IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

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UNITED STATES OF AMERICA Plaintiff,	
and	
COMMONWEALTH OF PENNSYLVANIA CITY OF PHILADELPHIA STATE OF OKLAHOMA STATE OF OHIO Plaintiff/Intervenors,	
V.	
SUNOCO, INC. Defendant	

CIVIL ACTION NO. 05-02866

FOURTH AMENDMENT TO CONSENT DECREE

WHEREAS, the United States of America (hereinafter "the United States"), the Commonwealth of Pennsylvania, the City of Philadelphia, the State of Oklahoma, and the State of Ohio; and Sunoco, Inc. (hereinafter "Sunoco") are parties to a Consent Decree entered by this Court on March 21, 2006, and amended on June 3, 2009, August 30, 2011 and September 1, 2011 ("Consent Decree"); and

WHEREAS, Sunoco currently owns and operates two petroleum refineries covered by the Consent Decree, to-wit the refinery located in Philadelphia, Pennsylvania (hereinafter the "Philadelphia Refinery") and in Marcus Hook, Pennsylvania (hereinafter the "Marcus Hook Refinery"); and

WHEREAS, on September 6, 2011, for business reasons Sunoco announced that it would temporarily idle the crude refining operations at the Marcus Hook Refinery, and on

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approximately December 1, 2011, began planning to permanently shut-down those operations; and

WHEREAS, on July 2, 2012, Sunoco entered into a refining contribution agreement (as amended, the "Contribution Agreement") with Carlyle PES, L.L.C. ("Carlyle"), Philadelphia Energy Solutions LLC ("PES LLC"), and Philadelphia Energy Solutions Refining and Marketing LLC ("PES R&M LLC"), and pursuant to the Contribution Agreement, the ownership and operation of the Philadelphia Refinery will be transferred to PES R&M LLC; and

WHEREAS, PES R&M LLC has contractually agreed to assume the obligations, rights, and benefits of, and to be bound by the terms and conditions of, the Consent Decree, to the extent such obligations, terms, and conditions relate to the Philadelphia Refinery subsequent to the effective date of this Fourth Amendment; and

WHEREAS, PES R&M LLC has represented that it has the financial and technical ability to assume the obligations and liabilities of the Consent Decree, to the extent such obligations and liabilities of the Consent Decree relate to the Philadelphia Refinery subsequent to the effective date of this Fourth Amendment, and based on these representations the United States, the Commonwealth of Pennsylvania and the City of Philadelphia agree to the transfer of the Philadelphia Refinery to PES R&M LLC; and

WHEREAS, the emission limit for SO_2 at the Philadelphia 868 FCCU contained in the Second Amendment to the Consent Decree was established as compensation for an expected increase in emissions that would have occurred from a delay in installation of controls at the Marcus Hook Refinery, but as a result of the permanent shut-down of crude refining operations at that refinery, those increased emissions will not materialize; and

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WHEREAS, the schedule for the final SO_2 emission limit at the Philadelphia 868 FCCU is modified as provided in this Fourth Amendment in recognition of the greater overall level in emission reductions in the Philadelphia area resulting from the permanent shut-down of crude refining at the Marcus Hook Refinery; and

WHEREAS, as reflected in this Fourth Amendment, the United States, the Commonwealth of Pennsylvania, the City of Philadelphia, Sunoco and PES R&M LLC (the "Parties") have agreed upon certain additional modifications of the Consent Decree related to Sunoco's Philadelphia refinery; and

WHEREAS, the Commonwealth of Pennsylvania is the "Appropriate Plaintiff/Intervenor," as that term is used in Paragraph 243 of the Consent Decree, for the Marcus Hook Refinery; and

WHEREAS, the City of Philadelphia is the "Appropriate Plaintiff/Intervenor," as that term is used in Paragraph 243 of the Consent Decree, for the Philadelphia Refinery; and

WHEREAS, the undersigned representatives of the United States, the Commonwealth of Pennsylvania, the City of Philadelphia, Sunoco and PES R&M LLC are fully authorized to enter into the terms and conditions of this amendment; and

WHEREAS, Paragraph 243 of the Consent Decree requires that this amendment be approved by the Court before it is effective; and

NOW THEREFORE, the United States, the Commonwealth of Pennsylvania, the City of Philadelphia, Sunoco and PES R&M LLC hereby agree that, upon approval of this amendment (the "Fourth Amendment") by the Court, the Consent Decree shall thereby be amended as follows:

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1. Effective on the Date of Entry of this Fourth Amendment, PES R&M LLC shall be added as a Party and shall be bound by all provisions of the Consent Decree as they apply to the Philadelphia Refinery, which shall be enforceable against PES R&M LLC to the same extent as if PES R&M LLC were specifically identified and/or named in those provisions of the Consent Decree. On and after the Date of Entry of this Fourth Amendment, Sunoco is released from all obligations and liabilities, but retains all rights, benefits, and releases, under the Consent Decree as they relate to the Philadelphia Refinery. Sunoco shall continue to be bound to comply with all Consent Decree provisions as they apply to the Marcus Hook Refinery.

2. By no later than August 31, 2012, Sunoco will have completed the permanent shutdown of the crude refining operations at Marcus Hook Refinery and the surrender of all air permits as they relate to crude refining operations. The date of permanent shutdown shall be deemed to be on the later of: (i) the date of the shut-down of crude refining operations at the Marcus Hook Refinery, and (ii) the date that Sunoco submits the required filings with the Commonwealth of Pennsylvania necessary to surrender all air permits to operate as a refinery.

3. New Paragraph 10.HHa shall be added and shall read as follows:

HHa. "Philadelphia Refinery Property" shall mean those portions of the 1,400 acre complex located within the City of Philadelphia containing two formerly separate refining operations known as "Point Breeze" and "Girard Point," as well as the West Yard, North Yard and Schuylkill River Tank Farm, as more fully described in Appendix 1 to this Fourth Amendment.

4. Paragraph 15A of the Consent Decree shall be replaced and shall read as follows:

15A. Control of SO₂ Emissions from the Philadelphia 868 FCCU.

a. <u>Interim Emission Limit</u>. Beginning on the Date of Entry of the Fourth Amendment to the Consent Decree, the Philadelphia 868 FCCU shall comply with an emission limit of 125 ppmvd SO₂ at 0% O₂ on a 365-day rolling average basis.

b. <u>Final Emission Limit</u>. By no later than January 1, 2016, the Philadelphia 868 FCCU shall comply with a long-term emission limit of 25 ppmvd SO₂ at 0% O₂ on a 365-day rolling average basis, and a short-term emission limit of 50 ppmvd at 0% O₂ on a 7-day rolling average basis. For purposes of clarity, the first day used in the 7-day or 365-day rolling average compliance period is January 1, 2016, and the first complete 7-day rolling average average compliance period is January 7, 2016, and the first complete 365-day rolling average compliance period is December 31, 2016.

