

Nancy Koon (adpce.ad)

From: David Carstens <dcarstens@harborenv.com>
Sent: Monday, January 23, 2023 10:33 AM
To: Terry Liu (adpce.ad)
Cc: Bryan Leamons (adpce.ad); Jessica Sears (adpce.ad); Dean Caldwell; Booher, Martin T.; Andrew Rike; Nick Muenks; Wilson, Joshua T.
Subject: Exploratory Ventures - Information to Support a Higher 7Q10 Value - NPDES Permit No. AR0053384 (AFIN: 47-01073)
Attachments: DWR-TN0000108-Permit-20200326-2366.pdf; ExxonMobil_TN0000108_Permit Database_Jan-19-2023.pdf

Hello Mr. Liu:

This email is submitted on behalf of Exploratory Ventures, LLC (EV) in Osceola (AFIN: 47-01073).

On January 19, 2023, EV met with the DEQ to discuss use of a higher 7Q10 flow for the Mississippi River in pending NPDES Permit No. AR0053384.

We reported that the Tennessee Department of Environment and Conservation (TNDEC) issued an NPDES permit for the ExxonMobil Pipeline Terminal in Memphis in March 2020. This permit included a 7Q10 flow of 159,270 cubic feet per second.

Per the DEQ's request, I have researched the TNDEC's on-line files for information on NPDES Permit No. TN0000108 (attached) for this facility.

Based on the publicly available records, EPA Region 4 did not comment on the draft permit. The only comments were made by the facility. These items are addressed in the "Addendum to (the Permit) Rationale" (page 24 of 34).

The TNDEC maintains a very detailed database on its NPDES permits. There isn't any correspondence between the TNDEC and EPA Region 4 regarding the 7Q10 flow for this facility or any other issue.

Links to the TNDEC's permits database are provided below for your general reference. A snapshot of the database entry for ExxonMobil is attached.

I hope this information is helpful. Please contact me if you have any questions, comments, and/or instructions. Thank you.

David Carstens

https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34051:12102559416420:::34051:P34051_PERMIT_NUMBER:TN000108

<https://tdeconline.tn.gov/dwr/>

David Carstens, Sr. Project Manager
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STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102

March 26, 2020

Johnita D. Jones
VP & Southern Operations Manager
e-copy: johnita.d.jones@exxonmobil.com
ExxonMobil
22777 Springwoods Village Pkwy
Spring, TX 77389

Subject: **NPDES Permit No. TN0000108**
ExxonMobil Pipeline Company
Memphis, Shelby County, Tennessee

Dear Ms. Jones:

In accordance with the provisions of the Tennessee Water Quality Control Act, Tennessee Code Annotated (T.C.A.), Sections 69-3-101 through 69-3-120, the Division of Water Resources hereby issues the enclosed NPDES Permit. The continuance and/or reissuance of this NPDES Permit is contingent upon your meeting the conditions and requirements as stated therein.

Please be advised that a petition for permit appeal may be filed, pursuant to T.C.A. Section 69-3-105, subsection (i), by the permit applicant or by any aggrieved person who participated in the public comment period or gave testimony at a formal public hearing whose appeal is based upon any of the issues that were provided to the commissioner in writing during the public comment period or in testimony at a formal public hearing on the permit application. Additionally, for those permits for which the department gives public notice of a draft permit, any permit applicant or aggrieved person may base a permit appeal on any material change to conditions in the final permit from those in the draft, unless the material change has been subject to additional opportunity for public comment. Any petition for permit appeal under this subsection (i) shall be filed with the Technical Secretary of the Water Quality, Oil and Gas Board within thirty (30) days after public notice of the commissioner's decision to issue or deny the permit. A copy of the filing should also be sent to TDEC's Office of General Counsel.

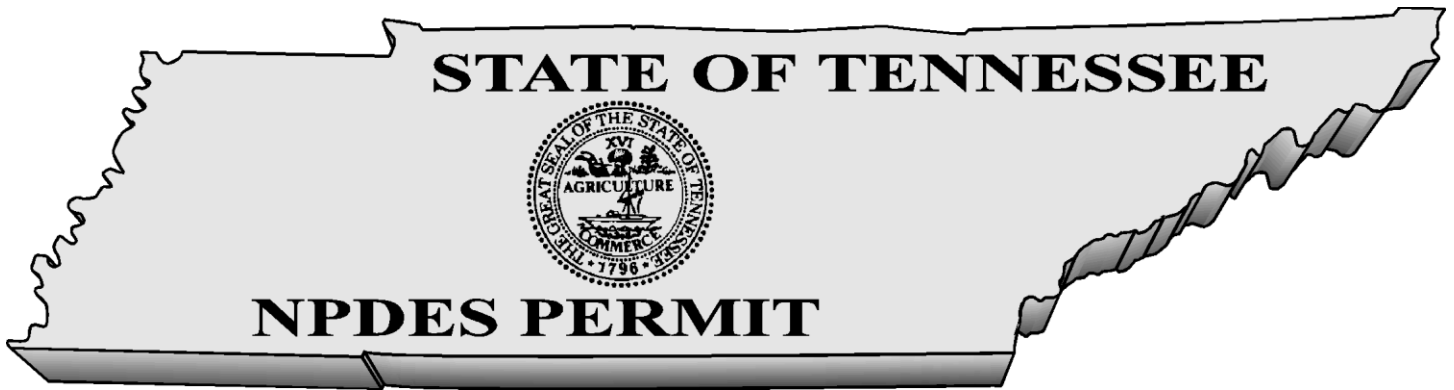
If you have questions, please contact the Memphis Environmental Field Office at 1-888-891-TDEC; or, at this office, please contact Ms. Sarah Terpstra at (615) 532-3634 or by E-mail at Sarah.Terpstra@tn.gov.

Sincerely,

Vojin Janjic
Manager, Water-Based Systems

Enclosure

cc: Permit File
Memphis Environmental Field Office
Mr. Johnny R. Canady, Terminal Superintendent, ExxonMobil, johnny.r.canady@exxonmobil.com



No. TN000108

Authorization to discharge under the
National Pollutant Discharge Elimination System (NPDES)

Issued By

**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102**

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the delegation of authority from the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.)

Discharger: **ExxonMobil Pipeline Company
Memphis Terminal**

is authorized to discharge: **treated stormwater runoff, tank water draw-off, tank hydrostatic testing water, rack/pump/equipment washwater, truck rinse, monitoring well purge, remediation system water and dock washwater from Outfall 003 and uncontaminated stormwater runoff from Outfalls SW1, SW2 and SW3**

from a facility located at: **454 Wisconsin Avenue, Memphis, Shelby County, Tennessee**

to receiving waters named: **Mississippi River at mile 734**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on: **April 1, 2020**

This permit shall expire on: **March 31, 2025**

Issuance date: **March 26, 2020**



for Jennifer Dodd
Director

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PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

ExxonMobil Pipeline Company is authorized to discharge treated stormwater runoff, tank water draw-off, tank hydrostatic testing water, rack/pump/equipment washwater, truck rinse, monitoring well purge, remediation system water and dock washwater from Outfall 003 and uncontaminated stormwater runoff from Outfalls SW1, SW2 and SW3 to the Mississippi River at mile 734.

