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April 23, 2013

Inspector General Arthur A. Elkins, Jr.  
 Environmental Protection Agency  
 Office of Inspector General  
 1200 Pennsylvania Avenue, N.W. (2410T)  
 Washington, DC 20460

Re: Clean Air Act Enforcement of Excess Emissions and the Affirmative Defense

Dear Inspector General Elkins:

In 2012, industrial facilities in Texas reported releasing 21,493 tons of air pollutants during malfunctions, maintenance, startups, and shutdowns (MSS).<sup>i</sup> (Table A). These emissions are not an anomaly; more than a hundred thousand tons were released due to MSS events from 2009 through 2012, according to reports submitted online to the Texas Commission on Environmental Quality.<sup>ii</sup> The emissions include well known “criteria” pollutants that contribute to smog or increase exposure to fine particles, as well as neurotoxins, carcinogens, and other hazardous air pollutants (HAPs). (Tables A and B). Over one third of these pollutants are released by the same handful of facilities, which report multiple MSS episodes year-after-year. (Table C). These releases degrade air quality and threaten human health, especially in neighborhoods downwind of the oil, gas, and chemical plants that most often report these emission events.

**Table A: MSS Emissions of Criteria Pollutants 2009-2012 (Tons)**

Year	2009	2010	2011	2012	Total
NOx	643	490	1,628	1,186	3,947
PM	270	322	510	467	1,569
SO <sub>2</sub>	9,948	9,284	23,485	11,791	54,508
VOCs	8,546	10,371	30,144	8,049	57,110
Total (Tons) *	19,407	20,467	55,767	21,493	117,134

\* Totals include CO, HAPs, and other non-criteria pollutants.

**Table B: Emissions of Hazardous Air Pollutants (Tons)**

Year	2009	2010	2011	2012	Total
Benzene	41	57	168	21	287
1,3-Butadiene	33	36	29	29	127
Hexane	106	79	468	385	1,038
Toluene	44	38	228	23	333
Other	95	62	57	59	273
HAP Total	319	272	950	517	2,058

We are writing on behalf of ourselves, Air Alliance Houston, Community In-Power and Development Association, Earthjustice, the Lone Star Chapter of the Sierra Club, Public Citizen Texas, Sustainable Energy and Economic Development Coalition, Texas Campaign for the Environment, Texas Environmental Justice Advocacy Services, and Texas Interfaith Center for Public Policy to request that the Office of Inspector General evaluate how the U.S. Environmental Protection Agency (USEPA) and the Texas Commission on Environmental Quality (TCEQ) enforce the Clean Air Act when facilities release large amounts of pollution during malfunctions and other emission events. We understand that USEPA has recognized an affirmative defense that may excuse penalties if a defendant can show that the emissions were unavoidable, including through better operation or maintenance, were minimized to the maximum extent possible, and were not “part of a recurring pattern indicating improper design, operation or maintenance.”<sup>iii</sup> Similar conditions are also incorporated into the Texas State Implementation Plan for the Clean Air Act.<sup>iv</sup> We are specifically requesting that your office determine what enforcement actions USEPA and TCEQ have taken with respect to facilities reporting the largest and most frequent events, and how the affirmative defense has been applied in such cases.

***MSS Events:***

As discussed above, a small handful of facilities report a disproportionate amount of emissions and MSS events. (Table C). In absolute terms, these facilities released more than 49,000 tons of nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), and volatile organic compounds (VOCs) from 2009 through 2012, and reported a combined total of 2,746 MSS events. The frequency and severity of these episodes should have prompted some kind of enforcement response.

**Table C: Frequent and Large Sources of Criteria Emissions**

Facility Name	Company	County	2009-2012 Total		
			NO <sub>x</sub> , PM, SO <sub>2</sub> , and VOCs (Tons)	HAPs (Tons)	Number of MSS Events
A 10 Hutt Compressor Station	Atlas Pipeline	Midland	653	19	24
Borger Refinery	Phillips 66 Company	Hutchinson	1,454	3	104
Boyd Compressor Station	Atlas Pipeline	Reagan	1,581	90	83
BP Products North America	BP	Galveston	967	167	218
El Mar 12	Oxy (Occidental Petroleum)	Loving	1,835	0	22
ExxonMobil Baytown Facility	ExxonMobil	Harris	554	6	110
ExxonMobil Beaumont Refinery	ExxonMobil	Jefferson	5,639	75	70
Formosa Point Comfort Plant	Formosa Plastics	Calhoun	570	101	299
Goldsmith Gas Plant	DCP Midstream	Ector	3,373	17	240
JT McElroy 202 TB	Chevron	Crane	1,212	0	50
Keystone Gas Plant	Southern Union Gas Services	Winkler	13,714	0	229

