

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In The Matter Of:

Shell Chemical Appalachia, LLC	:	Violations of Air Pollution Control Act,
300 Frankfort Road	:	Storage Tank Act and
Monaca, PA 15061	:	Clean Streams Law

CONSENT ORDER AND AGREEMENT

This Consent Order and Agreement is entered into this 4th day of September, 2026, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection (“Department”) and Shell Chemical Appalachia, LLC.

The Department has found and determined the following:

A. The Department is the agency with the duty and authority to administer and enforce the Air Pollution Control Act, Act of January 8, 1960, P.L. 2119 (1959), *as amended*, 35 P.S. §§ 4001 – 4015 (“Air Pollution Control Act”); the Storage Tank and Spill Prevention Act, Act of July 6, 1989, P.L. 169, *as amended*, 35 P.S. §§ 6021.101-6021.2104 (“Storage Tank Act”); The Clean Streams Law, Act of June 22, 1937, P.L. 1987, *as amended*, 35 P.S. §§ 691.1-691.1001 (“Clean Streams Law”); Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, *as amended*, 71 P.S. § 510-17 (“Administrative Code”); and the rules and regulations (“rules and regulations”) promulgated thereunder.

B. Shell Chemical Appalachia, LLC is a Delaware limited liability company with a mailing address of 300 Frankfort Road, Monaca, PA 15061 (“Shell”).

C. Shell owns and operates a petrochemical facility (“Facility”) in Potter Township, Beaver County pursuant to Plan Approval No. 04-00740A, issued on June 18, 2015.

D. Two amendments of Plan Approval No. 04-00740A were subsequently issued: Plan Approval No. 04-00740B, issued March 1, 2021, and Plan Approval No. 04-00740C, issued

September 12, 2022. Plan Approval No. 04-00740C is the operative plan approval (“Plan Approval”) for purposes of this Consent Order and Agreement.

E. The Facility is a major source of air contaminants for the ozone precursors, Nitrogen Oxides (“NO_x”) and Volatile Organic Compounds (“VOC”), Nitrogen Oxides (“NO₂”), Carbon Monoxide (“CO”), particulate matter (“PM₁₀ and PM_{2.5}”), hazardous air pollutants (HAP), and carbon dioxide equivalents (“CO_{2e}”).

F. Because Pennsylvania is included in the Northeast Ozone Transport Region, the Facility and surrounding area is considered to be in moderate non-attainment status for the ozone National Ambient Air Quality Standards (“NAAQS”).

G. VOC and NO_x are precursors of ground-level ozone, which is a criteria pollutant.

H. Beaver County is in attainment with NAAQS for CO, PM₁₀, PM_{2.5} and Sulfur Dioxide (“SO₂”).

I. Section C, Condition 5 of the Plan Approval states, in relevant part: Emissions from the Facility shall not equal or exceed the following in any consecutive 12-month period:

Air Contaminant Emission Rate (tons)

NO_x: 328.5
CO: 983.7
PM (filterable): 74.3
PM₁₀: 168.9
PM_{2.5}: 163.7
SO_x: 22.4
VOC: 516.2
VOC (ERC) 612
HAP: 32.0
Ammonia: 154
CO_{2e}: 2,304,499

The emission limits set forth in Section C, Condition 5 of the Plan Approval shall be referred to as “Twelve-Month Emission Limitations.”

J. The Plan Approval authorizes temporary operation of the air contamination sources at the Facility and, per 25 Pa. Code § 127.12b(d), Shell has been authorized to operate air

contamination sources at the Facility at all times since commencement of operation of air contamination sources.

K. On May 24, 2023, the Department and Shell entered into a consent order and agreement addressing violations of the Plan Approval, requiring Shell to take specified corrective action, and resolving Shell's civil penalty liability for identified violations occurring up to and including May 24, 2023 and Twelve-Month Emission Limitations violations through December 31, 2023 ("2023 COA").

L. As of the date of this Consent Order and Agreement, Shell has paid all civil penalties required by the 2023 COA¹ and timely completed the following corrective actions specified in the 2023 COA:

1. repair of the Totally Enclosed Ground Flares (TEGF);
2. Waste Water Treatment Plant (WWTP) report;
3. submitted Monthly Emission Reports;
4. updated its emissions inventory;
5. mitigated its emissions of VOC, CO, and HAP to come into compliance with the Plan Approval; and
6. the Commissioning Report.

M. On June 19, 2024, in accordance with a Department letter dated February 22, 2024 and 25 Pa. Code § 127.505(a), Shell submitted an application to the Department for a Title V operating permit ("Title V Application").

EMACT

N. Shell's high pressure flaring system at the Facility consists of two totally enclosed ground flares ("TEGFs") identified as Source IDs C205A & C205B and one elevated flare

¹ In addition, Shell paid monthly NOx emissions per applicable penalty calculation for January and February 2024.

(“Elevated Flare”) identified as Source ID C205C (collectively, the “High Pressure Flaring System”). The Elevated Flare is intended to be used as a backup to the TEGFs, and the TEGFs are intended to be used for most upset events. The minimum smokeless design capacity of the Elevated Flare is 180 TPH. The High Pressure Flaring System has adequate capacity to handle an upset event even if one TEGF is out of service. However, if only one TEGF is in service, the Elevated Flare may be used more frequently and for longer periods.

O. The High Pressure Flaring System is the primary air cleaning device and safety control device for the Facility. Shell has represented that the combined design capacity of all high pressure flares exceeds the maximum amount of gas that could be sent to the flares in any upset.

P. Section D, Source ID 205, Condition 012 of the Plan Approval requires Shell to maintain a minimum net heating value of 500 btu/scf in the vent gas to be combusted at each TEGF.

Q. Pursuant to 40 CFR § 63.1103(e), Shell is required to comply with Maximum Achievable Control Technology applicable to waste streams from ethylene production facilities, 40 CFR Part 63, Subpart YY (“EMACT”).

R. Because the TEGFs are considered “pressure assisted flares” under EMACT, as of July 6, 2023, Shell is required pursuant to 40 CFR § 63.1103 to maintain a minimum net heating value of 800 btu/scf in combustion zone gas for each TEGF and have at least two pilot lights (with one continuously lit) on each of the stages at each TEGF.

