NPDES Permit No. IL0004073 Notice No. MEL:14112601.docx

Public Notice Beginning Date: April 7, 2015

Public Notice Ending Date: May 7, 2015

National Pollutant Discharge Elimination System (NPDES) Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency Bureau of Water, Division of Water Pollution Control Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 217/782-0610

Name and Address of Discharger:

Marathon Petroleum Company LP P.O. Box 1200 Robinson, Illinois 62454 Name and Address of Facility:

Marathon Petroleum Company LP - Robinson Refinery 100 Marathon Avenue Robinson, Illinois 62454 (Crawford County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Mark E. Liska at 217/782-0610.

The applicant is engaged in the operation of a complex, integrated petroleum refinery (SIC 2911). Waste water is generated from oil refining processes, cooling tower and boiler blowdown, hydrostatic testing, stormwater runoff, off-facility wastewater and hydrostatic test water from terminals and pipelines, fire and utility water usage, and sanitary wastewater. Plant operation results in a historical average discharge of 2.729 MGD of wastewater treatment plant effluent (including treated process wastewater and stormwater runoff) from outfall 001; an intermittent discharge of treatment plant overflow, recycled treatment plant effluent, boiler and cooling tower blowdown, and storm water from outfall 002; an intermittent discharge of hydrostatic test water, coke rail car water, stormwater, and fire/utility water from outfall 003; and intermittent discharge of stormwater from outfalls 005, 006, 007, 008, 009, and 010.

The following modification is proposed:

The permittee will increase production from 225,000 bpd to 245,000 bpd. The DAF at outfall 001 will increase from 2.666 MGD to 2.729 MGD. The peak average flow at outfall 001 will increase from 3.434 MGD to 3.505 MGD. The increase in production and the increase in flow does not include an increase in permitted load limits.

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| Application is made for new and existing discharge(s) which are located in Crawford County, Illinois. | The following information identifies |
|---|--------------------------------------|
| the discharge point, receiving stream and stream classifications: | - |

| Outfall | Receiving Stream | Latitude | | Longitude | | Stream Classification | Biological Stream Characterization |
|---------|---|------------------------|-------|------------------------|------|--------------------------|---------------------------------------|
| 001 | Robinson Creek | 39°00'58" | North | 87 [°] 42'30" | West | General Use | E |
| 002 | Marathon Creek | 39 ° 00'16" | North | 87 [°] 42'51" | West | General Use | Not Listed |
| 003 | Marathon Creek | 39 [°] 00'15" | North | 87 [°] 42'50" | West | General Use | Not Listed |
| 005 | Marathon Creek | 39 [°] 00'15" | North | 87 [°] 42'51" | West | General Use | Not Listed |
| 006 | Robinson Creek | 39 ° 00'23" | North | 87 [°] 42'17" | West | General Use | E |
| 007 | Unnamed Creek tributary to Robinson Creek | 38 ° 59'42" | North | 87 [°] 42'14" | West | General Use | E |
| 008 | Drainage Tile to Marathon Creek | 38 [°] 59'35" | North | 87 [°] 43'02" | West | General Use | Not Listed |
| 009 | Drainage Ditch to Robinson Creek | 38 [°] 59'45" | North | 87 [°] 43'35" | West | General Use | E |
| 010 | Drainage Ditch to Robinson Creek | 39 [°] 00'08" | North | 87 [°] 43'44" | West | General Use | E |

To assist you further in identifying the location of the discharge please see the attached map.

The stream segments BFC-25 and BFC-26 receiving the discharge from outfall(s) 001, 006, 007, 009, and 010 are on the 2014 303 (d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System.*

The following parameters have been identified as the pollutants causing impairment:

| Designated Use | Potential Cause |
|----------------|----------------------|
| Aquatic Life | Phosphorus, Chloride |

The stream segments BFCA-22 receiving the discharge from outfall(s) 002, 003, 005, and 08 are on the 2012 303 (d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

The following parameters have been identified as the pollutants causing impairment:

| Designated Use | Potential Cause |
|----------------|-----------------|
| Aquatic Life | Cause Unknown |

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The discharge(s) from the facility shall be monitored and limited at all times as follows:

IAC: Illinois Administrative Code

| Outfall 001: | LOAD LIMIT <u>DAF</u> | S lbs/day** (DMF) | | CONCENT <u>LIMITS</u> | | |
|---|--------------------------|------------------------|---|--------------------------|------------------|---|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| Flow (MGD) | | | | Meas | ure | 35 IAC 309.146 |
| рН | | | | Shall be in the | range 6.0-9.0 | 35 IAC 304.125 |
| Temperature | | | | Stanc | lard | 35 IAC 302.211 |
| WET | | | | Meas | ure | 35 IAC 309.146 |
| BOD ₅ | 222 | 573 | 35 IAC 304.120(c) | 10 | 20 | 35 IAC 304.120(c) |
| Total Suspended Solids | 267 | 687 | 35 IAC 304.120(c) | 12 | 24 | 35 IAC 304.120(c) |
| Chemical Oxygen Demand | 9,767 | 18,821 | 40 CFR 419.22 | | | |
| Oil & Grease | 333 | 763 | 40 CFR 419.22 | 15 | 30 | 35 IAC 304.124 |
| Phenol (4AAP) | | 2.9 | 35 IAC 302.208 | | 0.1 | 35 IAC 302.208 |
| Ammonia as N* Spring/Fall | 36 | 193 | 35 IAC 355, 35 IAC 302.212 | 1.6 | 6.6 | 35 IAC 355, 35 IAC 302.212 |
| Summer | 34 | 201 | 35 IAC 355, 35 IAC 302.212 | 1.5 | 6.9 | 35 IAC 355, 35 IAC 302.212 |
| Winter | 91 | 199 | 35 IAC 302.212 35 IAC 355, 35 IAC 302.212 | 4.0 | 6.8 | 35 IAC 302.212 35 IAC 355, 35 IAC 302.212 |
| Sulfide | 7.4 | 16.5 | 40 CFR 419.22 | | | |
| Total Chromium | 9.8 | 28 | 40 CFR 419.23 | 1.0 | 2.0 | 35 IAC 304.124 |
| Hexavalent Chromium | 0.24 | 0.46 | 35 IAC 302.208 | 0.011 | 0.016 | 35 IAC 302.208 |
| Chloride | | 28,643 | 35 IAC 303.323 | | 1000 | 35 IAC 303.323 |
| Fluoride | 91 | 486 | | 4 | 17 | 35 IAC 302.208 |
| Zinc (Total) | | | | Moni | tor | 35 IAC 309.146 |
| Sulfate | | | | Moni | tor | 35 IAC 309.146 |
| Phosphorus (Total) | | | | Moni | tor | 35 IAC 309.146 |
| Nitrogen (Total) | | | | Moni | tor | 35 IAC 309.146 |
| Mercury | | | | Monitor | | 35 IAC 309.146 |
| Selenium | | | | Moni | tor | 35 IAC 309.146 |
| | | Monthly Avg Minimum | Weekly Average Minimum | Daily Minimum | | |
| Dissolved Oxygen March - July August - February | | NA 5.5 | 6 4 | 5 3.5 | | 35 IAC 302.206 |

