STATE OF TENNESSEE

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

IN THE MATTER OF:	)	**DIVISION OF REMEDIATION**
	)	
COLONIAL PIPELINE COMPANY, TENNESSEE DEPARTMENT OF TRANSPORTATION, AECOM TECHNICAL SERVICES, INC. AND METROPOLITAN NASHVILLE AIRPORT AUTHORITY	)	**VOLUNTARY CLEANUP, OVERSIGHT AND ASSISTANCE PROGRAM**
Re: Site at Nashville International Airport, 1 Terminal Drive, east of Donelson Pike near the northern terminus of Runway 20L/2R Davidson County, Tennessee	)	**SITE NUMBER 19-746**

BROWNFIELD CONSENT ORDER

This Brownfield Consent Order (hereinafter referred to as this "Order"(addresses the following site (the "Site"): areas impacted by the release of petroleum product (the "release") from a refined petroleum products transport pipeline strike on April 9, 2019, near the northern terminus of Runway 20R/2L at Nashville International Airport, including all impacts from the presence or migration of contamination before or after the date of this Order, and any additional areas investigated by the Consenting Parties (as defined herein) that may have been, or may be, impacted by such contamination. The Site has been assigned site number 19-746.

I.INTRODUCTION

This Order is made and entered into as of the last date of execution shown herein below by and between the following parties: (1) the Tennessee Department of Environment and Conservation ("TDEC" or the "Department"); (2) Colonial Pipeline Company, a corporation organized under the laws of the states of Delaware and Virginia ("Colonial Pipeline"); (3) the Tennessee Department of Transportation ("TDOT"), a Tennessee governmental entity; (4) AECOM Technical Services, Inc. ("AECOM"), a corporation organized under the laws of the state of California; and (5) Metropolitan Nashville Airport Authority ("MNAA"), a Tennessee

governmental entity, (Colonial Pipeline, TDOT, AECOM and MNAA are hereinafter referred to collectively as the "Consenting Parties" and individually as a "Consenting Party"), for the purpose of addressing the Site, which has the real or perceived threat of the presence of hazardous substances, solid waste, or any other pollutant (including refined petroleum products), at or on the Site. The administrative record for the Site addressed in this Order is maintained by the Department's Division of Remediation (the "Division"). The Site has been assigned site number 19-746 and is known as the Colonial Pipeline CPC-L19 Site.

David W. Salyers, P.E., is the duly appointed Commissioner of the Department (the "Commissioner"(. James S. Sanders, Director of the Department's Division of Remediation (the "Director"), has been delegated the authority to enter into this Order.

Pursuant to Tennessee Code Annotated § 68-212-224, the Commissioner is authorized to enter into a Consent Order with a party willing and able to conduct an investigation and/or remediation of a hazardous substance site or Brownfield Project.

The Department and each Consenting Party agrees to undertake all actions required of it by this Order. The purpose of this Order is to set forth a scope and schedule of activities at the Site and respond to the actual, threatened, or perceived release of hazardous substances, solid wastes or other pollutants at the Site. In addition, this Order is intended to settle and resolve the potential liabilities of the Consenting Parties for the real or perceived threat of the presence of hazardous substances, solid waste, or any other pollutant at the Site.

II.REQUIREMENTS

A. SITE LOCATION

The Site includes a portion of the Nashville International Airport property located at 1 Terminal Drive, east of Donelson Pike near the northern terminus of Runway 20L/2R. A figure prepared by MNAAs environmental consultant showing its current understanding of the area of the the Site, and a legal description of that area, is attached as Exhibit A, which is incorporated herein by

reference; provided that the Site is the area defined in the first paragraph of this Order which may now or hereafter be greater than the area depicted and described in Exhibit A.

B. ELIGIBILITY

As required by Tennessee Code Annotated § 68-212-224(a)(4), as of the Effective Date, as specified in the last paragraph of this Order, the Department has determined that the Site is not listed or been proposed for listing on the federal National Priorities List by the United States Environmental Protection Agency ("EPA").

The Site was accepted into the Voluntary Cleanup Oversight and Assistance Program upon application of Colonial Pipeline, on April 7, 2020. Colonial, TDOT, AECOM and MNAA join in this Order for the purposes of obtaining Department oversight of response activities and allocation of liability among the Consenting Parties. As required by Tennessee Code Annotated § 68-212-224(a)(2), a summary description of all known existing environmental investigations, studies, reports, or documents concerning the Site's environmental condition has been submitted to the Department by the Consenting Parties (a copy of the Summary is attached hereto as Exhibit B).

C. FINANCIAL REQUIREMENTS

Tennessee Code Annotated § 68-212-224 requires consideration of a fee to enroll in the Voluntary Cleanup Oversight and Assistance Program. The Commissioner has set the following schedule of fees that may apply to all sites working in cooperation with the Department to recover the expense of oversight. These fees are in place of hourly time charges and normal travel costs during the first 150 hours of oversight for the project.

Program Entry	$ 750
Site Characterization	$ 2,000
Remediation	$ 2,500
Risk Assessment	$ 2,500
Vapor Intrusion Assessment	$ 2,000

Beneficial Use Determination	$ 2,500
Voluntary Agreement/Consent Order	$ 3,000
Land Use Restrictions	$ 500

In addition to the fees identified previously, an annual longevity fee of $3,000 will be charged to MNAA on the anniversary of the date the Site was accepted into the Voluntary Program until a letter requiring no further action has been issued to MNAA or this Order has been terminated. MNAA shall timely pay each fee referenced in this Section C. For the purpose of this Order, timely payment means the Department receiving payment from MNAA within 60 days of the first billing of a financial requirement or according to a payment plan agreed in writing between MNAA and the Department.

Notwithstanding the foregoing, any and all cost recovery assessments arising from actions to comply with a recorded Notice of Land Use Restrictions imposed pursuant to and recorded on the Site under the terms of this Order, shall be due from and payable only from the particular Consenting Party or Successor Party submitting the report to be reviewed and/or requesting the related oversight action by TDEC that gives rise to the associated fees; provided that this paragraph does not affect any agreement among any Consenting Parties regarding reimbursement of any such costs.

D. IDENTIFICATION AND DOCUMENTATION OF MATTERS ADDRESSED

Real or perceived hazardous substances, solid wastes or other pollutants are determined to be present on this Site to an extent that may or may not have yet been fully characterized. Pursuant to Tennessee Code Annotated § 68-212-224(a)(2) the Consenting Parties have submitted to the Commissioner a summary description of all known existing environmental investigations, studies, reports or documents concerning the site's environmental condition. Based on the information submitted to the Department by or on behalf of the Consenting Partes, and the Department's own review of this information, the Department and the Consenting Parties agree that the environmental conditions identified in the reports referred to below and any reports generated pursuant to this Order, or in the Summary at Exhibit B, including the environmental conditions described below

are to be addressed under this Order (collectively referred to as the "*Matters Addressed in this Order*"(:

Initial response and recovery efforts

On April 9, 2019, an underground refined petroleum products transport pipeline containing gasoline, owned by Colonial Pipeline and located on MNAA property, was struck, punctured, and damaged by TDOT while TDOT was investigating conditions in preparation for a roadway improvement project in the area. The release occurred in an undeveloped, pavement and grass-covered area at an elevation of approximately 540 feet above mean sea level (amsl). McCrory Creek, which is part of the Site, is located approximately 1,000 feet east and downgradient from the release area at an elevation of approximately 460 feet amsl. Liquid petroleum hydrocarbons ("LPH") traveled via surface flow approximately 300 feet to the northeast to a low spot near the top of the bank of McCrory Creek. Unspecified quantities of LPH migrated into the surface soil at and around the release area, some of which resurfaced at McCrory Creek.

Colonial Pipeline and MNAA mobilized response teams to the Site immediately after the line strike. Based on the sediment, soil, surface water, and groundwater sampling, Colonial Pipeline initially determined that benzene, toluene, ethylbenzene, and xylene ("BTEX") and naphthalene are the main constituents of concern ("COCs") for the Site.

