

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0004782

Owner: The Boeing Company
Address: 100 North Riverside, Chicago, IL 60606

Continuing Authority: Same as above
Address: Same as above

Facility Name: The Boeing Company
Facility Address: 6200 James McDonnell Blvd., Building 100, St. Louis, MO 63134

Legal Description: See page 2
UTM Coordinates: See page 2

Receiving Stream: See page 2
First Classified Stream and ID: See page 2
USGS Basin & Sub-watershed No.: See page 2

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

The Boeing Company is a military contractor for the manufacturing and assembly of combat aircraft and missile parts.

Outfalls #001 - #005, #008 - #009, and #011 are historical outfalls no longer covered by this permit.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Sections 640.013, 621.250, and 644.051.6 of the Law.

February 1, 2016
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

January 31, 2021
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (continued):

Outfall #006 - Industrial – Aircraft - SIC #3721

Stormwater only.

Design flow is dependent upon rainfall.

Actual flow is dependent upon rainfall.

Legal Description: N ½, Sec. 04, T46N, R06E, St. Louis
UTM Coordinates: X= 730393, Y= 4293048
Receiving Stream: Unnamed tributary to Coldwater Creek (C) (3960)
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960)
USGS Basin & Sub-watershed No.: 10300200-0802

Outfall #007 - Industrial – Aircraft - SIC #3721

Stormwater / non-contact cooling water / groundwater.

Dechlorination

Design flow is 107,170 gallons per day.

Actual flow is 64,048 gallons per day.

Legal Description: N ½, Sec. 04, T46N, R06E, St. Louis
UTM Coordinates: X= 730334, Y= 4293244
Receiving Stream: Unnamed tributary to Coldwater Creek (C) (3960)
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960)
USGS Basin & Sub-watershed No.: 10300200-0802

Outfall #010 - Industrial – Aircraft - SIC #3721

Stormwater / non-contact cooling water / groundwater.

Dechlorination

Design flow is 194,908 gallons per day.

Actual flow is 137,476 gallons per day

Legal Description: Landgrant 2979, St. Louis
UTM Coordinates: X= 731040, Y= 4293132
Receiving Stream: Unnamed tributary to Coldwater Creek (C) (3960)
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960)
USGS Basin & Sub-watershed No.: 10300200-0802

Outfall #012 - Industrial – Aircraft - SIC #3721

Stormwater only.

Design flow is dependent upon rainfall.

Actual flow is dependent upon rainfall.

Legal Description: Land Grant 3096, St. Louis
UTM Coordinates: X= 729625, Y= 4292668
Receiving Stream: Unnamed tributary to Coldwater Creek (C) (3960)
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960)
USGS Basin & Sub-watershed No.: 10300200-0802

Outfall #013 - Industrial – Aircraft - SIC #3721

Stormwater / groundwater.

Design flow is dependent upon rainfall.

Actual flow is dependent upon rainfall.

Legal Description: N ½, Sec. 04, T46N, R06E, St. Louis
UTM Coordinates: X= 730208, Y= 4293262
Receiving Stream: Unnamed tributary to Coldwater Creek (C) (3960)
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960)
USGS Basin & Sub-watershed No.: 10300200-0802

FACILITY DESCRIPTION (continued):

Outfall #014 - Industrial – Aircraft - SIC #3721

Stormwater only.

Design flow is dependent upon rainfall.

Actual flow is dependent upon rainfall.

| | |
|---------------------------------|---|
| Legal Description: | Landgrant 2979, St. Louis |
| UTM Coordinates: | X= 730644, Y= 4293498 |
| Receiving Stream: | Unnamed tributary to Coldwater Creek (C) (3960) |
| First Classified Stream and ID: | 8-20-13 MUDD V1.0 (C) (3960) |
| USGS Basin & Sub-watershed No.: | 10300200-0802 |

Outfall #015 - Industrial – Aircraft - SIC #3721

Stormwater only.

Design flow is dependent upon rainfall.

