U.S. Environmental Protection Agency
Office of Civil Rights

INVESTIGATIVE REPORT

for

Title VI Administrative Complaint File No. 07R-08-R6
(Texas City Complaint)

I. INTRODUCTION

A. Factual Background

By letter dated June 24, 2008, Mr. [redacted], together with others in his community, filed a complaint (Title VI Complaint) with the United States Environmental Protection Agency (EPA), Office of Civil Rights (OCR), which claimed that the "clean air division of government" (at other time referenced in the Title VI Complaint as the "offices of government that represent clean air laws and regulations" or "government agency in charge of regulations of the Clean Air Act") violated Title VI of the Civil Rights Act of 1964, as amended (Title VI), 42 U.S.C. §§ 2000d *et seq*[1]. This Title VI Complaint alleged that the responsible regulatory government agency had discriminated against the African American residents living in the east side of Texas City, Texas, by not continuously monitoring air emissions from nearby industrial facilities. By letter dated March 3, 2009, OCR accepted for investigation whether Galveston County Health District's (GCHD) failure to install a continuous monitoring system near the chemical, petro chemical, and storage tank facilities on the east side of Texas City, Texas, created a disparate impact on the African American community residing in that area.[2]

Continuous monitoring systems consist of monitoring equipment that records certain defined parameters in the air on a continuous basis; not all air monitoring systems are operated to record such data on a continuous basis. Ambient air monitoring can be conducted for a variety of different purposes and through a variety of air monitoring schemes. Air monitors in Texas City, Texas, are operated not only by GCHD, but also by the Texas Commission on Environmental Quality (TCEQ) and by private industry. These monitors have operated for different periods of time and monitor air quality for different parameters. This Investigative Report details the activities of GCHD and of these other entities in order to determine whether the lack of a GCHD continuous air monitoring system in Texas City constitutes a Title VI violation.

This Investigative Report constitutes OCR's findings under Title VI and 40 C.F.R. Part 7 and dismissal of Mr. [redacted]'s complaint (EPA Complaint Number 07R-08-R6) pursuant to 40 C.F.R. § 7.120(g). OCR finds that GCHD did not discriminate on the basis of race by failing to install a continuous air monitoring system in the east side of Texas City, Texas.

B. Statutory Background

Title VI of the Civil Rights Act of 1964, as amended (Title VI) prohibits discrimination based on race, color, or national origin under any program or activity[3] receiving federal financial

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[1] See Letter from Mr. [redacted], to Office of Civil Rights, U.S. EPA, dated June 24, 2008.

[2] See Letter from Karen D. Higginbotham, Director, Office of Civil Rights, U.S. EPA, to [redacted], dated March 3, 2009.

3 The Civil Rights Restoration Act of 1987 broadly defines "program or activity" to include all of the operations of an entity, any part of which receives federal assistance. 42 U.S.C. § 2000d-4a.

assistance.[4] Under Section 601 of Title VI,

> No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. [5]

This section prohibits intentional discrimination.[6] In addition, Section 602 "authorize[s] and direct[s]" federal departments and agencies that extend federal financial assistance "to effectuate the provisions of section [601] . . . by issuing rules, regulations, or orders of general applicability."[7] At least forty federal agencies have adopted regulations that prohibit disparate impact discrimination pursuant to this authority.[8] The Supreme Court has held that such regulations may validly prohibit practices having a disparate impact on protected groups, even if the actions or practices are not intentionally discriminatory.[9] The United States Environmental Protection Agency's Title VI implementing regulations are codified at 40 C.F.R. Part 7. Under these regulations, a recipient of EPA financial assistance may not intentionally discriminate or use policies or practices that have a discriminatory effect based on race, color, or national origin.

As provided at 40 C.F.R. § 7.120, administrative complaints alleging discriminatory acts in violation of 40 C.F.R. Part 7 may be filed with the Agency. EPA reviews accepted complaints in accordance with 40 C.F.R. Part 7, Subpart E (§§ 7.105-7.135).

C. Regulatory Background - Discriminatory Effects

Under Section 602 of Title VI, EPA promulgated 40 C.F.R. § 7.35(b). This section provides that an EPA funding recipient may not use criteria or methods of administering its programs and activities that have the effect of discriminating against persons based on their race, color, or national origin. In accordance with this provision, recipients are responsible for ensuring that the activities authorized by their environmental permits do not have discriminatory effects, regardless of whether the recipient selects the site or location of permitted sources.[10]

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[4] 42 U.S.C. §§ 2000d to 2000d-7.

[5] 42 U.S.C. § 2000d.

[6] *See Alexander v. Choate,* 469 U.S. 287, 293 (1985); *Guardians Ass'n v. Civil Serv. Comm'n*, 463 U.S. 582, 607-08 (1983).

[7] 42 U.S.C. § 2000d-1.

[8] *See Guardians,* 463 U.S. at 619 (Marshall, J. dissenting).

[9] *See Alexander*, 469 U.S. at 292-94; *Guardians*, 463 U.S. at 582; *Elston v. Talladega County Bd. of Educ.*, 997 F.2d 1394, 1406, *reh'g denied*, 7 F.3d 242 (11th Cir. 1993).

[10] *See Alexander*, 469 U.S. at 293 ("[A]ctions having an unjustifiable disparate impact on minorities could be redressed through agency regulations designed to implement the purposes of Title VI."); *Guardians*, 463 U.S. at 592 (opinion of White, J.) ("[T]hose charged with enforcing Title VI had sufficient discretion to enforce the statute by forbidding unintentional as well as intentional discrimination."); *id.* at 623 (Marshall, J., dissenting) ("I would hold that Title VI bars practices that have a discriminatory impact and cannot be justified on legitimate grounds."); *id.* at 645 (Stevens, J., joined by Brennan and Blackmun, JJ., dissenting) ("[A]lthough the petitioners had to prove that the

In determining whether a recipient's procedures or practices have had a disparate impact on a protected group, OCR must evaluate the causal connection between these facially neutral procedures or practices, and a disproportionate impact on the protected group.[11] If OCR finds such a connection, the recipient may offer a "substantial legitimate justification" for the challenged practice.[12] If the recipient can make such a showing, the inquiry must shift to whether there are any "equally effective alternative practices" that would result in less racial disproportionality or whether the justification proffered by the recipient is actually a pretext for discrimination.[13] Evidence of either will support a finding of noncompliance.

II. ALLEGATIONS

By letter dated June 24, 2008, Mr. [redacted] filed a Title VI complaint that alleged that the community on the east side of Texas City was being discriminated against by the "clean air division of government" by not having a continuous air monitor installed in that area.[14] The Title VI Complaint was signed not only by Mr. [redacted], but also by forty other individuals.[15] The Title VI Complaint defined the east side of Texas City as being west of Bay Street, north of Texas Avenue (to Ninth Avenue and beyond) and east of 12th Street.[16] See Appendix A, Texas City Study Area. The Title VI Complaint claimed that the community was about eighty percent (80%) African American and that a continuous air monitor was needed to monitor for air toxics, carcinogens, and particulate matter that were being emitted by the chemical, petrochemical, and storage tank facilities which were located upwind of this community.[17] The complaint further explained that a continuous air monitor was needed because private industries could not be relied upon to honestly report air pollution emission events and suggested that complaints to GCHD were not effective because by the time it responded to a citizen complaint, the air contaminant had dissipated.[18]

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respondents' actions were motivated by an invidious intent in order to prove a violation of the statute, they only had to show that the respondents' actions were producing discriminatory effects in order to prove a violation of valid federal law.").

[11] *Larry P. v. Riles*, 793 F.2d 969, 982 (9th Cir. 1984); *Elston*, 997 F.2d at 1407 (citing *Georgia State Conf.*, 775 F.2d at 1417).

[12] *Georgia State Conference of Branches of NAACP v. Georgia*, 775 F.2d 1403, 1417 (1985).

[13] *Id. See generally, McDonnell Douglas Corp. v. Green*, 411 U.S. 792 (1973).

[14] See Letter from Mr. [redacted], to Office of Civil Rights, U.S. EPA, dated June 24, 2008. The Title VI Complaint also references the alleged entity in charge of air monitoring as the "offices of government that represent clean air laws and regulations" or "government agency in charge of regulations of the Clean Air Act."

[15] *Id.*, "Signatures."

[16] *Id.*, "Motion – Admissions," page 1.

[17] *Id.*, "Statement," page 1.

[18] For instance, the Title VI Complaint attached a Galveston County Air Pollution Control, Investigation Report (Investigation # 641077, Incident # 105678, dated March 28, 2008)(Investigation Report), which documented the investigation of an incident on March 28, 2008. On that occasion, GCHD received a complaint at 1:55PM about a strong benzene odor in the area of the 200 block of 2nd Avenue North in Texas City. Two GCHD investigators reported to the scene at 3:10PM of that day and conducted an odor survey around the area of the complainant's residence. The two investigators were unable to locate the odor in the surrounding area and left at approximately

The Title VI Complaint requested a continuous air monitoring station installed in the east side of Texas City, with public access to the data recorded.[19] Specifically, the Title VI Complaint requested that the government exercise eminent domain over one of two properties (one located at 18 Texas Avenue, Texas City, and the other located at 317 Texas Avenue, Texas City), in order to install a continuous air monitor in one of those locations.[20]

III. POSITION STATEMENT FROM THE RECIPIENT

In response to a September 29, 2009 OCR request for information[21], GCHD indicated that it operated an air control program in Galveston County, Texas, but that it contracted with TCEQ for air monitoring within Galveston County.[22] Specifically, GCHD indicated it had two contracts for service with TCEQ that included selected air monitoring for particulate matter and biological sampling. The monitoring pursuant to these two contracts resulted in four (4) monitors being installed, the locations of which were all selected by TCEQ.[23]

TCEQ, for its part, indicated in response to a November 30, 2009 OCR request for information[24], that it selected monitoring locations in accordance with guidance and EPA regulations.[25] TCEQ in this response also indicated the location of past and present air monitors in Texas City and the parameters that were monitored at each location.[26]

IV. METHODOLOGY OF THE INVESTIGATION

EPA conducted its investigation in accordance with the U.S. Department of Justice (DOJ) Investigation Procedures Manual.[27] Specifically, EPA's investigative record includes the

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3:20PM. The Investigation Report further indicated that upon return to the office, one of the investigators searched the State of Texas Environmental Electronic Reporting Service (STEERS) database (for more information regarding the STEERS database, please see http://www.tceq.state.tx.us/permitting/steers) to see if there were any emission events on March 28, 2008, which could be a potential cause of the alleged odor. The Investigation Report indicates that no events were reported to STEERS.

