886,303.10	\$ 4,302,709.44	\$ 3,583,593.66	45%
Wyoming	\$ 4,837,806.84	\$ 3,063,454.18	\$ 1,774,352.66	37%
Total	\$ 154,465,912.96	\$ 94,371,464.29	\$ 60,094,448.67	39%

*Estimated State Fees do not include administrative, processing, or other fees. All calculations were done using fees for 2006.

State Title V Fees Sources

State	Source	Statute/Regulation
Alabama	http://www.adem.state.al.us/AirDivision/Permitting/PermittingMain.htm and Phone conversation with Larry Brown @ ADEM	
Arizona	http://www.azdeq.gov/environ/air/permits/download/factsheet.pdf and http://www.azdeq.gov/environ/air/permits/fees.html	A.R.S. §49-426.E.1 and A.A.C. R18-2-326 and R18-2-511
Colorado	http://www.cdphe.state.co.us/ap/billing.html and phone conversation with Roy Doyle @ CO DPHE Air Pollution Control Division	Colorado State Law: § 25-7-114.7(2)(a)(I); 5 Colo. Code Regs. 1001-5 VI.C.
Florida	http://www.dep.state.fl.us/air/permitting/tvfee.htm and email with Yi Zhu @ DEP	
Indiana	Email conversation with Don Poole @ IDEM	326 Ind. Admin. Code 2.7.19
Kansas	Phone conversation with David Butler @ KDHE	
Kentucky	Phone and email conversation with John Griffith @ KYDEP DAQ	401 KAR 50:038 and 50:038
Louisiana	http://www.deq.louisiana.gov/portal/Portals/0/planning/regs/tit1e33/33v03.pdf and emails from Bryan Johnston @ DEQ	LAC 33:III Chapter 2 Fee # 2310.
Michigan	http://www.michigan.gov/deq/0,1607,7-135-3310_4103_5784---,00.html and	phone conversation with Dennis McGeen
Mississippi	http://www.deq.state.ms.us/MDEQ.nsf/pdf/About_Commission_MinutesMAY272004/\$File/May%202004%20minutes.pdf?OpenElement http://www.deq.state.ms.us/MDEQ.nsf/pdf/Air_Order5140-06TVFee/\$File/Order5140-06TVFee.pdf?OpenElement	Miss. Ann. Code 49-17-30
North Carolina	http://daq.state.nc.us/permits/fees2006.pdf	15A NCAC 2Q.0200
North Dakota	Phone conversation with Tom Bachmen @ Dept. of Health and http://www.legis.nd.gov/information/acdata/html/..%5Cpdf%5C33-15-23.pdf	N.D. Admin. Code 33.15.23

State Title V Fees Sources

State	Source	Statute/Regulation
Oklahoma	http://www.deq.state.ok.us/factsheets/air/air_quality_permits.pdf ; http://www.deq.state.ok.us/factsheets/air/titleVfaq.pdf ; and email and phone conversation w/ Morris Moffett, EPS III, Air Quality Division	OAC 252:100-5-2.1, -5-2.2, and -8-6 (a)(8)
South Dakota	http://www.state.sd.us/denr/DES/AirQuality/aaper.htm and phone conversation with AQP	S.D. Admin. R. 74.37.01.01-.09
Texas	http://www.tceq.state.tx.us/assets/public/implementation/air/ie/pseiforms/fy2006fees.pdf and http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=101&rl=27 and phone conversation with Michael De La Cruz @ TCEQ	V.T.C.A., Health and Safety Code Section 382.0621. Texas Administrative Code 3-1 §101.27
West Virginia	http://www.wvdep.org/item.cfm?ssid=8&ss1id=325#Certified_Emissions_Statement and email conversation with Christa Montgomery @ WVDAQ	W. Va. Code R. § 45-30-8 (2006)
Wyoming	http://deq.state.wy.us/aqd/ and phone conversation with Janet Stevens @ DEQ	DEQ Rules Chap. 6 §3(f)(v)