These discharges shall be limited and monitored by the permittee as specified below:

Outfall 003							
Code	Parameter	Qualifier	Value	Unit	Sample Type	Frequency	Statistical Base
00400	pH	>=	6.0	SU	Grab	Monthly	Minimum
00400	pH	<=	9.0	SU	Grab	Monthly	Maximum
00530	Total Suspended Solids (TSS)	<=	40	mg/L	Composite	Monthly	Daily Maximum
00556	Oil & Grease	<=	15	mg/L	Grab	Monthly	Daily Maximum
34010	Toluene	<=	1.0	mg/L	Grab	Monthly	Daily Maximum
34030	Benzene	<=	0.5	mg/L	Grab	Monthly	Daily Maximum
34371	Ethylbenzene	<=	0.2	mg/L	Grab	Monthly	Daily Maximum
81551	Xylene	<=	0.5	mg/L	Grab	Monthly	Daily Maximum
45613	Floating solids or visible foam-visual	Report	-	Y=1;N=0	Visual	Weekly	Total
50050	Flow	Report	-	MGD	Totalizer	Monthly	Daily Maximum
50050	Flow	Report	-	MGD	Totalizer	Monthly	Monthly Average

Outfalls designated as SW1, SW2, and SW3 represent discharges from large containment structures surrounding aboveground storage tanks which capture precipitation. Sumps within the containment area allow pumping of accumulated rainwater at a controlled rate on an as-needed basis. This discharge of accumulated rainfall is authorized under this permit, after the terminal has determined the stormwater is uncontaminated.

Additional monitoring requirements and conditions applicable to Outfall 003 include:

There shall be no distinctly visible floating solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to fish and aquatic life.

The wastewater discharge shall not contain pollutants in quantities that will be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.

Sludge or any other material removed by any treatment works must be disposed of in a manner, which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material must be in compliance with the Tennessee Solid Waste Disposal Act, TCA 68-31-101 et seq. and the Tennessee Hazardous Waste Management Act, TCA 68-46-101 et seq.

B. MONITORING PROCEDURES

1. Representative Sampling

Samples and measurements taken in compliance with the monitoring requirements specified herein shall be representative of the volume and nature of the monitored discharge, and shall be taken after treatment and prior to mixing with uncontaminated storm water runoff or the receiving stream. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than plus or minus 10% from the true discharge rates throughout the range of expected discharge volumes.

2. Sampling Frequency

The permittee should mark the 'No Discharge' box on the Discharge Monitoring Report form only if a permitted outfall does not discharge at any time during the monitoring period. If the outfall discharges effluent at any time during the monitoring period, the permittee must provide at least one sampling result from the effluent of that outfall.

3. Test Procedures

- a. Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304 (h) of the Clean Water Act (the "Act"), as amended, under which such procedures may be required.
- b. Unless otherwise noted in the permit, all pollutant parameters shall be determined according to methods prescribed in Title 40, CFR Part 136, as amended, promulgated pursuant to Section 304 (h) of the Act.
- c. For analyses of xylene, EPA methods utilized for volatile organic compounds are determined appropriate, including EPA Method 602, 624, or 1624 B.

In instances where permit limits established through implementation of applicable water criteria are below analytical capabilities, compliance with those limits will be determined using the detection limits described in the TN Rules, Chapter 0400-40-03-.05(8).

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling or measurements;
- b. The exact person(s) collecting samples or measurements;
- c. The dates and times the analyses were performed;
- d. The person(s) or laboratory who performed the analyses;
- e. The analytical techniques or methods used, and;
- f. The results of all required analyses.

5. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation shall be retained for a minimum of three (3) years, or longer, if requested by the Division of Water Resources.

C. DEFINITIONS

For the purpose of this permit, **Annually** is defined as a monitoring frequency of once every twelve (12) months beginning with the date of issuance of this permit so long as the following set of measurements for a given 12 month period are made approximately 12 months subsequent to that time.

A **bypass** is defined as the intentional diversion of waste streams from any portion of a treatment facility.

A **calendar day** is defined as the 24-hour period from midnight to midnight or any other 24-hour period that reasonably approximates the midnight to midnight time period.

The **Daily Maximum Concentration** is a limitation on the average concentration, in milligrams per liter (mg/L), of the discharge during any calendar day. When a proportional-to-flow composite sampling device is used, the daily concentration is the concentration of that 24-hour composite; when other sampling means are used, the daily concentration is the arithmetic mean of the concentrations of equal volume samples collected during any calendar day or sampling period.

“Degradation” means the alteration of the properties of waters by the addition of pollutants, withdrawal of water, or removal of habitat, except those alterations of a short duration.

“De Minimis” - Degradation of a small magnitude, as provided in this paragraph.

(a) Discharges and withdrawals

1. Subject to the limitation in part 3 of this subparagraph, a single discharge other than those from new domestic wastewater sources will be considered de minimis if it uses less than five percent of the available assimilative capacity for the substance being discharged.
2. Subject to the limitation in part 3 of this subparagraph, a single water withdrawal will be considered de minimis if it removes less than five percent of the 7Q10 flow of the stream.
3. If more than one activity described in part 1 or 2 of this subparagraph has been authorized in a segment and the total of the authorized and proposed impacts uses no more than 10% of the assimilative capacity, or 7Q10 low flow, they are presumed to be de minimis. Where the total of the authorized and proposed impacts uses 10% of the assimilative capacity, or 7Q10 low flow, additional degradation may only be treated as de minimis if the Division finds on a scientific basis that the additional degradation has an insignificant effect on the resource.

(b) Habitat alterations authorized by an Aquatic Resource Alteration Permit (ARAP) are de minimis if the Division finds that the impacts, individually and cumulatively are offset by impact minimization and/or in-system mitigation, provided however, in ONRWs the mitigation must occur within the ONRW.

Discharge or “discharge of a pollutant” refers to the addition of pollutants to waters from a source.

Dry Weather Flow shall be construed to represent discharges consisting of process and/or non-process wastewater only.

A **Grab Sample**, for the purposes of this permit, is defined as a single effluent sample of at least 100 milliliters (sample volumes <100 milliliters are allowed when specified per standard methods, latest edition) collected at a randomly selected time over a period not exceeding 15 minutes. The sample(s) shall be collected at the period(s) most representative of the total discharge.

The **monthly average amount**, shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.