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*For Ammonia as Nitrogen, Spring/Fall is March-May and September-October; Summer is June-August; and Winter is November-February. Discharge from outfall 001 will also be subject to weekly average limits for Ammonia as Nitrogen. Weekly average limit for Spring/Fall is 4.0 mg/L (91 lb/day). Weekly average limit for Summer is 3.8 mg/L (86 lb/day). No weekly average limit applies for Winter.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 002 - Waste Water Treatment Plant Bypass

| | LOAD LIMITS lbs/day*** DAF (DMF) CONCENTRATION LIMITS mg/l | | | | | |
|------------------------------|--|------------------|------------|-------------------|------------------|-------------------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| | | | | | | |
| Flow (MGD) | | | | Meas | ure | 35 IAC 309.146 |
| рН | | | | Shall be in the | range 6.0-9.0 | 33 IAC 304.125 |
| BOD₅ | | | | 10 | 20 | 35 IAC 304.120(c) |
| Total Suspended Solids | | | | 12 | 24 | 35 IAC 304.120(c) |
| Oil & Grease | | | | 15 | 30 | 35 IAC 304.124 |
| Ammonia as N* Spring/Fall | | | | 1.6 | 6.6 | 35 IAC 355, 35 IAC 302.212 |
| Summer | | | | 1.5 | 6.9 | 35 IAC 355, 35 IAC 302.212 |
| Winter | | | | 4.0 | 6.8 | 35 IAC 355, 35 IAC 302.212 |
| Phenols(4AAP) | | | | | 0.1 | 35 IAC 301.208 |
| Total Chromium | | | | 1.0 | 2.0 | 35 IAC 304.124 |
| Hexavalent Chromium | | | | 0.011 | 0.016 | 35 IAC 302.208 |
| Chemical Oxygen Demand | | | | Monitor | | 35 IAC 309.146 |
| Chloride | | | | | 500 | 35 IAC 302.208 |
| Total BETX** | | | | Monitor | | 35 IAC 309.146 |
| Total PNAs** | | | | Moni | tor | 35 IAC 309.146 |

*For Ammonia as Nitrogen, Spring/Fall is March-May and September-October; Summer is June-August; and Winter is November-February. Should discharge occur on two or more days in a seven-day period, a weekly average limit shall apply. The weekly average limit for Ammonia as Nitrogen in Spring/Fall is 4.0 mg/L and in summer is 3.8 mg/L. No weekly average limit shall apply during Winter. **The Permittee shall report a daily maximum for Toluene, Total BETX, and Total PNAs, and if discharge occurs more than one day in a month, the Permittee shall report a monthly average. These shall be reported on the monthly DMR form. A special condition will define Total BETX and Total PNAs.

***Stormwater Credits will apply to outfall 002.

Outfall: 003 - East Impoundment Basin Discharge

| | LOAD LIMI <u>DAF (</u> | | | CONCEN LIMIT | | |
|------------------------------|---------------------------|------------------|------------|-------------------|------------------|---|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| Flow (MGD) | | | | Mea | asure | 35 IAC 309.146 |
| рН | | | | Shall be in the | e range 6.0-9.0 | 35 IAC 304.125 |
| Oil & Grease | | | | 15 | 30 | 35 IAC 304.124 |
| Phenol | | | | | 0.1 | 35 IAC 302.208 |
| Total Chromium | | | | 1.0 | 2.0 | 35 IAC 304.124 |
| Total Organic Carbon | | | | Мо | | |
| Ammonia as N* Spring/Fall | | | | 1.6 | 6.6 | 35 IAC 355, 35 IAC 302.212 |
| Summer | | | | 1.5 | 6.9 | 35 IAC 355, |
| Winter | | | | 4.0 | 6.8 | 35 IAC 302.212 35 IAC 355, 35 IAC 302.212 |
| Total Suspended Solids | | | | 15 | 30 | 35 IAC 304.124 |
| BOD ₅ | | | | Мо | nitor | |
| Chemical Oxygen Demand | | | | Monitor | | |
| Sulfide | | | | Мо | nitor | |
| Chloride | | | | | 500 | 35 IAC 302.208 |
| Fluoride | | | | 15 | 30 | 35 IAC 304.124 |
| Sulfate | | | | Мо | nitor | 35 IAC 302.208 |

*For Ammonia as Nitrogen, Spring/Fall is March-May and September -October; Summer is June-August; and Winter is November-February. The discharge at 003 is subject to weekly average limits for Ammonia as Nitrogen. Spring/Fall weekly average limit shall be 4.0 mg/L and Summer weekly average limit shall be 3.8 mg/L. No weekly average limit shall apply in Winter.