S. On March 28, 2024, Shell submitted a Request for Determination of Minor Significance addressing the installation of additional pilots on multiple stages at each TEGF, and on April 4, 2024, the Department acknowledged that the installation did not require a plan approval.

T. Shell will achieve the higher net heating value in the gas to be combusted at each TEGF by adding natural gas and/or recovered tail gas to the vent gas stream as needed.

U. The combustion of gas with a higher minimum net heating value as required by EMACT results in increased emission of air contaminants from the Facility including NO_x, PM₁₀, PM_{2.5}, CO, and CO_{2e}.

V. In February 2024, Shell began operating the TEGFs with the higher net heating value in the gas to achieve compliance with the EMACT.

W. Shell's change in the method of operation of the TEGFs to meet the EMACT results in potential emission increases that constitute a major modification for purposes of Non-Attainment New Source Review ("NNSR") (25 Pa. Code Chapter 127, Subchapter E) and Prevention of Significant Deterioration ("PSD") (25 Pa. Code Chapter 127, Subchapter D).

Wastewater Treatment Plant Upgrades

X. The 2023 COA required Shell to study control options for the wastewater treatment plant at the Facility ("Wastewater Treatment Plant") and to propose permanent controls to the Department.

Y. In 2023 and 2024, the Department approved Requests for Determination of Minor Significance for Shell's installation of temporary control equipment at the Wastewater Treatment Plant to evaluate the effectiveness of the control equipment before choosing permanent controls. Specifically, Shell's Requests for Determination of Minor Significance described the temporary use and evaluation of a WEMCO 84 Depurator induced nitrogen flotation ("DAF") and an Enviro-Cell induced nitrogen flotation unit ("EC-15") to remove VOCs and HAPs from the wastewater and capture them for destruction.

Z. Based on the evaluation of the temporary controls described in Paragraph Y, above, Shell has developed a plan to better control emissions for the Wastewater Treatment Plant using settlement drums, two dissolved nitrogen flotation ("DNF") units, a float/sludge drum, a steam stripper, and other equipment upgrades ("WWTP Plan").

AA. Shell is seeking authorization for the installation and initial operation of the permanent control equipment proposed in the WWTP Plan as part of the amendment to the Plan Approval described in Paragraphs BB through EE, below.

2024 Plan Approval Application

BB. On September 13, 2024, Shell submitted to the Department an application for a plan approval, which has been referenced in public notices as Plan Approval PA-04-00740D, (“2024 Application”) to:

1. authorize the change in the method of operation required to comply with EMACT;
2. reconcile as-built conditions at the Facility with the initial and amended plan approvals;
3. authorize installation of permanent controls and physical change at the Wastewater Treatment Plant;
4. authorize revisions to the methods of calculating emissions; and
5. clarify continuous emission monitor (CEM) codes.

CC. The 2024 Application indicates, among other things, an increase in potential to emit NO_x of 127.23 tons. NO_x is a precursor to ozone and PM_{2.5}.

DD. Air dispersion modeling submitted for the 2024 Application shows that the items included in the 2024 Application will have no significant ambient air impact or will not cause or contribute to exceedances of any NAAQS and will not cause or contribute to unlawful consumption of PSD increment.

EE. The inhalation risk assessment submitted for the 2024 Application shows that the items included in the 2024 Application will not pose an unacceptable risk to the public.

Twelve-Month Emission Limitation Exceedances

FF. By January 2024, Shell achieved compliance with the Twelve-Month Emissions Limitations for CO, HAP, and VOC, and, as of the date of this Consent Order and Agreement, Shell's emissions of CO, HAP, and VOC have remained in compliance.

GG. Shell has not achieved compliance with the Twelve-Month Emission Limitation for NO_x of 328.5 tons and is expected to remain out of compliance until the Twelve-Month Emission Limitation for NO_x is adjusted to account for the higher net heating value in the gas needed to achieve compliance with the EMACT. Shell has proposed the adjustment in the 2024 Application.

Ethane Cracking Furnaces

HH. On the dates set forth below, stack testing on the ethane cracking furnaces at the Facility showed that emissions of PM₁₀ and PM_{2.5} exceeded the limits² set forth in Section E, Condition # 005 of the Plan Approval, as follows:

Source ID	Test Date	Operating Mode	PM₁₀ Limits (lb./hr.)	PM₁₀ Results (lb./hr.)	PM_{2.5} Limits (lb./hr.)	PM_{2.5} Results (lb./hr.)
032	2/8/2023	Normal	3.10	10.2	3.10	7.6
033	1/17/2023	Normal	3.10	12.5	3.10	12.2
034	1/16/2023	Normal	3.10	9.8	3.10	9.4
036	1/18/2023	Normal	3.10	5.2	3.10	4.8

II. Section E, Condition #011 of the Plan Approval required Shell to perform emission testing on each of the seven ethane cracking furnaces for VOC, PM₁₀, PM_{2.5}, Ammonia (NH₃) and n-Hexane initial performance testing within 180 days of start-up.

JJ. Shell failed to perform emission testing or to perform acceptable emission testing for certain pollutants from certain ethane cracking furnaces at the Facility as required by Section E, Condition # 011 of the Plan Approval as set forth below:

² Shell maintains that the original test used an erroneous method and the re-test demonstrated compliance with PM_{2.5} and PM₁₀ limits.

Source ID	Test Due Date	Initial Test Date	Pollutant(s) with Unacceptable or Untimely Initial Test Result
031	2/23/2024	12/22/2022	VOC (THC)
033	2/26/2023	1/17/2023	n-Hexane
034	3/1/2023	1/16/2023	VOC (THC), NH ₃ , n-Hexane
035	2/26/2023	12/21/2022	VOC (THC)
037	2/2/2023	3/23/2023	VOC (THC), PM _{2.5} , NH ₃ , and n-Hexane

KK. Shell subsequently performed emission testing that has demonstrated compliance with the Plan Approval limits for VOC, PM₁₀, PM_{2.5}, NH₃, and n-Hexane (no limit) for Source IDs 031, 033, 034, 035 and 037.