The media impacted are soils, groundwater and surface water. Review of sediment and subsurface soil sample results indicated COC concentrations were less than current applicable screening criteria, except ethylbenzene, which was detected at a concentration greater than screening criteria in only one boring (B-23 at 5.0 to 7.5 feet below ground surface (bgs)) located near the source area. Review of groundwater analytical results indicated BTEX and naphthalene concentrations greater than current applicable screening criteria near McCrory Creek. LPH from the release has impacted McCrory Creek. The volume of these LPH discharges has not been quantified.

Recovery actions by Colonial Pipeline included extraction/recovery of LPH from groundwater and McCrory Creek; excavation of impacted surficial soils, erosion and sediment control measures; installation of interceptor trenches between the release location and McCrory Creek to enhance LPH recovery; LPH recovery from identified seeps; construction and ongoing maintenance of a temporary containment system (the "Temporary Containment System") pursuant to a Temporary Containment System work plan dated June 9, 2020 (the "Temporary Containment Work Plan") approved by TDEC; installation and maintenance of sorbent booms in McCrory Creek; and LPH recovery from the Temporary Containment System and areas within the booms in, and wells near, McCrory Creek. These measures and natural biodegradation of petroleum constituents have resulted in reduced concentrations of BTEX in groundwater and surface water since initial sampling began in April 2019.

Summary of all Colonial soil and groundwater sampling data and observations

Specifically, analyses of soil samples from the Site taken on behalf of Colonial in May through July of 2019 after the line strike and reported in the April 1, 2020 Release Response Report prepared by Wood Environment and Infrastructure Solutions, Inc. ("Wood") showed maximum concentrations of the COCs and methyl tert-butyl ether ("MtBE") to be:

- Benzene – 4.37 mg/kg (B-19 at 2.5'-5.0' bgs)
- Toluene – 85.5 mg/kg (B-23 at 5.0'-7.5' bgs)
- Ethylbenzene – 34.4 mg/kg (B-23 at 5.0'-7.5' bgs)
- Total Xylenes – 186 mg/kg (B-23 at 5.0'-7.5' bgs)
- MtBE – 0.00119 mg/kg (B-19 at 8'-9'bgs)
- Napthalene – 6.22 mg/kg (B-23 at 5.0'-7.5' bgs)

Stockpiled soils eventually removed from the Site by Colonial's contractors and consultants contained lead (Pb) at a maximum concentration of 18.7 mg/kg, and total petroleum hydrocarbons (TPH) and extractable petroleum hydrocarbons ("EPH") at maximum concentrations of 0.265 mg/kg and 866 mg/kg, respectively, as reported in the April 1, 2020 Release Response Report prepared by Wood.

Analyses of Colonial's samples of soil remaining in place at the Site after soil removal, collected in March of 2020 in the areas of the former soil stockpiles and in August 2021, as included in the reports and information provided to the Department, showed maximum concentrations of the COCs and other constituents to be:

- Benzene – 0.0535 mg/kg (WSB-05 at 6'-8' bgs)
- Toluene – 0.977 mg/kg (surface sample from stockpile area, J5 qualifier)
- Ethylbenzene – 1.05 mg/kg (surface sample from stockpile area, J5 qualifier)
- Total Xylenes – 7.28 mg/kg (surface sample from stockpile area, J5 qualifier)
- MtBE – below detection limit
- Napthalene – 1.90 mg/kg (surface sample from stockpile area, J5 qualifier)
- Benzo(a)pyrene – 0.0575 mg/kg (WSB-11 at 0'-1' bgs)
- Benzo(b)flouranthene – 0.0509 mg/kg (WSB-11 at 0'-1' bgs)
- Benzo(g,h,i)perylene – 0.1020 mg/kg (WSB-11 at 0'-1' bgs)
- Chrysene – 0.00685 mg/kg (WSB-07 at 0'-2' bgs)
- Dibenz(a,h)anthracene – 0.0366 mg/kg (WSB-11 at 0'-1' bgs)
- Flouranthene – 0.0112 mg/kg (WSB-07 at 0'-2' bgs)
- Indeno(1,2,3-cd)pyrene – 0.0521 mg/kg (WSB-11 at 0'-1' bgs)
- Pyrene – 0.0322 mg/kg (WSB-11 at 0'-1' bgs)
- TPH-GRO – 22.9 mg/kg (WSB-09 at 0'-2' bgs)
- TPH DRO – 74.9 mg/kg (WSB-07 at 5'-9' bgs)

With respect to groundwater, the monitoring wells installed at the Site on behalf of Colonial contain LPH and have exhibited a petroleum odor. Analyses of samples from these wells taken on behalf of Colonial in the spring of 2019, and reported in the April 1, 2020 Release Response Report prepared by Wood, showed maximum concentrations of the COCs to be:

- Benzene – 7.45 mg/L (MW-3)

- Toluene – 36.2 mg/L (MW-3)
- Ethylbenzene – 3.2 mg/L (MW-3)
- Total Xylenes – 17.6 mg/L (MW-3)
- Napthalene – 1.52 mg/L (MW-1)

Summary of all MNAA site characterization activities, soil, groundwater and surface water sampling data and observations

Based on these findings, MNAA decided to undertake additional site characterization to further delineate the hydrocarbon impacts associated with the release. Soil, groundwater, and surface water samples were analyzed for the potential constituents of concern that were identified following the release. A summary of all analytical results, as documented in Site Characterization Report and Supplemental Site Characterization Report by Ramboll US Consulting, Inc. ("Ramboll") dated November 2021, is as follows:

Soil

- Clay overburden above the limestone bedrock was impacted immediately downgradient of the release along the surface flow path (B-102A), where total xylenes were identified at concentrations in excess of the TDEC Initial Screening Levels (ISLs).

Groundwater (Temporary Monitoring Wells)

- One perched temporary monitoring well immediately down-gradient of the release location (B-102A/TW-102A) exceeded the groundwater TDEC ISL for BTEX and naphthalene. Further down-gradient of the release surface flow path, one perched temporary monitoring well (TW-112) exceeded the groundwater TDEC ISL [5 micrograms per liter (µg/L)] for benzene.
- In the upper bedrock (Carters Limestone), a water-bearing void was encountered at TW-113 with a benzene exceedance.
- In the lower bedrock (Lebanon Limestone), benzene exceeded the TDEC ISL (5 µg/L) at four locations (TW-102B, TW-106, TW-109 and TW-120A). The location near the release location (TW-102B) had a higher benzene concentration (18.7 µg/L) compared to down-gradient locations that ranged from (6.1 µg/L to 8.2 µg/L).

Groundwater (Monitoring Wells)

- The primary constituents that exceeded their respective TDEC ISLs were benzene and naphthalene, while toluene and ethylbenzene exceeded their respective TDEC ISLs once at monitoring well location (MW-2).
- Contaminant concentration decay plots were generated for monitoring well data since the first sampling event in May 2019 (MW-1 thru MW-9). All contaminants showed decreasing concentration trends over the two-year monitoring period. Benzene, the primary constituent on concern, decreased by 89–99%, depending on the monitoring well location.

Surface Water

- Estimated detections of benzene were observed in the surface water at multiple locations collected since the release; however, all results were below their respective

United States Environmental Protection Agency ("USEPA") maximum contaminant levels (MCLs) and USEPA Region 4 ecological screening values ("ESVs").

Fate and Transport

- Soil impacts are limited to the clay overburden immediately down-gradient of the release surface flow path (B-102A), indicating that the released gasoline migrated rather rapidly vertically through the thin clay layer (approximately 5 feet thick at B-102A) and entered the underlying bedrock through the prevalent horizontal and vertical fractures.
- Within 47 hours of the release, a petroleum sheen was observed in the western stream bank of McCrory Creek located 925 feet east of the release location. Gasoline migrated to McCrory Creek via a combination of overland and subsurface flow. Gasoline flowed overland 600 feet downhill from the release location prior to being contained. Gasoline also flowed in the subsurface somewhere between 325 to 925 feet to McCrory Creek. The gasoline subsurface migration rate was somewhere on the order of 10 to 20 feet per hour. Geophysical and rock core data document the presence of karst secondary porosity features that facilitate the rapid subsurface migration rates described above.
- In the upland source area portion of the Site, photoionization detector ("PID") measurements typically increased with depth, with the highest measurements associated with hydrocarbon-stained fractures and bedding planes at depth. Generally, the upper 20 feet of bedrock was lightly impacted. No Light Non-aqueous Phase Liquids ("LNAPL") was observed in any soil boring, temporary monitoring well, or permanent monitoring well. Significant natural source area depletion of petroleum constituents has occurred since the release.
- Contaminant concentration decay plots generated for existing monitoring wells (MW-1 thru MW-9) since the release indicate that benzene, the primary constituent on concern, have decreased by one to two orders of magnitude (89 –99%).
- Dissolved oxygen (DO) levels of zero and negative oxidation-reduction potential (ORP) values in groundwater as measured at the eight monitoring wells located immediately west of McCrory Creek discharge zone indicate active biodegradation of petroleum constituents continues to occur.