[19] See Letter from Mr. [redacted], to Office of Civil Rights, U.S. EPA, dated June 24, 2008, "Conclusion," page 1.

[20] *Id.*, "Proposal," page 1.

[21] See Letter from Yasmin Yorker, Assistant Director, External Compliance, Office of Civil Rights, U.S. EPA, to Dr. Harlan Guidry, Chief Executive Officer and Health Authority, GCHD, dated September 29, 2009.

[22] See Letter from Ronnie Schultz, Director of Environmental Health Programs, GCHD, to Yasmin Yorker, Assistant Director, External Compliance, Office of Civil Rights, U.S. EPA, dated October 12, 2009.

[23] *Id.*

[24] See Letter from Helena Wooden-Aguilar, Acting Assistant Director, External Compliance and Complaints Program, Office of Civil Rights, U.S. EPA, to Dr. Bryan W. Shaw, Chairman, TCEQ, dated November 30, 2009.

[25] See Letter from Mark R. Vickery, P.G., Executive Director, TCEQ, to Helena Wooden-Aguilar, Acting Assistant Director, External Compliance and Complaints Program, Office of Civil Rights, U.S. EPA, dated December 22, 2009.

[26] *Id.*

[27] See Investigation Procedures Manual for the Investigation and Resolution of Complaints Alleging Violations of Title VI and Other Nondiscrimination Statutes. (September 1998).

complaint and written responses submitted by GCHD and TCEQ to OCR information requests. EPA also reviewed the extensive documentation maintained by TCEQ on its website concerning its air monitoring efforts and the reviews undertaken by TCEQ's Toxicology Division of this data.

V. FINDINGS OF FACT

GCHD and TCEQ Background

1. The GCHD includes the Office of Environmental Health Services, which in turn, includes the Air and Water Pollution Services Division.[28]

2. GCHD's Air and Water Pollution Services Division is in turn divided into two sections, the Air Pollution Division and the Water Pollution Division.[29]

3. GCHD's Air Pollution Division performs the following functions, which it is responsible for through contracts with TCEQ[30]:

    a. Comprehensive Compliance Inspections of major industrial facilities to assure compliance with state and federal rules;
    b. Site Review of industrial facilities to assure compliance with siting requirements of state and federal rules;
    c. Permit Review of industrial facilities to review proposed TCEQ permit language for facilities and provide comment on enforceability and consistency of permits;
    d. Stage II Vapor Recovery inspections of gasoline dispensing facilities to assure compliance with state and federal rules governing emissions from these sources;
    e. Operating Ambient Air Monitoring Stations in Galveston County to determine if the area meets the current National Ambient Air Quality Standards for Particular Matter with a diameter size of 10 microns or less;
    f. Operating Ambient Special Purpose Air Monitoring Stations in Galveston County as needed for federal initiatives; and
    g. Investigate and answer citizen complaints regarding air pollution concerns, such as smoke nuisance, odors, or suspected industrial overspray impacts on property.

4. In addition to the services performed under contract with TCEQ, the GCHD Air Pollution Division undertakes separate duties as a service only to county residents; these duties include[31]:

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[28] See http://www.gchd.org/ech/index.htm.
[29] See http://www.gchd.org/pollution/index.htm.
[30] See http://www.gchd.org/pollution/airsvcs.htm.
[31] See http://www.gchd.org/pollution/airsvcs.htm.

a. Registration and documentation of outdoor burning in unincorporated areas of the county to inform citizens of State requirements;
b. Maintenance of records of industrial releases due to upsets or maintenance activities; and
c. Non-contracted Comprehensive Compliance Inspections of industrial facilities to assure compliance with state and federal rules due to environmental sensitivity of the Galveston County area and priorities of constituents.

5. Moreover, the GCHD Air Pollution Division undertakes special projects, such as mobile air monitoring (a screening tool to help determine community exposure to toxic compounds and identification of areas to investigate for suspected releases—these are located in areas not otherwise monitored) and participation in the Community Air Toxics Monitoring Network (the goal of which is to determine community exposure to toxic organic compounds and their potential to cause long-term health effects).[32]

6. GCHD operates the air control program in Galveston County, Texas, and pursuant to a contract with TCEQ it operates certain air monitors within Galveston County. Specifically, GCHD has two contracts for service with TCEQ which include selected air monitoring for particulate matter and biological sampling. The monitoring pursuant to these two contracts has resulted in four (4) monitors being installed, the locations of which were all selected by TCEQ.[33] The contract between GCHD and TCEQ pursuant to which GCHD operated monitors on behalf of TCEQ (Contract No. 582-8-72686, which was in effect between September 1, 2007 and August 31, 2009, and Contract No. 582-10-86412, which was in effect between September 1, 2009 and August 31, 2011) indicates that GCHD operated one PM 10 monitor and one PM 10 colocated monitor at 25th Street and Texas Avenue.[34]

Air Monitoring in Texas City

7. There are no GCHD or TCEQ operated continuous air monitors of the type contemplated by Complainants in place in Texas City either at the time of the filing of the Title VI Complaint or currently. There is one TCEQ operated monitor that collects data on a continuous basis, but data is collected on a continuous basis for only two pollutants (sulfur dioxide and hydrogen sulfide). There are several monitors operated by private industry in Texas City that monitor on a continuous basis, but not for all of the pollutants requested by Complainants.

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[32] See http://www.gchd.org/pollution/airsvcs.htm.
[33] See Letter from Ronnie Schultz, Director of Environmental Health Programs, GCHD, to Yasmin Yorker, Assistant Director, External Compliance, Office of Civil Rights, U.S. EPA, dated October 12, 2009.
[34] See Letter from Mark R. Vickery, P.G., Executive Director, TCEQ, to Helena Wooden-Aguilar, Acting Assistant Director, External Compliance and Complaints Program, Office of Civil Rights, U.S. EPA, dated December 22, 2009.

8. At the time of the filing of the Title VI Complaint, the following air monitors were operational in Texas City, one of which was operated by TCEQ[35]:

Continuous Air Monitoring Station Number (CAMS)/EPA Site Identification	Street Address	Responsible Entity
48-167-0004	2516 Texas Avenue	GCHD[36]
CAMS 1022/48-167-005	2516 ½ Texas Avenue	TCEQ
CAMS 620/48-167-0056	2212 North 34th Street	URS Corporation for Texas City Industry Group

9. Currently there are several air monitors in Texas City, only one of which is operated by TCEQ; the monitors are the following[37]:

Continuous Air Monitoring Station Number (CAMS)/EPA Site Identification	Street Address	Responsible Entity
48-167-0004	2516 Texas Avenue	GCHD[38]
CAMS 1022/48-167-0005	2516 ½ Texas Avenue	TCEQ
CAMS 615/48-167-0615 CAMS 1615/48-167-0615	302 31st Street South (this location is on BP property between Texas Avenue and 5th Avenue)	URS Corporation for British Petroleum (BP)
CAMS 616/48-167-0616 CAMS 1616/48-167-0616	East 19th Street (this location is on BP property near Highway 197)	URS Corporation for BP
CAMS 620/48-167-0056	2212 North 34th Street	URS Corporation for Texas City Industry Group
CAMS 621/48-167-0621 CAMS 1621/48-167-0621	303 South Logan Street	URS Corporation for BP
CAMS 683/48-167-0683	502 10th Street South	URS Corporation for Marathon Petroleum Co.

[35] See Letter from Mark R. Vickery, P.G., Executive Director, TCEQ, to Helena Wooden-Aguilar, Acting Assistant Director, External Compliance and Complaints Program, Office of Civil Rights, U.S. EPA, dated December 22, 2009.

[36] As indicated in Finding of Fact 6, this monitoring location is operated by GCHD on behalf of TCEQ.

[37] See http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_info.pl.

[38] As indicated in Finding of Fact 6, this monitoring location is operated by GCHD on behalf of TCEQ.