LL. For 2023 through the Second Quarter 2026, continuous emissions monitoring of the ethane cracking furnaces (Source IDs: 031, 032, 033, 034, 035, 036, & 037) showed instances that emissions of NO_x exceeded the limits set forth in Section E, Group G01, Condition #007 of the Plan Approval.

MM. For the Second Quarter 2026, continuous emissions monitoring of ethane cracking furnace #1 (Source ID 031) showed one instance that emissions of CO exceeded the limit set forth in Section E, Group G01, Condition #004 of the Plan Approval.

NN. For 2023, 2025, and the First and Second Quarter 2026, continuous emissions monitoring of ethane cracking furnaces #1, #4, #6, and #7 (Source IDs: 031, 034, 036, & 037) showed instances that emissions of NH₃ exceeded the limit set forth in Section E, Group G01, Condition #006 of the Plan Approval.

OO. On June 9, 2025, visible emission at two ethane cracking furnaces (Source IDs: 032, 033) exceeded the 10% or greater than 3 minutes in an hour limit set forth in Section E, Group G01, Condition # 002 of the Plan Approval.

PP. On June 26, 2025, visible emissions at four ethane cracking furnaces (Source IDs: 033, 034, 036 & 037) exceeded the 30% limit set forth in Section E, Group G01, Condition # 002 of the Plan Approval.

Continuous Vent Thermal Oxidizer

QQ. Stack testing on the continuous vent thermal oxidizer at the Facility (Source ID 204A), performed on May 21, 2024, showed that emissions of total particulate exceeded the emission limits set forth in Section D, Source ID 204, Condition #003 of the Plan Approval.

Spent Caustic Thermal Oxidizer

RR. Stack testing on the spent caustic vent incinerator at the Facility (Source ID C206), performed on May 21, 2024, showed that emissions of oxides of nitrogen and total particulate exceeded the emissions limits set forth in Section D, Source ID 206, Condition #001 of the Plan Approval. A compliant retest was conducted on September 17, 2024.

SS. A malfunction at the spent caustic thermal oxidizer (Source ID C206) occurred on September 29 and 30, 2025, and resulted in spent caustic vent vapors being exhausted to the atmosphere without being captured and routed through a control system to the spent caustic thermal incinerator as required by the Plan Approval.

Multi-point Ground Flare Visible Emissions

TT. Section D, Source ID 204B (Multi-Point Ground Flare), Condition #001, prohibits visible emissions from both the low pressure incinerator and multi-point ground flare at the Facility exceeding 0% opacity except for a total of five minutes during any consecutive two-hour period.

UU. On July 10, 2023, Shell caused visible emissions for a period of greater than 5 minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

VV. On August 3, 2023, Shell caused visible emissions for a period of greater than 5 minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

WW. On September 2-3, 2023, Shell caused visible emissions for a period of greater than five minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval and 25 Pa. Code § 127.25.

XX. On October 11, 2023, Shell caused visible emissions for a period of greater than five minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

YY. On February 21-22, 2024, Shell caused visible emissions for a period of greater than five minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

ZZ. On March 4, 2024, Shell caused visible emissions for a period of greater than five minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

AAA. On September 16, 2024, Shell caused visible emissions for a period of greater than five minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

BBB. On September 18, 2024, Shell caused visible emissions for a period of greater than five minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

CCC. On December 6, 2024, Shell caused visible emissions for a period of greater than five minutes in a two-hour period from the multi-point ground flare at the Facility contrary to Section D, Source ID 204B, Condition #001 of the Plan Approval.

High Pressure Flaring System Visible Emissions

DDD. Section D, Source ID 205, Condition #001 prohibits visible emissions from both the TEGFs and the Elevated Flare that exceed 0% opacity except for a total of five minutes during any consecutive two-hour period.

EEE. On May 24, 2023, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID 205A, within a two-hour period contrary to Section D, Source ID 205A, Condition #001 of the Plan Approval.

FFF. On July 10, 2023, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the Elevated Flare, identified as Source ID 205C, within a two-hour period contrary to Section D, Source ID 205C, Condition #001 of the Plan Approval.

GGG. On December 28, 2023, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID 205A, within a two-hour period contrary to Section D, Source ID 205A, Condition #001 of the Plan Approval.

HHH. On May 8, 2024, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID 205A, within a two-hour period contrary to Section D, Source ID 205A, Condition #001 of the Plan Approval.

III. On June 17, 2024, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID 205B, within a two-hour period contrary to Section D, Source ID 205B, Condition #001 of the Plan Approval.

JJJ. On July 10, 2024, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID C205A, within a two-hour period contrary to Section D, Source ID 205, Condition #001 of the Plan Approval.

KKK. On July 10, 2024, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID C205B, within a two-hour period contrary to Section D, Source ID 205B, Condition #001 of the Plan Approval.

LLL. On November 8, 2024, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID C205A, within a two-hour period contrary to Section D, Source ID 205A, Condition #001 of the Plan Approval.

MMM. On November 8, 2024, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID C205B, within a two-hour period contrary to Section D, Source ID C205B, Condition #001 of the Plan Approval.

NNN. On November 8, 2024, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the Elevated Flare, identified as Source ID C205C, within a two-hour period contrary to Section D, Source ID C205C, Condition #001 of the Plan Approval.

OOO. On March 13, 2025, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID C205A, within a two-hour period contrary to Section D, Source ID 205, Condition #001 of the Plan Approval.

PPP. On March 13, 2025, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID C205B, within a two-hour period contrary to Section D, Source ID 205, Condition #001 of the Plan Approval.

QQQ. On March 28, 2025, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the Elevated Flare, identified as Source ID C205C, within a two-hour period contrary to Section D, Source ID 205, Condition #001 of the Plan Approval.

RRR. On April 25, 2025, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from TEGF #1 and #2, identified as Source IDs 205A and 205B, within a two-hour period contrary to Section D, Source IDs 205 and 205, Condition #001 of the Plan Approval.

SSS. On May 12, 2025, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGF, identified as Source ID C205A, within a two-hour period contrary to Section D, Source ID 205, Condition #001 of the Plan Approval.