Outfalls 005, 006, 007, 008, 009, and 010: Storm Water Pollution Prevention Plan Public Notice/Fact Sheet -- Page 6 -- NPDES Permit No. IL0004073

Outfalls 001: Treatment Plant Discharge

Load Limit Calculations:

- A. Load limit calculations for the following pollutant parameters were based on a design average flow of 2.729 MGD and a peak average flow of 3.505 MGD and using the formula of flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅, Total Suspended Solids, Phenol (4AAP), Ammonia as Nitrogen (001 only), Hexavalent Chromium, and Chloride (001 only).
- B. Production based load limits were calculated by multiplying the average production by the effluent limit contained in 40 CFR 419 -Petroleum Refining. Production figures utilized in these calculations for the following subcategories are as follows:

| Subcategory | | Production Rate |
|---------------------------------|--|---|
| Subpart B: Cracking Subcategory | | Feedstock Consumption:245,000 Barrels per daySize Factor:1.41Process Factor:1.0 |

Chemical Oxygen Demand, Oil and Grease, Sulfide, and Total Chromium were limited using Federal production based load limits. The following sample calculation shows the methodology utilized to determine production based load limitations:

The BPT load limits (40 CFR 419.22) were determined using the size factor, process factor and average production, as well as the BPT effluent limitations factor in lbs/1,000 barrels. The BPT load limits (lbs/day) for COD are as follows:

30-Day Average for COD:

(38.4 lbs/1,000 bbl) x (245,000 bbl/day) x (1.41) x (1.00) = 13,265 lbs/day

Daily Maximum for COD:

(74 lbs/1,000 bbl) x (245,000 bbl/day) x (1.41) x (1.00) = 25,563 lbs/day

The size factor used to determine the BPT load limits is based on the total barrels of feedstock per stream day. The process factor was determined based on the process configuration, which was determined based on the average production (bbl/day) for the various refinery processes. The BAT load limits (40 CFR 419.23) were determined using the average production (bbl/day) for the various refinery processes and the BAT effluent limitation factor. The average production for the refinery processes is as follows: Crude – 245,000 bbl/day; Cracking and Coking – 173,300 bbl/day, and Reforming and Alkylation – 73,900 bbl/day. The following sample calculation for chromium (total) shows the methodology utilized to determine the BAT production based load limits:

30 - Day Average for Chromium (Total): (245) x (0.004) + (173.3) x (0.041) + (73.9) x (0.037) = 10.8 lbs/day

Daily Maximum for Chromium (Total): (245) x (0.011) + (173.3) x (0.119) + (73.9) x (0.107) = 31.2 lbs/day

The BAT effluent limitation factors used in the above calculation are in lbs/1000 bbl. The average production figures used in the above calculation are in1,000 bbl/day. The crude processes include crude distillation, desalting and vacuum distillation. The cracking and coking processes include fluid catalytic cracking, delayed coking, and hydrotreating. The catalytic reforming processes contribute to the production in the reforming and alkylation subcategory.

The state load limits, BPT load limits and BAT limits and BAT load limits were compared, and the most stringent load limits are in the permit for each parameter.

Additional storm water credit (pounds per 1,000 gallons of storm water flow) for the following parameters is based on the quantity of storm water flow taken through the process treatment: COD, Chromium (total) and Chromium (hexavalent).

The BOD₅, TSS, COD, Oil & Grease, Phenols, Sulfide, Cyanide, Fluoride, and Chromium (total) and Chromium (Hexavalent) load limits appearing in the permit are effluent limits from the prior permit, which are more stringent than the State and Federal Guidelines presented above. There is no rise in any load limit from the previous permit.

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The permittee will increase production from 225,000 bpd to 245,000 bpd. The DAF at outfall 001 will increase from 2.666 MGD to 2.729 MGD. The peak average flow at outfall 001 will increase from 3.434 MGD to 3.505 MGD. The rise in flow is due to the increase in production. Although there is an increase in flow rate, the permittee has agreed to continue to use the load limits from the previous permit which were calculated based on lower flow (see table below). Since there is no increase in load limits and there is no new wastewater stream (the flow increase is only in already permitted streams), the flow increase is not subject to an antidegradation analysis.

The table below summarizes the limits for Outfall 001. For flow and production-based limits, the Permittee has agreed to use the lower of previous and newly calculated load limits.

| Limits used ar | e in bol | d. | | | | | | |
|----------------|----------|--------|-----------------|----------------------------------|---------------|-------|----------|-------------|
| | Previous | | Calculated Load | | Load Limit | | | Conc. Limit |
| | Load L | imits | Load Limits | | Regulation | Conc | . Limits | Regulation |
| BOD5 | 222 | 573 | 227 | 584 | 304.120(c) | 10 | 20 | 304.120(c) |
| TSS | 267 | 687 | 273 | 701 | 304.120(c) | 12 | 24 | 304.120(c) |
| COD | 9,767 | 18,821 | 13,265 | 25,563 | 40 CFR 419.23 | | | |
| Oil & Grease | 333 | 859 | 341 | 876 | 304.124 | 15 | 30 | 304.124 |
| Phenols | | 2.9 | | 2.9 | 302.208 | | 0.1 | 302.208 |
| Ammonia | | | | | | | | |
| Spring/Fall | 33 | 163 | 36* | 193* | 35 IAC 355 | 1.6 | 6.6 | 35 IAC 355 |
| Summer | 33 | 198 | 34* | 201* | 35 IAC 355 | 1.5 | 6.9 | 35 IAC 355 |
| Winter | 89 | 135 | 91* | 199* | 35 IAC 355 | 4 | 6.8 | 35 IAC 355 |
| Sulfide | 7.4 | 16.5 | 10 | 22 | 40 CFR 419.23 | | | |
| Chromium(T) | 9.8 | 28 | 11 | 31 | 40 CFR 419.23 | 1 | 2 | 304.124 |
| Chromium (H) | 0.24 | 0.46 | 0.24 | 0.46 | 40 CFR 419.23 | 0.1 | 0.2 | 304.124 |
| Chloride | | 28,643 | | 29,232 | 303.323 | | 1000 | 303.323 |
| Fluoride | 114 | 486 | 91 | 497 | | 4 | 17 | 302.208 |
| Sulfate | | 46797 | No Reasonable | No Reasonable Potential Exists** | | | or Only | |
| Zinc | 1.2 | 8.7 | No Reasonable | Potential Exists | S** | Monit | or Only | |

* Changes in load limits for ammonia are due to calculations based on pH in the receiving stream. The increase in a load limit due to new pH data is not subject to an antidegradation assessment or anti-backsliding pursuant to 35 III. Adm. Code 302.105(d)(7) and 40 CFR 122.44(I)(2)(i)(B)(1), respectively.