10. The monitoring station identified as EPA Site Identification 48-167-0004 has an activation date of January 1, 1972. This location monitors on a non-continuous basis for PM 10.[39]

11. The monitoring station identified as CAMS 1022/EPA Site Identification 48-167-0005 has an activation date of October 20, 1997. This location monitors on a continuous basis for the following parameters: meteorological data (wind speed, resultant wind speed, resultant wind direction, maximum wind gust, standard deviation of horizontal wind direction, outdoor temperature), sulfur dioxide and hydrogen sulfide. This location also monitors on a non-continuous basis, via canisters, for volatile organic compounds.[40] The monitoring for volatile organic compounds is done as part of the Community Air Toxic Monitoring Network, whereby canister samples are collected every sixth day and analyzed using a gas chromatograph-mass spectrometer.[41]

12. The monitoring station identified as CAMS 615/EPA Site Identification 48-167-0615 has an activation date of December 31, 2009. This location monitors on a continuous basis for the following parameters: meteorological data (wind speed, resultant wind speed, resultant wind direction, maximum wind gust, standard deviation of horizontal wind direction, outdoor temperature), sulfur dioxide, hydrogen sulfide, n-Pentane, n-Hexane, benzene, and toluene.[42]

13. The monitoring station identified as CAMS 616/EPA Site Identification 48-167-0616 has an activation date of March 23, 2010. This location monitors on a continuous basis for the following parameters: meteorological data (wind speed, resultant wind speed, resultant wind direction, maximum wind gust, standard deviation of horizontal wind direction, outdoor temperature), sulfur dioxide, hydrogen sulfide, n-Pentane, n-Hexane, benzene, and toluene.[43]

14. The monitoring station identified as CAMS 620/EPA Site Identification 48-167-0056 has an activation date of June 1, 2003. This location monitors on a continuous basis for the following parameters: meteorological data (wind speed, resultant wind speed, resultant wind direction, maximum wind gust, standard deviation of horizontal wind

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[39] See http://www5.tceq.state.tx.us/tamis/index.cfm?fuseaction=report.site_list and http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_photo.pl.

[40] See http://www5.tceq.state.tx.us/tamis/index.cfm?fuseaction=report.site_list and http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_photo.pl?cams=1022.

[41] See http://www.tceq.texas.gov/toxicology/AirToxics.html.

[42] See http://www5.tceq.state.tx.us/tamis/index.cfm?fuseaction=report.site_list and http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_photo.pl?cams=615.

[43] See http://www5.tceq.state.tx.us/tamis/index.cfm?fuseaction=report.site_list and http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_photo.pl?cams=616.

direction, outdoor temperature, net radiation), ozone, and nitrous oxides (nitric oxide, nitrogen dioxide, and oxides of nitrogen). This location also monitors for volatile organic compounds, via automated gas chromatography samplers (One 40-minute sample is collected each hour and analyzed automatically on-site).[44]

15. The monitoring station identified as CAMS 621/EPA Site Identification 48-167-0621 has an activation date of April 7, 2010. This location monitors on a continuous basis for meteorological data (wind speed, resultant wind speed, resultant wind direction, maximum wind gust, standard deviation of horizontal wind direction, outdoor temperature), sulfur dioxide, hydrogen sulfide, n-Pentane, n-Hexane, benzene, and toluene.[45]

16. The monitoring station identified as CAMS 683/EPA Site Identification 48-167-0683 has an activation date of January 1, 2010. This location monitors on a continuous basis for meteorological data (wind speed, resultant wind speed, resultant wind direction, standard deviation of horizontal wind direction) and benzene.[46]

17. By letter dated December 22, 2009, TCEQ, in response to an OCR request for information, indicated that the agency relied upon the monitoring data obtained from local industry. TCEQ explained that, "This data complies with the TCEQ's Quality Assurance Project Plan (QAPP) and is considered as reliable as the TCEQ site. In addition, the TCEQ collects extensive ambient air samples from across the Texas City area during its mobile monitoring projects. Since 1995, nine of these mobile monitoring projects have been completed. Data from the TCEQ Texas City Ball Park site, the industry-sponsored sites, and mobile monitoring projects are used in evaluating the potential health impact of the measured pollutants on residents in the Texas City area, as well as evaluating the effectiveness of internal procedures (i.e., the stringency of air permit reviews, frequency of field investigations, etc.) at ensuring industrial emissions are at or below a level of potential health concern."[47]

18. A map depicting the monitors currently relied upon by TCEQ is contained in a recent TCEQ report[48] and duplicated below:

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[44]See http://www5.tceq.state.tx.us/tamis/index.cfm?fuseaction=report.site_list and http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_photo.pl?cams=620.

[45] See http://www5.tceq.state.tx.us/tamis/index.cfm?fuseaction=report.site_list and http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_photo.pl?cams=621.

[46] See http://www5.tceq.state.tx.us/tamis/index.cfm?fuseaction=report.site_list and http://www.tceq.state.tx.us/cgi-bin/compliance/monops/site_photo.pl?cams=683.

[47] See Letter from Mark R. Vickery, P.G., Executive Director, TCEQ, to Helena Wooden-Aguilar, Acting Assistant Director, External Compliance and Complaints Program, Office of Civil Rights, U.S. EPA, dated December 22, 2009.

[48] See Report on the Air Pollutant Watch List Areas in Texas, prepared by the TCEQ Chief Engineer's Office, dated February 2012. This document can be obtained from the following webpage on the TCEQ site: http://www.tceq.texas.gov/toxicology/AirPollutantMain. Please note that although not identified on the map, the

TCEQ Air Pollutant Watch List and Annual Health Effects Review

19. In its December 22, 2009, letter, TCEQ explained that, "In addition to the TCEQ continuous air monitoring sites, the TCEQ Toxicology Section bases health effects evaluations of the Texas City area and decision about the Texas City Air Pollutant Watch List on industry-sponsored data and mobile monitoring reports."[49]

20. According to the TCEQ website, the Air Pollutant Watch List (APWL) "alerts technical personnel to cities and counties within the state that have areas with

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monitoring location identified in purple is EPA Site Identification 48-167-0004. For a legend for the map above, please refer to Appendix B.

[49] See Letter from Mark R. Vickery, P.G., Executive Director, TCEQ, to Helena Wooden-Aguilar, Acting Assistant Director, External Compliance and Complaints Program, Office of Civil Rights, U.S. EPA, dated December 22, 2009.

elevated concentrations of special-interest air pollutants."[50] The website further states that the purpose of the APWL includes to heighten awareness in areas of concern for parties such as TCEQ personnel, industry representatives and private citizens, to encourage efforts to reduce emissions, and to help TCEQ focus its resources with respect to inspections, enforcement activities, increased pollution prevention efforts, prioritization of mobile monitoring efforts.[51] The 2009 Annual Report on the Air Pollutant Watch List Areas in Texas prepared by the Toxicology Division, Chief Engineer's Office, TCEQ, issued on February 17, 2010, further explains, "For the limited areas (less than 7% of the monitoring network in 2008) that have concentrations of pollutants above the TCEQ's comparison values (air toxics and metals) or 30-minute state regulatory standards (sulfur dioxide and hydrogen sulfide), the pollutant and area are put on the Air Pollutant Watch List (APWL). The APWL is a list of chemicals that have been monitored at or above the TCEQ's comparison values or standards and the associated areas of potential sources of those chemicals. Only consistently monitored decreases in concentrations will allow the chemical and/or area to be removed from the APWL. Although a chemical may be removed from the APWL, it can be added again at any point, should concentrations begin to increase above a level of concern."[52] The document goes on to add[53],

> The TCEQ Toxicology Division (TD) constantly reviews ambient air monitoring data from approximately 75 monitoring sites across the state and extensive data collected during mobile monitoring projects throughout the state. Monitored concentrations of pollutants are compared to TCEQ's health- and welfare-protective comparison values, including Effects Screening Levels (ESLs) and Reference Values (ReVs) or, collectively, air monitoring comparison values (AMCVs). ...
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> If long-term monitored concentrations of pollutants are above the long-term AMCV or if there are frequent exceedances of the short-term AMCV, the TD recommends that the pollutant and the area of potential sources of the pollutant be added to the APWL. As of June 2009, this recommendation process was amended to include advanced notification of the recommendation for legislative officials whose districts are in the proposed area. Once the legislative officials are notified, a 30-day public comment period is opened. Notification of this comment period is put on the APWL Web site and individuals signed up for the TD listserv are sent notifications via email. After the close of the comment period, all comments and any additional monitoring information are re-evaluated. Following a final

[50] See http://www.tceq.state.tx.us/implementation/tox/AirPollutantMain/APWL_index.html.
[51] *Id.*
[52] See http://tceq.com/assets/public/implementation/tox/apwl/annual_report/2009.pdf, page 2.
[53] See http://tceq.com/assets/public/implementation/tox/apwl/annual_report/2009.pdf, pages 3-4.

notification to legislative officials, the pollutant and/or area is placed on the APWL.

An area's listing on the APWL results in more stringent permitting of local industry, prioritized investigative efforts on behalf of TCEQ investigators and monitoring staff, and increased efforts to work with industry to address air quality concerns through pollution control technology and, in some cases, increased monitoring and notification. Through enhancing the TCEQ and industry's awareness of pollutants of concern and their sources, the air quality has been dramatically improved in six APWL areas, and nine pollutants were removed in 2009 and January 2010.

The process of removing a chemical and/or area from the APWL is similar to the addition process. In order to be eligible for removal from the APWL, long-term monitoring in these areas must show a decreasing trend and/or mobile monitoring must show that levels of pollutants are no longer at a level of potential concern. In addition, the TD takes into account industry efforts to control or reduce emissions of the pollutant of concern that could have contributed to the monitored decrease in ambient concentrations. Legislators whose districts are in these areas are notified of the proposal to remove these pollutants from the APWL and the public is given a 30-day comment period. The public comment period consists of posting relevant data on the APWL Web site along with the public comment form. Those signed up for the TD listserv are notified of the update via email. After all comments and any additional monitoring data are reassessed, a final notification is provided to legislative officials prior to the final removal of the chemical and/or area.

Although a pollutant and/or area may be removed from the APWL, it does not necessarily indicate that monitoring in the area will stop. Mobile monitoring trips are scheduled each year and are dependent on a number of variables, including funding level, complaints, TCEQ regional office investigations, etc. and are not solely based on the area's presence on the APWL. Stationary monitors in former APWL areas may be moved to another location where higher levels of air pollution are suspected, though the monitor may also stay at that location indefinitely. If future mobile or stationary monitoring indicates concentrations of a removed chemical are rising above a level of potential health concern, the TD would recommend that the pollutant and/or area be re-listed on the APWL.