The **monthly average concentration**, other than for *E. coli* bacteria, is the arithmetic mean of all the composite or grab samples collected in a one-calendar month period.

Pollutant means sewage, industrial wastes, or other wastes.

A **Qualifying Storm Event** is one which is greater than 0.1 inches and that occurs after a period of at least 72 hours after any previous storm event with rainfall of 0.1 inches or greater.

For the purpose of this permit, a **Quarter** is defined as any one of the following three month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, or October 1 through December 31.

A **rainfall event** is defined as any occurrence of rain, preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event.

A **rationale** (or “fact sheet”) is a document that is prepared when drafting an NPDES permit or permit action. It provides the technical, regulatory and administrative basis for an agency’s permit decision.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

The term **washout** is applicable to activated sludge plants and is defined as loss of mixed liquor suspended solids (MLSS) of 30.00% or more from the aeration basin(s).

Waters means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

The **weekly average concentration** is the arithmetic mean of all the composite samples collected in a one-week period. The permittee must report the highest weekly average in the one-month period.

Wet Weather Flow shall be construed to represent storm water runoff which, in combination with all process and/or non-process wastewater discharges, as applicable, is discharged during a qualifying storm event.

D. ACRONYMS AND ABBREVIATIONS

1Q10 – 1-day minimum, 10-year recurrence interval
30Q5 – 30-day minimum, 5-year recurrence interval
7Q10 – 7-day minimum, 10-year recurrence interval
BAT – best available technology economically achievable
BCT – best conventional pollutant control technology
BDL – below detection level
BOD₅ – five day biochemical oxygen demand
BPT – best practicable control technology currently available
CBOD₅ – five day carbonaceous biochemical oxygen demand
CEI – compliance evaluation inspection
CFR – code of federal regulations
CFS – cubic feet per second

CFU – colony forming units
CIU – categorical industrial user
CSO – combined sewer overflow
DMR – discharge monitoring report
D.O. – dissolved oxygen
E. coli – *Escherichia coli*
EFO – environmental field office
LB(lb) - pound
IC₂₅ – inhibition concentration causing 25% reduction in survival, reproduction and growth of the test organisms
IU – industrial user
IWS – industrial waste survey
LC₅₀ – acute test causing 50% lethality
MDL – method detection level
MGD – million gallons per day
MG/L(mg/l) – milligrams per liter
ML – minimum level of quantification
ml – milliliter
MLSS – mixed liquor suspended solids
MOR – monthly operating report
NODI – no discharge
NPDES – national pollutant discharge elimination system
PL – permit limit
POTW – publicly owned treatment works
RDL – required detection limit
SAR – semi-annual [pretreatment program] report
SIU – significant industrial user
SSO – sanitary sewer overflow
STP – sewage treatment plant
TCA – Tennessee code annotated
TDEC – Tennessee Department of Environment and Conservation
TIE/TRE – toxicity identification evaluation/toxicity reduction evaluation
TMDL – total maximum daily load
TRC – total residual chlorine
TSS – total suspended solids
WQBEL – water quality based effluent limit

E. REPORTING

1. Monitoring Results

Monitoring results shall be recorded monthly and submitted monthly using NetDMR. Submittals shall be no later than 15 days after the completion of the reporting period. If NetDMR is not functioning, a completed DMR with an original signature shall be submitted to the following address:

**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION**

**DIVISION OF WATER RESOURCES
COMPLIANCE & ENFORCEMENT SECTION
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102**

If NetDMR is not functioning, a copy of the completed and signed DMR shall be mailed to the Memphis Environmental Field Office (EFO) at the following address:

**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
Memphis Environmental Field Office
8383 Wolf Lake Drive
Bartlett, Tennessee 38133**

A copy should be retained for the permittee's files. In addition, any communication regarding compliance with the conditions of this permit must be sent to the two offices listed above.

The first DMR is due on the 15th of the month following permit effectiveness.

DMRs and any other information or report must be signed and certified by a responsible corporate officer as defined in 40 CFR 122.22, a general partner or proprietor, or a principal municipal executive officer or ranking elected official, or his duly authorized representative. Such authorization must be submitted in writing and must explain the duties and responsibilities of the authorized representative.

The electronic submission of DMR data will be accepted only if formally approved beforehand by the division. For purposes of determining compliance with this permit, data approved by the division to be submitted electronically is legally equivalent to data submitted on signed and certified DMR forms.

2. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required at the location(s) designated, using approved analytical methods as specified herein, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form. Such increased frequency shall also be indicated on the form.

3. Falsifying Results and/or Reports

Knowingly making any false statement on any report required by this permit or falsifying any result may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Water Pollution Control Act, as amended, and in Section 69-3-115 of the Tennessee Water Quality Control Act.

4. Outlier Data

Outlier data include analytical results that are probably false. The validity of results is based on operational knowledge and a properly implemented quality assurance program. False results may include laboratory artifacts, potential sample tampering, broken or suspect sample containers, sample contamination or similar demonstrated quality control flaw.

Outlier data are identified through a properly implemented quality assurance program, and according to ASTM standards (e.g. Grubbs Test, 'h' and 'k' statistics). Furthermore, outliers should be verified, corrected, or removed, based on further inquiries into the matter. If an outlier was verified (through repeated testing and/or analysis), it should remain in the preliminary data set. If an outlier resulted from a transcription or similar clerical error, it should be corrected and subsequently reported.

Therefore, only if an outlier was associated with problems in the collection or analysis of the samples and as such does not conform with the Guidelines Establishing Test Procedures for the Analysis of Pollutants (40 CFR §136), it can be removed from the data set and not reported on the Discharge Monitoring Report forms (DMRs). Otherwise, all results (including monitoring of pollutants more frequently than required at the location(s) designated, using approved analytical methods as specified in the permit) should be included in the calculation and reporting of the values required in the DMR form. You are encouraged to use "comment" section of the DMR form (or attach additional pages), in order to explain any potential outliers or dubious results.

F. SCHEDULE OF COMPLIANCE

Full compliance and operational levels shall be attained from the effective date of this permit.

PART II

A. GENERAL PROVISIONS

1. Duty to Reapply

Permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Director of the Division of Water Resources (the "Director") no later than 180 days prior to the expiration date. Such applications must be properly signed and certified.

2. Right of Entry

The permittee shall allow the Director, the Regional Administrator of the U.S. Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an effluent source is located or where records are required to be kept under the terms and conditions of this permit, and at reasonable times to copy these records;
- b. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- c. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Director.

3. Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Water Pollution Control Act, as amended, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division of Water Resources. As required by the Federal Act, effluent data shall not be considered confidential.

4. Proper Operation and Maintenance

- a. The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. Backup continuous pH and flow monitoring equipment are not required.

- b. Dilution water shall not be added to comply with effluent requirements to achieve BCT, BPT, BAT and/or other technology-based effluent limitations such as those in State of Tennessee Rule 0400-40-05-.09.