** DMR data show that, for sulfate and zinc, no reasonable potential exists to exceed the water quality limit. These two parameters will have non-limited monitoring only. The dropping of permit limits due to new water quality data is not subject to anti-backsliding pursuant to 40 CFR 122.44(I)(2)(i)(B)(1).

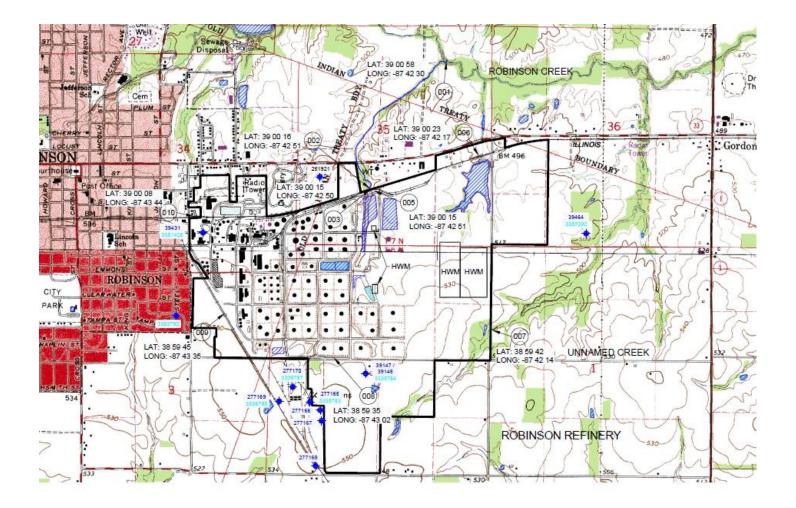
DMR data for mercury shows that the average discharge concentration at outfall 001 is 4.77 ng/L. No reasonable potential exists to exceed the water quality limit. Mercury will continue to have non-limited monitoring only.

All Water Treatment Additives which were previously approved by the Agency will continue to be approved.

The following explain the conditions of the proposed permit:

Special conditions are used to clarify discharge reporting and monitoring requirements. A special condition will be included to explain and establish stormwater credits for outfall 001 and 002. Special conditions define biomonitoring and require biomonitoring toxicity evaluations for outfall 001. Special conditions will outline temperature limits for discharges from outfall 001. A special condition outlining a Storm Water Pollution Prevention Plan will be included, as outfalls 005, 006, 007, 008, 009, and 010 will be governed by a Storm Water Pollution Prevention Plan.

All water used for both processes and cooling is pumped from offsite wells and groundwater seepage from two historically used gravel pits which are not waters-of-the-state. With no surface water intakes, the facility is not subject to 316(b) regulations.



Public Notice of Draft Permit

Public Notice Number MEL:14112601.docx is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0004073 has been prepared under 40 CFR 124.6(d) for Marathon Petroleum Company LP, P.O. Box 1200, Robinson, Illinois 62454 for discharge into Robinson Creek from the Marathon Petroleum Company LP -Robinson Refinery, 100 Marathon Avenue, Robinson, Illinois 62454 (Crawford County). Marathon Petroleum Company LP -Illinois Refining Division operates a complex, integrated petroleum refinery, with a crude oil consumption of 245,000 Barrels per day. Wastewater is discharged via three outfalls: 002 is treatment plant overflow; 003 is stormwater and miscellaneous non-process waste streams; 001 is treated process wastewater, treated sanitary wastewater, and miscellaneous other waste streams.

The application, draft permit and other documents are available for inspection and may be copied at the Agency between 9:30 A.M. and 3:30 P.M. Monday through Friday. A Fact Sheet containing more detailed information is available at no charge. For further information, call the Public Notice Clerk at 217/782-0610.

Interested persons are invited to submit written comments on the draft permit to the Agency at the above address. The NPDES Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 30 days from the date of this publication shall be considered in making the final decision regarding permit issuance.

Any interested person may submit written request for a public hearing on the draft permit, stating their name and address, the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to these issues in the hearing. Such requests must be received by the Agency not later than 30 days from the date of this publication.

If written comments and/or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing.

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Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Name and Address of Permittee:

Marathon Petroleum Company LP P.O. Box 1200 Robinson, Illinois 62454 Issue Date: Effective Date:

Facility Name and Address:

Marathon Petroleum Company LP - Robinson Refinery 100 Marathon Avenue Robinson, Illinois 62454 (Crawford County)

Discharge Number and Name:

001 - Wastewater Treatment Plant Discharge

002 - Treatment Plant Bypass

003 - East Impoundment Basin Discharge

005 - Coke Rail Car Repair Area Stormwater Runoff

006 - York Pond/North Culvert Outflow Stormwater

007 - Southeast Culvert/North Ditch Run-In Stormwater

008 - Southern Fence Line Stormwater Runoff

009 - Southwest Gate Drainage Culvert/South Culvert Stormwater

010 - Northwest Fence Pipe Outflow Stormwater

Receiving Waters:

Robinson Creek Marathon Creek Marathon Creek Marathon Creek Robinson Creek Unnamed Creek tributary to Robinson Creek Drainage Tile tributary to Marathon Creek Unnamed Ditch tributary to Robinson Creek Unnamed Ditch tributary to Robinson Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

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Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001: Wastewater Treatment Plant Discharge and FCCU Scrubber Wastewater - (DAF = 2.729 MGD)