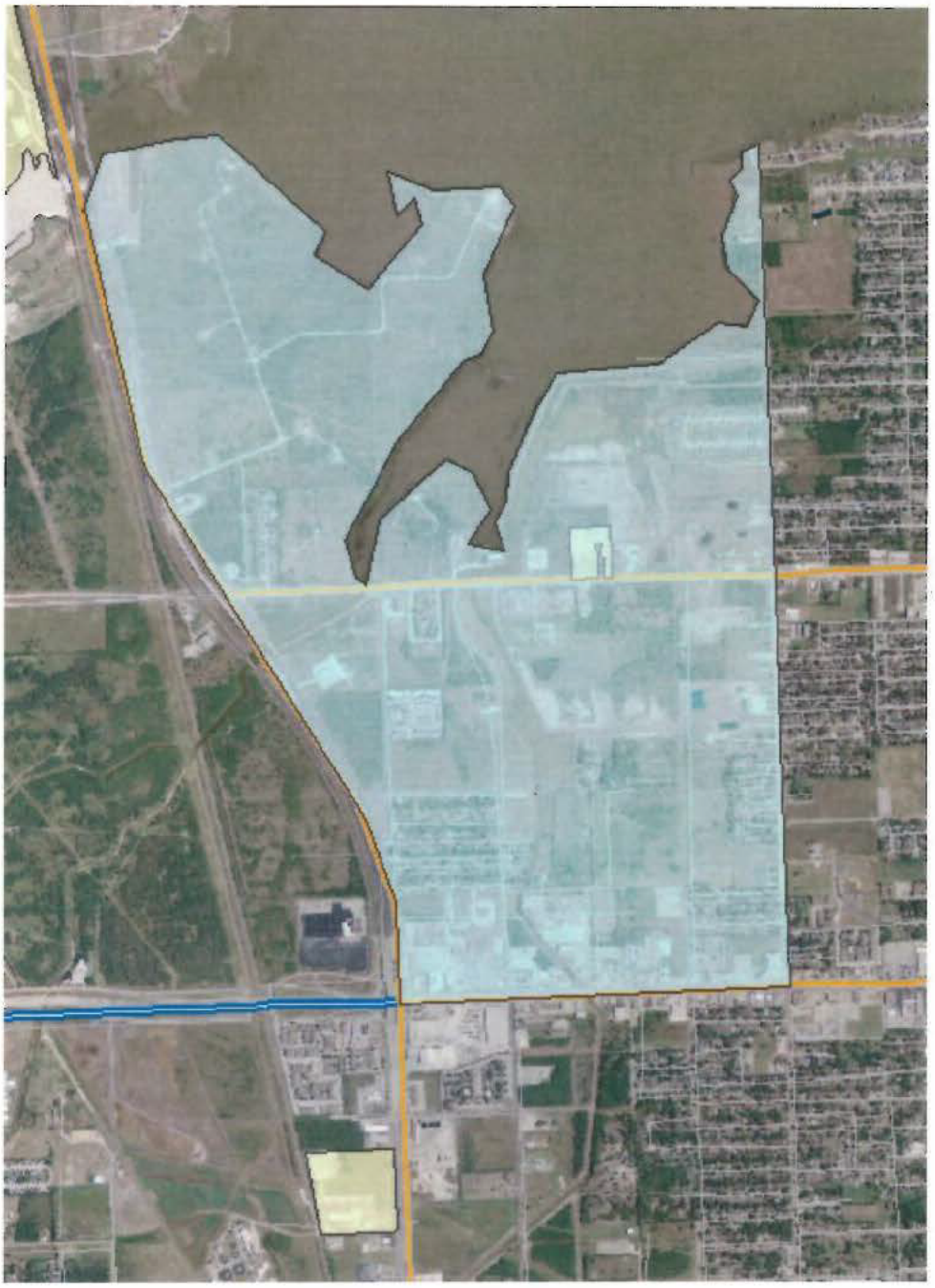
21. Texas City has had two geographic areas within it that have been on the APWL; these areas have been identified as APWL 1202 and APWL 1203. These areas are in proximity to what has been defined by complainants as the east side of Texas City. See Appendix C.

22. The geographic boundaries of APWL 1202 are: south of Texas Avenue/State Highway 348; east of Highway 146, and west of Galveston Bay. APWL 1202 is depicted in this graphic obtained from the TCEQ website[54]:

[54] See http://www.tceq.texas.gov/assets/public/implementation/tox/apwl/current/1202_propionaldehyde,_benzene_hydrogen_sulfide_tx_city.pdf.

23. TCEQ added APWL 1202 in 2001 due to concentrations of propionaldehyde for that area. TCEQ added benzene to this area in 2003 and hydrogen sulfide in 2004.

24. The geographic boundaries of APWL 1203 are: north of Farm-to-Market Road 1764, south of Moses Lake, east of Highway 146, and west of 29th Street North. APWL 1203 is depicted in this graphic obtained from the TCEQ website[55]:



[55] See http://www.tceq.com/assets/public/implementation/tox/apwl/apwl_1203_removed.pdf.

25. APWL 1203 was created by TCEQ in 2004 due to benzene concentrations in that area. TCEQ removed this area in 2007 due to reduced monitored levels of benzene.[56]

26. The Toxicology Division of TCEQ has prepared evaluations of ambient air sampling conducted at monitoring locations in Texas City. OCR has reviewed these annual evaluations for the years 2003 through 2010. These reviews are briefly summarized in the subsequent Findings of Fact.

27. The Health Effects Review for 2003 concluded that the average benzene levels at Texas City Ball Park monitoring site (CAMS 1022/EPA Site Identification 48-167-005) exceeded the long-term benzene Effects Screening Levels (ESL).[57]

28. The Health Effects Review for 2004 stated that with respect to one-hour concentrations, the Texas City Ball Park monitoring site (CAMS 1022/EPA Site Identification 48-167-005) reflected 113 hourly benzene concentrations which exceeded the short-term ESL. In addition, monitoring revealed an exceedance of the long-term ESL for benzene at the Texas City Ball Park monitoring site. The report also reflects mobile monitoring efforts and indicates that GCHD was planning an investigation into potential benzene sources from an area facility and compliance with applicable requirements.[58]

29. The Health Effects Review for 2005 stated that with respect to one-hour concentrations of benzene, the Texas City Ball Park monitoring site (CAMS 1022/EPA Site Identification 48-167-005) still had incidences of exceedences, but had been reduced to 18 occasions. An industry-sponsored BP North America Products, Inc. (BP) monitor revealed exceedances of the short-term ESL on 88 occasions. The BP monitor was located on 31st Street, between Texas Avenue and 5th Avenue. Moreover, with respect to annual average concentrations, one of the monitoring sites (Texas City 34th Street site-CAMS 620/EPA Site Identification 48-167-0056) reflected a reduction in comparison to 2004, while two other monitoring sites (Texas City Ballpark monitoring site and the BP-sponsored monitoring site) reflected an increase in comparison to 2004. The memorandum concludes that the annual average concentrations for one particular monitoring site (Texas City Ballpark

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[56] See http://www.tceq.com/assets/public/implementation/tox/apwl/apwl_1203_removed.pdf.

[57] See Interoffice Memorandum from Vincent Leopold, Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12-Houston during 2003," dated January 3, 2005, available online at http://www.tceq.texas.gov/toxicology/regmemo/2003/Reg12.html.

[58] See Interoffice Memorandum from Joseph T. Haney, Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12-Houston during 2004," dated January 6, 2006, available online at http://www.tceq.texas.gov/toxicology/regmemo/2004/Reg12.html/at_download/file.

monitoring site) were such that it would remain on the APWL and that benzene reductions would be encouraged for that area.[59]

30. The Health Effects Review for 2006 stated that with respect to one-hour concentrations of benzene, the Texas City 34th Street monitoring site (CAMS 620/EPA Site Identification 48-167-0056) experienced exceedances on four occasions. The BP monitor (located on 31st Street, between Texas Avenue and 5th Avenue) revealed exceedances of the short-term ESL on 32 occasions. According to this report, at both the Texas City 34th Street site and the BP-sponsored site the maximum reported concentrations were significantly below levels attributable to short-term, adverse health effects. Moreover, with respect to annual average concentrations, both the Texas City Ball Park and the Texas City 34th Street monitors reported annual average concentrations below the long-term, health-based ESL. Accordingly, the APWL area located north of Farm to Market Road 1764 (APWL 1203) was removed from the APWL on July 18, 2007.[60] With respect to the BP-sponsored monitoring site, while the annual average concentration of benzene was below prior years, it was still above the long-term, health based ESL. The area where the BP-sponsored monitoring site (located on 31st Street, between Texas Avenue and 5th Avenue) was located was within the area identified as APWL 1202 and this area would remain on the APWL and further benzene reductions were recommended.[61]

31. The Health Effects Review for 2007 discussed annual average concentrations of benzene with respect to Texas City. The reason for this is that the majority of the monitoring stations did not detect levels of benzene above the TCEQ short-term, health-based ambient air comparison levels. The document stated that the reported 2007 average benzene concentration at the BP-sponsored monitoring site (located on 31st Street, between Texas Avenue and 5th Avenue) in Texas City indicated a continued decline, and was below TCEQ's long-term, health-based comparison value for the first time since monitoring began. With respect to the Texas City 34th Street monitoring site, the 2007 benzene concentrations were below TCEQ's long-term, health-based comparison value and continued to support removal of APWL 1203 from the APWL in 2007. Lastly, the 2007 benzene concentration at the Marathon Petroleum Company (Marathon) sponsored monitoring site (located on 11th Street South, at 6th Avenue South) in Texas City was above TCEQ's long-term, health-based comparison value. This site was within an APWL area for benzene (APWL

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[59] See Interoffice Memorandum from Bernard Kadlubar, Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12 during 2005," dated December 18, 2006, available online at http://www.tceq.texas.gov/toxicology/regmemo/2005/Reg12.html/at_download/file.
[60] See http://www.tceq.com/assets/public/implementation/tox/apwl/apwl_1203_removed.pdf.
[61] See Interoffice Memorandum from Bernard Kadlubar, Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12 during 2006," dated October 5, 2007, available online at http://www.tceq.texas.gov/assets/public/implementation/tox/monitoring/evaluation/2006/reg_12_houston.pdf.