Mallet CO2 Recovery Plant	Occidental Permian	Hockley	3,434	0	110
McElroy Section 199 Emergency Flare	Chevron	Crane	997	0	43
Sand Hills Gas Plant	Targa Midstream Services	Crane	1,636	1	41
Slaughter Gasoline Plant	Occidental Permian	Hockley	1,627	0	14
Tilden Gas Plant	Regency	McMullen	1,663	0	323
Valero Port Arthur Refinery	Valero	Jefferson	2,986	12	100
Waha Gas Plant	Regency/Duke Energy Field Services	Pecos	1,312	0	395
West Seminole San Andres Unit Central Tank Battery	Oxy (Occidental Petroleum)	Gaines	1,166	0	134
XTO Energy Russell Compressor Station	XTO Energy	Gaines	2,687	35	137
<b>Grand Total</b>			<b>49,060</b>	<b>526</b>	<b>2,746</b>

While Table C identifies the sources responsible for an inordinate share of emissions of criteria pollutants during emission events, it does not include several sources that reported astonishingly high releases of HAPs during MSS events. For example the Magellan Pipeline in Galveston County released 345 tons of HAPs, including 141 tons of benzene in 2011. The very next year, in 2012, the Houston Pipeline in Karnes County emitted 201 tons of HAPs. Other plants that reported large amounts of HAP emissions between 2009 and 2012 include DOW Freeport Texas Operations (54 tons) and Ascend Performance Materials Chocolate Bayou Plant (53 tons) both in Brazoria County; the Mont Belvieu Fractionator (41 tons) in Chambers County; and the ExxonMobil Chemical Baytown Olefins plant (36 tons) in Harris County.

### ***Enforcement and the Affirmative Defense:***

In light of these concerns, we are specifically asking that your office evaluate the following:

- Virtually all of the emissions reported by the plants in Table C were caused by upsets (reported in Texas as “emission events”). What enforcement investigations or actions has USEPA or TCEQ taken to require these facilities to investigate, identify, and remedy the conditions that cause repeated upsets? If those cases did not result in penalties, did USEPA determine that defendants established their eligibility for the affirmative defense?
- The Fifth Circuit recently upheld USEPA’s decision to approve the affirmative defense in the Texas SIP for malfunctions, but emphasized that it only precludes penalties and does not bar an enforcement action for injunctive relief, e.g., to require actions to prevent a recurrence of the violation.<sup>v</sup> Have either USEPA or TCEQ taken enforcement action requiring any of these facilities to take specific actions to prevent these violations from recurring, e.g., by requiring improved emission controls or operating practices? If so, have these requirements proved to be effective?

- Have either USEPA or TCEQ determined that a reported emission event is “part of a recurring pattern indicating improper design or maintenance?” How many emission events does it take to make such a determination?
- TCEQ has established plant-wide emission caps for many facilities. Is pollution released during emission events counted towards determining whether a facility has exceeded its plant-wide cap?
- The affirmative defense does not apply to emissions during scheduled maintenance, or the scheduled startup or shutdown of a unit.<sup>vi</sup> Does TCEQ consider shutdowns or maintenance activities that follow malfunctions to be “scheduled” events?
- Are emissions during emission events promptly and accurately reported as required?<sup>vii</sup>
- Many of the facilities reporting chronic emission events fall within the natural gas sector. Do USEPA managers and staff believe that the natural gas industry is “off limits” to enforcement, and if so, are those beliefs well founded?

***The Data:***

Texas regulations require facilities to report all emissions caused by MSS events that exceed certain thresholds to TCEQ’s Emission Event Database.<sup>viii</sup> We have enclosed a CD-ROM with Excel spreadsheets that include all emission events reported to TCEQ for each facility from 2009 to 2012.

We would be pleased to provide additional information that supports the need for a comprehensive review of these issues by your office, or to meet with you to discuss our concerns in more detail. I can be reached at 202-263-4440 or your office may contact Sparsh Khandeshi at 202-263-4446. In the meantime, thank you for your attention to our request.

Sincerely,

A handwritten signature in black ink that reads "Eric Schaeffer". The signature is written in a cursive, flowing style.

Eric Schaeffer  
Executive Director  
Environmental Integrity Project  
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Enclosure

cc: Cynthia Giles, Assistant Administrator  
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<sup>i</sup> TCEQ, Air Emission Event Report Database, <http://www11.tceq.texas.gov/oce/eer/index.cfm>.

<sup>ii</sup> *Id.*

<sup>iii</sup> SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction, 78 Fed. Reg. 12460, 12468-71 (proposed Feb. 22, 2013) (to be codified at 40 C.F.R. pt. 52)[hereinafter Proposed SIP Call].

<sup>iv</sup> 40 C.F.R. § 52.2270; 30 TEX. ADMIN. CODE §101.222(b).

<sup>v</sup> Luminant Generation Co., v. USEPA, 2013 WL 1995649 (5th Cir. 2013).

<sup>vi</sup> Proposed SIP Call, *supra* note iii, at 12479-80.

<sup>vii</sup> 40 C.F.R. § 52.2270; 30 TEX. ADMIN. CODE §101.201(a) (Facilities are required to submit an initial report within 24 hours after the discovery of an emission event and make a final record within two weeks after the end of an emissions event).

<sup>viii</sup> 40 C.F.R. § 52.2270; 30 TEX. ADMIN. CODE §101.201(a).