5. Paragraph 27.a is revised to read as follows:

27. NOx Emission Reductions from Heaters and Boilers.

a. <u>NOx Emission Reductions from Sunoco Refinery Heaters and</u> <u>Boilers</u>. On or before September 30, 2014, Sunoco shall use Qualifying Controls to reduce NOx emissions from the heaters and boilers greater than 40 mmBTU per hour by at least 1,773.5 tons per year, so as to satisfy the following inequality:

n $\sum_{i=1}^{n} [(E_{actual})i - (E_{allowable})i] \ge 1,773.5 \text{ tons of NOx per year}$

Where:

- (E_{allowable})i = [(The permitted allowable pounds of NOx per million BTU for heater or boiler i, or, the requested portion of the permitted reduction pursuant to Paragraph 100/(2000 pounds per ton)] x [(the lower of permitted or maximum heat input rate capacity in million BTU per hour for Combustion Unit i) x (the lower of 8760 or permitted hours per year)];
 - (E_{actual})i = The tons of NOx per year prior actual emissions during calendar years 2001 and 2002 (unless prior actuals exceed allowable emissions, then use allowable) as shown in Appendix B for controlled heater or boiler i; and
 - n = The number of heaters and boilers with Qualifying Controls at all Sunoco Refineries from those listed in Appendix B that are selected by Sunoco to satisfy the requirements of the equation set forth in this paragraph.

For heaters and boilers at the Philadelphia and Marcus Hook Refineries (except for Boiler # 38 at the Philadelphia Refinery only) at which Qualifying Controls are used to meet the requirements of this section V.F, those Qualifying Controls shall be installed by no later than June 15, 2010, unless this date is extended jointly by PADEP and/or AMS, and EPA. Boiler # 38 may be operated only during 2013 and 2014 as a temporary back-up during periods of maintenance or down-time at the Philadelphia Refinery No. 3 boilerhouse or the steam generating portions of the 1232 unit, provided that its total annual NOx emissions do not exceed 24.9 tons per year on a 12 month rolling average basis in 2013 or 2014, and it shall be permanently shut-down as provided in Paragraph 10.JJ.iv ("Qualifying Controls") by no later than August 31, 2014.

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6. A new Paragraph 99A shall be added to the Consent Decree and shall read as follows:

99A. Exception to General Prohibition Applicable Solely to the Marcus

Hook and Philadelphia Refineries. Notwithstanding the provisions of Paragraphs 97, 98 and 99:

a. CD emissions reductions required by Paragraph 15A may be used as credits in any PSD, major non-attainment and/or minor NSR permit(s) or permit proceeding(s) only at the Philadelphia Refinery Property occurring after the Date of Entry of the Fourth Amendment, provided that the new or modified emissions units at which credits are being used have a federally enforceable permit that reflects the following requirements that are applicable to the pollutants for which credits are being used:

i. For heaters and boilers, a limit of 0.020 lbs NOx per million BTU or less on a 3-hour rolling average basis;

ii. For heaters and boilers, a limit of 162 ppmvd of hydrogen sulfide in fuel gas or 20 ppmvd SO_2 corrected to 0% O_2 both on a 3-hour rolling average, and 60 ppmv hydrogen sulfide in fuel gas on a 365-day average;

iii. For heaters and boilers, no liquid or solid fuel firing authorization;

iv. For FCCUs, a limit of 20 ppmvd NOx corrected to $0\% O_2$ or less on a 365-day rolling average basis; a limit of 25 ppmvd SO₂ corrected to $0\% O_2$ or less on a 365-day rolling average basis; and a limit

of 0.5 pound of PM per 1000 pounds of coke burned on a 3-hour average basis;

v. For Flaring Devices, 162 ppmv hydrogen sulfide in gas burned in the flare on a 3-hour rolling average;

vi. For SRPs, NSPS Subpart Ja emission limits; and

vii. For emissions units other than those listed in Paragraph 99A.a.i-vi at which credits are being used, Best Available Control Technology ("BACT"), Best Available Technology ("BAT") or Lowest Achievable Emission Rate ("LAER"), as determined by AMS.

b. In the event that PADEP and AMS determine that the Marcus Hook and Philadelphia Refineries are considered one "facility" under Pa. Code Title 25 § 121.1, and a "stationary source" under 40 C.F.R. § 52.21(b)(5), and such determination is reflected in a final agency action by PADEP or AMS relative to the permit issued under Title V, then the Philadelphia Refinery Property may use up to 111.37 tons per year of NOx, 128.42 tons per year of SO₂. 317.94 tons per year of PM_{2.5}, 317.94 tons per year of PM₁₀, 365.60 tons per year of CO, 2.21 tons per year of VOCs, 922,286.83 tons per year of Greenhouse Gases ("GHGs," as defined in 40 C.F.R. § 70.12(a)(1)) and 56.07 tons per year of sulfuric acid mist ("SO₃") from the permanent shut-down of the Marcus Hook Refinery emission units and in the amounts specified in Appendix 2 to the Fourth Amendment, as credits in any PSD, major non-attainment and/or minor NSR permit(s) or permit proceeding(s) no sooner than the Date of Entry of the Fourth Amendment to Consent Decree, provided that (a) such credits are generated while

the Philadelphia and Marcus Hook refineries constitute one stationary source under the authorities listed above, (b) the emissions units at which credits are being used have a federally enforceable permit that reflects the requirements of Paragraph 99A.a.i-vii, as applicable, and (c) the credits are "contemporaneous" with the increases from the project covered by the permit.

c. Any unused emission reduction credits under this Paragraph 99A may be used as offsets for compliance with the requirements of 42 U.S.C. § 7503(c) only at the Marcus Hook Refinery and the Philadelphia Refinery Property. Use of any such offsets must also comply with the requirements of Pa. Code Title 25 § 127, subchapter E.

d. <u>Conditions Precedent to Utilizing Exception to General</u> <u>Prohibition</u>. Utilization of the exception set forth in this Paragraph 99A to the general prohibition against the generation or utilization of CD emissions reductions set forth in Paragraph 97 is subject to the following conditions:

i. No NOx, SO₂, PM₁₀, PM_{2.5}, CO, VOC, GHG or SO₃ reductions may be used as credits or offsets under this paragraph prior to the date of the permanent shut-down of crude refining operations at the Marcus Hook Refinery, which is on the later of: (i) the date of the shutdown of the crude refining operations at the Refinery, and (ii) the date that Sunoco submits the required filings with the Commonwealth of Pennsylvania necessary to surrender all air permits to operate as a refinery;

ii. The CD emissions reductions provisions of this Consent
Decree are for purposes of this Consent Decree only and neither Sunoco,
PES R&M LLC, nor any other entity may use CD emissions reductions
for any purpose, including in any subsequent permitting or enforcement
proceeding, except as provided herein; and

iii. Sunoco and PES R&M LLC still shall be subject to all federal, state, and local regulations applicable to the PSD, major non-attainment and/or minor NSR permitting process.

7. For purposes of Notification under Paragraph 240 of the Consent Decree, the Philadelphia Refinery shall be notified as follows:

As to PES R&M LLC:

Philip L. Rinaldi Chief Executive Officer Philadelphia Energy Solutions Refining and Marketing LLC 3144 Passyunk Avenue Philadelphia, PA 19134

8. New Paragraph 113A shall be added to the Consent Decree and shall read as follows:

113A. <u>Fenceline Monitoring at the Philadelphia Refinery</u>. PES R&M LLC shall implement a project to install monitors at the fenceline or perimeter of the Philadelphia Refinery to monitor certain emissions and make the data publicly available, as provided in Appendix J of this Consent Decree ("Fenceline Monitoring System at the Philadelphia Refinery"). The installation and commencement of operation of the

fenceline monitoring system shall be completed by no later than 30 months after the Date

of Entry of the Fourth Amendment to Consent Decree.

9. New Appendix J shall be added to the Consent Decree and shall read as follows:

APPENDIX J

FENCELINE MONITORING SYSTEM AT THE PHILADELPHIA REFINERY

PES R&M LLC will install, operate and maintain a fenceline monitoring system and make the data collected available to the public in accordance with the specifications and criteria identified in this Appendix.