Actual flow is dependent upon rainfall.

| | |
|---------------------------------|---|
| Legal Description: | Landgrant 2979, St. Louis |
| UTM Coordinates: | X= 731086, Y= 4293046 |
| Receiving Stream: | Unnamed tributary to Coldwater Creek (C) (3960) |
| First Classified Stream and ID: | 8-20-13 MUDD V1.0 (C) (3960) |
| USGS Basin & Sub-watershed No.: | 10300200-0802 |

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| EFFLUENT PARAMETER(S) (Note 1, Page 4) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|---|---------|----------------------------|----------------|-----------------|-------------------------|-----------------|
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | - | - | once/quarter**** | 24 hr. estimate |
| Chemical Oxygen Demand | mg/L | ** | - | - | once/quarter**** | grab |
| Total Suspended Solids | mg/L | ** | - | - | once/quarter**** | grab |
| Settleable Solids | mL/L/hr | ** | - | - | once/quarter**** | grab |
| pH – Units | SU | *** | - | - | once/quarter**** | grab |
| Oil & Grease | mg/L | ** | - | - | once/quarter**** | grab |
| Chloride | mg/L | * | - | - | once/quarter**** | grab |
| Nitrogen, Total as N | mg/L | * | - | - | once/quarter**** | grab |
| Phosphorus, Total as P | mg/L | * | - | - | once/quarter**** | grab |
| Aluminum, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| Chromium (VI), Dissolved | µg/L | ** | - | - | once/quarter**** | grab |
| Copper, Total Recoverable | µg/L | ** | - | - | once/quarter**** | grab |
| Iron, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| Lead, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- * Monitoring requirement only.
- ** Monitoring requirement with a benchmark value.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** See table below for quarterly sampling.

| Minimum Sampling Requirements | | | |
|-------------------------------|-----------------------------|--|--------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28 th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28 th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28 th |

Note 1 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

| OUTFALLS #007 & #010 - BASE FLOW | | TABLE A-2. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS | | | | |
|---|---------|--|----------------|-----------------|-------------------------|-----------------|
| The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on February 1, 2016 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below: | | | | | | |
| EFFLUENT PARAMETER(S) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | - | * | once/quarter**** | 24 hr. estimate |
| Chemical Oxygen Demand | mg/L | ** | - | ** | once/quarter**** | grab |
| Total Suspended Solids | mg/L | ** | - | ** | once/quarter**** | grab |
| Settleable Solids | mL/L/hr | 1.5 | - | 1.0 | once/quarter**** | grab |
| pH – Units | SU | *** | - | *** | once/quarter**** | grab |
| Total Residual Chlorine (Note 1, Page 5) | µg/L | 17 | - | 8 | once/quarter**** | grab |
| Copper, Total Recoverable at Outfall #007 | µg/L | 71 | - | 27 | once/quarter**** | grab |
| Copper, Total Recoverable at Outfall #010 | µg/L | 70 | - | 32 | once/quarter**** | grab |
| MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>APRIL 28, 2016</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. | | | | | | |

- * Monitoring requirement only.
- ** Monitoring requirement with a benchmark value.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- **** See table below for quarterly sampling.

| Minimum Sampling Requirements | | | |
|--------------------------------------|-----------------------------|--|--------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28 th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28 th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28 th |

Note 1 - This permit contains a Total Residual Chlorine (TRC) limit.

- (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The Department has determined the current acceptable ML for total residual chlorine to be 130 µg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 130 µg/L will be considered violations of the permit and values less than the minimum quantification level of 130 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Disinfection is required year-round unless the permit specifically states that “Final limitations and monitoring requirements for *E. coli* are applicable only during the recreational season from April 1 through October 31.” If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
- (c) Do not chemically dechlorinate **if it is not needed to meet the limits in your permit**.
- (d) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 µg/L” TRC.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

| <p>OUTFALLS #007 & #010 – BASE FLOW</p> | <p>TABLE A-3. WHOLE EFFLUENT TOXICITY FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</p> | | | | | |
|---|--|----------------------------|----------------|-----------------|-------------------------|-------------|
| | <p>The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on February 1, 2017 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:</p> | | | | | |
| EFFLUENT PARAMETER(S) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Acute Whole Effluent Toxicity | TU _a | * | - | - | once/permit cycle | grab |
| <p>MONITORING REPORTS SHALL BE SUBMITTED <u>ONCE PER PERMIT CYCLE</u>; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2020</u>.</p> | | | | | | |