Summary of all Colonial surface water and sediment sampling data and observations

Surface Water: In connection with the Temporary Containment Work Plan, Colonial's consultants have observed and performed LPH recovery from the Temporary Containment System and areas within the booms in McCrory Creek. Colonial's consultants continue regularly to observe and recover sheens from the Temporary Containment System adjacent to McCrory Creek as recently as February 2022, as included in the reports and information provided to the Department. LPH has historically impacted and may continue to threaten McCrory Creek, specifically by the continued appearance of a sheen on the surface of water within the Temporary Containment System and at times within the boomed area of McCrory Creek.

Sampling of McCrory Creek by Colonial's consultants shows BTEX and TPH-GRO to be present. The maximum concentrations of these in McCrory Creek since the line strike have been immediately downgradient of the release area, at location SW-10 in mid-April 2019 as reported in the April 1, 2020 Release Response Report prepared by Wood, and have been:

- Benzene – 1,690 ug/L
- Toluene – 5,070 ug/L
- Ethylbenzene – 625 ug/L
- m,p-Xylene – 2,540 ug/L
- o-Xylene – 1,130 ug/L
- TPH-GRO – 25,600 ug/L

Concentrations of BTEX and TPH-GRO in McCrory Creek have decreased over time, and the maximum concentrations in samples collected by Colonial's consultants in 2021, as included in the reports and information provided to the Department, have been:

- Benzene – 20.6 ug/L
- Toluene – 78.4 ug/L
- Ethylbenzene – 82.7 ug/L
- m,p-Xylene – 326 ug/L
- o-Xylene – 126 ug/L
- TPH-GRO – 4,200 ug/L

Sediment: Sediment from McCrory Creek was also sampled the day after the line strike. The maximum concentrations in sediment samples from McCrory Creek collected by Colonial's consultants at that time, as reported in the April 1, 2020 Release Response Report prepared by Wood, were:

- Benzene – 2.6 ug/kg (SD-3)
- Toluene – 5.45 ug/kg (SD-3)
- Ethylbenzene – 1.09 ug/kg (SD-4)
- m,p-Xylene – 4.87 ug/kg (SD-4)
- o-Xylene – 1.85 ug/kg (SD-4)
- TPH-GRO – 189 ug/kg (SD-4)

MNAA, as owner of a portion of the Site, plans for the Site to remain in use as airport property. TDOT plans to reconfigure and maintain certain public roadways on and adjoining portions of the Site. Colonial Pipeline plans to continue utilizing designated easements through portions of the Site for its Line 19 refined petroleum products transport pipeline until a portion of Line 19, which includes that section, is relocated to the east of McCrory Creek. All uses of the MNAA property are expected to be commercial and industrial. Pursuant to this Order, Consenting Parties are not being required to fully remediate the pre-existing environmental conditions noted above, but each is required to take certain actions specified in this Order to ensure that the identified environmental impacts and conditions do not pose a threat to human health or the environment during and after completion of the response actvities.

Notwithstanding the fact that the *Matters Addressed in this Order* do not constitue hazardous substances under applicable law, to the extent consistent with requirements applicable to releases of and contamination from LPH, the Consenting Parties agree that criteria required in Tennessee Code Annotated § 68-212-206(d) shall be used in determining containment and cleanup actions, including monitoring and maintenance options to be followed under this Order.

E. AGREED LIABILITY RELIEF

To the extent the activities of one or more of the Consenting Parties resulted in the release of hazardous substances, and/or one or more of the Consenting parties is an owner or operator of an inactive hazardous substance site, the Consenting Parties may occupy the status of a "liable party" pursuant to the definition of that term contained in Tennessee Code Annotated § 68-212-202(4). The Commissioner is authorized by Tennessee Code Annotated § 68-212-224 to determine an apportionment of liability pursuant to factors in Tennessee Code Annotated § 68-212-207 as well as other equitable factors set forth in an agreement or consent order. Further, Tennessee Code Annotated § 68-212-224(a)(5) provides that the Commissioner is authorized to limit the liability of a participant in a voluntary agreement or consent order entered into pursuant to Tennessee Code Annotated § 68-212-224. Such voluntary agreement or consent order may limit the liability of such participant to the obligations set forth therein and exempt the participant from any further liability under any statute administered by the Department for investigation, remediation, monitoring, and/or maintenance of contamination identified and addressed in the voluntary agreement or consent order. The Commissioner may extend this liability protection to successors in interest or in title to the participant, contractors conducting response actions at the Site, developers, future owners, tenants, and lenders, fiduciaries, or insurers (collectively "Successor Parties"(. The Commissioner agrees that each Consenting Party's implementation of the actions required of it as agreed upon in Section G will constitute satisfaction of the apportioned liability of that Consenting Party under all environmental statutes administered by the Department for the *Matters Addressed in this Order*.

Each Consenting Party and any of the Successor Parties, however, remain potentially responsible for any release of hazardous substances or other pollutants that they cause, or that occurs at the

Site after the Effective Date while it owns or operates the Site or for environmental conditions other than *Matters Addressed in this Order*.

In accordance with the above-referenced authority, the Department agrees that other than with respect to the obligations set forth in this Order, including without limitation the implementation of the actions agreed upon in Section G to the extent applicable to each Consenting Party and Successor Parties, the Consenting Parties and Successor Parties shall bear no liability to the State of Tennessee under any statute administered by the Department for investigation, remediation, monitoring, treatment, and/or maintenance of environmental conditions identified in and addressed in Section D of this Order; provided, however, that to the extent that any Consenting Party or Successor Parties has or maintains an interest in the Site, or possesses and/or controls all or a portion of the Site, its liability protections herein are contingent upon its continued adherence and enforcement of any land use restrictions imposed pursuant to or as a result of this Order. The failure of any Consenting Party to implement the actions agreed upon in Section G does not affect the liability of other Consenting Parties. Nothing in this Order shall be construed as limiting the liability or potential liability of any Consenting Party for environmental conditions occurring after the Effective Date or for environmental conditions other than *Matters Addressed in this Order*. This liability protection and all other benefits conferred by this Order are extended to all future "Successor Parties" conditioned upon performance of the obligations contained in this Order and compliance with the Land Use Restrictions (hereinafter defined); provided, that such liability protection to other persons does not apply to the extent that such liability arose prior to the Effective Date. For the avoidance of doubt, a breach of this Order by a successor-in-interest or a successor-in-title will not alter the liability protection provided to a predecessor-in-interest or in-title.

In addition, the Commissioner has determined that implementation of the agreed actions required of a Consenting Party in Section G adequately and fully resolves all potential liabity of that Consenting Party under all statutes administered by the Department for civil penalties or natural resource damages. The failure of any Consenting Party to implement the actions agreed upon in Section G does not affect the liability of other Consenting Parties under this Order.

F. ADMINISTRATIVE SETTLEMENT; THIRD PARTY LIABILITY

Tennessee Code Annotated § 68-212-224(a)(6), subject to the notice requirements provided therein, provides that this Order also constitutes an administrative settlement for purposes of Section 113(f) of CERCLA, 42 U.S.C. § 9613(f), for inactive hazardous substance sites. Consenting Parties and Successor Parties (as hereinafter defined) have, as of the Effective Date, resolved their liability to the State of Tennessee for *Matters Addressed in this Order*.