A. Equipment: The monitoring system shall consist of two monitoring stations, which shall be equipped with the following equipment:

1. Instruments capable of measuring and recording the concentrations of the following compounds in air at minimum detection levels for the following analytes:

Analyte	Level of Detection
PM _{2.5} and PM ₁₀	$0.1 \text{ micrograms per m}^3$
СО	40.0 ppbV
VOCs	1.0 ppbV
Sulfur dioxide	40.0 ppbV
NOx	1.0 ppbV
Hydrogen sulfide	1.0 ppbV
Reduced sulfur compounds	1.0 ppbV
(defined as all compounds containing	
reduced sulfur measured as an	
aggregate sum)	

The monitoring equipment shall be capable of measuring the analytes at the abovereferenced concentrations and the data recording system shall reduce those measurements to hourly averages.

Within 360 days of the Date of Entry of the Fourth Amendment to the Consent Decree, PES R&M LLC shall provide EPA and AMS with a Fenceline Monitoring Plan to include, at a minimum, identifying the location of the meteorological station and demonstrating how that site meets the requirements of this Appendix; a Quality Assurance Project Plan (QAPP) that describes the Quality Assurance/Quality Control procedures, specifications, and other technical activities to be implemented to ensure that the results of the fenceline monitoring system meets project specifications; and implementation of the data availability requirements in Paragraph E of this Appendix. a. <u>SO₂, Reduced Sulfur Compounds and H₂S</u>. Ambient concentrations of sulfur dioxide (SO₂) will be continuously measured using Teledyne-API Model T100 or equivalent in accordance with 40 C.F.R. Part 53, Subparts A and C. The SO₂ monitor shall be operated and maintained in accordance with all corresponding EPA equivalent method requirements. The SO₂ monitors will be operated in the 0 to 0.50 ppm full scale measurement range with temperature and pressure compensation features activated. For Hydrogen Sulfide (H₂S) and reduced sulfur compounds, the Teledyne API Model T101 or equivalent will be operated in switching mode to provide alternate 5-minute data for H₂S, then reduced sulfur compounds. The monitors shall be operated and maintained in accordance with the manufacturer's recommendations and shall be capable of measuring reduced sulfur compounds and H₂S, with a lower detection level of 1.0 ppb.

Nothing in this Appendix J shall preclude the use of any other, additional fenceline monitoring equipment and/or monitoring of any other, additional pollutants at the fenceline of the Philadelphia Refinery.

2. <u>Instruments for Measuring and Recording Wind Speed, Wind Direction, Ambient</u> <u>Temperature, Humidity and Barometric Pressure</u>. PES R&M LCC will utilize existing equipment to monitor specific meteorological parameters to obtain data representative of prevailing meteorological conditions for the Philadelphia Refinery area. The data set produced shall be adequate to correlate prevailing conditions with pollutant measurements and transport.

a. Continuously measured meteorological parameters shall include hourlyaveraged (scalar or vector) measurements of horizontal wind speed and wind direction, the standard deviation of the horizontal wind direction (sigma theta), air temperature and relative humidity. Wind speed and direction shall be measured at a height of approximately 10 meters. Temperature, relative humidity, and barometric pressure shall be measured at a height of 2 to 3 meters.

b. Wind direction and sigma theta measurement data shall be compiled and reported as hourly block averages in degrees (°), rounded to the nearest whole degree. Wind speed measurement data shall be compiled and reported as hourly block averages in miles per hour (mph), rounded to the nearest tenth of a mph.

c. Air temperature measurement data will be compiled and reported as hourly block averages in degrees Fahrenheit (° F) or Celsius (° C), rounded to the nearest tenth of a degree.

d. Relative humidity measurement data will be compiled and reported as hourly block averages in percent, rounded to the nearest whole percent.

3. <u>Monitoring Station</u>. Monitoring equipment (except meteorological monitors and their support towers) shall be installed and operated inside a temperature-controlled equipment shelter. The temperature within each shelter shall be continuously monitored

and recorded using a calibrated RTD and microprocessor-or PC-based data acquisition system (DAS or data logger). The climate control system for each monitoring shelter will be capable of maintaining a stable temperature within the range of 20° C to 30° C.

Typically, a monitoring shelter will measure 8 feet wide by 12 feet long by 8 feet high. The shelter will be anchored and secured to a concrete pad for safety. A padlocked exterior compartment attached to an outer wall of the shelter will safely house all compressed support gases. Shelter walls and roof will have a minimum insulation rating of R11. The shelter will be equipped with electrical service panels, interior electrical distribution circuits, lighting, workbench and sufficient space for housing, operating and maintaining the monitoring instruments. All electrical wiring and appurtenances will conform to the National Electric Code (NEC). Each shelter electrical service and the shelter building itself will be grounded to earth in conformance with NEC and local code requirements.

The monitoring shelter, if located within the refinery, shall maintain a slight (*e.g.*, 0.013 to 0.026 Bar) internal positive air pressure with respect to atmospheric air pressure.

B. Location – The monitoring stations shall be located on Philadelphia Refinery property near the Refinery fenceline at up- and down-wind locations to be determined by PES R&M LLC, in consultations with EPA and interested members of the Philadelphia Refinery's Community Advisory Panel (CAP), and in consideration of the following siting criteria:

a. The up- and down-wind locations should be determined by the last 5 years of NOAA data from the most appropriate National Weather Service (NWS) or from the [local] monitoring station. The meteorological data (resultant wind direction and wind speed hourly averages) will be used to construct wind roses for the site.

b. Availability of land, accessibility to site, availability of utility services, and security of monitors and operating personnel.

c. Geographic spacing of sites relative to the refinery for monitoring upwind and downwind concentrations.

d. Probe or sampler inlet should be 2 to 5 meters above ground and have unrestricted airflow 270 degrees around the sample inlet probe or 180 degrees if the probe is on the side of a building.

e. Probe or sampler inlet should be >20 meters from the dripline of any tree(s).

f. SO₂, TRS, and VOC probes should be >1 meter away from supporting structures, walls and parapets.

g. The distance from a sampler probe to an obstacle, such as a building, should be at least twice the height the obstacle protrudes above the sampler, probe, or monitoring path.

h. All probes and samplers should be away from minor sources, such as incineration flues, to avoid undue influences from minor sources. The separation

distance is dependent on the height of the minor source's emission point (such as a flue), the type of fuel or waste burned, and the quality of the fuel.

C. **Operation** – PES R&M LLC shall operate and maintain the monitors and equipment described herein in accordance with manufacturers' recommendations.

D. Quality Assurance/Quality Control (QA/QC) – PES R&M LLC shall ensure that all data collected by the Fenceline Monitoring System is subjected to appropriate QA/QC procedures on a monthly basis. The QA/QC procedures for a given month's data shall be completed by no later than the end of the month following the month within which the data were collected.

E. Data Availability – On a weekly basis, PES R&M LLC shall post the Fenceline Monitoring System data on a dedicated website ("Monitoring Data Website"), in a manner that shall be readily accessible, clearly labeled, and clearly presented to the public. PES R&M LLC shall additionally post on the Monitoring Data Website, on a quarterly basis, CEMS emissions reports submitted to AMS and/or USEPA pursuant to the Title V permit for all refinery units that are monitored by CEMS. PES R&M LLC shall maintain data collected through the Fence Line Monitoring System on the Monitoring Data Website for at least five years from the date of its collection, and shall review the Fence Line Monitoring Data with the CAP members as they may request.