Outfall 001 consists of Treated Process Wastewater, which includes Coke Railcar Water, Fire Hydrant Flushings, Fire Training Water, Fire Water from Emergency Response Operations, Reverse Osmosis Rejection Water, Boiler and Cooling Tower Blowdown, Treated Sanitary Wastewater, Process Wastewater and Hydrostatic Test Water from Terminals and Pipelines, Stormwater Runoff, Hydrostatic Test Water, Treated Groundwater, and Filter Backwash Water all treated in the Waste Water Treatment Plant. Discharge is to Robinson Creek. Average proposed discharge is 2.729 MGD; Peak Average Flow is 3.505 MGD.

| | Load Limit: <u>Daf (I</u> | | CONCEN LIMITS | | | |
|--|------------------------------|-------------------|-------------------|-------------------|----------------------------|-------------------------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | SAMPLE FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | See Special | Condition 1 | | | Continuous | Meter |
| рН | See Special | Condition 2 | | | 2/Week | Grab |
| Temperature | See Special | Condition 8 | | | 2/Week | Grab |
| WET | See Special | Condition 13 | | | 2/Year | |
| BOD₅ | 222 | 573 | 10 | 20 | 2/Week | Composite |
| Total Suspended Solids | 267 | 687 | 12 | 24 | 2/Week | Composite |
| Chemical Oxygen Demand | 9,767 | 18,821 | | | 2/Week | Composite |
| Oil & Grease | 333 | 763 | 15 | 30 | 1/Week | Mathematical Composite** |
| Phenol (4AAP) | | 2.9 | | 0.1 | 2/Week | Grab |
| Ammonia as N* Spring/Fall Summer Winter | 36 34 91 | 193 201 199 | 1.6 1.5 4.0 | 6.6 6.9 6.8 | 2/Week 2/Week 2/Week | Composite Composite Composite |
| Sulfide | 7.4 | 16.5 | | | 2/Week | Composite |
| Total Chromium***** | 9.8 | 28 | 1.0 | 2.0 | 2/Year | Composite |
| Hexavalent Chromium***** | 0.24 | 0.46 | 0.011 | 0.016 | 2/Year | Composite |
| Chloride | | 28,643 | | 1000 | 2/Week | Composite |

| | Monthly Average Minimum | Weekly Average Minimum | Daily Minimum | | |
|---|----------------------------|---------------------------|------------------|------------------|--------------|
| Dissolved Oxygen March - July August - February | NA 5.5 | 6 4 | 5 3.5 | 2/Week 2/Week | Grab Grab |

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall 001: Wastewater Treatment Plant Discharge (continued)

| | LOAD LIMIT <u>DAF (</u> | | CONCENTRATION LIMITS mg/l | | | |
|--------------------|----------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | SAMPLE FREQUENCY | SAMPLE TYPE |
| Fluoride | 91 | 486 | 4 | 17 | 2/Month | Composite |
| Zinc (Total) | | | | Monitor Only | 1/Month | Composite |
| Sulfate | | | | Monitor Only | 1/Month | Composite |
| Phosphorus (Total) | | | | Monitor Only | 1/Month | Composite |
| Nitrogen (Total) | | | | Monitor Only | 1/Month | Composite |
| Mercury**** | | | | Monitor Only | 1/Month | Grab |
| Selenium | | | | Monitor Only | 1/Month | Composite |

* For Ammonia as Nitrogen, Spring/Fall is March-May and September-October; Summer is June-August; and Winter is November-February. Discharge from outfall 001 will also be subject to weekly average limits for Ammonia as Nitrogen. Weekly average limit for Spring/Fall is 4.0 mg/L (91 lb/day). Weekly average limit for Summer is 3.8 mg/L (86 lb/day). No weekly average limit applies for Winter.

**See Special Condition 7.

***See Special Condition 19.

**** Mercury shall be analyzed using Method 1631E.

***** Total Chromium and Hexavalent Chromium shall be sampled twice per year. In the event that only one sample is collected in the six-month period, the permittee shall report the semiannual value as the daily maximum on the January or July DMR form and this value will be subject only to the daily maximum limit. Should the permittee sample more frequently, the permittee shall report the average value of all results obtained during the six-month period as the monthly average value subject to the monthly average limit and the maximum of all results as a daily maximum subject to the daily maximum limit on the January or July DMR form. If the Hexavalent Chromium concentration(s) is below the detection limit (< 0.01 mg/L), then the load limit shall be calculated using one-half the detection limit as the concentration.

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 002: Treatment Plant Bypass - (Intermittent Discharge)

Outfall 002 consists of Process Area Stormwater, Cooling Tower and Boiler Blowdown, Stormwater Impoundments, and Overflow from Wastewater Treatment Plant (Including Process Wastewater). Discharge is to Marathon Creek. See Special Condition 9 regarding Bypass.

| | LOAD LIMITS <u>DAF (I</u> | | CONCENTRATION LIMITS mg/l | | | |
|---|------------------------------|------------------|------------------------------|-------------------|-------------------------|----------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | SAMPLE FREQUENCY* | SAMPLE TYPE |
| Flow (MGD) | See Special Cor | ndition 1 | | | 1/Day | Estimate |
| рН | See Special Cor | ndition 2 | | | 1/Day | Grab |
| BOD₅ | | | 10 | 20 | 1/Day | Grab |
| Total Suspended Solids | | | 12 | 24 | 1/Day | Grab |
| Oil & Grease | | | 15 | 30 | 1/Day | Grab |
| Ammonia as N** Spring/Fall Summer Winter | | | 1.6 1.5 4.0 | 6.6 6.9 6.8 | 1/Day 1/Day 1/Day | Grab Grab Grab |
| Phenols | | | | 0.1 | 1/Day | Grab |
| Total Chromium | | | 1.0 | 2.0 | 1/Day | Grab |
| Hexavalent Chromium | | | 0.011 | 0.016 | 1/Day | Grab |
| Chemical Oxygen Demand | | | Monitor | | 1/Day | Grab |
| Chloride | | | | 500 | 1/Day | Grab |
| Total BETX*** | | | Mon | itor | 1/Day | Grab |
| Total PNAs*** | | | Mon | itor | 1/Day | Grab |

Note: Ammonia, Biochemical Oxygen Demand, Oil and Grease, Total Chromium, Hexavalent Chromium, and Total Suspended Solids shall be sampled once per day during discharge. In the event that only one sample is collected during the month, the Permittee shall report the values as daily maximums on the DMR form and these values will be subject only to the daily maximum limits. Should the Permittee sample more frequently or discharge occurs for more than 24-hours during a month, the Permittee shall report the average value of all results obtained during the month as a monthly average value subject to the monthly average limit and the maximum of all results as a daily maximum subject to the daily maximum limit.