The Consenting Parties shall not be liable to third parties for contribution regarding *Matters Addressed in this Order*; provided that, the Consenting Parties gave the third party actual or constructive notice of this Order, and the third party was given an actual or constructive opportunity to comment upon this Order. The Consenting Parties have demonstrated to the Department that constructive notice was accomplished by publishing a summary of this Order in the Nashville Ledger at least thirty (30) days prior to the Effective Date.

Nothing in this Order shall impair the rights of third parties with respect to tort liability claims for damage to person or property arising from the contamination addressed by this Order.

G. AGREED ACTIONS TO BE TAKEN

Each Consenting Party agrees to conduct the following activities specifically required of it in order to address remedial or response action(s) recommended, including any monitoring and/or maintenance, pursuant to the explicit terms of this Order. Each Consenting Party shall conduct all activities required of it by this Order in accordance with all applicable work plans, as approved by TDEC, all applicable laws and regulations, and any appropriate guidance documents. The Department has determined that the actions in this Order constitute "reasonable steps" with respect to *Matters Addressed in This Order*.

The Consenting Parties agree to conduct the following activities:

1. Required of Colonial Pipeline: Colonial Pipeline has previously conducted initial release response and site chararacterization activities, as documented in the Release Response Report referenced in Exhibit B, and other activities prior to the date of this Order. The Commissioner determines that Colonial Pipelines apportioned share of liabilty is fully and completely met by its prior contributions to addressing Matters Addressed in this Order. On the Effective Date, Colonial Pipeline may cease its ongoing response actions to monitor and address any LPH contamination that reaches McCrory Creek.

2. Required of MNAA:

   (a) MNAA shall cause the Notice of Land Use Restrictions)"NLUR"(attached hereto as Exhibit C to be recorded within thirty (30) days of the Effective Date. Upon recording, a copy of the NLUR shall be mailed to all local governments having jurisdiction over any part of the subject property. Additionally, a copy of the recorded NLUR shall be provided to the Department. Any party receiving liability protection under this Order that seeks approval for restricted uses or seeks to cancel or make a restriction less stringent shall be responsible for any costs incurred by the Department in the review and oversight of work associated with the restriction modification.

   (b) Beginning on the Effective Date and continuing until approval and implementation of the new work plan described in the following subsection 2.(c), and thereafter as provided in the new work plan as described in that subsection, MNAA shall assume all responsibility for and conduct the following ongoing response actions to monitor and address any LPH contamination that reaches, or but for these actions could reach, McCrory Creek (the "Initial Requirements"):

      (i) inspection for and removal of any LPH or sheen in the Temporary Containment System and adjacent boomed area in McCrory Creek, to be done at least once a week and within one day after each rainfall event greater than 0.25 inches in magnitude;

(ii) any necessary maintenance or replacement of the Temporary Containment System and the adjacent booms; and

(iii) reporting monthly all of the foregoing to the Department, including all instances of presence of LPH and/or a petroleum sheen.

(c) Within seven (7) days of the Effective Date, MNAA shall submit to the Department a new work plan for monitoring and addressing any LPH contamination that reaches the Temporary Containment System or threatens McCrory Creek, which Plan will require the Initial Requirements until June 30, 2022, and thereafter such actions, if any, as are required by the Department, to address ongoing LPH contamination, if any, reaching or threatening McCrory Creek. The new work plan shall also include without limitation removal of the Temporary Containment System and restoration of McCrory Creek's pre-existing stream flow as required by the Temporary Containment Work Plan when the Department determines in writing that maintenance of the Temporary Containment System is no longer necessary. If the Department requires changes to the new work plan, MNAA shall either resubmit a revised new work plan with the requested changes or initiate dispute resolution pursuant to Section II.L of this Order. Upon approval by the Department, MNAA shall implement the new work plan until such time as the Department determines in writing that the activities described and/or required in the new work plan may cease, which shall not be prior to June 30, 2022.

3. Required of AECOM: AECOM shall send notification of this Order required by T.C.A. § 68-212-224(h) by certified mail to all local governments having jurisdiction over any part of the subject property and to all owners of adjoining properties. AECOM shall provide adequate documentation to the Department and the other Consenting Parties to demonstrate that (i) public notice has been accomplished as provided in in T.C.A. § 68-212-224(a)(3) in a manner approved by the Department, and (ii) a summary of this Order to be published as described in T.C.A. § 68-212-224(a)(6). AECOM will obtain

prior approval by the Department and the other Consenting Parties of the language for the notification, notice and summary referred to in this paragraph.

4. Required of all Consenting Parties: Consenting Parties agree that the groundwater beneath the Site will not be used, accessed, or otherwise disturbed unless required by a Government agency of competent jurisdiction, or in accordance with the Soil and Groundwater Management Plan dated February 2022 and approved by the Department on February 25, 2022, or such applicable amended or restated Soil and Groundwater Management Plan as may be approved by the Department in the future (the "SGMP"). Soil disturbance in the course of redevelopment at the Site shall be in accordance with the Department-approved SGMP. Any excavated soil shall be managed, transported, and/or disposed of in compliance with all applicable federal, state and local laws, regulations and ordinances including, without limitation, those pertaining to environmental protection and occupational safety and in such a manner as to not create an unacceptable risk or threat to site workers and neighbors. The ongoing requirement to comply with the SGMP under the recorded NLUR does not prevent the issuance of a no further action letter in accordance with this Section G.

Upon completion of all activities required of a Consenting Party set forth in this Order, the Department shall issue to each such Consenting Party a letter stating the requirements of this Order applicable to that Consenting Party have been fulfilled and no further action is required of the Consenting Party concerning *Matters Addressed in this Order*. Upon the request of a Consenting Party from time to time, the Department shall issue an interim status letter identifying what specific obligations remain to achieve completion of the work under this Order. Issuance of a no further action letter shall not relieve the Consenting Party receiving such letter of any its responsibilities, if any, for operation and maintenance activities or continued adherence to and enforcement of land use restrictions, if any, pursuant to Tennessee Code Annotated § 68-212-225. The Department reserves the right to require a Consenting Party to take additional action for contamination caused by such Consenting Party occurring after the date of this or for environmental conditions other than *Matters Addressed in this Order*.

H. ADDITIONAL REQUIREMENTS

1. A Consenting Party may request a time extension for any deadline included in this Order prior to the deadline. The time extension may be granted through mutual consent for good cause shown.

2. The Consenting Parties and Successor Parties agree not to disturb, move, or remove any areas of hazardous substances, solid waste, or other pollutant(s) that are subject to liability protection under this Order without written approval by the Department unless the activities are being conducted under the terms and conditions of this Order or necessitated by the normal day-to-day activities of any on-going business.

3. Pursuant to Tennessee Code Annotated § 68-212-222, whether or not permits are required for onsite cleanup activities related to *Matters Addressed in this Order*, such activities shall meet the standards that would apply if such permits were required.

I. SITE ACCESS

During the effective period of this Order, and with respect to each Consenting Party until the Department's issuance of a No Further Action Letter to it upon its completion of all activities under this Order, the Consenting Parties, and any Successor Party shall, to the extent it is in control of the Site, provide the Department and its representatives or designees access during normal business hours to the Site to the extent that the Consenting Party has the power and authority to grant such access. Nothing herein shall limit or otherwise affect the Department's right of entry, pursuant to any applicable statute, regulation, or permit. The Department and its representative shall comply with all reasonable health and safety plans published by the Consenting Party, Successor Party or their contractors and used by Site personnel for the purpose of protecting life and property.

J. SUBMISSION OF INFORMATION, REPORTS, OR STUDIES

The Department may deny submission or approval of any reports or studies performed by or on

behalf of the Consenting Party and submitted under the terms of this Order that do not contain the following statement:

> "I certify under penalty of law, including but not limited to penalties for perjury, that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information contained in this document and on any attachment is true, accurate and complete to the best of my knowledge, information, and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for intentional violation. As specified in Tennessee Code Annotated § 39-16-702(a)(4), this declaration is made under penalty of perjury."