TTT. On August 3, 2025, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from TEGF #1 and #2, identified as Source IDs 205A and 205B, within a two-hour period contrary to Section D, Source ID 205A and 205B, Condition #001 of the Plan Approval.

UUU. On August 29, 2025, Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from TEGF #1 and #2, identified as Source IDs 205A and 205B, within a two-hour period contrary to Section D, Source ID 205A and 205B, Condition #001 of the Plan Approval.

VVV. On June 4 and 11, 2026 Shell caused visible emissions with greater than 0% opacity for a period in excess of five minutes from TEGF #1, identified as Source IDs 205A within a two-hour period contrary to Section D, Source ID 205A, Condition #001 of the Plan Approval.

WWW. On August 5, 2024, Shell submitted to the Department a final report documenting the repairs to the TEGFs that occurred in June and July 2024, that all damage to the TEGFs has been repaired, and that the TEGFs are in good working order to combust gas in accordance with manufacturer's guarantees.

XXX. On July 21, 2023, Shell submitted to the Department the Steam Report required by Paragraph 4.b. of the 2023 COA, which was subsequently supplemented by a Report dated February 7, 2024. The Steam Report and Supplement indicated that Shell's "steam system will, during unforeseen upset conditions, deliver an adequate amount of steam in a timely manner to the Elevated Flare to promote good combustion and operate in a condition that complies with the Plan Approval."

YYY. On May 17, 2024, Shell provided a "Steam Supplemental Report – May 2024 Update" which identified previously unidentified problems with the steam system that compromised the steam system's ability to deliver an adequate amount of steam in a timely manner to the Elevated Flare to promote good combustion and operate in a condition that complies with the Plan Approval. On September 17, 2024, Shell advised the Department that it discovered an error in the steam system

modeling. As a result, under some scenarios the steam system is unable to deliver an adequate amount of steam in a timely manner to the Elevated Flare to promote combustion and operate in a condition that complies with the Plan Approval.

ZZZ. In accordance with Paragraph 4.c. of the 2023 COA, the Department and Shell have met and conferred to determine what further corrective actions should be undertaken to address the potential for the Elevated Flare to not operate in a condition that complies with the Plan Approval and those corrective actions are addressed in Paragraph 3, below.

Benzene Waste NESHAP

AAAA. To comply with the Benzene Waste NESHAP, 40 CFR Part 61, Subpart FF (“Subpart FF”), and Section C, Condition 008 of the Plan Approval, Shell was required to comply with the requirements of Subpart FF for facilities which generate a total Benzene Waste of less than 11 tons per year as determined through 40 CFR § 61.355.

BBBB. Before April 18, 2023, Shell was using an incorrect Point of Waste Generation (as defined in 40 CFR § 61.341) to determine the total Benzene Waste generated at the Facility.

CCCC. On or about April 19, 2023, Shell submitted a Revised Initial Report for 40 CFR Part 61 Subpart FF, that reported the total of Benzene Waste generated as 60 tons per year using the correct Point of Waste Generation for Subpart FF. On September 11, 2023, the Department issued Shell a Notice of Violation (“NOV”), for a violation of the amount of total benzene waste from the Facility identified in Section C, Condition #008 of the Plan Approval.

DDDD. Shell also reported in the Revised Initial Report that it would demonstrate compliance with Subpart FF using the Benzene Quantity 6 Mg/yr. option under 40 CFR § 61.342(e).

Combustion Turbines

EEEE. Section E, Group G02, Cogeneration Units, Condition #011 of the Plan Approval required Shell to perform VOC, PM10, PM2.5, Formaldehyde, NH₃, Benzene, and Toluene

emissions testing on each of the three combustion turbines with duct burners (Source IDs 101, 102, and 103) in accordance with 25 Pa. Code Chapter 139 within 180 days of start-up.

FFFF. Shell failed to perform Formaldehyde, Benzene and Toluene emissions testing on each of the three combustion turbines (Source IDs: 101, 102 & 103) with duct burners in accordance with 25 Pa. Code Chapter 139 within 180 days of start-up as required by Section E, Group G02, Cogeneration Units, Condition #011 of the Plan Approval. The Department had granted an extension beyond 180 days and Shell performed tests within the extended time period, but the tests were later deemed unacceptable based on methodology.

GGGG. As of the date of this Consent Order and Agreement, Shell has performed Formaldehyde, Benzene and Toluene emissions testing on each of the three combustion turbines with duct burners in accordance with 25 Pa. Code Chapter 139.

HHHH. For 2022 through the Second Quarter 2026, continuous emissions monitoring of emissions from the combustion turbine/duct burners showed instances that emissions of NO_x exceeded the limit set forth in Section E, Group G02, Cogeneration Units, Condition #001 of the Plan Approval.

IIII. For 2022 through 2025, continuous emissions monitoring of emissions from the combustion turbine/duct burners showed instances that emissions of CO exceeded the limit set forth in Section E, Group G02, Cogeneration Units, Condition #003 of the Plan Approval.

JJJJ. For 2023, 2025, and the First Quarter 2026, continuous emissions monitoring of emissions from the combustion turbine/duct burners showed instances that emissions of NH₃ exceeded the limit set forth in Section E, Group G02, Cogeneration Units, Condition #006 of the Plan Approval.

Aboveground Storage Tanks

KKKK. On July 16, 2024, the Department issued an NOV to Shell for “violation of performance standards for aboveground storage tanks” in violation of 25 Pa. Code § 245.521, which has been “Corrected/Abated.”

LLLL. On November 22, 2025, the Department conducted an inspection of the Facility, specifically on aboveground storage tanks (“ASTs”) T054A, T056A and T057A, and on January 16, 2026, the Department issued an NOV to Shell listing the following violations under Section 1310 of the Storage Tank and Spill Prevention Act, 35 P.S. §§ 6021.101-6021.2104 (“Storage Tank Act”), and the regulations promulgated at 25 Pa. Code Chapter 245:

1. Tank T054A’s shell, coating, bottom extension, roof, nozzles, and flanges failed to comply with the AST system exterior coating requirements in violation of 25 Pa. Code § 245.533;
2. Tank T054A’s seal between the concrete grillage and containment bottoms is in unsatisfactory condition in violation of 25 Pa. Code § 245.542(b);
3. Tank T056A’s coating on the tank roof and nozzles failed to comply with exterior coating requirements in violation of 25 Pa. Code § 245.533; and
4. Tank T057A’s coating on the bottom extension and roof failed to comply with exterior coating requirements in violation of 25 Pa. Code § 245.533.