* Monitoring requirement only.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

| OUTFALLS #007 & #010 - HIGH FLOW | | TABLE A-4. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS | | | | |
|---|---------|--|----------------|-----------------|-------------------------|-----------------|
| The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on February 1, 2016 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below: | | | | | | |
| EFFLUENT PARAMETER(S) (Note 1, Page 8) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | - | - | once/quarter**** | 24 hr. estimate |
| Chemical Oxygen Demand | mg/L | ** | - | - | once/quarter**** | grab |
| Total Suspended Solids | mg/L | ** | - | - | once/quarter**** | grab |
| Settleable Solids | mL/L/hr | 1.5 | - | - | once/quarter**** | grab |
| pH – Units | SU | *** | - | - | once/quarter**** | grab |
| Oil & Grease | mg/L | 15 | - | - | once/quarter**** | grab |
| Chloride | mg/L | * | - | - | once/quarter**** | grab |
| Total Residual Chlorine (Note 2, Page 8) | µg/L | 17 | - | - | once/quarter**** | grab |
| Nitrogen, Total as N | mg/L | * | - | - | once/quarter**** | grab |
| Phosphorus, Total as P | mg/L | * | - | - | once/quarter**** | grab |
| Aluminum, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| Chromium (VI), Dissolved | µg/L | ** | - | - | once/quarter**** | grab |
| Copper, Total Recoverable at Outfall #007 | µg/L | 71 | - | - | once/quarter**** | grab |
| Copper, Total Recoverable at Outfall #010 | µg/L | 70 | - | - | once/quarter**** | grab |
| Iron, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| Lead, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>APRIL 28, 2016</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. | | | | | | |

- * Monitoring requirement only.
- ** Monitoring requirement only with a benchmark value.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- **** See table below for quarterly sampling.

| Minimum Sampling Requirements | | | |
|--------------------------------------|-----------------------------|--|------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28th |

Note 1 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, sample the flow caused by industrial process water discharges (non-contact cooling water). If no flow is discharged (either process water or stormwater) during the sampling period, report as **no discharge**.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 2 - This permit contains a Total Residual Chlorine (TRC) limit.

- (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The Department has determined the current acceptable ML for total residual chlorine to be 130 µg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 130 µg/L will be considered violations of the permit and values less than the minimum quantification level of 130 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Disinfection is required year-round unless the permit specifically states that “Final limitations and monitoring requirements for *E. coli* are applicable only during the recreational season from April 1 through October 31.” If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
- (c) Do not chemically dechlorinate **if it is not needed to meet the limits in your permit**.
- (d) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 µg/L” TRC.

| OUTFALLS #007 & #010 – HIGH FLOW | TABLE A-5. WHOLE EFFLUENT TOXICITY FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS | | | | | |
|--|---|----------------------------|----------------|-----------------|-------------------------|-------------|
| | The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on February 1, 2016 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below: | | | | | |
| EFFLUENT PARAMETER(S) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Acute Whole Effluent Toxicity | TU _a | * | - | - | once/permit cycle | grab |
| MONITORING REPORTS SHALL BE SUBMITTED <u>ONCE PER PERMIT CYCLE</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2020</u> . | | | | | | |