L. DISPUTE RESOLUTION

1. Assessment Conferences

With respect to actions required by a Consenting Party pursuant to Section II.G of this Order: (i) during implementation of this ORDER the Consenting Party may request in writing an assessment conference with the Division to discuss those actions, work plans, current activities, or items that arise during implementation of this ORDER; (ii) the Division may also initiate an assessment conference with a Consenting Party by at least seven (7) days' written notice to the Consenting Party. The Division and the Consenting Party shall use their best efforts to resolve any disputes concerning submissions hereunder and the proper application of statutory or regulatory provisions informally and in good faith. Any deadlines under this ORDER when such request or notice is given shall be stayed from the date such request or notice is given until the assessment conference is completed, the request or notice is withdrawn, or the request is denied.

2. Informal Conferences

If the Division and the Consenting Party cannot come to an agreement through an assessment conference, then the Consenting Party may seek review of the Division's decision by petitioning the Director for review. The Director will hold an informal conference with representatives of the Division and the Consenting Party present. Following the informal conference, the Director will make a decision in writing.

3. Petition for Declaratory Order.

If the Consenting Party disagrees with a decision by the Director following an informal conference pursuant to the previous subsection 2, it may petition the Underground Storage Tanks and Solid Waste Disposal Control Board ("Board") pursuant to Tenn. Code Ann. § 4-5-223 for a declaratory order with respect to the matter at issue. The Department will not oppose to the Board's convening a contested case hearing in response to the petition but may oppose the merits of the petition.

M. RESERVATION OF RIGHTS

1. Nothing in this Order shall be construed as limiting or waiving any right or authority available to the Commissioner to require a liable party to address contamination occurring after the Effective Date or for environmental conditions other than *Matters Addressed in this Order*.

2. Nothing in this Order shall be interpreted as limiting any Consenting Party's right to preserve the confidentiality of attorney work product or client-attorney communication. Tennessee Code Annotated § 68-212-202 et seq. contains no provisions for confidentiality or proprietary information. Therefore, records, reports, test results, or other information submitted to the Department under this Order shall be subject to public review. Any and all records, reports, test results or other information relating to a hazardous substance site or the possible hazardous substance at the Site submitted under this Order may be used by the Department for all purposes set forth in Tennessee Code Annotated § 68-212-201 et seq.

3. In the event a Consenting Party or Successor Party does not fulfill all the requirements established in this Order, the Commissioner may seek to enforce this Order against that Consenting Party or Successor Party to it through any legal remedy.

4. If any provision of this Order is held to be invalid or unenforceable by a court of competent jurisdiction, then the remaining provisions of this Order will remain in full force and effect.

5. Nothing in this Order shall be interpreted as limiting the liability of a Consenting

Party for the improper management and/or disposal of contaminated material removed by it from the Site.

6. The Consenting Parties do not admit to liability by entering this Order but agree to this apportionment of potential liability to address environmental conditions at the Site. The Consenting Parties reserve their rights to contest the factual allegations and any legal assertions or conclusions in this Order in any proceeding other than one brought by the Department to enforce the terms of this Order, including the right to contest liability, damages, or allocation of fault in any other proceeding so long as the grounds for any contest are not inconsistent with the separate Settlement Agreement entered into by the Consenting Parties.

N. CONFIRMATION OF NO TERMINATION

The Department of Environment and Conservation hereby confirms that the public notice required by T.C.A. 68-212-224(a)(6) has been given, the notice period required by that Code section has expired, and the Department has not received any timely comments from third-party contribution claim holders that disclose facts or considerations that indicate that the allocation of liability of Colonial Pipeline, TDOT, AECOM, and/or MNAA under this Order is inappropriate, improper, or inadequate. Accordingly, the Department will not terminate this Order based on public comment.

The individuals signing below on behalf of each Consenting Party represent that they are duly authorized agents, capable of entering into a binding Consent Order and agreement on behalf of the Consenting Party.

The Effective Date of this Agreement is the last date of execution shown below.

[Signature pages follow]

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

By: _____

James S. Sanders
Director, Division of Remediation

Date: 3/18/22

Approved as to form and legality:

By: _____

E. Joseph Sanders (BPR #006691)
TDEC Office of General Counsel
312 Rosa L. Parks Ave.
Tennessee Tower, 2nd Floor
Nashville, TN 37243
(615) 532-0122

COLONIAL PIPELINE COMPANY
1000 Lake Street
Alpharetta, Georgia 30009

By: DocuSigned by: Samuel A. McEwen 3014396537CD451...

Name: Samuel A. McEwen

Title: Director, Environmental

Date: March 10, 2022

METROPOLITAN NASHVILLE AIRPORT AUTHORITY
1 Terminal Drive
Nashville, TN 37214

By: _____

Name: Neale R. Bedrock

Title: Executive VP + General Counsel

Date: 3/11/2022

TENNESSEE DEPARTMENT OF TRANSPORTATION
James K. Polk Building, Suite 700
505 Deaderick Street
Nashville, TN 37243

By: _____

Name: _____

Title: _____

Date: _____

METROPOLITAN NASHVILLE AIRPORT AUTHORITY
1 Terminal Drive
Nashville, TN 37214

By: _____

Name: _____

Title: _____

Date: _____

TENNESSEE DEPARTMENT OF TRANSPORTATION
James K. Polk Building, Suite 700
505 Deaderick Street
Nashville, TN 37243

By: _____

Name: Joseph Galbato III

Title: Interim Commissioner

Date: March 8, 2022

AECOM TECHNICAL SERVICES, INC.
300 South Grand Avenue, Floor 9
Los Angeles, CA 90071

By: _____

Name: Douglas E. Tennant

Title: Senior Vice President

Date: 3.8.22

EXHIBIT A
TO BROWNFIELD CONSENT ORDER
SITE DESCRIPTION

The Site constitutes that portion of the property owned by MNAA impacted by the release of petroleum product from a pipeline strike on April 9, 2019, including from migration of contamination before or after the date of this Order, and any additional areas investigated by the Consenting Parties.

A legal description of the portion of the Site to be covered by the required Notice of Land Use Restriction is as follows:

Colonial Pipeline Area of Investigation

A. MAP 108, PARCEL 66

Being a parcel of land in the 13th Councilmanic District of Metropolitan Nashville, Davidson County, Tennessee and being a portion of the property owned by the Metropolitan Nashville Airport Authority of record as shown on the consolidation plat PL-20140624-0054937 Register's Office of Davidson County Tennessee. Being more particularly described as follows:
COMMENCING on NGS monument, PID AA4382 (BNA AP 1964 STA B2) thence South 84 degrees 02 minutes 58 seconds East, 5,016.23 feet to a point at the southeast concrete curb of Economy Parking Lot B and the point of beginning of the hereon described area of investigation.
Thence, along the back of curb, North 28 degrees 22 minutes 58 seconds East, 223.22 feet to a point;
Thence, leaving the curb, South 69 degrees 53 minutes 59 seconds East, 259.82 feet to a point in the north margin of a graved access road;

Thence, continuing along the northern margin of said gravel access road for the next nine calls;
North 48 degrees 29 minutes 16 seconds East, 25.20 feet to a point;
North 55 degrees 29 minutes 36 seconds East, 54.38 feet to a point;

North 66 degrees 13 minutes 17 seconds East, 57.18 feet to a point;
North 77 degrees 44 minutes 40 seconds East, 65.39 feet to a point;
North 86 degrees 06 minutes 02 seconds East, 73.00 feet to a point;
South 89 degrees 30 minutes 02 seconds East, 79.64 feet to a point;
South 88 degrees 49 minutes 31 seconds East, 100.00 feet to a point;
South 89 degrees 35 minutes 22 seconds East, 60.75 feet to a point;
North 81 degrees 26 minutes 25 seconds East, 47.97 feet to a point;
Thence, along the northern edge of a soil detention dam and running along a paved access road North 65 degrees 00 minutes 18 seconds East, 630.67 feet to a point;
Thence, leaving the road margin and crossing the soil detention dam and paved access road, South 24 degrees 59 minutes 42 seconds East, 67.52 feet to a point;

Thence, South 31 degrees 21 minutes 05 seconds West, 74.37' to the centerline of McCrory Creek

Thence, continuing along the centerline of McCrory Creek for the next twenty-two calls;