MMMM. Pursuant to the NOV, the Department has requested that the area of coating failure on Tanks T054A, T056A, and T057A be painted to protect them from corrosion and deterioration, and that the grillage seal on Tank T054A be repaired or replaced, and that documentation be provided to show the containment is in satisfactory condition and that all violations have been corrected.

Effluent Limitations

NNNN. Following the Department's review of the Facility's January 2022 and June 2023 Discharge Monitoring Reports, Shell was issued a NOV on July 26, 2023, for exceedances of the effluent limitations under its National Pollution Discharge Elimination System ("NPDES") Permit No. PA0002208, due to average monthly exceedances of Biochemical Oxygen Demand ("BOD5") in Outfall 004 in November 2022, and both average monthly and daily maximum exceedances of Toluene at Outfalls 004 (November 2022) and 101 (April 2023). The Department has marked this NOV as an "Administrative Close Out."

OOOO. Following the Department's December 19, 2023 inspection of the Facility, and its review of Discharge Monitoring Reports for July 2023 through November 2023, the Department issued Shell an NOV on January 8, 2024, related to exceedances of the effluent limitations under its NPDES Permit No. PA0002208, due to average monthly exceedances of the total suspended solids limits in Outfall 004 in August 2023. The Department has marked this NOV as an "Administrative Close Out."

PPPP. On June 18, 2024, the Department issued Shell a NOV following the Department's review of Discharge Monitoring Reports from December 2023 through May 2024, Shell was issued a NOV related to exceedances of the effluent limitations under the Facility's NPDES Permit No. PA0002208, due to average monthly and daily maximum exceedances of BOD5 and Di-n-Butyl Phthalate in Outfall 004 in April 2024. The Department has marked this NOV as an "Administrative Close Out."

QQQQ. On June 27, 2024, Shell submitted its response to the Department's June 18, 2024 NOV and addressed the violations and Shell's intentions for correction.

Violations

RRRR. Each of Shell's failures to meet the Twelve-Month Emission Limitations for NO_x, as described in Paragraph GG, above, violates Section C, Condition 5 of the Plan Approval and 25 Pa. Code § 127.25.

SSSS. Shell's exceedance of the emissions limitations for emissions of PM₁₀ and PM_{2.5} from the ethane cracking furnaces as described in Paragraph HH, above, violates Section E, Condition # 005 of the Plan Approval and 25 Pa. Code § 127.25

TTTT. Shell's failure to perform emission testing or to perform acceptable emission testing for certain pollutants from its ethane cracking furnaces at the Facility as described in Paragraph JJ, above, violates Section E, Condition # 005 of the Plan Approval and 25 Pa. Code § 127.25.

UUUU. Shell's exceedances of the NO_x emissions limitation from the ethane cracking furnaces as described in Paragraph LL, above, violate Section E, Source G01, Condition #007 of the Plan Approval and 25 Pa. Code § 127.25.

VVVV. Shell's exceedances of the CO emissions limitation from the ethane cracking furnace (Source 31) as described in Paragraph MM, above, violates Section E, Group G01, Condition #004 of the Plan Approval and 25 Pa. Code § 127.25.

WWWW. Shell's exceedances of the NH₃ emissions limitation from the ethane cracking furnaces as described in Paragraph NN, above, violates Section E, Group G01, Condition #006 of the Plan Approval and 25 Pa. Code § 127.25.

XXXX. Shell's exceedances of the visible emissions limitations for from the ethane cracking furnaces as described in Paragraph OO and PP, above, violate Section E, Group G01, Condition # 002 of the Plan Approval and 25 Pa. Code § 127.25.

YYYY. Shell's exceedance of the emissions limitations for emissions of total particulate from the continuous vent thermal oxidizer as described in Paragraph QQ, above, violates Section D, Source ID 204, Condition #003 of the Plan Approval and 25 Pa. Code § 127.25.

ZZZZ. Shell's exceedance of the emissions limitations for emissions of oxides of nitrogen and total particulate from the spent caustic thermal oxidizer as described in Paragraph RR, above, violates Section D, Source ID 206, Condition #001 of the Plan Approval and 25 Pa. Code § 127.25.

AAAAA. Shell's malfunction at the spent caustic thermal oxidizer as described in Paragraph SS, above, violates 25 Pa. Code § 127.25.

BBBBB. Shell's visible emissions for a period of greater than 5 minutes in a two-hour period from the multipoint ground flare as described in Paragraphs TT through CCC, above, violates Section D, Source ID 204, Condition #001 of the Plan Approval and 25 Pa. Code § 127.25.

CCCCC. Shell's emission of visible emissions with greater than 0% opacity for a period in excess of five minutes from the TEGFs and Elevated Flare within a two-hour period as described in Paragraphs DDD through VVV above, violates Condition #001 of Section D, Source ID 205 of the Plan Approval and 25 Pa. Code § 127.25.

DDDDD. Shell's failure to comply with Subpart FF for facilities which generate benzene waste above 10 Mg/yr as described in Paragraphs AAAA through CCCC, above, violates Section C, Condition #008 of the Plan Approval and 40 CFR § 61.355.

EEEE. Shell's failure to perform Formaldehyde, Benzene, and Toluene emissions testing on each of the three combustion turbines with duct burners (Source IDs 101, 102, and 103) in accordance with 25 Pa. Code Chapter 139 within 180 days of start-up as described in Paragraph FFFF, above violates Section E, Group G02, Cogeneration Units, Condition #011 of the Plan Approval.

FFFFF. Shell's exceedance of the emissions limitations for emissions of NO_x from combustion turbine with duct burner #1, combustion turbine with duct burner #2 and combustion turbine with duct burner #3 (Source IDs 101,102, and 103) as described in Paragraph HHHH, above, violate Section E, Group GO2, Cogeneration Units, Condition #001 of the Plan Approval and 25 Pa. Code § 127.25.