*One sample per day when discharging.

** For Ammonia as Nitrogen, Spring/Fall is March-May and September -October; Summer is June-August; and Winter is November-February. The discharge at 003 is subject to weekly average limits for Ammonia as Nitrogen. Spring/Fall weekly average limit shall be 4.0 mg/L and Summer weekly average limit shall be 3.8 mg/L. No weekly average limit shall apply in Winter.

***For BETX and PNAs, the Permittee shall sample daily when discharging. The Permittee shall report a daily maximum for each month in which discharge occurs. For any month which two or more discharges occur, the Permittee shall report a monthly average on the DMR form. See Special Condition 12.

****See Special Condition 19.

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Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 003: East Impoundment Basin Discharge***** - (DAF = 2.631 MGD)

Outfall 003 consists of Hydrostatic Test Water, Coke Railcar Wash Water, Non-Process Area Stormwater, East and West Tank Farm Controlled Stormwater Drainage, Stormwater from Wabash Pond, Non-Emergency Use Firewater, Fire Hydrant Flushings, Fire Water from Emergency Use, Utility Water, and Frog Pond stormwater due to extreme rainfall. Discharge is to Marathon Creek.

| | | ITS lbs/day (<u>DMF)</u> | CONCENTRATION LIMITS mg/I | | | |
|--|-------------------|------------------------------|------------------------------|-------------------|-------------------------|-------------------------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | SAMPLE FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | See Special | Condition 1 | | | 1/Day | Estimate |
| рН | See Special | Condition 2 | | | 1/Day | Grab |
| Oil & Grease | | | 15 | 30 | 1/Day | Mathematical Composite* |
| Phenol | | | | 0.1 | 1/Day | Grab |
| Total Chromium | | | 1.0 | 2.0 | 1/Day | Composite |
| Total Organic Carbon**** | | | Monitor | | 2/Year** | Composite |
| Ammonia as N*** Spring/Fall Summer Winter | | | 1.6 1.5 4.0 | 6.6 6.9 6.8 | 1/Day 1/Day 1/Day | Composite Composite Composite |
| Total Suspended Solids | | | 15 | 30 | 2/Year** | Composite |
| BOD₅ | | | Mor | hitor | 2/Year** | Composite |
| Chemical Oxygen Demand | | | Monitor | | 2/Year** | Composite |
| Sulfide | | | Monitor | | 2/Year** | Composite |
| Chloride | | | | 500 | 2/Year** | Composite |
| Fluoride | | | 15 | 30 | 2/Year** | Composite |
| Sulfate | | | Mor | hitor | 2/Year** | Composite |

*See Special Condition 7.

**Total Organic Carbon, Total Suspended Solids, Biological Oxygen Demand, Chemical Oxygen Demand, Sulfide, Chloride, Fluoride, and Sulfate shall be sampled twice per year. In the event that only one sample is collected in the six-month period, the Permittee shall report the semiannual value as a daily maximum on the January or July DMR form and this value will be subject only to the daily maximum limit. Should the Permittee sample more frequently, the Permittee shall report the average value of all results obtained during the six-month period as a monthly average value subject to the monthly average limit and the maximum of all results as a daily maximum subject to the daily maximum limit on the January or July DMR form.

*** For Ammonia as Nitrogen, Spring/Fall is March-May and September -October; Summer is June-August; and Winter is November-February. The discharge at 003 is subject to weekly average limits for Ammonia as Nitrogen. Spring/Fall weekly average limit shall be 4.0 mg/L and Summer weekly average limit shall be 3.8 mg/L. No weekly average limit shall apply in Winter.

In the event that only one sample is collected during a month, the Permittee shall report the value as a daily maximum and this value will be subject only to the daily maximum limit. Should the Permittee sample more frequently, the Permittee shall report the average value of all results obtained during the month as a monthly average value subject to the monthly average limit and the maximum of all results as a daily maximum subject to the daily max limit.

*****See Special Condition 15.

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NPDES Permit No. IL0004073 Special Conditions

<u>SPECIAL CONDITION 1</u>. Flow shall be reported in MGD as a daily maximum and a monthly average, and shall be reported on the monthly DMR form.

<u>SPECIAL CONDITION 2</u>. For outfalls 001, and 002, the pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form. For outfall 003, the minimum pH shall be 6.0, but the pH 9.0 maximum limitation may be exceeded if the elevated pH level is caused entirely by algae in treatment lagoons, in which case there is no upper pH limit. This shall be indicated by the permittee in the comment section of the DMR form.

<u>SPECIAL CONDITION 3</u>. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 4</u>. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 5. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

<u>SPECIAL CONDITION 6</u>. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, includina registration information for the **NetDMR** program, can be obtained on the IEPA website. http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 20th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

<u>SPECIAL CONDITION 7</u>. Mathematical composites for oil, fats and greases shall consist of a series of grab samples collected over any 24-hour consecutive period. Each sample shall be analyzed separately and the arithmetic mean of all grab samples collected during a 24-hour period shall constitute a mathematical composite. No single grab sample shall exceed a concentration of 75 mg/l.