South 17 degrees 07 minutes 16 seconds West, 19.63 feet to a point;
South 27 degrees 57 minutes 29 seconds West, 53.06 feet to a point;
South 14 degrees 14 minutes 16 seconds West, 52.73 feet to a point;
South 12 degrees 43 minutes 02 seconds West, 84.15 feet to a point;
South 00 degrees 26 minutes 26 seconds West, 34.43 feet to a point;
South 23 degrees 02 minutes 22 seconds East, 40.57 feet to a point;
South 17 degrees 37 minutes 43 seconds East, 54.18 feet to a point;
South 47 degrees 23 minutes 23 seconds East, 22.30 feet to a point;
South 46 degrees 25 minutes 40 seconds East, 33.42 feet to a point;
South 31 degrees 21 minutes 05 seconds East, 45.27 feet to a point;
South 30 degrees 35 minutes 31 seconds East, 43.68 feet to a point;
South 60 degrees 20 minutes 29 seconds East, 37.46 feet to a point;
South 61 degrees 00 minutes 00 seconds East, 64.45 feet to a point;
South 74 degrees 44 minutes 12 seconds East, 57.34 feet to a point;
South 55 degrees 09 minutes 01 seconds East, 55.15 feet to a point;
South 28 degrees 40 minutes 57 seconds East, 38.03 feet to a point;
South 14 degrees 53 minutes 54 seconds East, 59.74 feet to a point;
South 02 degrees 19 minutes 41 seconds East, 78.18 feet to a point;
South 04 degrees 16 minutes 32 seconds West, 49.49 feet to a point;
South 02 degrees 41 minutes 06 seconds West, 79.43 feet to a point;
South 04 degrees 31 minutes 08 seconds West, 60.46 feet to a point;
South 03 degrees 24 minutes 16 seconds West, 44.57 feet to a point;
South 02 degrees 12 minutes 05 seconds East, 53.31 feet to a point;

Thence leaving the centerline of McCrory Creek, North 89 degrees 56 minutes 14 seconds West, 232.84 feet to a point offset 2' from the Airfield Operations Area fence;

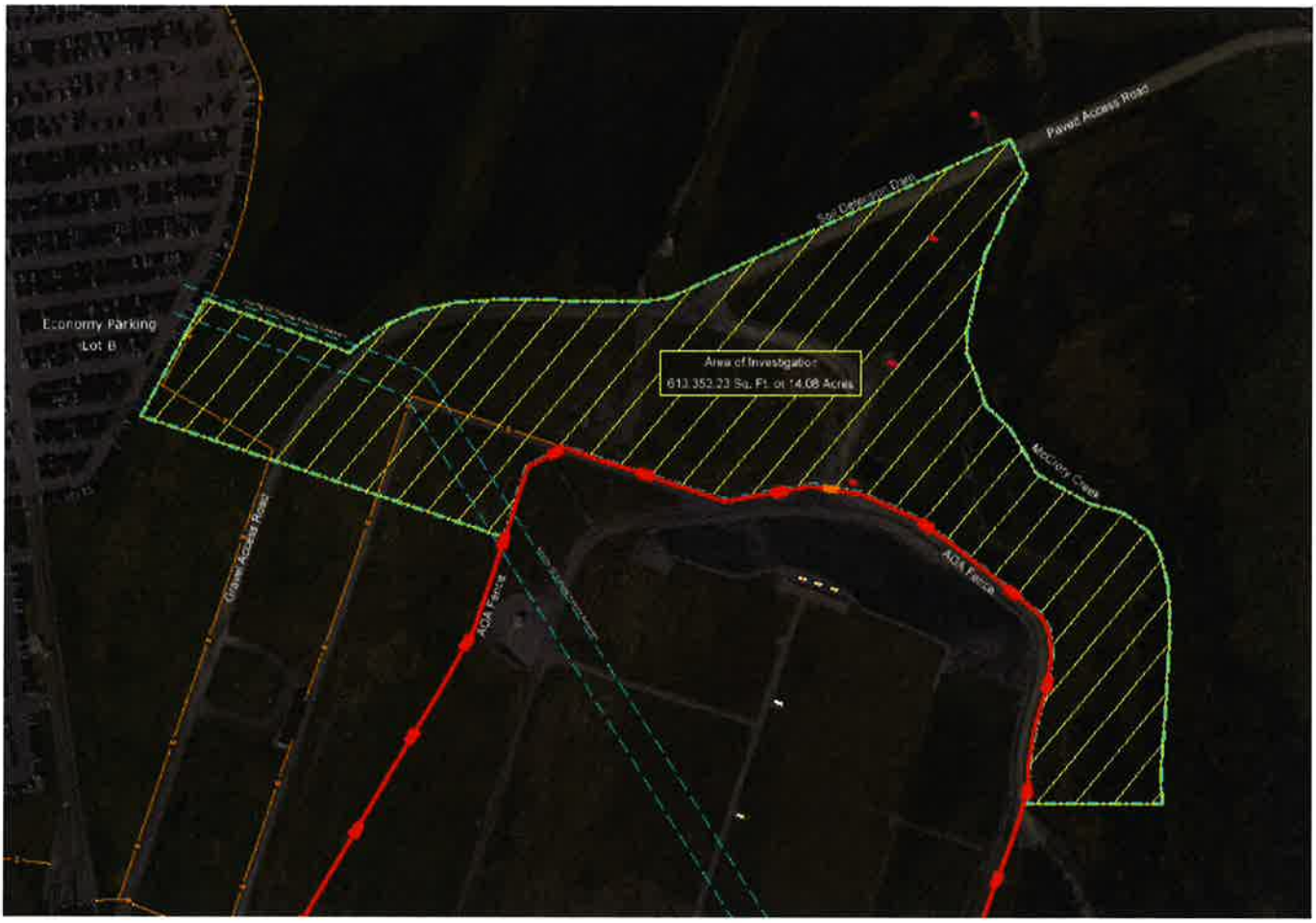
Thence, continuing along the Airfield Operations Area fence for the next sixteen calls;

North 17 degrees 45 minutes 20 seconds East, 18.86 feet to a point;
North 02 degrees 42 minutes 09 seconds East, 49.35 feet to a point;
North 09 degrees 43 minutes 38 seconds East, 56.86 feet to a point;
North 15 degrees 55 minutes 53 seconds East, 78.91 feet to a point;
North 07 degrees 40 minutes 26 seconds East, 50.37 feet to a point;
North 05 degrees 48 minutes 23 seconds West, 41.72 feet to a point;
North 29 degrees 53 minutes 17 seconds West, 31.27 feet to a point;
North 51 degrees 16 minutes 24 seconds West, 114.91 feet to a point;
North 51 degrees 47 minutes 43 seconds West, 78.50 feet to a point;
North 54 degrees 52 minutes 08 seconds West, 72.12 feet to a point;
North 66 degrees 18 minutes 49 seconds West, 100.13 feet to a point;
North 80 degrees 20 minutes 30 seconds West, 83.63 feet to a point;
South 79 degrees 52 minutes 06 seconds West, 150.07 feet to a point;
North 71 degrees 39 minutes 32 seconds West, 284.17 feet to a point;
South 62 degrees 33 minutes 16 seconds West, 71.89 feet to a point;

South 18 degrees 03 minutes 39 seconds West, 125.65 feet to a point;
Thence leaving the Airfield Operations Area fence, North 71 degrees 41 minutes 04 seconds West, 643.23 feet to the point beginning. The area of investigation contains 613,353.23 Square Feet or 14.08 Acres, more or less.

This description was prepared by Michael David Fulghum, Tennessee Registered Land Surveyor Number 2103, on January 19, 2022 and is based on the recorded Consolidation Plat PL-20140624-0054937 by the Metropolitan Nashville Airport Authority and shown on "Exhibit A-1"

Being part of the property conveyed to the Metropolitan Nashville Airport Authority by deeds of record in Book 4440, page 758 and Book 6096, page 984, said Register's Office.



A figure of the Consenting Parties' current understanding of the area impacted to date by the release of petroleum product from a pipeline strike on April 9, 2019, and any additional areas investigated to date by the Consenting Parties is as follows:

EXHIBIT B
TO BROWNFIELD CONSENT ORDER
SUMMARY OF TECHNICAL REPORTS FOR THE SITE

The following summary is a listing of technical reports for environmental investigations and assessments for the Site that are in the possession of the Consenting Parties. This summary is intended to fulfill the statutory disclosure requirements associated with the Brownfield agreement application process. All reports listed and all data summarized below are on file at the Department.