5. Treatment Facility Failure

The permittee, in order to maintain compliance with this permit, shall control production, all discharges, or both, upon reduction, loss, or failure of the treatment facility, until the facility is restored or an alternative method of treatment is provided. This requirement applies in such situations as the reduction, loss, or failure of the primary source of power.

6. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

7. Severability

The provisions of this permit are severable. If any provision of this permit due to any circumstance, is held invalid, then the application of such provision to other circumstances and to the remainder of this permit shall not be affected thereby.

8. Other Information

If the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, then he shall promptly submit such facts or information.

B. CHANGES AFFECTING THE PERMIT

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices.

2. Permit Modification, Revocation, or Termination

- a. This permit may be modified, revoked and reissued, or terminated for cause as described in 40 CFR 122.62 and 122.64, Federal Register, Volume 49, No. 188 (Wednesday, September 26, 1984), as amended.
- b. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- c. If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established for any toxic pollutant under Section 307(a) of the Federal Water Pollution Control Act, as amended, the Director shall modify or revoke and reissue the permit to conform to the prohibition or to the effluent standard, providing that the effluent standard is more stringent than the limitation in the permit on the toxic pollutant. The permittee shall comply with these effluent standards or prohibitions within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified or revoked and reissued to incorporate the requirement.
- d. The filing of a request by the permittee for a modification, revocation, reissuance, termination, or notification of planned changes or anticipated noncompliance does not halt any permit condition.

3. Change of Ownership

This permit may be transferred to another party (provided there are neither modifications to the facility or its operations, nor any other changes which might affect the permit limits and conditions contained in the permit) by the permittee if:

- a. The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b. The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and liability between them; and
- c. The Director, within 30 days, does not notify the current permittee and the new permittee of his intent to modify, revoke or reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

Pursuant to the requirements of 40 CFR 122.61, concerning transfer of ownership, the permittee must provide the following information to the division in their formal notice of intent to transfer ownership: 1) the NPDES permit number of the subject permit; 2) the effective date of the proposed transfer; 3) the name and address of the transferor; 4) the name and address of the

transferee; 5) the names of the responsible parties for both the transferor and transferee; 6) a statement that the transferee assumes responsibility for the subject NPDES permit; 7) a statement that the transferor relinquishes responsibility for the subject NPDES permit; 8) the signatures of the responsible parties for both the transferor and transferee pursuant to the requirements of 40 CFR 122.22(a), "Signatories to permit applications"; and, 9) a statement regarding any proposed modifications to the facility, its operations, or any other changes which might affect the permit limits and conditions contained in the permit.

4. Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice the original address of the permittee will be assumed to be correct.

C. NONCOMPLIANCE

1. Effect of Noncompliance

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of applicable State and Federal laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

2. Reporting of Noncompliance

a. 24-Hour Reporting

In the case of any noncompliance which could cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Resources in the appropriate regional Field Office within 24-hours from the time the permittee becomes aware of the circumstances. (The regional Field Office should be contacted for names and phone numbers of environmental response personnel).

A written submission must be provided within five calendar days of the time the permittee becomes aware of the circumstances, unless this requirement is waived by the Director on a case-by-case basis. The permittee shall provide the Director with the following information:

- i. A description of the discharge and cause of noncompliance;
- ii. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- iii. The steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. Scheduled Reporting

For instances of noncompliance which do not cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the permittee shall report the noncompliance on the Discharge Monitoring Report. The report shall contain all information concerning the steps taken, or planned, to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

3. Sanitary Sewer Overflow

a. "**Sanitary Sewer Overflow**" means the discharge to land or water of wastes from any portion of the collection, transmission, or treatment system other than through permitted outfalls.

b. Sanitary Sewer Overflows are prohibited.

c. The permittee shall operate the collection system so as to avoid sanitary sewer overflows. No new or additional flows shall be added upstream of any point in the collection system, which experiences chronic sanitary sewer overflows (greater than 5 overflows per year) or would otherwise overload any portion of the system.

d. Unless there is specific enforcement action to the contrary, the permittee is relieved of this requirement after: 1) an authorized representative of the Commissioner of the Department of Environment and Conservation has approved an engineering report and construction plans and specifications prepared in accordance with accepted engineering practices for correction of the problem; 2) the correction work is underway; and 3) the cumulative, peak-design, flows potentially added from new connections and line extensions upstream of any chronic overflow point are less than or proportional to the amount of inflow and infiltration removal documented upstream of that point. The inflow and infiltration reduction must be measured by the permittee using practices that are customary in the environmental engineering field and reported in an attachment to a Monthly Operating Report submitted to the regional TDEC Field Office. The data measurement period shall be sufficient to account for seasonal rainfall patterns and seasonal groundwater table elevations.

e. In the event that more than five (5) sanitary sewer overflows have occurred from a single point in the collection system for reasons that may not warrant the self-imposed moratorium or completion of the actions identified in this paragraph, the permittee may request a meeting with the Division of Water Resources field office staff to petition for a waiver based on mitigating evidence.

4. Upset

a. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not

include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

- b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;
 - iii. The permittee submitted information required under "Reporting of Noncompliance" within 24-hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days); and
 - iv. The permittee complied with any remedial measures required under "Adverse Impact."

5. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

6. Bypass

- a. "**Bypass**" is the intentional diversion of wastewater away from any portion of a treatment facility. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypasses are prohibited unless the following 3 conditions are met:
 - i. The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There are not feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during

normal periods of equipment down-time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass, which occurred during normal periods of equipment down-time or preventative maintenance;

- iii. The permittee submits notice of an unanticipated bypass to the Division of Water Resources in the appropriate environmental assistance center within 24-hours of becoming aware of the bypass (if this information is provided orally, a written submission must be provided within five days). When the need for the bypass is foreseeable, prior notification shall be submitted to the Director, if possible, at least 10 days before the date of the bypass.
- c. Bypasses not exceeding limitations are allowed **only** if the bypass is necessary for essential maintenance to assure efficient operation. All other bypasses are prohibited. Allowable bypasses not exceeding limitations are not subject to the reporting requirements of 6.b.iii, above.

7. Washout

- a. For domestic wastewater plants only, a "washout" shall be defined as loss of Mixed Liquor Suspended Solids (MLSS) of 30.00% or more. This refers to the MLSS in the aeration basin(s) only. This does not include MLSS decrease due to solids wasting to the sludge disposal system. A washout can be caused by improper operation or from peak flows due to infiltration and inflow.
- b. A washout is prohibited. If a washout occurs the permittee must report the incident to the Division of Water Resources in the appropriate regional Field Office within 24-hours by telephone. A written submission must be provided within 5 days. The washout must be noted on the discharge monitoring report. Each day of a washout is a separate violation.