1202), and a reduction in benzene emissions in this area was recommended. Actions taken by TCEQ in response to these findings of elevated levels were to conduct benzene focused investigations at the Marathon and BP Texas City facilities and additional inspection and enforcement activities were undertaken in connection with a number of facilities in Texas City. The report states,

> At the request of the TS [Toxicology Section], the TCEQ Mobile Monitoring Team (MMT) recently conducted ambient air monitoring in this APWL area in an attempt to identify benzene sources, including those which may be impacting the benzene levels reported for the Marathon-sponsored site. The MMT report for the May 31- June 7, 2008 mobile monitoring trip is currently being prepared and may contain useful information for prioritizing TCEQ inspections of facilities in this area. Reductions in benzene emissions are recommended for this area, especially those impacting the Marathon-sponsored site. This area (APWL Site # APLW1202) will remain on the APWL until the TS has determined the benzene concentrations in the area are no longer of potential health concern.[62]

32. The 2008 Health Effects Review also focused on annual average concentrations. According to this report, the 2008 average benzene concentration measured at the Marathon-sponsored monitoring site (located on 11th Street South, at 6th Avenue South) exceeded TCEQ's long-term, health-based screening value, although it was somewhat lower than the 10- and 11-month averages for 2005-2007. TCEQ indicated that it undertook efforts to identify potential benzene sources that may be affecting long-term benzene levels at this monitoring site, specifically focused investigations and enforcement with respect to facilities in the area. Additionally, the TCEQ Mobile Monitoring Team (MMT) conducted a May 31-June 7, 2008, ambient air monitoring trip in this APWL area in an attempt to identify benzene sources. With respect to the BP-sponsored monitoring site, the reported 2008 average benzene concentration indicated a continued decline, and was below TCEQ's long-term, health-based comparison value for 2007 and 2008.[63]

33. The 2009 Annual Report on the Air Pollutant Watch List Areas in Texas prepared by the Toxicology Division, Chief Engineer's Office, TCEQ, was issued on February 17,

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[62] See Interoffice Memorandum from Joseph T. Haney, Jr., Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12 during 2007," dated September 29, 2008, available online at http://www.tceq.texas.gov/assets/public/implementation/tox/monitoring/evaluation/2007/reg_12_houston.pdf.

[63] See Interoffice Memorandum from Joseph T. Haney, Jr., Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12 during 2008," dated January 11, 2010, available online at http://www.tceq.state.tx.us/assets/public/implementation/tox/monitoring/evaluation/2008/reg_12_houston.pdf.

2010. With respect to Texas City, this annual report focused on benzene, hydrogen sulfide, and propionaldehyde. For each of these pollutants the report indicated that the pollutants would remain on APWL 1202 and that TCEQ would continue to monitor and to encourage emission reductions from industry. Although 2007-2008 average benzene concentrations at the BP-sponsored site in Texas City declined and were well below TCEQ's long-term air monitoring comparison values (AMCVs), the 2009 average equals the AMCV. The report recommended a continued effort to control and/or reduce benzene emissions such that the long-term AMCV would continue to be met at this site. While the 2009 benzene concentration at the Marathon-sponsored monitoring site in Texas City exceeded TCEQ's long-term AMCV, preliminary data for 2010 suggested that the 2010 average would be below the AMCV for the first time since monitoring began in 2005. Due to historical AMCV exceedances, the report recommended the identification of potential benzene sources which may have been affecting long-term benzene levels at this site and subsequent benzene emissions reductions in this area. The report details the results of monitoring for those particular pollutants and summarizes TCEQ's efforts with respect to monitoring and achieving reductions. For instance, with respect to benzene, the report states, "Not only have efforts been made to identify potential sources of benzene and monitor ambient levels, but regional investigators have also conducted focused benzene investigations and reconnaissance investigations in the Texas City area. In 2008, the Houston Regional Office issued 27 notices of enforcement and 10 notices of violation to facilities in Texas City."[64]

34. The Health Effects Review for 2010 indicated that annual averages for all chemicals and metals were below their respective long-term air monitoring comparison values (AMCVs) for the first time in many years of sampling. This document summarized the efforts undertaken by TCEQ in Texas City, which included additional investigations and enforcement.[65]

TCEQ Enforcement Efforts

35. A number of the yearly Health Effects Review documents, particularly those beginning in 2007, describe the additional inspection and enforcement efforts undertaken by TCEQ.

36. The Health Effects Review for 2007[66] states as follows,

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[64] See http://tceq.com/assets/public/implementation/tox/apwl/annual_report/2009.pdf.

[65] See TCEQ Interoffice Memorandum from Joseph T. Haney, Jr., Toxicology Division, Chief Engineer's Office, TCEQ, entitled "Health Effects Review of 2010 Ambient Air Network Monitoring Data in Region 12, Houston," dated July 27, 2011, available online at http://www.tceq.texas.gov/assets/public/implementation/tox/monitoring/evaluation/2010/reg_12_houston.pdf.

[66] See Interoffice Memorandum from Joseph T. Haney, Jr., Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12 during 2007," dated September 29,

TCEQ activities in 2007 in this area included, but were not limited to:

- Benzene focused investigations were conducted by Region 12 at Marathon and BP Texas City. NOEs [Notice of Enforcement] are under development.
- Region 12 conducted follow-up investigations to TexAQS II [Texas Air Quality Field Study II] at Marathon, BP Texas City, and Valero Texas City.
- During 2007 there were 16 NOVs [Notice of Violation] and 33 NOEs issued to regulated entities in the Texas City Area. Of those, 3 EEE [Excessive Emission Events] determinations were made at the Valero Texas City Refinery and 4 EEE determinations were made at BP Texas City.
- Region 12 continues to conduct focused investigations and reconnaissance investigations in the Texas City Area to address on-going issues discovered through use of GasFindIR or visual inspections.

37. The Health Effects Review for 2008[67] provides the following information,

TCEQ activities in 2008 related to benzene in Texas City included, but were not limited to:

- Region 12 continued to conduct focused investigations and reconnaissance investigations in the Texas City Area to address on-going issues discovered through use of GasFindIR or visual inspections. On a periodic basis, regional investigators conduct surveillance of facilities in the Texas City area using the GasFindIR camera.
- All reportable emissions events were investigated, resulting in the issuance of 27 NOEs and 10 NOVs.
- Regarding benzene specifically, an NOV related to benzene releases was issued in 2008 to Sterling Chemicals, which is located east of the Marathon-Sponsored 11th St. S. site, and an NOV was also issued to Valero Refining, which is located south/southeast of the site.
- In addition to 1 NOV issued to Marathon for benzene releases following an emission event investigation, a focused benzene investigation was conducted at Marathon in May 2008. As a result, an NOE was issued on 9/8/08 that included several violations, including but not limited to:

    - violations associated with tank requirements (e.g., failure to repair external floating roof tank within 60 days of discovery of pinhole leaks in the roof deck, failure to maintain records of monitoring for carbon canister breakthrough during

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2008, available online at http://www.tceq.texas.gov/assets/public/implementation/tox/monitoring/evaluation/2007/reg_12_houston.pdf.

[67] See Interoffice Memorandum from Joseph T. Haney, Jr., Toxicology Section, Chief Engineer's Office, entitled, "Health Effects Review of Air Monitoring Data Collected in TCEQ Region 12 during 2008," dated January 11, 2010, available online at http://www.tceq.state.tx.us/assets/public/implementation/tox/monitoring/evaluation/2008/reg_12_houston.pdf.

tank degassing (including degassing of benzene, gasoline, and crude oil tanks), failure to repair the tank floating roof primary seal within 45 days of determining the seal needed replacement, failure to maintain vacuum breakers in closed position);
- open ended lines;
- issues related to carbon canisters used as benzene control devices for wastewater treatment facilities.

- In addition to 5 NOEs and 3 NOVs issued to BP for benzene releases following emission event investigations, a focused benzene investigation was conducted by Region 12 in May-June 2008 at the BP Refinery (just west of Marathon). The investigation resulted in an NOE issued on 8/29/08 that included several violations, including but not limited to:

  - failure to meet the reporting requirements under 40 CFR 61 subpart FF (National Emission Standards for Benzene Waste Operations) by not reporting that API 1 and API 2 were on delay of repair;
  - failure to limit benzene content of the uncontrolled sources subject to Benzene Waste Organic NESHAP (BWON) requirements of 40 CFR 61 subpart FF to 2 Mg/yr in 2006;
  - failure to operate a temporary flare installed for the control of emissions from maintenance activities in 2006 according to the authorized limitations for benzene in Standard Permit 77811;
  - failure to comply with control device requirements for API 2;
  - failure to monitor more than 60 pumps at AU2 and/or ARU in February, May, and September 2007.