<u>SPECIAL CONDITION 8</u>. For outfall 001, discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:

- A. Maximum temperature rise above natural temperature must not exceed 5°F (2.8°C).
- B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F (1.7°C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

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|---------|---|
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| | <u>Jan.</u> | Feb. | <u>Mar.</u> | <u>April</u> | May | <u>June</u> | <u>July</u> | <u>Aug.</u> | Sept. | Oct. | <u>Nov.</u> | Dec. |
|----|-------------|------|-------------|--------------|-----|-------------|-------------|-------------|-------|------|-------------|------|
| °F | 60 | 60 | 60 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 60 |
| °C | 16 | 16 | 16 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 16 |

In addition, the discharge shall not cause abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.

C. The monthly maximum value shall be reported on the DMR form.

D. Temperature monitoring may be performed manually using a certified portable temperature monitoring device. The Outfall 001 temperature will be monitored on-site at the sampling weir located south of the Sand Filter Building or other representative monitoring location in the event the sampling weir is out of service. In the event the Outfall 001 temperature exceeds the limits in the table, upstream and downstream temperature readings will be monitored at designated locations. The upstream temperatures will be monitored at the bridge north of Carter Lumber, or downstream of the City of Robinson Waste Water Treatment Plant, or other location that is representative of Robinson Creek prior to mixing with Outfall 001. The downstream temperatures will be monitored at the bridge at the Hog Farm east of Route 1, or the Route 1 Highway bridge, or other location that is representative of Robinson Creek and Outfall 001.

<u>SPECIAL CONDITION 9</u>. Discharge Number 002 is an emergency high level bypass. Discharges from this overflow are subject to the following conditions:

(1) Definitions

- (I) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes 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.
- (2) Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. Bypass of WWTP sand filters due to excess hydraulic loading to the sand filters is an acceptable bypass, provided the effluent does not cause effluent limitations to be exceeded. Bypass of WWTP Tank 79D-63 in order to impound off-spec wastewater so as to prevent a negative impact to the activated sludge treatment is an acceptable bypass, provided the effluent limitations to be exceeded. These bypasses are not subject to the provisions of paragraphs (3) and (4) of this section.

(3) Notice

- (I) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in Standard Condition 12(e) of this Permit (24-hour notice). In the event that notice shall be given outside of business hours, the permittee shall contact the Illinois Emergency Management Agency at 800-782-7860.
- (4) Prohibition of bypass. Bypass is prohibited, and the IEPA may take enforcement action against a Permittee for bypass, unless:
 - (I) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. 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 downtime or preventive maintenance; and
 - (iii) The Permittee submitted notices as required under Standard Condition 12(e) of this Permit.
- (5) Emergency Bypass when discharging, shall be monitored daily for parameters listed on Page 3 for outfall 002. The Permittee shall submit the monitoring results on Discharge Monitoring Report forms using one such form for each month in which bypassing occurs. The Permittee shall specify the number of discharges per month and the duration in days of each discharge that occur in the comments section of the DMR form. The Permittee shall report the average and maximum concentration values for the parameters listed on Page 3 for outfall 002 on the DMR form.

SPECIAL CONDITION 10.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility discharge from outfalls 005, 006, 007, 008, 009, and 010. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.
 - 1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.

Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act

For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

- C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.
- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:
 - 1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.
 - 2. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
 - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations

- vii. Areas of existing and potential soil erosion;
- viii. Vehicle service areas;
- ix. Material loading, unloading, and access areas.
- x. Areas under items iv and ix above may be withheld from the site for security reasons.
- 3. A narrative description of the following:
 - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities;
 - v. Methods of onsite storage and disposal of significant materials.
- 4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
- 5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
- 6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
 - 1. Storm Water Pollution Prevention Personnel Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
 - 2. Preventive Maintenance Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
 - 3. Good Housekeeping Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
 - 4. Spill Prevention and Response Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
 - 5. Storm Water Management Practices Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
 - i. Containment Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.
 - ii. Oil & Grease Separation Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.

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- iii. Debris & Sediment Control Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.
- iv. Waste Chemical Disposal Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
- v. Storm Water Diversion Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment of activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.
- vi. Covered Storage or Manufacturing Areas Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
- 6. Sediment and Erosion Prevention The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.
- 7. Employee Training Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
- 8. Inspection Procedures Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. Non-Storm Water Discharge The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.
- H. Quarterly Visual Observation of Discharges The requirements and procedures of quarterly visual observations are applicable to all outfalls covered by this condition.
 - 1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.
 - 2. Your visual observation must be made on samples collected as soon as practical after a discharge begins. The sampler will record the time of sampling and when the rainfall event began. When monitoring for a discharge from snow melt, the sampler will record when the air temperature exceeded freezing. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4. The permittee shall take corrective action to address the pollutant(s) within one week of confirmation of a pollutant discharge unless otherwise specified by the Agency.
 - 3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
 - 4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
 - 5. Representative Outfalls If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls

and report that the results also apply to the substantially identical outfall(s).

- 6. The visual observation documentation shall be made available to the Agency and general public upon written request.
- I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response shall be corrected by the permittee within 1 week unless otherwise specified by the Agency. The appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
- J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.
- K. The plan is considered a report that shall be available to the public at any reasonable time upon request.
- L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
- M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

- N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights thereunder.
- O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
- P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
- Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

- R. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.
- S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired
- T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.
- U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be submitted to the following email and office addresses: epa.npdes.inspection@illinois.gov

Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section Annual Inspection Report 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

V. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.

<u>SPECIAL CONDITION 11</u>. For outfalls 001, 002, and 003, the Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

<u>SPECIAL CONDITION 12</u>. For the purposes of this permit, Total PNAs is defined as the arithmetic sum of the following polynuclear aromatic compounds: Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene, Chrysene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene, and Pyrene. Total BETX shall be defined as the arithmetic sum of Benzene, Toluene, Ethylbenzene, and Total Xylenes. For the purpose of showing compliance, concentrations found to be below detection shall be considered zero in calculations and will be reported as zero on the DMR form if all concentrations are below the detection limits.

<u>SPECIAL CONDITION 13</u>. The Permittee shall conduct biomonitoring of the effluent from Outfall 001.