Release Response Report, CPC-L19-BNA, prepared by Wood Environment & Infrastrucutre Solutions, Inc. (April 1, 2020).

Colonial Pipeline mobilized response teams to the Site immediately after the line strike. Potential constituents of concern (PCOCs) were identified as:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX);
- Methyl tertiary butyl ether (MtBE); and
- Naphthalene.

Initial response activities completed at the Site by Colonial Pipeline included:

- LPH recovery;
- Absorbent boom placement at the release Site and in McCrory Creek;
- Implementation of sediment and erosion control;
- Soil excavation at the release point;
- Surface water and sediment sampling;
- Installation of four (4) recovery trenches;
- Advancement and sampling of twenty-eight (28) soil borings (B-1 to B-28);
- Installation of nine (9) recovery wells (MW-1 to MW-9);
- Groundwater sampling; and
- Waste characterization and profiling.

Based on the sediment, soil, surface water, and groundwater sampling, Colonial Pipeline initially determined that BTEX and naphthalene are the main constituents of concern (COCs) for the Site. The main media of concern are groundwater and surface water. Review of sediment and subsurface soil sample results indicated COC concentrations were less than applicable screening criteria, except ethylbenzene, which was detected at a concentration greater than screening criteria in only one boring (B-23 at 5.0 to 7.5 feet below ground surface (bgs)) located near the source area. Review of groundwater analytical results indicated BTEX and naphthalene concentrations greater than the applicable screening criteria near McCrory Creek in 2020. LPH from the release has impacted McCrory Creek, The volume of these LPH discharges has not been quantified.

Recovery actions by Colonial Pipeline included extraction/recovery of LPH from groundwater and McCrory Creek, excavation of impacted surficial soils, erosion and sediment control measures, installation of interceptor trenches between the release location and McCrory Creek to enhance LPH recovery, LPH recovery from identified seeps, construction and ongoing maintenance of a temporary containment system (the "Temporary Containment System") pursuant to a Temporary Containment System work plan dated June 9, 2020 (the "Temporary Containment Work Plan")

approved by TDEC, installation and maintenance of sorbent booms in McCrory Creek, and LPH recovery from the Temporary Containment System and areas within the booms in, and wells near, McCrory Creek. These measures and natural biodegradation of petroleum constituents have resulted in reduced concentrations of BTEX in groundwater and surface water since initial sampling began in April 2019.

Two work plans have been submitted to and approved by TDEC in 2020, but have not been implemented:

> Site Characterization Work Plan, Colonial Pipeline Release, prepared by Wood Environment & Infrastrucutre Solutions, Inc. (June 2020).
>
> Interim Action Work Plan, Colonial Pipeline Release, prepared by Wood Environment & Infrastrucutre Solutions, Inc. (June 2020).

Site Characterization Report, Metropolitan Nashville Airport Authority, Colonial Pipeline Strike, prepared by Ramboll US Consulting, Inc. (November 2021):

Based on the findings of Colonial's Release Response Report, MNAA decided to undertake additional site characterization to better delineate the hydrocarbon impacts associated with the April 2019 L19 spill incident (release). A two-phase Supplemental Site Characterization Investigation was conducted in late Spring 2021 to better characterize the lateral and vertical extent of petroleum constituent impacts to the site soils, groundwater, and surface water remaining from the April 2019 L19 release.

A geophysical survey identified significant variability in the soil and bedrock conditions at the Site, indicating an uneven and fractured bedrock that is filled-in with clay-rich soils. Anomalous zones (i.e., high conductivity and low resistivity) were identified for further investigation during Phase II Site Characterization activities.

Soil, groundwater and surface water were analyzed for the potential constituents of concern that were identified following the April 2019 L19 gasoline spill incident, as follows: benzene, toluene, ethylbenzene and xylenes (BTEX), naphthalene and methyl tert-butyl ether (MTBE). A summary of analytical results associated with the Phase II Supplemental Site Characterization sampling conducted in June 2021 that exceed their respective regulatory standards are, as follows:

Soil
• Clay overburden above the limestone bedrock was impacted immediately downgradient of the release along the surface flow path (B-102A); total xylenes were identified at concentrations in excess of the TDEC ISLs.

Groundwater (Temporary Monitoring Wells)
• One perched temporary monitoring well immediately down-gradient of the release location (B-102A/TW-102A) exceeded the groundwater TDEC ISL for BTEX and naphthalene. Further down-gradient of the release surface flow path, one perched temporary monitoring well (TW-112) exceeded the groundwater TDEC ISL [5 micrograms per liter (µg/L)] for benzene only.

• In the upper bedrock (Carters Limestone), a water-bearing void was encountered at TW-113 with a benzene exceedance.
• In the lower bedrock (Lebanon Limestone), benzene exceeded the TDEC ISL (5 µg/L) at four locations (TW-102B, TW-106, TW-109 and TW-120A). The location near the release location (TW-102B) had a slightly higher benzene concentration (18.7 µg/L) compared to down-gradient locations that ranged from (6.1 µg/L to 8.2 µg/L).

Groundwater (Monitoring Wells)
• The primary constituents that exceeded their respective TDEC ISLs were benzene and naphthalene, while toluene and ethylbenzene exceeded their respective TDEC ISLs only once at the most contaminated monitoring well location (MW-2).
• Contaminant concentration decay plots were generated for monitoring well data since the first sampling event in May 2019 (MW-1 thru MW-9). All contaminants showed decreasing concentration trends over the two-year monitoring period. Benzene, the primary constituent on concern, decreased by 89–99%, depending on the monitoring well location.

Surface Water
• Estimated detections of benzene were observed in the surface water at multiple locations collected since the release; however, all results were well below their respective USEPA MCLs and Region IV ESVs.

Fate and Transport
• Soil impacts are limited to the clay overburden immediately down-gradient of the release surface flow path (B-102A), indicating that the released gasoline migrated rather rapidly vertically through the thin clay layer (approximately 5 feet thick at B-102A) and entered the underlying bedrock through the prevalent horizontal and vertical fractures.
• Within 47 hours of the release, a petroleum sheen was observed in the western stream bank of McCrory Creek located 925 feet east of the release point. Gasoline migrated to McCrory Creek via a combination of overland and subsurface flow. Gasoline flowed overland 600 feet downhill from the release point prior to being contained. Gasoline also flowed in the subsurface somewhere between 325 to 925 feet to McCrory Creek. The L19 gasoline subsurface migration rate was somewhere on the order of 10 to 20 feet per hour. Geophysical and rock core data document the presence of karst secondary porosity features that facilitate the rapid subsurface migration rates described above.
• In the upland source area portion of the site, PID measurements typically increased with depth, with the highest measurements associated with hydrocarbon-stained fractures and bedding planes at depth. Generally, the upper 20 feet of bedrock was only lightly impacted. No Light Non-aqueous Phase Liquids (LNAPL) was observed in any soil boring, temporary monitoring well, or permanent monitoring well. Significant natural source area depletion of petroleum constituents has occurred since the April 2019 L19 release.
• Contaminant concentration decay plots generated for existing monitoring wells (MW-1 thru MW-9) since the release indicate that benzene, the primary constituent on concern, have decreased by one to two orders of magnitude (89 –99%).
• Dissolved oxygen (DO) levels of zero and negative oxidation-reduction potential (ORP) values in groundwater as measured at the eight monitoring wells located immediately west of McCrory Creek discharge zone indicate active biodegradation of petroleum constituents continues to occur.

