

# **Exhibit 8**

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA

-v-

10-CR-219-S

TONAWANDA COKE CORPORATION and  
MARK L. KAMHOLZ

Defendants.

---

**AFFIDAVIT**

STATE OF NEW YORK )  
COUNTY OF NEW YORK) SS:  
CITY OF NEW YORK )

**HARISH PATEL**, being duly sworn, deposes and states:

1. I am a lead environmental engineer in the United States Environmental Protection Agency, Region 2 ("EPA") Division of Enforcement and Compliance Assurance, Air Compliance Branch in New York, New York. EPA Region 2 has geographical jurisdiction for the implementation and enforcement of federal environmental laws in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. I am providing this affidavit as part of the United States' response to sentencing memoranda filed on behalf of Tonawanda Coke Corporation ("Tonawanda Coke") and Mark L. Kamholz.

2. I have been employed with the EPA for approximately 26 years serving as an environmental engineer. My experience includes writing permits under the Clean Air Act and conducting compliance inspections and investigations. I graduated with a B.E. and M.E. in Chemical Engineering from City College of New York.

3. The Air Compliance Branch includes a variety of teams that report directly to the Branch Chief. As the lead environmental engineer, I am the Team Leader for the Senior Enforcement Team and am responsible for supervising three civil inspectors. The team is responsible for performing compliance inspections of the regulated community to determine violations of the Clean Air Act and its implementing regulations. In my position, I became familiar with Tonawanda Coke because I was assigned as the lead civil investigator for civil inspections at the facility since April 2009.

4. I have reviewed the sentencing memoranda filed on behalf of Tonawanda Coke and Mark L. Kamholz and have comments regarding statements and/or assertions made regarding the Clean Air Act (“CAA”) statute. Specifically, Tonawanda Coke’s memorandum contains assertions throughout regarding the lack of regulatory emphasis on coke ovens, low emissions of hazardous air pollutants (“HAPs”) from the pressure relief valve (“PRV”) in the by-products department, and the ineffectiveness of baffles as an air pollution control device.

**Clean Air Act and Title V Permit Program Objectives**

5. When Congress passed the CAA, it stated at 42 U.S.C. § 101(b)(1) that its purpose is to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.” The Title V Permit program supports this statutory objective by ensuring that all applicable pollution control requirements for major sources of air emissions are included within a single public document. EPA has stated in the regulatory development process that the comprehensive Title V Permit program is intended to enhance compliance with, and enforcement of, the CAA, and to improve accountability in the regulated community. The CAA, like other pollution control environmental

statutes, relies upon self-reporting through the permit application process and through on-going permit and regulatory requirements.

6. Tonawanda Coke had an obligation as part of their Title V Permit application and an on-going obligation under its permit, to describe all emissions of regulated air pollutants emitted from any emission sources. Listing a PRV in the July 2003 Tonawanda Coke HAP Emission Inventory Report does not meet its notification obligations under the Title V program. Furthermore, the purpose of the HAP Inventory Emission Report submitted by Tonawanda Coke was to determine whether the facility was subject to 40 C.F.R. Part 63, Subpart CCCCC, the “National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks” that was promulgated in April 2003, not to satisfy Tonawanda Coke’s obligations to report emissions sources under the Title V Permit Program requirements.

7. Tonawanda Coke’s sentencing memorandum implies that it is the obligation of state and federal regulators to find all emission sources, regardless of whether the emission source is listed in the facility’s Title V Permit. The company implies the EPA should have figured out where the PRV was located because they “identified its location on the coke oven gas line in the by-products unit” in a HAP inventory submitted to NYS DEC and “later forwarded to the US EPA.” See Dkt. # 229, p. 7. The Title V Permit is the primary source of information that EPA uses to ensure compliance. If Tonawanda Coke had identified the existence of the PRV for inclusion in its Title V Permit, regulators at the state and federal level would have known of its existence and included it as part of any compliance evaluations at the facility. It is the legal responsibility of Tonawanda Coke to notify regulators of all emission sources accurately in the Title V Permit application, and not for the regulators to find all emissions sources and then instruct the facility to include them in their permit.

8. Additionally, assertions were made in the sentencing memorandum that “CAA regulation and inspections for coke oven plants focuses primarily on the coke oven batteries” and not the by-products department. See Dkt. #229, p. 15. While there are regulations specifically developed to address coke ovens, which are a pollution source unique to the coke industry, it does not mean that other sources of pollution are of lesser concern to regulators or under the law. In fact, the first set of federal regulations that were promulgated for the coke industry in 1989 applied to the coke by-products areas not the coke oven battery. EPA has long been concerned with emissions of HAPs from the by-products operations of coke manufactures. The CAA does not distinguish the relative importance of different regulatory requirements.

**Pressure Relief Valve Emissions Contained Hazardous Air Pollutants**

9. Throughout their memorandum, Tonawanda Coke maintains that “the PRV was not a significant source of benzene emissions from the Tonawanda Coke facility.” Dkt. #229, p. 16. Still, the PRV was emitting coke oven gas (“COG”), which itself is a hazardous air pollutant specifically listed in Section 112(b) of the CAA. Even if some portion of benzene and other light oils were recovered by the light oil recovery system when in operation, the COG that was illegally emitted contained a variety of other hazardous chemicals which would not have been removed. The Emission Factor Determination<sup>1</sup> (AP-42) for coke production specifies the hazardous pollutants typically found in coke oven gas.