- An Office Permit Compliance Certification Review was conducted at BP in May 2008 and resulted in the issuance of an NOV on 9/2/08. Thirty nine violations were cited, including but not limited to:

  - failure to perform two quarterly visual inspections on exposed sewer lines that manage benzene-contaminated waste from April 1, 2007, through September 30, 2007;
  - failure to perform 11 quarterly visual inspections of manways and hatches on junction boxes in benzene-contaminated wastewater service on process units FCCU1, DDU, Alkylation 3, FCCU3, and UU3;
  - failure to perform five quarterly visual inspections of tanks in benzene contaminated wastewater service;
  - failure to operate the thermal oxidizer (EPN 293) with a temperature of 1400 degrees Fahrenheit or more on seven occasions occurring on six days from December 12, 2006, through March 7, 2007;
  - failure to perform quarterly visual inspections for the integrity of seals and gaskets on refinery oil/water separators;

- failure to operate the W01 oil/water separator and PS3B south oil/water separator with closed hatches and vapor tight seals;
- failure to perform monthly bypass-valve inspections from October 2006 through March 30, 2007, for 15 carbon canisters on various individual drain systems across the refinery.

38. The Health Effects Review for 2009[68] provides the following information,

TCEQ activities in 2009 (and 2010) related to benzene in Texas City included, but were not limited to, the following:

- Focused investigations and reconnaissance investigations in the Texas City area to address on-going issues discovered through use of GasFindIR or through visual observations. Fence-line reconnaissance investigations during normal business hours and at night.

- Investigation of all reportable emissions events, resulting in the issuance of 17 NOEs and 10 NOVs at the BP Texas City Refinery in 2009.

- Region 12 efforts continued at the BP Texas City Refinery in 2010.

  - There were 21 NOEs and five NOVs issued to the BP Texas City Refinery.
  - A full site inspection was conducted at the BP Texas City refinery from May 26 through June 14, 2010. A total of 49 violations were identified with 17 violations associated to an NOE, and 32 violations associated to an NOV. The violations cited included:

    - Failure to inspect and/or repair tank seals;
    - Exceeding NOX, CO, SO2 and ammonia emission limits;
    - Failure to operate NOX, CO, SO2 and HRVOC analyzers;
    - Failure to seal open ended lines;
    - Failure to monitor pumps, connectors and valves; and
    - Failure to conduct stack testing.

  - Also in 2010, the BP Texas City Refinery was issued an NOE along with an Excessive Emission Event determination for Incident 138052 which began on April 6, 2010 and ended May 16, 2010. The event resulted in the release of over 500,000 lbs of emissions including over 17,000 lbs of benzene.

[68] See http://tceq.com/assets/public/implementation/tox/apwl/annual_report/2009.pdf.

- Investigation of all reportable emission events at the Valero Texas City Refinery, which resulted in the issuance of multiple NOVs and NOEs. A full site inspection was conducted at the Valero Texas City Refinery in 2009. There were 38 violations identified with five violations being associated with an NOE and 33 violations associated with an NOV.

- Other investigations in the Texas City area included compliance and emission event investigations at BP Chemical and Marathon Petroleum.

    - Compliance investigations conducted in 2009 at BP Chemical resulted in the issuance of one NOV in 2010.
    - During 2009, an LDAR investigation conducted at Marathon resulted in the issuance of an NOV. Other compliance investigations in 2009 and 2010 included a site investigation and emission event investigations that resulted in the issuance of two NOVs and one NOE in 2009 and six NOVs and two NOEs in 2010.

- Tank degassing operations initiative for various facilities located in the Texas City area in response to complaints received regarding the release of uncontrolled VOC emissions during the degassing or cleaning of stationary, marine and transport vessels. NOVs were issued in 2009 to BP Products, Oil Tanking, and Valero Refining.

39. The Health Effects Review for 2010[69] states:

TCEQ activities in 2010 related to benzene in Texas City included, but were not limited to, the following:

- Focused investigations and reconnaissance investigations in the Texas City area to address on-going issues discovered through use of GasFindIR or through visual observations. Fence-line reconnaissance investigations during normal business hours and at night.

- At the BP Texas City Refinery in 2010, TCEQ undertook the enforcement activities outlined in Finding of Fact 47.

- During 2010, a full compliance investigation conducted at Marathon resulted in the issuance of an NOV and an NOE. As a result, 22 violations were cited and included:

    - Failure to maintain flare pilot lights;

[69] See TCEQ Interoffice Memorandum from Joseph T. Haney, Jr., Toxicology Division, Chief Engineer's Office, TCEQ, entitled "Health Effects Review of 2010 Ambient Air Network Monitoring Data in Region 12, Houston," dated July 27, 2011, available online at http://www.tceq.texas.gov/assets/public/implementation/tox/monitoring/evaluation/2010/reg_12_houston.pdf.

- Failure to maintain with a cap or plug open end lines;
- Failure to maintain a minimum of 300 BTU/scf on P-1; and
- Failure to maintain a temperature of at least 1400 degrees F within the wastewater thermal oxidizer.

- Other compliance investigations in 2010 resulted in the issuance of six NOVs and two NOEs in 2010.

VI. ANALYSIS

By letter dated March 3, 2009, OCR indicated that it would investigate the allegation of whether GCHD's failure to install a continuous air monitoring system near the chemical, petrochemical, and storage tank facilities on the East Side of Texas City, Texas, created a disparate impact on African Americans residing in the East Side of Texas City, Texas. This allegation has been analyzed as a discriminatory effects claim. Given the role that TCEQ plays in monitoring air pollution in Texas City by virtue of its contracts with GCHD, the majority of this report has focused on TCEQ's monitoring, investigation, and enforcement activities. In addition, OCR has reviewed the monitors placed by private industry since data from those monitors are available and considered reliable by TCEQ. Nevertheless, the ultimate determination to be made is whether there is a basis to find GCHD in violation of Title VI.

A. Elements of a Discriminatory Effects Claim

In assessing whether a recipient's criteria or methods of administration resulted in unlawful discriminatory effects, OCR must determine whether a *prima facie* showing of adverse disparate impact can be established. To establish a *prima facie* showing of adverse disparate impact, OCR must evaluate whether the recipient's facially neutral procedure or practice caused an adverse impact on a particular group. An adverse disparate impact evaluation requires a determination of two elements; (1) whether the alleged impact is "adverse," and (2) if adverse, whether the adversity disproportionately impacted an individual or group protected under Title VI. If OCR cannot establish either of the *prima facie* elements, then OCR must make a finding that there was no violation of EPA's regulations, and dismiss the complaint.[70]

B. Analysis

Air monitoring is a complex undertaking, particularly in a highly industrialized area such as Texas City.[71] TCEQ air monitoring within Texas City serves several purposes, including

[70] 40 C.F.R. § 7.120(g); *New York City Envtl. Justice Alliance v. Giuliani*, 214 F.3d 65, [69] (2d Cir. 2000) (citing *Brown v. Coach Stores, Inc.*, 163 F.3d 706, 712 (2d Cir. 1998); *New York Urban League, Inc. v. New York*, 71 F.3d 1031, 1036 (2d Cir. 1995).

[71] See *Ambient Air Monitoring Strategy for State, Local, and Tribal Air Agencies*, Office of Air Quality Planning and Standards, U.S. EPA, December 2008. See also See *Hazardous Air Pollutants, Migrating Hot Spots, and the Prospect of Data-Driven Regulation of Complex Industrial Complexes*, Thomas O. McGarity, 86 Texas Law Review

identifying compliance with the National Ambient Air Quality Standards or for purposes of monitoring air toxics (these programs are described in greater detail below).

TCEQ obtains monitoring data from the monitors described in Findings of Fact 8 – 18; some of the monitors are operated by governmental entities and some are operated by private industry. The number of monitors in Texas City has increased since the time of the filing of the Complaint. Some of these additional monitors are the results of agreements and/or orders issued by either TCEQ or EPA; in this regard, it is important to note that one of the monitors operated by private industry, the monitor identified as CAMS 683/EPA Site Identification 48-167-0683 is located in the general vicinity of what Complainants have described as the east side of Texas City.[72] Compare, Findings of Fact 8 and 9. TCEQ has indicated that the monitoring information obtained from private industry is considered to be reliable. See Finding of Fact 17. Some of the parameters that are monitored at these locations are monitored on a continuous basis. See Findings of Fact 10 - 17. This monitoring information has been evaluated by TCEQ for purposes of conducting its yearly Health Effects Reviews for Texas City (which are outlined in Findings of Fact 36 – 43 for the years 2003 through 2010) and this in turn has led to further TCEQ evaluations and enforcement activities. It is very important to note that TCEQ has undertaken studies of the area using a mobile laboratory and that the use of the mobile laboratory has complemented the existing stationary monitors. See Findings of Fact 17, 28, 31, and 32.

National Ambient Air Quality Standards Monitoring

The Clean Air Act (CAA) requires EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment (See 40 C.F.R. Part 50). Two types of NAAQS are established by the CAA, primary standards and secondary standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. EPA has established NAAQS for the following six

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1445 (2008), which provides an overview, in relevant part, of air monitoring conducted by TCEQ in Texas City.