Biomonitoring

- Chronic Toxicity Standard definitive chronic toxicity tests shall be run on at least two (2) trophic levels of aquatic species (fish and invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with <u>Short-term</u> <u>Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms</u>, (Fourth Edition) EPA/821-R-02-013. Unless substitute tests are pre-approved; the following tests are required:
 - a. Fish Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test.
 - b. Invertebrates Ceriodaphnia Survival and Reproduction Test.
- 2. Test Requirements The above test shall be conducted semi-annually using 24-hour composite samples unless otherwise authorized by the IEPA. Effluent samples must be analyzed for chloride given that this parameter may be associated with chronic toxicity to *Ceriodaphnia*.
- 3. Reporting Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within fifteen (15) days of becoming available to the Permittee. Results from chloride analyses, as well as any other parameter believed to contribute to effluent toxicity, must be included in the bioassay report.
- 4. Toxicity Assessment –Should the review of the results of the biomonitoring program indicate a significant baseline shift in toxicity, the IEPA may require that the Permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall be developed in accordance with <u>Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, EPA/600/6-91/005F and <u>Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002</u>, which shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation and identification within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA.</u>

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

<u>SPECIAL CONDITION 14.</u> Untreated FCCU Scrubber Wastewater shall not be discharged to any waters of the state unless a modification to this permit is obtained. Modification under this special condition shall follow public notice and opportunity for hearing.

<u>SPECIAL CONDITION 15</u>. For the purpose of this permit, the discharge at outfall 003 shall be limited at all times to Hydrostatic Test Water, Coke Railcar Wash Water, Non-Process Area Stormwater, East and West Tank Farm Controlled Stormwater Drainage, Stormwater from Wabash Pond, Non-Emergency Use Firewater, Fire Hydrant Flushings, Fire Water From Emergency Use, Utility Water, and Frog Pond stormwater due to extreme rainfall. In the event that the permittee must discharge process wastewater or contaminated stormwater runoff into the East Impoundment Basin for temporary storage, there shall be no discharge from outfall 003, and the permittee shall notify the IEPA, Division of Water Pollution Control, Champaign Field Operations Section within 24 hours (or the next business day). The permittee shall notify the Agency on each such occasion.

<u>SPECIAL CONDITION 16</u>. This permit does not authorize the permittee to operate an on-site sludge disposal facility or the land application of sludge on-site. Sludge handling activities are authorized by RCRA permit issued to the permittee.

<u>SPECIAL CONDITION 17</u>. The permittee shall add 300 pounds of powdered activated carbon (PAC) per day at an appropriate point in the WWTP process to address chronic toxicity and comply with outfall 001 limits. The permittee shall maintain a daily log of the amount of PAC injected into the Waste Water Treatment Plant. The amount of PAC may be reduced based upon review of appropriate data and Agency approval.

SPECIAL CONDITION 18. In addition to the other requirements of this permit no effluent shall contain settleable solids, floating debris, visible oil, grease, scum, or sludge solids. Color, odor, and turbidity shall be reduced to below obvious levels.

SPECIAL CONDITION 19. Storm Water Credit:

An additional mass allowance may be calculated for Outfalls 001 and 002 Load Limitations, for the following parameters, based on 100% of the storm water flow as defined below.

| Parameter | Pounds per 1000 gallons of storm water flo <u>Average</u> <u>Maximum</u> | | | | | |
|--------------------|---|--------|--|--|--|--|
| COD | 1.5 | 3.0 | | | | |
| Oil and Grease | 0.067* | 0.13* | | | | |
| Chromium (total) | 0.0018 | 0.005 | | | | |
| BOD ₅ | 0.22 | 0.4 | | | | |
| Phenolic Compounds | 0.0014 | 0.0029 | | | | |

Dry Weather Flow - The average flow from the API separator for the last three consecutive zero precipitation days. Previously collected storm water shall not be included.

Storm Water Flows - The storm water runoff which is treated in the waste water treatment facility shall be defined as that portion of the flow greater than the dry weather flow.

The quantity of pollutants discharged shall not exceed the quantity determined by multiplying the flow of storm water as determined by the permittee times the concentrations listed in the above table.

The stormwater credit does not authorize the permittee to exceed the concentration limits contained in the Effluent Limitations and Monitoring for outfalls 001and 002.

In computing monthly average permit limits to include storm water credit, the pound credit calculated above shall be averaged along with the process pound limits over the 30 day period. Explanatory calculations and flow data shall be submitted together with the DMR form. *At no time shall oil and grease exceed 450 lb/day monthly average, 844 lbs/day daily maximum, for Outfall 001.

<u>SPECIAL CONDITION 20</u>. The permittee shall monitor outfall 003 for Total Organic Carbon (TOC) and shall report the daily maximum value and a monthly average if more than one sample is collected in a one-month period. Based upon reported values, the Agency may impose limits on outfall 003 for Total Organic Carbon if necessary.

SPECIAL CONDITION 21. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION 22</u>. The Permittee shall monitor and report concentrations (in mg/l) of the following listed parameters twice per year in the months of January and July at outfall 001. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on the monthly DMR's to IEPA. The parameters to be sampled are:

| | Minimum |
|---|---|
| PARAMETER | detection limit |
| Arsenic | 0.001 mg/l |
| Barium | 0.5 mg/l |
| Cadmium | 0.003 mg/l |
| Copper | 0.005 mg/l |
| Cyanide (grab) (weak acid dissociable) | 5.0 ug/l |
| Cyanide (grab not to exceed 24 hours) (total) | 5.0 ug/l |
| Iron (total) | 0.5 mg/l |
| Iron (Dissolved) | 0.5 mg/l |
| Lead | 0.05 mg/l |
| Manganese | 0.5 mg/l |
| Nickel | 0.005 mg/l |
| Silver (total) | 0.003 mg/l |
| Vanadium | 0.008 mg/l |
| | Arsenic Barium Cadmium Copper Cyanide (grab) (weak acid dissociable) Cyanide (grab not to exceed 24 hours) (total) Iron (total) Iron (Dissolved) Lead Manganese Nickel Silver (total) |

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.