GGGGG. Shell's exceedance of the emissions limitations for emissions of CO from combustion turbine with duct burner #1, combustion turbine with duct burner #2 and combustion turbine with duct burner #3 (Source IDs 101,102, and 103) as described in Paragraph IIII, above, violate Section E, Group GO2, Cogeneration Units, Condition #003 of the Plan Approval and 25 Pa. Code § 127.25.

HHHHH. Shell's exceedance of the emissions limitations for emissions of NH₃ from combustion turbine with duct burner #1, combustion turbine with duct burner #2 and combustion turbine with duct burner #3 (Source IDs 101,102, and 103) as described in Paragraph JJJJ, above, violate Section E, Group GO2, Cogeneration Units, Condition #006 of the Plan Approval and 25 Pa. Code § 127.25.

IIIII. Shell's failure to comply with AST performance standards, coating and containment regulations, as described in Paragraphs KKKK through LLLL, above, violate 25 Pa. Code §§ 245.521, 245.533, and 245.542(b) and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.

JJJJJ. By allowing discharges that exceeded applicable effluent limitations under the Facility's NPDES Permit No. PA0002208, as described in Paragraphs NNNN through PPPP, above, Shell violated 25 Pa. Code § 92a.41 and Sections 301 and 307 (Industrial Waste) of The Clean Streams Law, 35 P.S. §§ 691.201 and 691.202.

KKKKK. The violations described in Paragraphs RRRR through HHHHH, above, constitute unlawful conduct under Section 8 of the Air Pollution Control Act, 35 P.S. § 4008; a statutory

nuisance under Section 13 of the Air Pollution Control Act, 35 P.S. § 4013; and subject Shell to civil penalty liability under Section 9.1 of the Air Pollution Control Act, 35 P.S. § 4009.1.

LLLLL. The violations described in Paragraph IIIII, above, constitute unlawful conduct under Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310; a statutory nuisance under Section 1304 of the Storage Tank Act, 35 P.S. § 6021.1304; and subject Shell to civil penalty liability under Section 1307 of the Storage Tank Act, 35 P.S. § 6021.1307.

MMMMM. The violations described in Paragraph JJJJJ, above, constitutes unlawful conduct pursuant to Section 611 of the Clean Streams Law, 35 P.S. § 691.611, a statutory nuisance pursuant to Section 202 of the Clean Streams Law, 35 P.S. § 691.202, and subjects Shell to civil penalty liability pursuant to Section 605 of the Clean Streams Law, 35 P.S. § 691.605.

ORDER

After full and complete negotiation of all matters set forth in this Consent Order and Agreement and upon mutual exchange of covenants contained herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ORDERED by the Department and AGREED to by Shell as follows:

1. **Authority.** This Consent Order and Agreement is an Order of the Department authorized and issued pursuant to Sections 4 and 10 of the Air Pollution Control Act, 35 P.S. §§ 4002 and 4010; and Section 1917-A of the Administrative Code, 71 P.S. § 510-17.

2. **Findings.**

a. Shell agrees that the findings in Paragraph A through MMMMM are true and correct and, in any matter or proceeding involving Shell and the Department, Shell shall not challenge the accuracy or validity of these findings.

b. The parties do not authorize any other persons to use the findings in this Consent Order and Agreement in any matter or proceeding.

3. ***Elevated Flare.*** Within 90 days after the date of this Consent Order and Agreement, Shell shall submit to the Department a plan and schedule for undertaking the corrective actions needed to assure that Shell's steam system will during upset conditions deliver an adequate amount of steam, with adequate pressure in a timely manner, to the High Pressure Elevated Flare so that the Elevated Flare will comply with the visible emission requirements in 40 C.F.R. § 60.18(c)(1), when operating within its "smokeless capacity," and achieve a VOC and HAP destruction efficiency of at least 98%.

4. ***Wastewater Treatment Plant Upgrades.*** Within 90 days after the date of this Consent Order and Agreement, Shell shall submit to the Department a schedule for completing the upgrades at Wastewater Treatment Plant to come into compliance with the Plan Approval, as it may be amended by any plan approval issued in response to the 2024 Application ("WWTP Schedule").

5. ***Emissions Reports.***

a. Beginning on the 22nd day of the month following the date of this Consent Order and Agreement and continuing monthly subject to Paragraph 5.e., Shell shall report emissions from the Facility to the Department on a monthly basis by submitting an emission report to the Department in the same format as it currently appears on the Department's Southwest Regional Office Facility Information Page for the "Shell Petrochemical Complex," which will include monthly emissions previously reported from January 2022 to the present and the current month's emissions ("Emissions Report").

b. For the purpose of determining emissions for the Emissions Report, Shell shall continue to use the same methodology (i.e., emission factors, assumptions, calculations, data, etc.) as Shell has used to submit Emissions Reports to the Department since June 2023, and the emissions from the TEGFs shall be based on a destruction efficiency of 98%/99%.

c. The Emissions Report shall be submitted to the Department on or before the 22nd day of the month following the applicable reporting period (or, if the 22nd day falls on a weekend or holiday, the first business day following the weekend or holiday).

d. Emissions Reports shall be submitted with certification of a Responsible Official, as that term is defined in 25 Pa. Code § 121.1, stating the following “I certify that this data is accurate based on reasonable belief and inquiry.”

e. If the Department issues a plan approval in response to the 2024 Application (“2026 Approval”), emission reporting under this Paragraph 5 shall:

- i. continue on a monthly basis for two full calendar quarters following the issuance of the 2026 Approval;
- ii. beginning in the third calendar quarter after the Department issues the 2026 Approval, the frequency of the emission reporting under this Paragraph 5 shall be reduced to quarterly for at least four consecutive calendar quarters;
- iii. if Shell demonstrates compliance with the Twelve-Month Emission Limitations for all air contaminants under the Plan Approval, as may be amended pursuant to the 2026 Approval, for at least three consecutive months within the six calendar quarters after issuance of the 2026 Approval, emission reporting shall end after submission of the fourth consecutive quarterly emission report; and
- iv. if Shell cannot demonstrate compliance with the Twelve-Month Emission Limitations for all air contaminants under the Plan Approval, as may be amended pursuant to the 2026 Approval, for at least three consecutive months within the six calendar quarters after issuance of the 2026 Approval, quarterly emission reporting shall continue until Shell demonstrates compliance with the Twelve-Month Emission Limitations for all air contaminants under the Plan Approval, as may be amended pursuant to the 2026 Approval, for at least three consecutive months.