D. LIABILITIES

1. Civil and Criminal Liability

Except as provided in permit conditions for "**Bypass**," "**Overflow**," and "**Upset**," nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of wastewater to any surface or subsurface waters. Additionally, notwithstanding this Permit, it shall be the responsibility of the permittee to conduct its wastewater treatment and/or discharge activities in a manner such that public or private nuisances or health hazards will not be created.

2. Liability Under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or the Federal Water Pollution Control Act, as amended.

PART III

OTHER REQUIREMENTS

A. TOXIC POLLUTANTS

The permittee shall notify the Division of Water Resources as soon as it knows or has reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic substance(s) (listed at 40 CFR 122, Appendix D, Table II and III) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/l);
 - b. Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant(s) in the permit application in accordance with 122.21(g)(7); or
 - d. The level established by the Director in accordance with 122.44(f).
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter (500 ug/l);
 - b. One milligram per liter (1 mg/L) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 122.21(g)(7); or
 - d. The level established by the Director in accordance with 122.44(f).

B. REOPENER CLAUSE

If an applicable standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(B)(2), and 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation.

C. PLACEMENT OF SIGNS

Within sixty (60) days of the effective date of this permit, the permittee shall place and maintain a sign(s) at each outfall. The sign(s) should be clearly visible to the public from the bank and the receiving stream or from the nearest public property/right-of-way, if applicable. The minimum sign size should be two feet by two feet (2' x 2') with one inch (1") letters. The sign should be made of durable material and have a white background with black letters.

The sign(s) are to provide notice to the public as to the nature of the discharge and, in the case of the permitted outfalls, that the discharge is regulated by the Tennessee Department of Environment and Conservation, Division of Water Resources. The following is given as an example of the minimal amount of information that must be included on the sign:

<p>TREATED INDUSTRIAL WASTEWATER & STORMWATER RUNOFF ExxonMobil Pipeline Company Operator of Memphis Terminal (Permittee's Phone Number) NPDES Permit NO. TN0000108 TENNESSEE DIVISION OF WATER RESOURCES 1-888-891-8332 ENVIRONMENTAL FIELD OFFICE - Memphis</p>
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D. ANTIDegradation

Pursuant to the Rules of the Tennessee Department of Environment and Conservation, Chapter 0400-40-03-.06, titled "Tennessee Antidegradation Statement," which prohibits the degradation of exceptional Tennessee waters and the increased discharges of substances that cause or contribute to impairment, the permittee shall further be required, pursuant to the terms and conditions of this permit, to comply with the effluent limitations and schedules of compliance required to implement applicable water quality standards, to comply with a State Water Quality Plan or other state or federal laws or regulations, or where practicable, to comply with a standard permitting no discharge of pollutants.

PART IV

STORMWATER POLLUTION PREVENTION PLAN

The permittee will develop, document and maintain a storm water pollution prevention plan (SWPPP) pursuant to the requirements set forth in EPA guidance manuals titled "Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices", (EPA 832-R-92-006), September, 1992, and the "Summary Guidance", (EPA 833-R-92-002), October, 1992. The plan shall be signed by either a principal executive officer of a corporation, the duly authorized representative, the owner or proprietor of a sole proprietorship, or a partner or general partner of a partnership. The SWPPP developed and implemented shall be site specific to the permitted facility with regard to the general terms and conditions outlined in the guidance manuals cited herein. The permittee shall maintain the SWPPP onsite to be available for review by division personnel upon request. The SWPPP shall be developed pursuant to the requirements outlined in the TMSP, Sector P for "[Stormwater Discharges Associated With Industrial Activity From ...Petroleum Bulk Oil Stations and Terminals](#)".

ADDENDUM TO RATIONALE

ExxonMobil Pipeline Company
PERMIT NO. TN0000108

March 26, 2020

Addendum prepared by: Ms. Sarah Terpstra

In a letter prepared by Johnny Canady, Terminal Superintendent, ExxonMobil Pipeline Company submitted the following comments on the draft permit on March 24, 2020. The division's responses are included in bold.

- 1) "Part I.B.3 - The discharge from ExxonMobil Outfall003, consisting of intermittent storm water runoff and flow from maintenance-related activities at a petroleum terminal, does not contain significant amounts of *E. coli*. Therefore, the potential for degradation to the receiving waters from these discharges is not measureable, and should not be included in the Terminal's effluent limitations and monitoring requirements. Additionally, language in this section regarding *E. coli* is not clear on required monitoring frequency."

The permittee is not required to sample for *E. coli*. The language in Part I.B.3 regarding sampling requirements for *E. coli* has been removed from the permit.

- 2) "Part IV – Part IV, Stormwater Pollution Prevention Plan, outlines the representatives who are authorized to sign the SWPPP. In this version of the draft permit, the 'duly authorized representative' was removed from the list of signatory authorities. Given that the duly authorized representative is the party with the direct knowledge of the Terminal necessary to certify the SWPPP, ExxonMobil is requesting the below language update to continue to allow the duly authorized representative to certify the SWPPP.

'The plan shall be signed by either a principal executive officer of a corporation, the duly authorized representative, the owner or proprietor of a sole proprietorship, or a partner or general partner of a partnership.'

The permit has been updated as requested.

- 3) "Rationale – I. Discharger – The Nature of Business should be corrected with the language below, as the Terminal is not a marine terminal.

'Petroleum Bulk Storage Terminal that stores and distributes refined petroleum products.'

The division agrees that this is an inaccurate description of the permittee's nature of business. Unfortunately, since the description was included in the Rationale of the draft permit, it cannot be changed. However, our records have been updated, and future correspondence will be correct. This addendum recognizes that "Petroleum bulk storage terminal that stores and distributes refined petroleum products" is the correct description of the permittee's nature of business.

RATIONALE

ExxonMobil Pipeline Company
Memphis Terminal
NPDES PERMIT NO. TN0000108
Memphis, Shelby County, Tennessee

Permit Writer: Sarah Terpstra

I. DISCHARGER

ExxonMobil Pipeline Company
Operator of Memphis Terminal
454 Wisconsin Avenue
Memphis, Shelby County, Tennessee
Site Longitude: -90.077731 Site Latitude: 35.11965

Official Contact Person:

Johnita D. Jones
VP & Southern Operations Manager
(832) 624-7917

Nature of Business:

A marine terminal that stores and distributes refined petroleum products.