[72] The 2010 Health Effects Review states that, "Under a TCEQ agreed order (Agreed Order 2001-0575-AIR-E), Marathon Petroleum Company (Marathon) initially collected benzene data at this off-site monitor just north of Marathon from October 2004 to October 2005. Marathon then collected data at the site from January 30, 2006, to January 31, 2007, under a benzene emission investigation plan with the TCEQ and EPA. Marathon again began collecting benzene data at the site on April 1, 2007, per an agreement with the EPA and the US Department of Justice (DOJ). Then on November 5, 2007, the site was moved 1 block north to the corner of 11th St. S. and 6th Ave. S. Although the site was deactivated on December 31, 2010, a new agreement between Marathon and EPA was established for the 11th St. S. monitor with an effective date of July 1, 2011. ...The BP-sponsored 31st St. site monitor (and a BP on-site monitor) was previously operated under a BP agreement with the TCEQ. However, in 2009, BP entered into a Temporary Injunction with the Attorney General's Office (No. D-1-GV-09-000921) which required BP to operate the two existing monitors and an additional monitor (the Logan St. monitor) which began operating in April 2010."

principal pollutants, which are called "criteria" pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution, and sulfur dioxide.[73]

The CAA requires states to establish and operate ambient air quality monitors, collect and analyze the ambient air quality data, and make these data available to EPA upon request. The TCEQ operates and maintains a state-wide network of air quality monitors. TCEQ has indicated that it has placed its stationary monitors in accordance with EPA regulations set forth at 40 C.F.R. Part 58.[74] The Texas Statewide Air Quality Surveillance Network was approved by EPA (37 Fed. Reg. 10842, 10895) and revised on March 7, 1978 (43 Fed. Reg. 9275). Moreover, 40 C.F. R. § 58.10 requires states to submit to EPA an Annual Air Monitoring Network Plan (AAMNP) for criteria pollutants for the next calendar year. On June 30, 2010, TCEQ submitted its 2010 AAMNP that addresses each of the criteria pollutants; EPA approved the AAMNP on December 23, 2010.[75] Thus, pursuant to this approval, TCEQ met the requirement to establish, operate and maintain an ambient air monitoring network. Of the monitoring sites located in Texas City, two of them monitor for criteria pollutants: the monitor identified as EPA Site Identification 48-167-0004 (which monitors for particulate matter on a non-continuous basis) and CAMS 1022/EPA Site Identification 48-167-0005 (which monitors on a continuous basis for, among other parameters, sulfur dioxide).

Air Toxics Monitoring

Toxic air pollutants, also known as hazardous air pollutants, are those 187 pollutants identified in the CAA that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Benzene is an example of a toxic air pollutant.[76] TCEQ analyzes for 146 of the 187 air pollutants.[77] The TCEQ website identifies the Texas City Ball Park (CAMS 1022/EPA Site Identification 48-167-0005) and the Texas City 34th Street (CAMS 620/EPA Site Identification 48-167-0056) locations as monitors that are a part of its air toxics monitoring network.[78]

Additional Governmental Efforts

The monitoring previously described formed the basis for the TCEQ Toxicology Department to provide its yearly Health Effects Reviews (See Findings of Fact 27-34). This information also provided TCEQ the basis to decide whether to designate any geographic area

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[73] See http://www.epa.gov/air/criteria.html.

[74] See Letter from Mark R. Vickery, P.G., Executive Director, TCEQ, to Helena Wooden-Aguilar, Acting Assistant Director, External Compliance and Complaints Program, Office of Civil Rights, U.S. EPA, dated December 22, 2009.

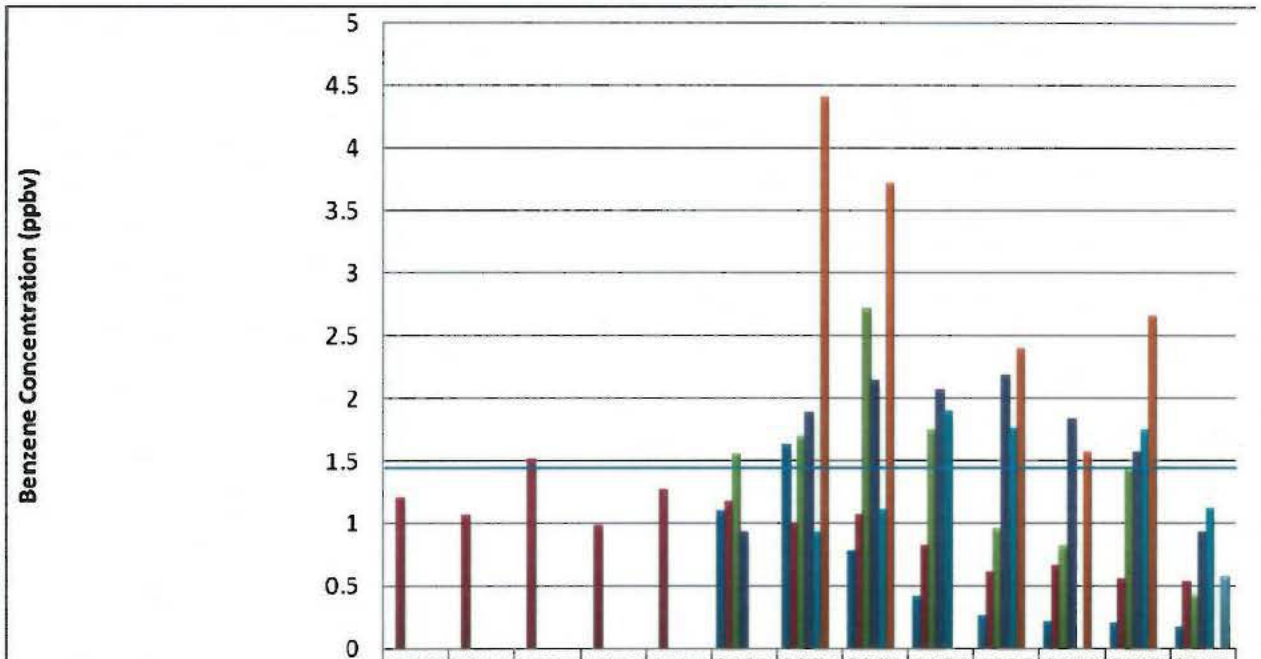
[75] See http://www.federalregister.gov/articles/2011/12/28/2011-33253/approval-and-disapproval-and-promulgation-of-implementation-plans-texas-infrastructure-and#p-95.

[76] See http://www.epa.gov/ttn/atw/allabout.html.

[77] See http://www.tceq.texas.gov/toxicology/AirToxics.html.

[78] See http://www.tceq.texas.gov/cgi-bin/compliance/monops/monitors.pl?region=12.

within Texas City as being on the Air Pollutant Watch List (APWL). TCEQ primarily focused its attention on three chemicals: Propionaldehyde, Benzene, and Hydrogen Sulfide. All three of these are discussed in TCEQ's "Report on the Air Pollutant Watch List Areas in Texas," prepared by the TCEQ Chief Engineer's Office, dated February 2012.[79] It is important to note that there have been successes during the time period reviewed, including the removal of APWL 1203 and the reduction in monitored annual average benzene concentrations. The 2012 TCEQ report cited above provided the following chart[80]:



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Texas City 34th Street						1.1*	1.6	0.8	0.4	0.3	0.2	0.2	0.2
Texas City Ball Park	1.2	1.1	1.5	1.0*	1.3	1.2	1.0	1.1	0.8	0.6	0.7	0.6	0.5
Texas City BP 31st Street						1.6*	1.7	2.7	1.7	1.0	0.8	1.4	0.4
Texas City 11th Street						0.9	1.9*	2.1*	2.1*	2.2*	1.8	1.6	0.9
BP OnSite							0.9	1.1	1.9	1.8		1.7	1.1*
Marathon OnSite							4.4*	3.7*		2.4*	1.6	2.7	
Texas City BP Logan Street													0.6*

*These average benzene concentrations are based on an incomplete year of data.

With respect to the above chart, the report goes on to state:

[79] This document can be obtained from the following webpage on the TCEQ website at http://www.tceq.texas.gov/toxicology/AirPollutantMain.

[80] See Report on the Air Pollutant Watch List Areas in Texas, prepared by the TCEQ Chief Engineer's Office, dated February 2012, available online at http://www.tceq.texas.gov/toxicology/AirPollutantMain.

> Figure 6 illustrates that annual average benzene concentrations exceed the 1.4 ppb_v long-term AMCV for multiple years (and monitors) prior to 2010, yet the 2010 average benzene concentrations at all active monitors are below 1.4 ppb_v. Texas City will remain on the APWL until the TCEQ can determine that the reduced benzene concentrations in the area will be maintained.[81]

These reductions may be attributable to historic and on-going efforts by TCEQ, and also EPA Region VI, to address air quality concerns in Texas City. TCEQ's efforts have been detailed in Findings of Fact 35 – 39. Region VI has conducted several evaluations at facilities located in the Texas City area over the years in order to ensure compliance with the applicable environmental requirements. As a result of these evaluations, EPA has reached settlement agreements with several companies in Texas City, resulting in significant emission reductions. For example, on September 30, 2010, EPA Region VI and the Department of Justice announced a large settlement with BP Products North America Inc. for Clean Air Act violations at its Texas City facility involving catastrophic incidents in 2004 and 2005.[82] EPA Region VI will continue to investigate facilities located in Texas City to ensure they are compliant with both the applicable environmental requirements, but also with the provisions included in the settlement agreements. Moreover, there was a very recent settlement between EPA and Marathon Petroleum Company, LP and Cattlesburg Refining, LLC.[83] This settlement, if approved by the court following public comment, will provide state-of-the-art controls on combustion devices (specifically, flares) and a cap on the volume of waste gas that will be sent to facility flares. It is anticipated that this will lead to a reduction of emissions of a variety of pollutants, including benzene. One of the facilities that is subject to this proposed settlement is the Marathon facility in Texas City. Lastly, there are on-going investigations by both the State of Texas and EPA Region VI concerning alleged releases from the BP Products North America, Inc. facility in Texas City.[84]

C. Conclusion

Complainants' community is in close proximity to the large industrial complex located in Texas City. See Appendix A, Texas City Study Area. In this instance, the Complainants have based their allegation on a specific type of monitor, a continuous monitor which would monitor for a variety of pollutants, to be placed at one of two locations. From Complainants' perspective such actions were necessary because they would allow for monitoring of a variety of pollutants and record the parameters detected, would provide credible evidence of potential releases that were not being otherwise documented, and would provide a reliable source of information

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[81] *Id.*

[82] See http://www.epa.gov/compliance/resources/cases/civil/rcra/bptexas.html.