6. ***Projects to Benefit Community Environment and Health.***

a. On or before December 31, 2026, Shell shall make a one-time contribution of \$7,500,000 to The Pittsburgh Foundation (“Foundation”) to establish the Beaver County Environment and Community Fund under a Declaration of Gift to be executed by Shell and the

Foundation no later than October 31, 2026. The Declaration of Gift shall establish an endowment of not less than \$6,500,000 as part of the Beaver County Environment and Community Fund, with remaining funds allocated to a grantmaking pool for a first round of funding distributed by December 31, 2028.

b. The Beaver County Environment and Community Fund is intended to be used to fund or implement projects by nonprofit organizations located in Beaver County, or those that partner with a nonprofit organization in Beaver County, to benefit the quality of life in Beaver County.

c. No later than October 31, 2026, Shell and the Department shall meet to review and discuss any revisions to the protocol previously used to evaluate grant applications for The Environmental Mitigation Community Fund established under the 2023 COA, so that it may be used to establish the process and criteria for seeking, evaluating, and supporting projects that benefit the environment, health, natural resources, public safety, small business and vocational training in Beaver County that will be funded by The Beaver County Environment and Community Fund (“Grant Protocol”).

d. Shell’s role in the Beaver County Environment and Community Fund is limited to developing the Grant Protocol with the Department, executing the Declaration of Gift Fund Agreement with the Foundation, and depositing the funds as required by this Consent Order and Agreement. Shell will not participate in evaluation of proposed projects nor recommendations for award of funding.

7. ***Submission of Documents.*** With regard to the Elevated Flare Report required by Paragraph 3, above, and the WWTP Schedule required by Paragraph 4, above, the Department will review the document and will approve or disapprove the document, or portion thereof, in writing. If the Department disapproves the document, or any portion of the document, Shell shall submit a revised document to the Department that addresses the Department’s concerns within a time

specified by the Department. The Department will approve or disapprove the revised document in writing. Upon approval by the Department, the document shall become a part of this Consent Order and Agreement for all purposes and shall be enforceable as such.

8. ***Civil Penalty Settlement.*** Shell consents to the assessment of a civil penalty in the amount of \$7,500,000. Shell shall pay the amount of \$ 7,500,000 in full within 20 business days after signing this Consent Order and Agreement. This payment is in settlement only of the Department's claim for civil penalties for the violations set forth in Paragraphs RRRR through HHHHH. The payment shall be made by corporate check payable to the "Commonwealth of Pennsylvania – Clean Air Fund" and sent to the address identified in Paragraph 14, below, or by electronic funds transfer. Any costs of such electronic funds transfer shall be Shell's responsibility. If the funds are provided by electronic transfer, Shell shall promptly inform the Department via e-mail when the transaction has been completed by electronic funds transfer. Notice shall be provided to the persons identified in Paragraph 14, below, and include the following information in the Notice:

- a. The name, address, phone number of the entity making payment;
- b. The Facility's permit number;
- c. The Reference/Confirmation No. and Advice No. of the transmittal;
- d. The amount (\$) of the transfer;
- e. The date the transfer occurred; and
- f. The sending bank's Federal ID number

9. ***Stipulated Civil Penalties.***

a. In the event Shell fails to comply in a timely manner with any term or provision of this Consent Order and Agreement, Shell shall be in violation of this Consent Order and Agreement and, in addition to other applicable remedies, shall pay a civil penalty of \$1,500 per day for each violation within 30 days of the date of written notice from the Department. If a violation of

this Consent Order and Agreement continues for more than 30 days, Shell shall pay a civil penalty of \$3,000 per day beginning on day 31 and continuing until the violation is resolved.

b. Payment shall be by corporate check made payable to the “Commonwealth of Pennsylvania – Clean Air Fund” and sent to the address identified in Paragraph 14, below, or by electronic funds transfer as specified in Paragraph 8, above.

c. Any payment under this paragraph shall neither waive Shell’s duty to meet its obligations under this Consent Order and Agreement nor preclude the Department from commencing an action to compel Shell’s compliance with the terms and conditions of this Consent Order and Agreement. The payment resolves only Shell’s liability for civil penalties arising from the violations of this Consent Order and Agreement for which the payment is made.

10. ***Additional Remedies.***

a. In the event Shell fails to comply with any provision of this Consent Order and Agreement, the Department may, in addition to the remedies prescribed herein, pursue any remedy available for a violation of an order of the Department, including an action to enforce this Consent Order and Agreement.

b. The remedies provided by this Paragraph and Paragraph 9 (Stipulated Civil Penalties) are cumulative and the exercise of one does not preclude the exercise of any other. The failure of the Department to pursue any remedy shall not be deemed to be a waiver of that remedy. The payment of a stipulated civil penalty, however, shall preclude any further assessment of civil penalties for the violation for which the stipulated penalty is paid.

11. ***Reservation of Rights.*** The Department reserves the right to require additional measures to achieve compliance with applicable law. Shell reserves the right to challenge any action which the Department may take to require those measures.

12. ***Liability of Operator.*** Shell shall be liable for any violations of this Consent Order and Agreement, including those caused by, contributed to, or allowed by its officers, agents,

employees, or contractors. Shell also shall be liable for any violation of this Consent Order and Agreement caused by, contributed to, or allowed by its successors and assigns.

13. ***Transfer of Facility.***

a. The duties and obligations under this Consent Order and Agreement shall not be modified, diminished, terminated or otherwise altered by the transfer of any legal or equitable interest in the Facility or any part thereof.

b. If Shell intends to transfer any legal or equitable interest in the Facility which is affected by this Consent Order and Agreement, Shell shall serve a copy of this Consent Order and Agreement upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the Southwest Regional Office of the Department of such intent.