* * * * *

ORDER

Before the taking of any testimony, without adjudication of any issue of fact or law, and

upon the consent and agreement of the Parties, it is:

ORDERED, ADJUDGED and DECREED that this Fourth Amendment to the Consent

Decree is hereby approved and entered as a final order of this court.

Dated and entered this _____ day of _____, 2012.

United States District Judge

FOR PLAINTIFF THE UNITED STATES OF AMERICA:

Date: 8/9/12

IGNACIA S. MORENO Assistant Attorney General Environment and Natural Resources Division United States Department of Justice Washington, DC 20460

Date: 8/16/12

MICHAEL J. MCNULTY Acting Assistant Chief Environmental Enforcement Section United States Department of Justice P.O. Box 7611 Ben Franklin Station Washington, DC 20044-7611

FOR PLAINTIFF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: 8/15/12

PAMELA J. MAZAKAS Acting Director, Office of Civil Enforcement United States Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, D.C. 20460-0001

Date: bygest 14, 2012

JOHN FOGARTY Associate Director, Office of Civil Enforcement United States Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, D.C. 20460-0001

> FOR PLAINTIFF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, **REGION 3:**

AUG 1 6 2012 Date:

SHAWN M. GARVIN **Regional Administrator** U.S. Environmental Protection Agency, Region 3

1650 Arch Street

Philadelphia, PA 19103-2029

FOR PLAINTIFF/INTERVENOR THE COMMONWEALTH OF PENNSYLVANIA:

Date: 8/14/2012

IAMES D. REBARCHAK Regional Manager Air Quality Commonwealth of Pennsylvania Department of Environmental Protection 2 East Main Street Norristown, PA 19401

FOR PLAINTIFF/INTERVENOR THE CITY OF PHILADELPHIA:

DONALD F. SCHWARZ, MD, MPH, MBA Deputy Mayor of Health and Opportunity and Health Commissioner

Date: 8/15/2012

8/15/2012

Date:

By:

THOMAS HUYNH Director, Air Management Services 321 University Avenue, 2nd Floor Philadelphia, PA 19104

SHELLEY R. SMITH City Solicitor

By:

DENNIS YUEN Assistant City Solicitor

PATRICK K. O'NEILL Divisional Deputy City Solicitor, Envtl. Law City of Philadelphia Law Dept. One Parkway Bldg. 16th Floor 1515 Arch Street Philadelphia, PA 19102

ATTORNEYS FOR PLAINTIFF/INTERVENOR CITY OF PHILADELPHIA

FOR DEFENDANT SUNOCO, INC.:

Date: 8/14/2012

JOHN D. PICKERING Senior Vice President, Manufacturing Sunoco, Inc. 1818 Market Street Philadelphia, PA 19103

Date: 8/14/2012

ARNOLD D. DODDERER Assistant General Counsel Sunoco, Inc. 1735 Market Street Philadelphia, PA 19103

ATTORNEY FOR SUNOCO, INC.

FOR DEFENDANT PHILADELPHIA ENERGY SOLUTIONS REFINING & MARKETING LLC:

Date: 8/14/12

PHILIP L. RINALDI Chief Executive Officer Philadelphia Energy Solutions Refining & Marketing LLC 3143 Passyunk Avenue Philadelphia, PA 19134

APPENDIX 1

Legal Description

PARCEL A

Girard Description. (Parcel A)

Beginning at a point on the northern side of Lanier Avenue and the corner of the Point Breeze Parcel B-3 North 58°52'39" East, a distance of 31.47 feet; thence South 31°07'21" East, a distance of 136.40feet; thence South 58°52'39" West, a distance of 50.41 feet to a point a corner of lands of Conrail; thence along lands of Conrail the 14 following courses and distances: (1) South 31°52'50" East, a distance of 90.73 feet to a point of curvature; (2) by a curve to the right having a radius of 335.54 feet and a central angle of 39°39'00" an arc length of 232.20 feet a chord which bears South 12°03'20" East 227.60 feet to a point; (3)South 07°46'10" West tangent to said curve, a distance of 541.48 feet; (4) North 35°26'10" East, a distance of 282.33 feet; (5) North 35°47'10" East, a distance of 273.76 feet; (6) South 07°46'01" West, a distance of 1297.42 feet; (7) South 07°54'07" West, a distance of 144.68 feet; (8) South 09°10'51" West, a distance of 320.82 feet; (9)South 04°26'38" West, a distance of 122.85 feet; (10) South 07°38'04" West, a distance of 30.09 feet; (11) South 08°09'35" West, a distance of 119.06 feet; (12) South 06°59'31" West, a distance of 139.54 feet; (13) South 81°41'24" East, a distance of 89.38 feet; (14) South 07°57'20" West, a distance of 232.50 feet to a point on the pierhead and bulkhead of the Schuylkill River; thence along the bulkhead of the Schuylkill River the 56 following courses

and distances:

(1) North 83°40'40" West, a distance of 484.75 feet; (2) North 80°59'10" West, a distance of 293.05 feet; (3) North 80°57'45" West, a distance of 291.76 feet; (4) North 80°39'50" West, a distance of 367.78 feet; (5) North 09°10'46" East, a distance of 47.72 feet; (6) North 63°43'59" West, a distance of 87.28 feet; (7) North 61°57'14" West, a distance of 104.02 feet; (8) South 26°32'09" West, a distance of 51.72 feet; (9) North 62°59'30" West, a distance of 133.92 feet; (10) North 62°12'53" West, a distance of 166.29 feet; (11) North 26°44'06" East, a distance of 55.61 feet; (12) North 62°58'22" West, a distance of 247.86 feet; (13) North 62°17'56" West, a distance of 287.77 feet; (14) North 45°26'57" West, a distance of 211.11 feet; (15) North 46°31'00" West, a distance of 354.57 feet; (16) North 64°57'13" West, a distance of 65.87 feet; (17) North 34°41'49" West, a distance of 109.10 feet; (18) North 46°10'22" West, a distance of 380.64 feet; (19) North 29°33'57" West, a distance of 210.22 feet; (20) North 28°49'08" West, a distance of 356.96 feet; (21) North 29°42'09" West, a distance of 364.44 feet; (22) North 16°12'31" West, a distance of 42.38 feet; (23) North 09°26'20" West, a distance of 45.39 feet; (24) North 15°41'58" West, a distance of 913.99 feet; (25) North 15°05'58" West, a distance of 56.31 feet; (26) North 08°17'52" West, a distance of 173.70 feet; (27) North 05°19'22" West, a distance of 64.01 feet; (28) North 07°37'01" West, a distance of 1136.34 feet; (29) North 08°01'22" East, a distance of 380.08 feet; (30) North 28°44'59" East, a distance of 7.74 feet; (31) North 43°42'20" East, a distance of 197.15 feet; (32) North 42°26'02" East, a distance of 89.30 feet; (33) North 44°10'07" East, a distance of 72.09 feet; (34) North 72°36'31" East, a distance of 27.87 feet; (35) North 75°53'49" East, a distance of 101.72 feet; (36) North 77°19'59" East, a distance of 293.03 feet; (37) South 86°50'08" East, a distance of 373.53 feet; (38) South 86°29'05" East, a distance of 408.99 feet; (39) North 84°56'19" East, a distance of 6.58 feet; (40) North 81°27'07" East, a distance of 156.35 feet; (41) North 85°23'48" East, a distance of 75.71 feet; (42) North 80°50'16" East, a distance of 28.45 feet; (43) South 15°42'39" East, a distance of 2.48 feet; (44) North 74°42'14" East, a distance of 40.34 feet; (45) North 79°38'24" East, a distance of 11.24 feet; (46) North 84°28'14" East, a distance of 78.29 feet; (47) North 71°34'56" East, a distance of 10.59 feet; (48) North 85°13'53" East, a distance of 68.60 feet; (49) North 53°43'35" East, a distance of 138.34 feet; (50)North 55°19'46" East, a distance of 24.25 feet; (51) North 49°12'19" East, a distance of 21.57 feet; (52) North 50°49'59" East, a distance of 22.71 feet; (53) North 63°34'55" East, a distance of 37.80 feet; (54) North 48°56'08" East, a distance of 17.60 feet; (55) North 48°01'38" East, a distance of 37.79 feet: (56) North 57°04'27" East, a distance of 220.24 feet to a point, a corner of Point Breeze Parcel B-1;

thence along Point Breeze Parcel B-1 the following 9 courses and distances:

(1) South 66°43'40" East, a distance of 165.74 feet;

(2) South 26°47'19" West, a distance of 173.62 feet to a point of curvature;

(3) by a curve to the left having a radius of 313.83 feet and a central angle of 55°00'41" an arc length of 301.32 feet a chord which bears South 00°06'24" West 289.88 feet;

(4) South 28°44'58" East, a distance of 198.19 feet; (5) North 78°06'33" East, a distance of 1489.09 feet;
(6) South 07°46'10" West, a distance of 1288.62 feet; (7) South 60°40'29" West, a distance of 577.59 feet;

(8) South 29°33'29" East, a distance of 525.42 feet;
(9) South 32°34'13" East, a distance of 529.63 feet to the point of Beginning. Containing 394.96 Acres, more or less.

BRT#885044000 - 3600 Lanier Ave BRT#884096500 - 3404 Penrose Ave BRT#884095400 - 3000 Penrose Ferry Rd BRT#884095500 - 3002 Penrose Ferry Rd

PARCEL B-1

Point Breeze Description (Parcel B-1)

Beginning at a point on the western side of 26th street; thence along the western side of 26th Street the 16 following courses and distances:

(1) South 07°45'55" West, a distance of 169.94 feet;

(2) South 00°16'02" East, a distance of 38.37 feet;

- (3) South 06°25'58" West, a distance of 199.87 feet;
- (4) South 07°53'20" West, a distance of 211.08 feet;
- (5) South 07°47'37" West, a distance of 1509.96 feet;
- (6) South 07°52'07" West, a distance of 726.03 feet;
- (7) South 07°38'49" West, a distance of 48.89 feet;
- (8) South 09°29'34" West, a distance of 130.93 feet;
- (9) South 07°13'47" West, a distance of 401.40 feet;
- (10) South 07°57'21" West, a distance of 318.70 feet;
- (11) South 15°50'52" West, a distance of 136.31 feet;
- (12) South 07°45'11" West, a distance of 118.07 feet;
- (13) North 80°01'54" West, a distance of 17.81 feet;
- (14) South 14°08'03" West, a distance of 552.84 feet to a point of curvature;
- (15) by a curve to the left having a radius of 200.76 feet and a central angle of 66°30'21" an arc length of
- 233.04 feet and a chord which bears South 34°54'40" West 220.17 feet;
- (16) South 01°46'40" West, a distance of 293.89 feet;

thence along the north side of Penrose Avenue South 43°34'41" West, a distance of 665.73 feet to a point of curvature; thence by a curve to the right having a radius of 126.09 feet and a central angle of 73°01'54" an arc length of 160.71 feet a chord which bears South 87°07'45" West 150.05 feet point of reverse curvature;

thence by a reverse curve to the left having a radius of 167.93 feet and a central angle of 102°48'10" an arc length of 301.32 feet and a chord South 78°02'49" West and a distance of 262.49 feet;

thence along the northern side of Lanier Avenue the eight following courses and distances:

(1) South 28°41'02" West, a distance of 84.04 feet;

- (2) South 30°01'19" West, a distance of 182.61 feet;
- (3)South 33°23'20" West, a distance of 122.68 feet to a point of curvature;

(4) by a curve to the left having a radius of 365.09 feet and a central angle of 10°02'31" an arc length of

63.99 feet a chord which bears South 38°14'27" West 63.90 feet;

(5) South 45°13'17" West, a distance of 69.72 feet to a point of curvature;

(6) by a curve to the left having a radius of 248.69 feet and a central angle of 11°28'08" an arc length of 49.78 feet a chord which bears South 50°30'20" West 49.70 feet;

(7)South 55°40'25" West, a distance of 127.19 feet; (8) South 58°52'39" West, a distance of 504.43 feet;

thence along Girard Point property the following ten courses and distances:

(1) South 58°52'39" West, a distance of 31.47 feet;

(2) North 32°34'13" West, a distance of 529.63 feet;

(3) North 29°33'29" West, a distance of 525.42 feet;

- (4) North 60°40'29" East, a distance of 577.59 feet;
- (5) North 07°46'10" East, a distance of 1288.62 feet;

(6) South 78°06'33" West, a distance of 1489.09 feet;

(7) North 28°44'58" West, a distance of 198.19 feet to a point of curvature;

(8) by a curve to the right having a radius of 313.83 feet and a central angle of 55°00'41" an arc length of

301.32 feet a chord which bears North 00°06'24" East 289.88 feet to a point;

(9) North 26°47'19" East, a distance of 173.62 feet;

(10) North 66°43'40" West, a distance of 165.74 feet to a point on the bulkhead of the Schuylkill River;

thence along the bulkhead of the Schuylkill River the 29 following courses and distances:

(1) North 43°24'56" East, a distance of 135.15 feet;

(2) North 32°59'59" East, a distance of 197.67 feet;

(3) North 28°46'15" East, a distance of 207.21 feet;

(4) South 67°36'32" East, a distance of 25.00 feet;

(5) North 28°53'49" East, a distance of 525.99 feet;

(6) North 23°14'16" East, a distance of 296.55 feet; (7) North 16°27'07" East, a distance of 155.27 feet; (8) North 09°56'26" East, a distance of 211.86 feet; (9) North 26°32'07" East, a distance of 130.56 feet; (10) North 45°19'27" West, a distance of 43.11 feet; (11) North 23°44'32" East, a distance of 11.78 feet; (12) North 58°39'44" East, a distance of 10.33 feet; (13) North 13°19'01" East, a distance of 20.88 feet; (14) North 21°53'43" East, a distance of 22.65 feet; (15) North 33°53'23" East, a distance of 15.69 feet; (16) North 22°37'41" East, a distance of 36.18 feet; (17) North 12°06'28" East, a distance of 42.35 feet; (18) South 78°45'03" East, a distance of 9.60 feet; (19) North 12°10'53" East, a distance of 13.10 feet; (20) North 84°10'16" West, a distance of 12.72 feet; (21) North 23°48'41" East, a distance of 452.70 feet; (22) North 23°48'41" East, a distance of 453.47 feet; (23) South 72°18'38" East, a distance of 4.28 feet; (24) North 19°03'43" East, a distance of 23.84 feet; (25) North 15°47'28" East, a distance of 46.32 feet; (26) South 80°51'48" East, a distance of 21.53 feet; (27) North 13°26'19" East, a distance of 231.84 feet; (28) North 07°22'43" East, a distance of 111.24 feet; (29) North 03°41'43" West, a distance of 175.93 feet; (30) North 15°46'02" West, a distance of 105.60 feet;

thence North 74°54'45" East, a distance of 126.56 feet; thence continuing along same North 74°54'45" East, a distance of 225.13 feet; thence South 14°27'15" East, a distance of 45.83 feet to a point on the southern side of Passyunk Avenue;

thence along the southern side of Passyunk Avenue North 74°50'12" East, a distance of 1289.66 feet; thence leaving said side of Passyunk Avenue South 15°09'48" East, a distance of 364.36 feet; thence North 74°50'12" East, a distance of 218.00 feet; thence South 15°09'48" East, a distance of 63.00 feet; thence South 89°08'54" East, a distance of 10.00 feet; thence South 25°09'48" East, a distance of 60.00 feet; thence South 63°09'48"