[83] See http://www.epa.gov/compliance/resources/cases/civil/caa/marathonrefining.html.

[84] See https://www.oag.state.tx.us/oagnews/release.php?id=3442 and http://yosemite.epa.gov/opa/admpress.nsf/e8f4ff7f7970934e8525735900400c2e/a82c50047d011bda852577a0006fa72d!OpenDocument.

because, in the eyes of Complainants, private industry could not be relied upon to honestly report air pollution emission events. Given the context provided by the Complainants in their allegation of industrial odors impacting their community yet dissipating before regulators can arrive on site to verify potential emissions, such a request is understandable. See Footnote 18. Nevertheless, OCR cannot conclude that the failure to install continuous emission monitors in the area requested by Complainants constitutes discrimination.

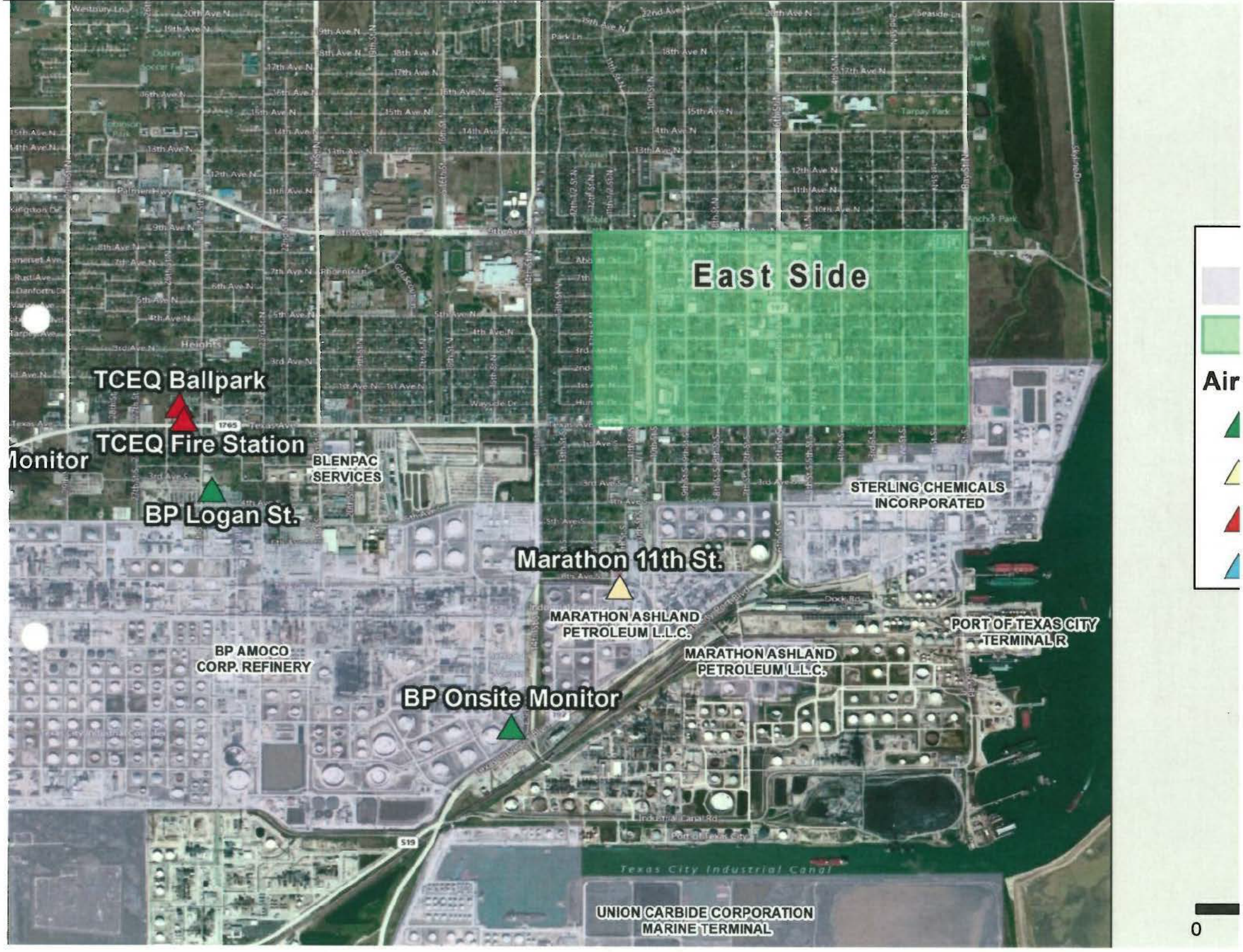
Based on the evidence of ongoing monitoring (both with stationary monitors and with the mobile laboratory) in Texas City, together with the additional enforcement efforts being undertaken by TCEQ and EPA, OCR concludes that the lack of continuous air monitoring near the chemical, petrochemical, and storage tank facilities on the east Side of Texas City, Texas, does not constitute a Title VI violation. In its conclusion, OCR considered that governmental entities are aware of potential pollution concerns with respect to Texas City and are taking active measures to address them. In addition, OCR notes that there is no area in Texas City that is monitored via a continuous air monitor that collects data for both criteria pollutants and air toxics.[85] Moreover, OCR is not aware of any evidence that continuous air monitoring for air toxic pollutants as requested by Complainants is the standard type of monitoring utilized in the United States; this type of monitoring is not widely used and is not part of standard air toxic monitoring plans. Accordingly, OCR has not seen any evidence that this community has been subject to disparate treatment with respect to air monitoring.

OCR would encourage GCHD, TCEQ, and EPA Region VI to meet with representatives of the Complainants to discuss the monitoring data currently available, or that could be made available to the community, and to discuss any ongoing concerns. To the extent that past or on-going enforcement efforts in the community can be discussed, OCR would encourage these entities to engage the community on this topic.

List of Appendices:

Appendix A: Texas City Study Area
Appendix B: Legend for map of monitors in Texas City
Appendix C: APWL 1202 and APWL 1203

[85] It bears noting that there is one monitor which is located in close proximity to the area defined by Complainants as the east side of Texas City (CAMS 683/EPA Site Identification 48-167-0683). However, this industry-operated monitor collects data on meteorological conditions and benzene on a continuous basis, but does not include some of the other pollutants identified by Complainants.


East Side
TCEQ Ballpark
TCEQ Fire Station
Monitor
BLENPAC SERVICES
BP Logan St.
STERLING CHEMICALS INCORPORATED
Marathon 11th St.
MARATHON ASHLAND PETROLEUM L.L.C.
PORT OF TEXAS CITY TERMINAL R
BP AMOCO CORP. REFINERY
MARATHON ASHLAND PETROLEUM L.L.C.
BP Onsite Monitor
Texas City Industrial Canal
UNION CARBIDE CORPORATION MARINE TERMINAL
Air
0

Map Legend

GeoTAM Viewer

Air Monitoring Site (Groups)

- Ozone
- CO / SO2 / H2S / TNMOC
- Nitrogen Oxides
- PM 10 & Other
- PM 2.5
- Air Toxics / VOCs
- Lead
- Chromium VI
- Meteorological

Pollutant / Sampler Type (within Air Monitor Sites)

- Ozone
- Carbon Monoxide
  Sulfur Dioxide
  Hydrogen Sulfide
- Oxides of Nitrogen
  Reactive Oxides of Nitrogen
- PM10 Continuous
  PM10 Non-Continuous
  Total Suspended Particulate
- PM 2.5 Continuous
  PM 2.5 Non-Continuous
  PM 2.5 Speciation
- AutoGC
  Carbonyl
  Multicanister VOC
  Semi-Volatile Organic Compounds
  Volatile Organic Compounds
- Lead
- Chromium VI

Network

- AutoGC
- CAMS
- Carbonyl
- Community Air Toxics
- Multicanister
- Non-Continuous Particulate
- Semi-Volatile Organic Compounds

QAPP

- Community Air Toxics Monitoring
- National Air Toxics Trends
- Photochemical Assessment Monitoring
- PANTEX
- Particulate Matter 2.5 Monitoring
- State and Local Air Monitoring
- Speciation/Trend

Collocation

- Collocated

Equipment

- Continuous
- Non-Continuous

General Layers

- Schools
- Oil and Gas Wells
- Oil and Gas Pipelines
- Non-Attainment / Near Non-Attainment
- TX House of Representatives Districts
- TX Senate Districts
- TCEQ Regions
- Urban Areas
- US Congressional District
- Census Blocks with Pop Density (sq mi)

Streets (Basemap Layers)

- Airport (point)
- Interstate Highway
- U.S. Highway
- Loop
- Beltway / Toll
- State Highway
- Ramp
- Major Roads
- Creek
- River
- Waterbodies
- Airport (area)
- Counties (user controlled)
- Counties (default)
- Parks
- Cities
- U.S. and Mexico States

Major Road
East Side
APWL 1202
APWL 1203

Proximity of Texas City "East Side" to APWL Areas 1202 & 1203 Texas City, Texas

Sources: Bing Maps aerial; APWL boundaries from TCEQ APWL maps; East Side boundary from US EPA Title VI Texas City Complaint document.

EPA Region 6
GIS Support
Dallas, TX
August 13, 2012