SIC Code(s): 5171 and 4491
Industrial Classification: Secondary w/o ELG
Discharger Rating: Minor

II. PERMIT STATUS

Issued March 01, 2016
Expired March 31, 2020
Application for renewal received September 29, 2019

Watershed Scheduling

Environmental Field Office: Memphis
Primary Outfall Longitude: -90.077242
Primary Outfall Latitude: 35.12186
Hydrocode: 08010100 Watershed Group: 5
Watershed Identification: Mississippi
Target Reissuance Year: 2025

III. FACILITY DISCHARGES AND RECEIVING WATERS

ExxonMobil Pipeline Company discharges treated stormwater runoff, tank water draw-off, tank hydrostatic testing water, rack/pad/equipment washwater, truck rinse, monitoring well purge water, remediation system water, and dock washwater from Outfall 003 and uncontaminated stormwater runoff from Outfalls SW1, SW2 and SW3 to the Mississippi River at mile 734.

Low flows on unregulated streams are estimated using guidance from the EPA document *Low Flow Statistics Tools: A How-To Handbook for NPDES Permit Writers*¹. When sufficient and representative USGS gage data is available, USGS SWToolbox² is used to analyze the flow data and calculate 7Q10 and 30Q5 values.

The USGS Gage Station 07032000 – Mississippi River at Memphis provides sufficient data to characterize the low flow of the receiving stream. Gage data was analyzed with SWToolbox and used to calculate the 7Q10 for a period of record from 1990 to 2020. The 7Q10 flow in the receiving stream was calculated to be 102,936 MGD. See Appendix 1 for more information.

IV. APPLICABLE EFFLUENT LIMITATIONS GUIDELINES

There are no EPA effluent guidelines for the discharges from this facility. Standards of performance are therefore established in accordance with existing state regulations using available treatability information and the permit writer's best professional judgement.

V. PREVIOUS PERMIT LIMITS AND MONITORING REQUIREMENTS

Appendix 2 lists the permit limitations and monitoring requirements as defined in the previous permit.

VI. HISTORICAL MONITORING AND INSPECTION

During the previous permit term, ExxonMobil Pipeline Company did not have any appreciable difficulty in meeting effluent limitations as outlined in the previous permit. A summary of the data reported on Discharge Monitoring Report forms during the previous permit term is summarized in Appendix 3.

During the previous permit term, division personnel from the Memphis Environmental Field Office performed a Compliance Evaluation Inspection (CEI) of the facility on March 19, 2019 and found the permittee to be in compliance with permit conditions.

¹ https://www.epa.gov/sites/production/files/2018-11/documents/low_flow_stats_tools_handbook.pdf
Released October 2018 (EPA-833-B-18-001).

² <https://www.usgs.gov/software/swtoolbox-software-information>

VII. NEW PERMIT LIMITS AND MONITORING REQUIREMENTS

The proposed new permit limits have been selected by determining a technology-based limit and evaluating if that limit protects the water quality of the receiving stream. If the technology-based limit would cause violations of water quality, the water quality-based limit is chosen. The technology-based limit is determined from EPA effluent limitations guidelines if applicable (see Part IV); or from State of Tennessee maximum effluent limits for effluent limited segments per Rule 0400-40-05-.08. Note that in general, the term “anti-backsliding” refers to a statutory provision that prohibits the renewal, reissuance, or modification of an existing NPDES permit that contains effluents limits, permit conditions, or standards that are less stringent than those established in the previous permit.

A. OUTFALL 003

Flow

Monitoring of flow quantifies the load of pollutants to the stream. Flow shall be reported in Million Gallons per Day (MGD) and monitored at the time of sample collection.

Oil and Grease

The division has determined that an oil and grease limitation is needed for this facility because of the potential of contamination from spills, leaks and other industrial activities present at the site. The technology-based limit for oil and grease is 15 mg/l as a daily maximum concentration. This level can be accomplished where oil/water separators are maintained, kept clean and are not overloaded. There should be less reliance upon the oil/water separator as a solution and a greater reliance upon good management, operation and housekeeping practices to restrict pollution.

According to the State of Tennessee Water Quality Standards for the protection of Fish & Aquatic Life [Chapter 0400-40-03-.03(3) (c)], there shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to fish and aquatic life in the receiving stream.

The permit writer is selecting technology-based limits for oil and grease of 15 mg/L as a daily maximum concentration. In addition, the permit will contain language prohibiting visible floating scum, oil or other matter in the wastewater discharge. Sample type will be grab and frequency will be monthly.

Considering a sample measurement frequency (once per month) and a definition of the Monthly Average Concentration (see Part I, Section C: *Definitions*), only the Daily Maximum Concentration for Oil and Grease of 15 mg/L will be retained.

Total Suspended Solids (TSS)

Total Suspended Solids is a general indicator of the quality of a wastewater and will be limited in this permit. The permit writer believes the limit of 40 mg/L daily maximum concentration will

provide protection of water quality in the receiving stream. Considering the nature of wastewater collection and discharge system, the sample type will be grab and the frequency will be monthly.

The State of Tennessee Water Quality Standards for the protection of Fish & Aquatic Life [Chapter 0400-40-03-.03(3) (c)] state there shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to fish and aquatic life in the receiving stream.

pH

According to the State of Tennessee Water Quality Standards [Chapter 0400-40-03-.03(3) (b)], the pH for the protection of Fish and Aquatic Life shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24-hours. Considering that the receiving stream will provide some buffering capacity, effluent limitation for pH will be retained in a range 6.0 to 9.0. The sample type will be grab.

Benzene, Ethylbenzene, Xylenes and Toluene

The daily maximum concentrations for Benzene, Ethylbenzene, Xylenes and Toluene were based upon odor threshold values. These odor threshold values were taken from *handbook of Environmental Data on Organic Chemicals*, Second Edition, by Karel Vershueren (Van Nostrand Reinhold Company, New York, 1982). The previous permit limits were the most restrictive for each effluent characteristic when compared with the Water Quality criteria values, and are retained in the new permit. The new permit retains the limits, sample type, and monthly monitoring frequency established in the previous permit.

Visual Observations

Visual observations must be made once per week to note the presence of the discharges floating materials, foam, color, oily materials, chemical odor, or other discernable contaminants. The permittee must describe in DMR comments any results obtained via the discharge visual observations monitoring.

B. STORMWATER OUTFALLS – SW1, SW2, AND SW3

The renewed permit maintains the requirement for the permittee to implement and maintain a Stormwater Pollution Prevention Plan (SWPPP). Stormwater at outfalls SW1, SW2, and SW3 is not associated with “industrial activities” as defined in 40 CFR §122.26 (b)(14). These outfalls represent discharge locations from the large containment structures surrounding aboveground storage tanks which capture precipitation. Sumps within the containment area allow pumping and discharge of accumulated rainwater at a controlled rate on an as-needed basis. Discharge of accumulated rainfall is authorized under this permit, after the terminal has determined the stormwater is uncontaminated. Similar to the provisions of the Tennessee Multi-Sector Permit (TMSP) for fuel terminal stormwater, no annual reporting is required.