14. ***Correspondence with Department.*** All correspondence with the Department concerning this Consent Order and Agreement and any documents submitted under this Consent Order and Agreement shall be addressed to:

Mark R. Gorog, P.E., Air Quality Program Manager
Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Phone: (412) 442-4000
mgorog@pa.gov

With a Copy to:

Brian Greenert, Assistant Counsel
Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Phone: (412) 442-4262
Fax: (412) 442-4267
bgreenert@pa.gov

15. ***Correspondence with Shell.*** All correspondence with Shell concerning this Consent Order and Agreement shall be addressed to:

Laura Sabolyk
US Regulatory Advisor, Shell Chemicals
Pennsylvania Chemicals Project
300 Frankfort Road
Monaca, Pennsylvania 15061

With a copy to:

Erin Peña
Legal Counsel
Shell USA, Inc.
Legal Counsel – Sustainability, ESG, Safety & Environment
150 N. Dairy Ashford
Houston, Texas 77079

Shell shall notify the Department whenever there is a change in the contact person's name, title, or address. Service of any notice or any legal process for any purpose under this Consent Order and Agreement, including its enforcement, may be made by mailing a copy by First-Class Mail to the above address.

16. ***Force Majeure.***

a. In the event that Shell is prevented from complying in a timely manner with any time limit imposed in this Consent Order and Agreement solely because of a strike, fire, flood, act of God, or other circumstance beyond Shell's control and which Shell, by the exercise of all reasonable diligence, is unable to prevent, then Shell may petition the Department for an extension of time. An increase in the cost of performing the obligations set forth in this Consent Order and Agreement shall not constitute circumstances beyond Shell's control. Shell's economic inability to comply with any of the obligations of this Consent Order and Agreement shall not be grounds for any extension of time.

b. Shell shall be entitled only to the benefits of this paragraph if it notifies the Department within five (5) working days by telephone and within ten (10) working days in writing

of the date it becomes aware, or reasonably should have become aware, of the event impeding performance. The written submission shall include all necessary documentation, as well as an affidavit from an authorized individual specifying the reasons for the delay, the expected duration of the delay, and the efforts which have been made and are being made by Shell to mitigate the effects of the event and to minimize the length of the delay. The initial written submission may be supplemented within ten (10) working days of its submission. Shell's failure to comply with the requirements of this paragraph specifically and in a timely fashion shall render this paragraph null and of no effect as to the particular incident involved.

c. The Department will decide whether to grant all or part of the extension requested on the basis of all documentation submitted by Shell and other information available to the Department. In any subsequent litigation, Shell shall have the burden of proving that the Department's refusal to grant the requested extension was an abuse of discretion based upon the information then available to it.

17. ***Severability.*** The paragraphs of this Consent Order and Agreement shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.

18. ***Entire Agreement.*** This Consent Order and Agreement shall constitute the entire integrated agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or extent of any provisions herein in any litigation or any other proceeding.

19. ***Attorney Fees.*** The parties shall bear their respective attorney fees, expenses, and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this Consent Order and Agreement.

20. ***Modifications.*** No changes, additions, modifications, or amendments of this Consent Order and Agreement shall be effective unless they are set out in writing and signed by the parties hereto.

21. ***Titles.*** A title used at the beginning of any paragraph of this Consent Order and Agreement may be used to aid in the construction of that paragraph but shall not be treated as controlling.

22. ***Decisions Under Consent Order.*** Shell waives its rights to appeal to the Environmental Hearing Board any decision that the Department makes under the provisions of this Consent Order and Agreement, including a notice that stipulated civil penalties are due, which rights may be available under Section 4 of the Environmental Hearing Board Act, the Act of July 13, 1988, P.L. 530, No. 1988-94, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa. C.S. § 103(a) and Chapters 5A and 7A; or any other provision of law. The Department agrees that any objection that Shell may have to any such decision may be raised as a defense in any Court where the Department enforces this Consent Order and Agreement.

23. ***Termination.*** The obligations but not the findings of this Consent Order and Agreement shall terminate when: (1) Shell has completed the obligations set forth in Paragraphs 3 through 6 of this Consent Order and Agreement; (2) Shell has demonstrated compliance with the Twelve-Month Emission Limitations for all air contaminants under the Plan Approval, as may be amended pursuant to the 2024 Application, for at least three consecutive months; and (3) Shell has paid any outstanding civil penalties or stipulated penalties; and Shell has fully deposited or provided to the Department or appropriate receiver the funds contemplated by Paragraph 6.a, above; or such earlier date if the Department determines in writing that termination is in the best interests of human health or the environment.

24. ***Execution of Agreement.*** This Consent Order and Agreement may be signed in counterparts, including counterparts transmitted by portable document format (.pdf), each of which

shall be deemed to be an original and all of which together shall constitute one and the same instrument.

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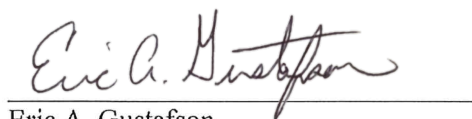
IN WITNESS WHEREOF, the parties hereto have caused this Consent Order and Agreement to be executed by their duly authorized representatives. The undersigned representatives of Shell certify under penalty of law, as provided by 18 Pa. C.S. § 4904, that they are authorized to execute this Consent Order and Agreement on behalf of Shell; that Shell consents to the entry of this Consent Order and Agreement as a final ORDER of the Department; and that Shell hereby knowingly waives its right to appeal this Consent Order and Agreement and to challenge its content or validity, which rights may be available under Section 4 of the Environmental Hearing Board Act, Act of July 13, 1988, P.L. 530, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa. C.S. § 103(a) and Chapters 5A and 7A; or any other provisions of law. (Signature by Shell's attorney certifies only that the agreement has been signed after consulting with counsel.)

FOR SHELL CHEMICAL APPALACHIA,
LLC:



Nathan Levin
Operations Manager
Shell Polymers Monaca

FOR THE COMMONWEALTH OF
PENNSYLVANIA, DEPARTMENT OF
ENVIRONMENTAL PROTECTION:



Eric A. Gustafson
Regional Director
Southwest Region



Erin Grubbs Pena
Legal Counsel, Shell USA, Inc.



Michael J. Heilman
Litigation Coordinator
Office of Chief Counsel