East, a distance of 27.00 feet; thence North 71°05'39" East, a distance of 79.00 feet; thence North 66°10'39" East, a distance of 201.00 feet; thence North 04°50'39" East, a distance of 61.00 feet; thence South 85°09'21" East, a

distance of 82.00 feet; thence North 74°50'39" East, a distance of 253.00 feet; thence South 82°09'21" East, a distance of 224.77 feet to the Point of Beginning.

Containing 360.55 Acres, more or less.

BRT#884097000 - 3144 W. Passyunk Ave

PARCEL B-2 Point Breeze Description. (Parcel B-2)

Beginning at a point on the south side of Passyunk Avenue and on the pierhead and bulkhead of the Schuylkill River; thence along the bulkhead of the Schuylkill River the thirty-three following courses and distances:

(1) North 15°46'02" West, a distance of 155.02 feet;

(2) North 31°09'33" West, a distance of 148.28 feet;

(3) North 39°25'25" West, a distance of 180.29 feet;

(4) North 44°07'32" West, a distance of 80.71 feet;

(5) North 65°32'53" West, a distance of 13.18 feet;

(6) North 49°22'28" West, a distance of 8.41 feet;

(7) North 65°46'02" West, a distance of 30.05 feet;

(8) South 54°50'25" West, a distance of 5.48 feet;

(9) North 40°45'12" West, a distance of 48.68 feet;

(10) North 56°19'58" West, a distance of 156.17 feet; (11) North 57°58'20" West, a distance of 145.68 feet; (12) North 75°17'24" West, a distance of 42.80 feet; (13) North 83°31'11" West, a distance of 86.58 feet; (14) North 83°31'11" West, a distance of 95.61 feet; (15) North 83°00'35" West, a distance of 187.03 feet; (16) South 80°37'47" West, a distance of 809.03 feet; (17) South 80°01'56" West, a distance of 46.99 feet; (18) South 85°22'16" West, a distance of 35.86 feet; (19) South 86°42'51" West, a distance of 95.79 feet; (20) North 05°28'09" West, a distance of 30.00 feet; (21) North 72°05'27" West, a distance of 480.36 feet; (22) North 49°21'34" West, a distance of 277.55 feet; (23) North 44°46'47" West, a distance of 91.93 feet; (24) North 27°49'54" West, a distance of 198.68 feet; (25) North 23°47'26" West, a distance of 139.41 feet; (26) North 27°22'11" West, a distance of 140.79 feet; (27) North 00°58'58" West, a distance of 695.54 feet; (27) North 14°12'09" East, a distance of 375.02 feet; (28) North 06°23'54" West, a distance of 78.53 feet; (29) North18°25'26" East, a distance of 447.84 feet; (30) South 74°33'15" East, a distance of 65.04 feet; (31) North 24°55'08" East, a distance of 22.18 feet; (32) South 81°55'09" East, a distance of 191.39 feet; (33) North 42°08'32" East, a distance of 43.36 feet;

thence leaving bulkhead and along lands of Conrail South 82°20'38" East, a distance of 644.83 feet; thence continuing along lands of Conrail the 11 following courses and distances:

(1) South 16°15'57" East, a distance of 120.19 feet to a point of curvature;

(2) by a curve to right having a radius of 653.39 feet and a central angle of 54°52'25" an arc length of 625.77 feet a chord

which bears South 44°45'52" East 602.12 feet;

(3) South 82°10'05" East, a distance of 379.22 feet;

(4) South 81°54'46" East, a distance of 281.13 feet;

(5) South 82°09'55" East, a distance of 185.06 feet;

(6) South 82°22'37" East, a distance of 375.54 feet;

(7) South 82°19'05" East, a distance of 329.39 feet;

(8) South 81°52'05" East, a distance of 339.43 feet;

(9) South 82°21'18" East, a distance of 639.33 feet;

(10) South 82°07'25" East, a distance of 230.24 feet to a point of curvature;

(11) by a of a curve to the right having a radius of 1028.90 feet and a central angle of 18°15'10" an arc length of 327.78 feet a chord which bears South 73°24'01"East 326.40 feet;

thence South 07°48'50" West, a distance of 86.27 feet to a point in line of lands owned by the City of Philadelphia; thence along lands of Philadelphia the 16 following courses and distances:

(1) by a curve to the left having a radius of 499.91 feet and a central angle of 22°54'36" an arc length of 199.89 feet a chord which bears South 82°53'51" West 198.56 feet;

(2) South 68°52'37" West, a distance of 368.16 feet to a point of curvature;

(3) by a curve to the left having a radius of 759.85 feet and a central angle of 9°50'11" an arc length of 130.45 feet a chord which bears South 74°48'53" West 130.29 feet;

(4) South 79°06'45" West, a distance of 310.68 feet;

(5) South 74°37'16" West, a distance of 96.75 feet;

(6) South 56°20'07" West, a distance of 70.00 feet;

(7) South 64°28'35" West, a distance of 251.25 feet;

(8) South 67°27'07" West, a distance of 302.11 feet;
(9) South 67°27'07" West, a distance of 402.58 feet;
(10) South 67°27'07" West, a distance of 141.14 feet;
(11) South 53°20'14" West, a distance of 50.00 feet;
(12) South 23°28'34" East, a distance of 32.51 feet;
(13) South 23°28'34" East, a distance of 299.99 feet;
(14) South 35°54'01" East, a distance of 737.38 feet;
(15) South 16°59'51" East, a distance of 113.90 feet;
(16) South 44°15'26" East, a distance of 25.66 feet;
thence South 74°54'45" West, a distance of 126.56 feet to the Point of Beginning.

Containing 141.00 Acres, more or less. BRT#884097200 - 3143 W. Passyunk Ave

PARCEL B-3 (Point Breeze Description. (Parcel B-3)

Beginning at a point on the right of way of Moore street; thence along the southern right of way of Moore Street South 76°59'06" East, a distance of 85.84 feet; thence continuing along said right of way South 76°04'48" East, a distance of 329.50 feet to a point on the western right of way line of 35th street; thence along the western right of way line of 35th Street South 13°57'01" West, a distance of 518.75 feet; thence South 82°07'46" East, a distance of 497.03 feet to a point on the western right of way line of 34th Street; thence along the western right of way line of 34th Street South 20°22'25" West, a distance of 139.66 feet to a point on the southern right of way line of Maiden Lane; thence along the southern right of way line of Maiden Lane

South 64°11'02" East, a distance of 1256.82 feet to a point of curvature; thence by a curve to the right entering the western side of 26th Street having a radius of 491.39 feet and a central angle of 18°49'29" an arc length of 161.45 feet and a chord which bears South 55°27'35" East 160.72 feet;

thence along the western side of 26th Street the eight following courses and distances:

- (1) South 43°44'58" West, a distance of 2.95 feet;
- (2) South 40°36'48" East, a distance of 169.81 feet;
- (3) South 37°29'46" East, a distance of 210.70 feet;
- (4) South 37°08'53" East, a distance of 599.67 feet;
- (5)South 37°13'25" East, a distance of 255.57 feet;
- (6) South 45°31'16" West, a distance of 2.49 feet;
- (7) South 34°13'50" East, a distance of 144.39 feet;
- (8) South 33°56'02" East, a distance of 266.03 feet;

thence leaving the western side of 26th Street and going along the northern side of lands of Conrail the 24 following courses and distances:

(1) North 81°59'00" West, a distance of 236.77 feet; (2) North 58°22'13" East, a distance of 33.81 feet; (3) North 74°29'15" West, a distance of 121.44 feet; (4) North 76°18'45" West, a distance of 250.63 feet; (5) North 84°05'02" West, a distance of 285.50 feet; (6) South 47°15'52" West, a distance of 15.18 feet; (7) North 75°52'55" West, a distance of 46.21 feet; (8) North 82°02'14" West, a distance of 525.00 feet; (9) North 02°36'38" East, a distance of 6.00 feet; (10)North 82°03'42" West, a distance of 209.46 feet; (11) North 82°26'26" West, a distance of 197.26 feet; (12) North 82°16'24" West, a distance of 149.97 feet; (13)North 82°06'49" West, a distance of 452.25 feet; (14) South 11°06'33" West, a distance of 15.19 feet; (15) North 81°57'23" West, a distance of 288.33 feet; (16) North 80°02'02" West, a distance of 92.49 feet;

(17)North 83°48'02" West, a distance of 66.93 feet:

(18) North 79°34'03" West, a distance of 240.34 feet to a point of curvature;

(19) by a curve to the right having a radius of 665.76 feet and a central angle of 55°53'57" an arc length of 649.53 feet and a chord which bears North 53°19'49" West 624.07 feet to a point of compound curvature; (20) by a compound curve to the right having a radius of 733.68 feet and a central angle of 44°51'23" an arc length of 574.39 feet and a chord which bears North 00°47'49" East 559.84 feet;

(21) North 21°41'17" East, a distance of 358.44 feet;

(22) North 26°05'47" East, a distance of 92.79 feet; (23) South 82°19'34" East, a distance of 223.64 feet;
(24) North 13°55'44" East, a distance of 990.16 feet to the Point of Beginning.

Containing 106.64 Acres, more or less.

BRT#884097200 - 3143 W. Passyunk Ave

PARCEL B-4 (Point Breeze Description. (Parcel B-4)

Beginning at a point on the northerly side of Moore street with the centerline of the said former 36th Street, stricken from the city plan at 50 feet wide; thence along the centerline of the said former 36th Street North 13°59'19" East, a distance of

240.14 feet to a point on the southerly side of the said former Fish House Lane (at 23.208 feet wide); thence along the said former Fish House Lane the following 5 courses and distances:

(1) North 79°29'59" West, a distance of 30.06 feet;

(2) North 13°59'19" East, a distance of 23.25 feet;

(3) South 79°29'59" East, a distance of 495.93 feet;

(4) South 13°59'19" West, a distance of 23.25 feet;

(5) North 79°29'59" West, a distance of 25.05 feet to a point on the centerline of the said former 35th Street (50 feet wide); thence along the the centerline of said former 35th Street South 13°59'19" West, a distance of 266.97 feet to a point on

the northerly side of Moore Street;

thence along the northerly side of Moore Street North 76°00'41" West, a distance of 440.00 feet to the point of Beginning.

Containing 2.83 Acres, more or less.

PARCEL C: SRTF (street side) Description.

ALL THAT CERTAIN tract or piece of land. SITUATE in the Forty-eighth Ward of the City of Philadelphia, described in accordance with an ALTA/ACSM Land Title Survey made by Ludgate Engineering Corporation dated 5/1/2012, as follows, to wit:

Beginning at a point on the eastern side of Essington Avenue and a corner of lands of Pacific Atlantic Terminal; thence along lands of Pacific Atlantic Terminal South 82°10'16" East, a distance of 367.00 feet; thence continuing along said lands South 77°59'17" East, a distance of 668.27 feet to a point of curvature; thence by a curve to the left having a radius of 1463.35 feet and a central angle of 25°44'18" an arc length of 657.36 feet a chord which bears South 18°58'02" East 651.85 feet; thence South 31°50'11" East a distance of 827.78 feet; thence South 31°50'11" East, a distance of 1456.50 feet; thence along Mingo Creek South 58°16'51" West, a distance of 2698.79 feet; thence North 64°39'14" West, a distance of 673.96 feet to a point on the eastern side of Mingo Avenue; thence along Mingo Avenue North 00°03'26" West, a distance of 1413.86 feet to a point on the eastern side of Essington Avenue; thence along Essington Avenue North 10°51'10" East, a distance of 2507.54 feet to the Point of Beginning.

Containing 171.18 Acres, more or less.

PARCEL D: SRTF (river side) Description.

ALL THAT CERTAIN tract or piece of land. SITUATE in the Forty-eighth Ward of the City of Philadelphia, described in accordance with an ALTA/ACSM Land Title Survey made by Ludgate Engineering Corporation dated 5/1/2012, as follows, to wit:

Beginning at a point a corner of lands of Pacific Atlantic Terminal; thence along lands of Pacific Atlantic Terminal South 89°16'27" East, a distance of 989.92 feet to a point on the west side of the Schuylkill River; thence along said river the 4 following courses and distances: (1) South 03°54'17" East, a distance of 294.15 feet; (2) South 15°35'28" East, a distance of 973.86 feet; (3) South 15°35'28" East, a distance of 973.86 feet; (3) South 15°35'28" East, a distance of 955.16 feet; thence South 54°55'41" West, a distance of 467.65 feet to a point on the east side of lands of Pacific Atlantic Terminal; thence along lands of pacific Atlantic Terminal the three following courses and distances: (1) North 31°50'11" West, a distance of 1423.21 feet; (2) North 31°50'11" West, a distance of 857.35 feet to a point of curvature; (3) by a curve to the right having a radius of 1397.46 feet a central angle of 26°08'53" an arc length of 637.75 feet a chord which bears North 18°45'45" West a distance of 632.23 feet to the Point of Beginning.

Containing 39.90 Acres, more or less.

PARCEL E: West Yard Description.