Contaminated stormwater will be routed to the wastewater treatment system and discharged through Outfall 003, where it will be monitored and reported as described in Section A above. Accumulated stormwater for discharge at SW1, SW2, and SW3 can be properly segregated and

commingled for treatment and discharge through Outfall 003 when samples indicate contamination at any of the stormwater outfalls.

This renewed permit requires a SWPPP be maintained to regulate stormwater runoff. This SWPPP is meant to ensure that reasonable practices are employed by the facility to prevent significant sources of pollution to the receiving stream. The permittee shall develop, document, and maintain the SWPPP pursuant to the requirements outlined in the TMSP, Sector P for [“Stormwater Discharges Associated With Industrial Activity From ...Petroleum Bulk Oil Stations and Terminals”](#).

IX. ANTIDEGRADATION

Tennessee’s Antidegradation Statement is found in the Rules of the Tennessee Department of Environment and Conservation, Chapter 0400-40-03-.06. It is the purpose of Tennessee’s standards to fully protect existing uses of all surface waters as established under the Act.

Stream determinations for this permit action are associated with the waterbody segment identified by the division as segment ID# TN08010100001_1000. This segment of the Mississippi River is identified by the Department as Exceptional Tennessee Waters (ETW). This designation is based on the presence of the federally endangered Pallid Sturgeon and the state threatened Blue Sucker. Provisions of Tennessee’s Antidegradation Statement are based on the ETW designation and are addressed below.

The division has determined this portion of the Mississippi River is not supporting of its fish and aquatic life designated use due to habitat alterations, and not supporting of its recreation designated use due to the presence of polychlorinated biphenyls (PCBs), mercury, dioxin, and chlordane. These pollutants are not expected to be in the discharges of stormwater or treated process water from operations at the site. Therefore, the division considers the potential for degradation to the receiving stream from the permittee’s discharge to be negligible. The receiving stream is fully supporting of its designated uses for industrial water supply, irrigation, and livestock watering and wildlife.

TMDLs have been developed and approved for this waterbody segment on the following parameters and dates:

<u>Parameters</u>	<u>TMDL Approval Date</u>
Chlordane, dioxin, PCBs	July 25, 2008

The proposed terms and conditions of this permit comply with the wasteload allocations of these TMDLs.

X. ELECTRONIC REPORTING

Since December 21, 2016, all Individual NPDES Permit holders are required to submit Discharge Monitoring Reports (DMRs) electronically through NetDMR. The permittee has been reporting via NetDMR since February 29, 2016.

EPA published the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, which will modernize Clean Water Act reporting for municipalities, industries and other facilities. The rule was published in the Federal Register on October 22, 2015 and became effective on December 22, 2015. The rule replaces most paper-based NPDES reporting requirements with electronic reporting.

More information is available at <http://www.tn.gov/environment/topic/wr-netdmr-and-electronic-reporting>.

XI. PERMIT DURATION

The proposed limitations meet the requirements of Section 301(b)(2)(A), (C), (D), (E), and (F) of the Clean Water Act as amended. It is the intent of the division to organize the future issuance and expiration of this particular permit such that other permits located in the same watershed and group within the State of Tennessee will be set for issuance and expiration at the same time. In order to meet the target reissuance date for the Mississippi watershed and following the directives for the Watershed Management Program initiated in January, 1996, the permit will be issued to expire in 2025.

APPENDIX 1

FACILITY DISCHARGES AND RECEIVING WATERS

FACILITY DISCHARGES AND RECEIVING WATERS

OUTFALL 001	
LONGITUDE	LATITUDE
-90.077242	35.12186

FLOW (MGD)	DISCHARGE SOURCE
0.0205	Treated industrial wastewater & Stormwater
0.0205	TOTAL DISCHARGE

RECEIVING STREAM DISCHARGE ROUTE			
Mile 734 of Mississippi River			
STREAM LOW FLOW (CFS) *	7Q10	1Q10	30Q5
	159,270	N/A	207,250
(MGD)	102,936	N/A	133,946

STREAM USE CLASSIFICATIONS (WATER QUALITY)				
FISH & AQUATIC LIFE	RECREATION	IRRIGATION	LIVESTOCK & WILDLIFE	DOMESTIC SUPPLY
X	X	X	X	
INDUSTRIAL	NAVIGATION			
X	X			

Treatment: Oil/water separator, flow equalization tank, and carbon adsorber

* References: Streamflow-Characteristic Estimation Methods for Unregulated Streams of Tennessee, Scientific Investigations Report 2009-5159, by George S. Law, Gary D. Tasker, and David E. Ladd. Gage station 0703200. Data analyzed using SWToolbox for period of record 1990 - 2020.

SW TOOLBOX OUTPUTS

Description: 07032000 MISSISSIPPI RIVER AT MEMPHIS, TN
 Year Boundaries: April 1 - March 31
 Period in report: April 1, 1989 - March 31, 2020
 Parameter: 7-day low
 Non-zero values: 8
 Zero values: 0
 Negative values: 23 (ignored)

Input time series (zero and negative values not included in listing.)
 193570.000235570.000146570.000243430.000389570.000188000.000232710.000196430.000

LOG PEARSON TYPE III Frequency Curve Parameters
 (based on logs of the non-zero values)

Mean (logs)	5.342
Variance (logs)	0.015
Standard Deviation (logs)	0.123
Skewness (logs)	0.961
Standard Error of Skewness (logs)	0.752
Serial Correlation Coefficient (logs)	-0.232
Coefficient of Variation (logs)	0.023

Frequency Curve - Parameter values at selected probabilities

Non-exceedance Probability	Recurrence Interval	Parameter Value	Variance of Estimate	95-Pct Confidence Intervals	
				Lower	Upper
0.1000	10.00	159270.000	1.019	116890.000	187950.000
0.2000	5.00	172560.000	1.057	140910.000	216960.000

Description: 07032000 MISSISSIPPI RIVER AT MEMPHIS, TN
 Year Boundaries: April 1 - March 31
 Period in report: April 1, 1989 - March 31, 2020
 Parameter: 30-day Low
 Non-zero values: 8
 Zero values: 0
 Negative values: 23 (ignored)

Input time series (zero and negative values not included in listing.)
 251170.000269900.000174070.000258230.000477770.000236500.000274530.000238870.000

LOG PEARSON TYPE III Frequency Curve Parameters
 (based on logs of the non-zero values)

Mean (logs)	5.419
Variance (logs)	0.015
Standard Deviation (logs)	0.122
Skewness (logs)	1.231
Standard Error of Skewness (logs)	0.752
Serial Correlation Coefficient (logs)	-0.161
Coefficient of Variation (logs)	0.023

Frequency Curve - Parameter values at selected probabilities

Non-exceedance Probability	Recurrence Interval	Parameter Value	Variance of Estimate	95-Pct Confidence Intervals	
				Lower	Upper
0.1000	10.00	193890.000	1.023	150320.000	224520.000
0.2000	5.00	207250.000	1.070	174600.000	258040.000