Emissions from coke ovens include conventional pollutants [(particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), etc.)] and numerous organic compounds, including polycyclic organic matter (POM), volatile organic compounds (VOCs), and others. [. . .] Among the hazardous air pollutants (HAPs) included in the VOCs are benzene, toluene, xylenes, cyanide compounds, naphthalene, phenol, and polycyclic organic matter (POM), all of which are contained in coke oven gas.

---

<sup>1</sup> An emissions factor is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. See U.S. EPA webpage <http://www.epa.gov/ttnchie1/efpac/abefpac.html>, last accessed September 27, 2013.

Emission Factor Documentation for AP-42, Section 12.2 (May 2008), p. 2-10.

10. At trial, I testified specifically regarding how much COG was emitted into the environment from the PRV. Based upon the information provided by Mark Kamholz on behalf of Tonawanda Coke in response to an information request issued by EPA pursuant to the CAA, approximately 173 tons per year of COG was released through this unpermitted pollution source which would include the hazardous chemicals listed above.

11. Additionally, Tonawanda Coke has suggested that “coke oven gas emitted through the PRV was largely stripped of the chemical components listed as hazardous air pollutants, including benzene...” *See* Dkt. 229, p. 7. Because Tonawanda Coke did not include the PRV as an emissions source in its CAA Title V Permit application or any air permit applications required under New York state law or any subsequent reports or notifications required by such permits, EPA and NYSDEC were not aware of this emissions source. As such, there is no data regarding the pollutant concentrations of the COG emissions from the PRV. Further, had EPA and NYSDEC known of the existence of the PRV, Tonawanda Coke would have been required to control the emissions either through an evaluated pollution control device or operationally to prevent uncontrolled emissions of the COG HAPs to the environment.

**Baffles are Effective Pollution Control Device**

12. Tonawanda Coke also made several assertions regarding the efficacy of the baffles as a pollution control device and characterizes them as insufficient. Baffles are widely used by coke batteries and were recognized in the background information document for the proposed National Emissions Standards for Hazardous Air Pollutant (“NESHAP”) for coke ovens as the “only emission control equipment used to reduce quenching emissions.” *See* EPA-453/R-01-006 (2001), p. 3-14. Baffles are a significant control device that greatly reduces the

amount of particulate matter emitted from quench towers. The background information document also explains that baffles are primarily used for “reduction of carryover or fallout of particulates that often occurs in the vicinity of the quench tower [...] and “particulate removal for baffles ranges from 50% to 95% depending on the types of baffle being employed.” *See* EPA-453/R-01-006 (2001), p. 3-14. *Id.* Baffles are the industry standard and achieve significant particulate matter reductions at the source, and the New York State Implementation Plan required by the CAA includes a requirement to install baffles on each quench tower that “are designed to effectively reduce particulate emissions during quenching.” 6 NYCRR 214.5(a).

13. Additionally, in the response to comments for the final rule for the maximum achievable control technology standards, the EPA made specific statements regarding the health benefits that result from the use of baffles on quench towers.

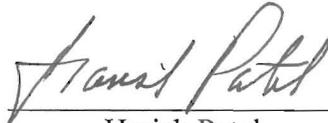
“[Baffles] reduce PM emissions. In addition, we believe that baffles also reduce the emission of HAP metal compounds contained in the particles of grit released, as well as semivolatile and VOC such as polycyclic aromatic hydrocarbons (PAH) and benzene, when green coke<sup>2</sup> is quenched. Semivolatile organic compounds evolve from green coke and condense to form fine PM or condense on other particles during the quenching process. Consequently, baffles reduce emissions of both metal and organic HAP.”

---

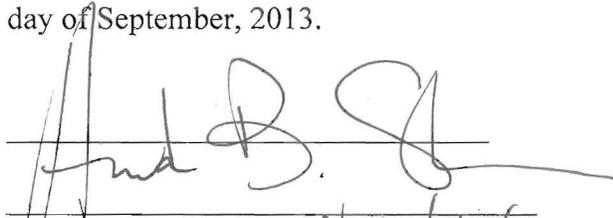
<sup>2</sup> While the background guidance document references emissions associated with green coke, baffles provide the same environmental protections for particulate matter emissions from furnace or foundry coke.

MACT Final Rule Notice, 68 Fed. Reg. 18008, 18018 (2003).

DATED: New York, New York, September 30, 2013.

  
\_\_\_\_\_  
Harish Patel

Sworn to before me this 30th  
day of September, 2013.

  
\_\_\_\_\_

Notary Public, State of New York  
Qualified in New York County  
My Commission Expires Nov. 5, 2013

AMANDA B. STULMAN  
Notary Public-State of New York  
No. 02ST6066061  
Qualified in New York County  
My Commission Expires Nov. 5, 2013