* Monitoring requirement only.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

| EFFLUENT PARAMETER(S) (Note 1, Page 9) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|---|---------|----------------------------|----------------|-----------------|-------------------------|-----------------|
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | - | - | once/quarter**** | 24 hr. estimate |
| Chemical Oxygen Demand | mg/L | ** | - | - | once/quarter**** | grab |
| Total Suspended Solids | mg/L | ** | - | - | once/quarter**** | grab |
| Settleable Solids | mL/L/hr | ** | - | - | once/quarter**** | grab |
| pH – Units | SU | *** | - | - | once/quarter**** | grab |
| Oil & Grease | mg/L | 15 | - | - | once/quarter**** | grab |
| Chloride | mg/L | * | - | - | once/quarter**** | grab |
| Nitrogen, Total as N | mg/L | * | - | - | once/quarter**** | grab |
| Phosphorus, Total as P | mg/L | * | - | - | once/quarter**** | grab |
| Aluminum, Total Recoverable | µg/L | ** | - | - | once/quarter**** | grab |
| Cadmium, Total Recoverable | µg/L | ** | - | - | once/quarter**** | grab |
| Chromium (VI), Dissolved | µg/L | ** | - | - | once/quarter**** | grab |
| Iron, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| Lead, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- * Monitoring requirement only.
- ** Monitoring requirement only with a benchmark value.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** See table below for quarterly sampling.

| Minimum Sampling Requirements | | | |
|-------------------------------|-----------------------------|--|--------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28 th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28 th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28 th |

Note 1 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

| EFFLUENT PARAMETER(S) (Note 1, Page 10) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|--|---------|----------------------------|----------------|-----------------|-------------------------|-----------------|
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | - | - | once/quarter**** | 24 hr. estimate |
| Chemical Oxygen Demand | mg/L | ** | - | - | once/quarter**** | grab |
| Total Suspended Solids | mg/L | ** | - | - | once/quarter**** | grab |
| Settleable Solids | mL/L/hr | ** | - | - | once/quarter**** | grab |
| pH – Units | SU | *** | - | - | once/quarter**** | grab |
| Oil & Grease | mg/L | ** | - | - | once/quarter**** | grab |
| Chloride | mg/L | * | - | - | once/quarter**** | grab |
| Nitrogen, Total as N | mg/L | * | - | - | once/quarter**** | grab |
| Phosphorus, Total as P | mg/L | * | - | - | once/quarter**** | grab |

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- * Monitoring requirement only.
- ** Monitoring requirement only with a benchmark value.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** See table below for quarterly sampling.

| Minimum Sampling Requirements | | | |
|-------------------------------|-----------------------------|--|------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28th |

Note 1 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

| EFFLUENT PARAMETER(S) (Note 1, Page 12) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|--|---------|----------------------------|----------------|-----------------|-------------------------|-----------------|
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | - | - | once/quarter**** | 24 hr. estimate |
| Chemical Oxygen Demand | mg/L | ** | - | - | once/quarter**** | grab |
| Total Suspended Solids | mg/L | ** | - | - | once/quarter**** | grab |
| Settleable Solids | mL/L/hr | ** | - | - | once/quarter**** | grab |
| pH – Units | SU | *** | - | - | once/quarter**** | grab |
| Oil & Grease | mg/L | 15 | - | - | once/quarter**** | grab |
| Chloride | mg/L | * | - | - | once/quarter**** | grab |
| Nitrogen, Total as N | mg/L | * | - | - | once/quarter**** | grab |
| Phosphorus, Total as P | mg/L | * | - | - | once/quarter**** | grab |
| Aluminum, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| Iron, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |
| Lead, Total Recoverable | µg/L | * | - | - | once/quarter**** | grab |

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- * Monitoring requirement only.
- ** Monitoring requirement only with a benchmark value.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** See table below for quarterly sampling.

| Minimum Sampling Requirements | | | |
|-------------------------------|-----------------------------|--|--------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28 th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28 th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28 th |