APPENDIX 2

PREVIOUS PERMIT LIMITS AND MONITORING REQUIREMENTS

OUTFALL 003						
Parameter	Qualifier	Value	Unit	Sample Type	Frequency	Statistical Base
Benzene	<=	0.5	mg/L	Grab	Monthly	Daily Maximum
Ethylbenzene	<=	0.2	mg/L	Grab	Monthly	Daily Maximum
Floating solids or visible foam-visual	Report	-	Y=1; N=0	Visual when discharging	Weekly	Total
Flow	Report	-	Mgal/d	Totalizer	Monthly	Monthly Average
Flow	Report	-	Mgal/d	Totalizer	Monthly	Daily Maximum
Oil & Grease	<=	15	mg/L	Grab	Monthly	Daily Maximum
Toluene	<=	1.0	mg/L	Grab	Monthly	Daily Maximum
Total Suspended Solids (TSS)	<=	40	mg/L	Grab	Monthly	Daily Maximum
Xylene	<=	0.5	mg/L	Grab	Monthly	Daily Maximum
pH	>=	6.0	SU	Grab	Monthly	Minimum
pH	<=	9.0	SU	Grab	Monthly	Maximum

APPENDIX 3

DISCHARGE MONITORING REPORT SUMMARY

Outfall 003	Benzene	Ethylbenzene	Floating solids, waste or visible foam	Flow		Oil & Grease	pH		TSS	Toluene	Xylene [mix of m+o+p]
	Daily max. (mg/L)	Daily max. (mg/L)	Weekly or daily (N=0;Y=1)	Monthly avg. (MGD)	Daily max. (MGD)	Daily max. (mg/L)	Minimum (SU)	Maximum (SU)	Daily max. (mg/L)	Daily max. (mg/L)	Daily max. (mg/L)
12/31/2019											
11/30/2019			0	0.00673	0.026	2.8	6.87	6.87	2		
10/31/2019			0	0.00401	0.02318		6.66	6.66	3.3	0.00365	
09/30/2019											
08/31/2019											
07/31/2019											
06/30/2019			0	0.01488	0.02661		6.7	6.7	2		
05/31/2019			0	0.01072	0.02406		6.95	6.95	2.67		
04/30/2019			0	0.01051	0.0193		6.57	6.57	2.6		
03/31/2019			0	0.00497	0.02015		6.23	6.23	1.5		
02/28/2019			0	0.0133	0.03065		6.88	6.88	1.5		
01/31/2019			0	0.18202	0.03428		6.68	6.68	3.8		
12/31/2018			0	0.00471	0.02072		6.98	6.98	7	< .000338	
11/30/2018			0	0.00875	0.02571		6.83	6.83			
10/31/2018			0	0.00427	0.02431		6.4	6.4	7.7		
09/30/2018											
08/31/2018	< .000649		0	0.0052	0.02688		6	6	5.9	< .000703	
07/31/2018											
06/30/2018											
05/31/2018											
04/30/2018	0.00508	0.00186	0	0.01376	0.01974	< 1.3	6.38	6.38	17.3	0.0251	0.019
03/31/2018											
02/28/2018											
01/31/2018											
12/31/2017											
11/30/2017	< .00036	< .00037	0	0.00161	0.00298	< 1.4	6.79	6.79	27	< .00033	< .0006
10/31/2017											
09/30/2017	< .00036	< .00037	0	0.00376	0.0138	< 1.6	7.19	7.19	12	< .00033	0.0006
08/31/2017	< .00036	< .00037	0	0.12288	0.01918	< 1.6	6.05	6.05	3.6	< .00033	< .0006
07/31/2017											
06/30/2017											
05/31/2017	< .00036	< .00037	0	0.01635	0.16225	< 1.6	6.12	6.12	6.4	< .00033	< .0006
04/30/2017											
03/31/2017											
02/28/2017											
01/31/2017	< .00036	< .00037	0	0.00774	0.03	< 1.6	6.17	6.17	10.9	< .00033	< .0006
12/31/2016											
11/30/2016											
10/31/2016											
09/30/2016	< .00036	< .00037	0	0.00068	0.02031	< 1.6	6.99	6.99	12.4	< .00033	< .0006
08/31/2016											
07/31/2016	< .00036	< .00037	0	0.00141	0.03145	< 1.64	6.8	6.8	9.3	< .00033	< .0006
06/30/2016	< .00036	< .00037	0	0.00679	0.02933	< 1.58	7.18	7.18	5.7	< .00033	< .0006
05/31/2016											
04/30/2016	< .00036	< .00037	0	0.00598	0.02277	< 1.58	7.07	7.07	5.71	< .00033	< .0006

NODI C = No Discharge
 NODI B = Below Detection

Site ID	Site	Location	City	County	EFO Name
4765	ExxonMobil Oil Corporation - Memphis Terminal	454 Wisconsin Avenue	Memphis	Shelby	Memphis

Permit Information

Permit Number TN0000108	Permit Type Individual	Status Reissuance
Permittee Name ExxonMobil Pipeline Company LLC	Project Name Memphis Terminal	
Activity Description Petroleum Bulk Storage Terminal that stores and distributes refined petroleum products.		
Permit Rating I	Facility Classification X	Discharge Code NPW, SW
Application Received 27-SEP-2019	Application Returned 20-JUL-2015	Application Complete 04-OCT-2019
Public Notice Date 25-FEB-2020	Issuance Date 26-MAR-2020	Effective Date 01-APR-2020
Expiration Date 31-MAR-2025	Modification Date	Termination Date
Receiving Stream Mississippi River at mile 734		
Effluent Description		

Permit Documents

View	File Type	Description	Document Date ↓	Return to Compliance
	Permit	Final Permit TN0000108 w/ Addendum to Rationale	26-MAR-2020	-
	Letter	Comments on Draft Permit from Johnny Canady	24-MAR-2020	-
	Draft Permit	Draft Permit TN0000108	25-FEB-2020	-
	Application	Application Addendum	12-DEC-2019	-
	Application	Application RCVD 9/27/19	27-SEP-2019	-
	Inspection Report	CEI Cover Letter, Inspection Report and Photo Document	25-MAR-2019	-
	Letter	Bypass notification due to MS River water level 02/26/2019	26-FEB-2019	-
	Letter	RCVD 19-JAN-18: letter re: contact info by Shonta Greenwood.	19-JAN-2018	-
	Letter	RCVD 01-DEC-17: letter re: inter-affiliate transfer of operating responsibility by Timothy Long.	01-DEC-2017	-
	Letter	RCVD 23-MAY-17: letter re: contact update by Johnny Canady.	23-MAY-2017	-

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Forms submitted through MyTDEC Forms after 11/17/2020 will be available in FileNet.