ALL THAT CERTAIN tract or piece of land. SITUATE in the Forty-eighth Ward of the City of Philadelphia, described in accordance with an ALTA/ACSM Land Title Survey made by Ludgate Engineering Corporation dated 5/1/2012, as follows, to wit:

Beginning at a point on the southern right of way of Passyunk Avenue and a corner of lands of now or late Thy B. Ma; thence along said lands of Ma and along lands of now or late Joseph & Rosanna Mitchell South 69°19'58" East, a distance of 315.10 feet to a point a corner of lands of the now or late Phing Tan and Khanh Buu Huynh; thence along said lands and lands of Passyunk Avenue Realty En. North 82°44'45" East, a distance of 601.48 feet to a point a corner of the now or late lands of Passyunk Avenue Realty En; thence along said lands South 61°00'00" East, a distance of 218.91 feet; thence South 68°14'30" East, a distance of 251.05 feet; thence along lands of Auto Recycling Real Estate North 88°16'32" East, a distance of 288.19 feet; thence continuing along said lands and along lands of S.R.S. Inc. North 35°03'05" East, a distance of 1800.00 feet near the Schuylkill River;

thence in and along the Schuylkill River the 10 following courses and distances:

(1)South 80°39'14" East, a distance of 401.15 feet;

(2) South 42°01'03" East, a distance of 297.66 feet;

(3) South 04°55'59" West, a distance of 350.17 feet;

(4) South 15°52'29" West, a distance of 487.33 feet;

(5) South 23°42'54" West, a distance of 196.89 feet;

(6) South 22°35'18" West, a distance of 384.45 feet;

(7) South 14°15'27" West, a distance of 121.55 feet;

(8) South 15°59'35" West, a distance of 219.74 feet;

(9) South 21°40'33" West, a distance of 445.70 feet;

(10) South 23°20'44" West, a distance of 324.02 feet to a point a corner of lands of Convoy Realty LP;

thence along lands of Convoy North 63°18'58" West, a distance of 1362.47 feet; thence North 07°11'32" East, a distance of 231.25 feet to a point of curvature; thence by a curve to the left having a radius of 5000.00 feet and a central angle of 1°29'17" an arc length of 129.85 feet a chord which bears North 70°46'37" West 129.85 feet;

thence along lands of Point Breeze Terminal LLC the eight following courses and distances:

(1) North 67°11'05" West, a distance of 14.72 feet;

(2) South 83°51'36" West, a distance of 839.02 feet;

- (3)North 60°55'04" East, a distance of 31.00 feet;
- (4) North 25°30'00" East, a distance of 145.00 feet;
- (5) North 00°00'00" East, a distance of 50.83 feet;
- (6) North 00°00'00" East, a distance of 41.00 feet;
- (7) North 85°21'56" West, a distance of 972.06 feet;

(8) North 07°07'07" East, a distance of 171.91 feet to a point on the southern side of Passyunk Avenue;

thence along the southern side of Passyunk Avenue the three following courses and distances:

(1) North 74°48'30" East, a distance of 226.91 feet;

(2) South 15°11'30" East, a distance of 6.00 feet;

(3) North 74°48'30" East, a distance of 349.28 feet to the Point of Beginning.

Containing 80.84 Acres, more or less.

PARCEL F (former premises "PP") ELIMINATED FROM COMMITMENT

PARCEL G (former premises "WW") REPLACED BY PREMISES B-4

PARCEL H – In 2 Parcels/Parcel H-1 and Parcel H-2

ALL THOSE CERTAIN tracts, pieces or parcels of land, situate former 36th Street and Moore Street, 36th Ward, City of Philadelphia, Commonwealth of Pennsylvania, as shown on a plan prepared by Van Demark & Lynch, Inc., Engineers, Planners and Surveyors, Wilmington, Delaware, Drawing No. 39945-F, dated April 23, 2010, entitled "Subdivision Plat, Premises "H", prepared for Sunoco, Inc." and being more particularly described as follows, to wit:

PARCEL "H-1":

BEGINNING at a point, the intersection of the northerly side of Moore Street, shown on the city plan and legally open at 50 feet wide, with the centerline of former 36th Street, stricken from the city plan at 50 feet wide, being the southwesterly corner of Premises 'H-1', Sunoco Propane Terminal (13-S-23/3) on a easterly line for land now or formerly of CSX Transportation, Inc. (13-S-24/4);

THENCE through the said land now or formerly of CSX Transportation, Inc. the seven (7) following described courses and distances:

(Courses 1 through 3 along or near a 6 foot chain link fence)

- 1. North 68° 50' 44" West, 77.400 feet to a point;
- 2. North 18° 57' 36" East, 199.926 feet to a point;
- 3. North 23° 20' 54" East, 201.193 feet to a fence corner;
- North 25° 18' 02" East, 84.179 feet to a point;
- 5. North 27° 45' 33" East, 22.761 feet to a point; and
- 6. South 68° 50' 44" East, 43.650 feet to a point, the northwesterly corner for the herein described Parcel "B" on the westerly line of the said former 36th Street;

(Course 7 along the said westerly side of former 36th Street, being the westerly line for the said Parcel "H-2")

 South 21° 09' 16" West, 245.524 feet to a point on the northerly side of former Fish House Lane, at 23.208 feet wide;

THENCE along the northerly side, westerly terminus and southerly side of the said former Fish House Lane the three (3) following described courses and distances:

- 1. North 72° 20' 02" West, 5.018 feet to a point;
- 2. South 21° 09' 16" West, 23.250 feet to a point; and

3. South 72°20'02" East, 30.064 feet to a point on the said centerline of former 36th Street;

THENCE along the said centerline of former 36th Street, South 21° 09' 16" West, 240.143 feet to the point and place of Beginning.

CONTAINING within said metes and bounds, 33,558 square feet (0.770 acres) of land, being the same, more or less.

PARCEL H-2

BEGINNING at a point, a southeasterly corner for the above described Parcel "H-1", the intersection of the westerly side of former 36th Street, stricken from the city plan at 50 feet wide, with the northerly side of former Fish House Lane, at 23.208 feet wide, being on a southeasterly line for land now or formerly of CSX Transportation, Inc. (13-S-2414), said point being measured the four (4) following courses and distances from the intersection of the northerly side of Moore Street, shown on the city plan and legally open at 50 feet wide, with the centerline of the said former 36th Street;

(Course 1 along the centerline of said former 36th Street)

1. North 21° 09' 16" East, 240.143 feet to a point on the southerly side of the said former Fish House Lane;

(Course 2 through 4 along the said former Fish House Lane)

- 2. North 72° 20' 02" West, 30.064 feet to a point;
- 3. North 21° 09' 16" East, 23.250 feet to a point; and
- 4. South 72° 20' 02" East, 5.018 feet to the Point of Beginning;

THENCE from said point of Beginning, through the said land now or formerly of CSX Transportation, Inc. the two (2) following courses and distances:

(Course 1 along an easterly line for the said Parcel "H-1")

1. North 21° 09' 16" East, 245.524 feet to a point; and

2. South 68° 50' 44" East, 25.000 feet to a point on the centerline for the said formerly 36th Street;

THENCE along the said centerline of the former 36th Street, South 21° 09' 16" West, 244.000 feet to a point on the said northerly side of former Fish House Lane;

THENCE along the said northerly side of former Fish House Lane, North 72° 20' 02" West, 25.046 feet to the point and place of Beginning.

CONTAINING within said metes and bounds, 6,119 square feet (0.140 acres) of land, being the same, more or less.

CONTAINING within said metes and bounds for Parcels "H-1" and "H-2", a total of 39,677 square feet (0.911 acres) of land, being the same, more or less.

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APPENDIX 2

Reductions Available Under Paragraph 99A.b from Shut-Down of Marcus Hook Emissions Units (in tpy)

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Id.	Emissions Unit	NOx	SO ₂	VOC	CO	PM _{2.5}	PM10	GHGs	SO ₃
101	10-4 FCC Unit	92.38	128.38	1.26	364.92	315.36	315.36	891,018.9	56.07
040	10-4 Feed Heater	12.85	0.01	0.74	0.36	2.13	2.13	3,848.2	0.0
705	LSG HDS Heater	5.14	0.01	0.13	0.01	0.29	0.29	16,551.0	0.0
706	LSG Stabilizer Heater	1.08	0.02	0.08	0.31	0.16	0.16	10,868.7	0.0
	TOTAL	111.37	128.42	2.21	365.60	317.94	317.94	922,286.83	56.07