Site Characterization Report Addendum, Wood Soil Boring Investigation, Metropolitan Nashville Airport Authority Colonial Pipleine Strike, prepared by Ramboll US Consulting, Inc. (November 2021):

Wood conducted a soil boring investigation along the proposed pipeline relocation Option 1B and east of the release location on August 16, 2021. Nine soil borings (WSB-01, WSB-02, WSB-04, WSB-05, WSB-06, WSB-07, WSB-08 and WSB-09) were installed along the proposed pipeline Option 1B, one soil boring (WSB-03) was installed west of the proposed pipeline Option 1B, and five soil borings (WSB-10, WSB-11, WSB-12, WSB-13, WSB-14 and WSB-15) were installed east of the proposed pipeline Option 1B. Ramboll collected general lithologic descriptions at each boring location, notes on moisture, PID readings and odors. These observations are provided in the borings logs in Appendix A of this addendum report. In addition, Ramboll collected split soil samples at the same depth intervals as Wood except for WSB-05.

A summary of the analytes identified in soil are discussed by constituent below:
• Benzene was detected in four of the 24 samples collected at concentrations below USEPA RSLs [5.1 milligram per kilogram (mg/kg)] as well as well below TDEC ISLs (3.8 mg/kg). The benzene detected concentrations ranged from 0.0102J mg/kg to 0.0729J mg/kg.
• Toluene was detected in nine samples (eight base samples and one field duplicate), none of which had concentrations above USEPA RSLs of 4,700 mg/kg or TDEC ISLs of 62.2 mg/kg. the toluene detected concentrations ranged from 0.00214J mg/kg to 0.00987J mg/kg.
• Ethylbenzene was detected in two samples at concentrations below USEPA RSLs of 25 mg/kg and TDEC ISLs of 1,310 mg/kg. The ethylbenzene detected concentrations ranged from 0.00166J mg/kg to 0.178J mg/kg.
• Total xylenes were detected in five samples, none of which had concentration above USEPA RSLs (250 mg/kg) or TDEC ISLs (88 mg/kg). The total xylenes detected concentrations ranged from 0.00149J mg/kg to 0.0332J mg/kg.
• Naphthalene was detected in three soil samples, at concentrations below TDEC ISLs of 403 mg/kg or USEPA RSLs of 8.6 mg/kg. The naphthalene detected concentrations ranged from 0.00116J mg/kg to 0.223J mg/kg.
• MTBE was not detected in any of the soil samples collected. In summary, contaminants of concern (i.e., BTEX, naphthalene and MTBE) were either not detected or were detected at concentrations less than 10% of their respective USEPA RSLs as well as TDEC ISLs.

Summary of all Colonial soil and groundwater sampling data and observations
Specifically, analyses of soil samples from the Site taken on behalf of Colonial in May through July of 2019 after the line strike and reported in the April 1, 2020 Release Response Report prepared by Wood Environment and Infrastructure Solutions, Inc. (Wood) showed maximum concentrations of the COCs and methyl tert-butyl ether (MtBE) to be:

- Benzene – 4.37 mg/kg (B-19 at 2.5'-5.0' bgs)
- Toluene – 85.5 mg/kg (B-23 at 5.0'-7.5' bgs)
- Ethylbenzene – 34.4 mg/kg (B-23 at 5.0'-7.5' bgs)
- Total Xylenes – 186 mg/kg (B-23 at 5.0'-7.5' bgs)
- MtBE – 0.00119 mg/kg (B-19 at 8'-9'bgs)
- Napthalene – 6.22 mg/kg (B-23 at 5.0'-7.5' bgs)

Stockpiled soils eventually removed from the Site by Colonial's contractors and consultants contained lead (Pb) at a maximum concentration of 18.7 mg/kg, and total petroleum hydrocarbons (TPH) and extractable petroleum hydrocarbons (EPH) at maximum concentrations of 0.265 mg/kg and 866 mg/kg, respectively, as reported in the April 1, 2020 Release Response Report prepared by Wood.

Analyses of Colonial's samples of soil remaining in place at the Site after soil removal, collected in March of 2020 in the areas of the former soil stockpiles and in August 2021, as included in the reports and information provided to the Department, showed maximum concentrations of the COCs and other constituents to be:

- Benzene – 0.0535 mg/kg (WSB-05 at 6'-8' bgs)
- Toluene – 0.977 mg/kg (surface sample from stockpile area, J5 qualifier)
- Ethylbenzene – 1.05 mg/kg (surface sample from stockpile area, J5 qualifier)
- Total Xylenes – 7.28 mg/kg (surface sample from stockpile area, J5 qualifier)
- MtBE – below detection limit
- Napthalene – 1.90 mg/kg (surface sample from stockpile area, J5 qualifier)
- Benzo(a)pyrene – 0.0575 mg/kg (WSB-11 at 0'-1' bgs)
- Benzo(b)flouranthene – 0.0509 mg/kg (WSB-11 at 0'-1' bgs)
- Benzo(g,h,i)perylene – 0.1020 mg/kg (WSB-11 at 0'-1' bgs)
- Chrysene – 0.00685 mg/kg (WSB-07 at 0'-2' bgs)
- Dibenz(a,h)anthracene – 0.0366 mg/kg (WSB-11 at 0'-1' bgs)
- Flouranthene – 0.0112 mg/kg (WSB-07 at 0'-2' bgs)
- Indeno(1,2,3-cd)pyrene – 0.0521 mg/kg (WSB-11 at 0'-1' bgs)
- Pyrene – 0.0322 mg/kg (WSB-11 at 0'-1' bgs)
- TPH-GRO – 22.9 mg/kg (WSB-09 at 0'-2' bgs)
- TPH DRO – 74.9 mg/kg (WSB-07 at 5'-9' bgs)

With respect to groundwater, the monitoring wells installed at the Site on behalf of Colonial contain LPH and have exhibited a petroleum odor. Analyses of samples from these wells taken in the spring of 2019 on behalf of Colonial, and reported in the April 1, 2020 Release Response Report prepared by Wood, showed maximum concentrations of the COCs to be:

- Benzene – 7.45 mg/L (MW-3)
- Toluene – 36.2 mg/L (MW-3)
- Ethylbenzene – 3.2 mg/L (MW-3)
- Total Xylenes – 17.6 mg/L (MW-3)
- Napthalene – 1.52 mg/L (MW-1)

Summary of all Colonial surface water and sediment sampling data and observations

Surface Water: In connection with the Temporary Containment Work Plan, Colonial's consultants have observed and performed LPH recovery from the Temporary Containment System and areas within the booms in McCrory Creek. Colonial's consultants continue regularly to observe and recover sheens from the Temporary Containment System adjacent to McCrory Creek

as recently as February 2022. LPH has historically impacted and may continue to threaten McCrory Creek, specifically by the appearance of a sheen regularly on the surface of water within the Temporary Containment System and at times within the boomed area of McCrory Creek.

Sampling of McCrory Creek by Colonial's consultants shows BTEX and TPH-GRO to be present. The maximum concentrations of these in McCrory Creek since the line strike have been immediately downgradient of the release area, at location SW-10 in mid-April 2019 as reported in the April 1, 2020 Release Response Report prepared by Wood, and have been:

- Benzene – 1,690 ug/L
- Toluene – 5,070 ug/L
- Ethylbenzene – 625 ug/L
- m,p-Xylene – 2,540 ug/L
- o-Xylene – 1,130 ug/L
- TPH-GRO – 25,600 ug/L

Concentrations of BTEX and TPH-GRO in McCrory Creek have decreased over time, and the maximum concentrations in samples collected by Colonial's consultants in 2021, as included in the reports and information provided to the Department, have been:

- Benzene – 20.6 ug/L
- Toluene – 78.4 ug/L
- Ethylbenzene – 82.7 ug/L
- m,p-Xylene – 326 ug/L
- o-Xylene – 126 ug/L
- TPH-GRO – 4,200 ug/L

Sediment: Sediment from McCrory Creek was also sampled the day after the line strike. The maximum concentrations in sediment samples from McCrory Creek collected by Colonial's consultants at that time, as reported in the April 1, 2020 Release Response Report prepared by Wood, were:

- Benzene – 2.6 ug/kg (SD-3)
- Toluene – 5.45 ug/kg (SD-3)
- Ethylbenzene – 1.09 ug/kg (SD-4)
- m,p-Xylene – 4.87 ug/kg (SD-4)
- o-Xylene – 1.85 ug/kg (SD-4)
- TPH-GRO – 189 ug/kg (SD-4)

EXHIBIT **C**
TO BROWNFIELD CONSENT ORDER
NOTICE OF LAND USE RESTRICTIONS