Note 1 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

| EFFLUENT PARAMETER(S) (Note 1, Page 12) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|--|---------|----------------------------|----------------|-----------------|-------------------------|-----------------|
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | - | - | once/quarter**** | 24 hr. estimate |
| Chemical Oxygen Demand | mg/L | ** | - | - | once/quarter**** | grab |
| Total Suspended Solids | mg/L | ** | - | - | once/quarter**** | grab |
| Settleable Solids | mL/L/hr | ** | - | - | once/quarter**** | grab |
| pH – Units | SU | *** | - | - | once/quarter**** | grab |
| Oil & Grease | mg/L | ** | - | - | once/quarter**** | grab |
| Chloride | mg/L | * | - | - | once/quarter**** | grab |
| Nitrogen, Total as N | mg/L | * | - | - | once/quarter**** | grab |
| Phosphorus, Total as P | mg/L | * | - | - | once/quarter**** | grab |

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- * Monitoring requirement only.
- ** Monitoring requirement with a benchmark value.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** See table below for quarterly sampling.

| Minimum Sampling Requirements | | | |
|-------------------------------|-----------------------------|--|--------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28 th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28 th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28 th |

Note 1 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated August 1, 2014, and hereby incorporated as though fully set forth herein.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.
3. Water Quality Standards
 - (a) To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
4. Changes in Discharges of Toxic Substances
The permittee shall notify the Director as soon as it knows or has reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established by the Director in accordance with 40 CFR 122.44(f).
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.

C. SPECIAL CONDITIONS (continued)

6. Reporting of Non-Detects:
 - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
 - (b) The permittee shall report the detection limit for all sample result reported as “Non-Detect”.
 - (c) The permittee shall provide the “Non-Detect” sample result using the less than sign and the minimum detection limit (e.g. <10).
 - (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
 - (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.

7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

8. The permittee shall implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented upon permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document:

Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.
 The SWPPP must include the following:
 - (a) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater.
 - (b) The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspections must include observation and evaluation of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department personnel upon request.
 - (c) A provision for designating an individual to be responsible for environmental matters.
 - (d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.

9. This permit stipulates pollutant benchmarks applicable to your discharge. The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of your SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce that pollutant in your stormwater discharge(s).

| Outfall | Units | #006 | #007 & #010 Base Flow | #007 & #010 High Flow | #012 | #013 | #014 | #015 |
|----------------------------------|--------------|-------------|--------------------------------------|--------------------------------------|-------------|-------------|-------------|-------------|
| Parameter | | | | | | | | |
| Chemical Oxygen Demand | mg/L | 141 | 141 | 141 | 141 | 141 | 141 | 141 |
| Total Suspended Solids | mg/L | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Settleable Solids | mL/L/hr | 1.5 | - | - | 1.5 | 1.5 | 1.5 | 1.5 |
| Oil & Grease | mg/L | 15 | - | - | - | 15 | - | 15 |
| Aluminum, Total Recoverable | µg/L | - | - | - | 750 | - | - | - |
| Cadmium, Total Recoverable | µg/L | - | - | - | 10 | - | - | - |
| Chromium (VI), Total Recoverable | µg/L | 15 | - | 15 | 15 | - | - | - |
| Copper, Total Recoverable | µg/L | 26 | - | - | - | - | - | - |

Any time a benchmark exceedance occurs a Corrective Action Report (CAR) must be completed. A CAR is a document that records the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and available to the department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make tangible progress towards achieving the benchmarks is a permit violation.

C. SPECIAL CONDITIONS (continued)

10. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
 - (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.

11. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.

12. Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. If the presence of hydrocarbons is indicated, this water must be tested for Total Petroleum Hydrocarbons (TPH). The suggested analytical method for testing TPH is non-Halogenated Organic by Gas Chromatography method 8015 (also known as OA1 and OA2). However, if the permittee so desires to use other approved testing methods (i.e. EPA 1664), they may do so. If the concentration for TPH exceeds 10mg/L, the water shall be taken to a WWTP for treatment.

13. Any spills must be managed in accordance with HW Permit #MOD000818963. A record of each spill shall be retained with the SWPPP. Any spill that leaves the property of the facility is considered an unpermitted discharge and must be reported to the department at the earliest practicable moment, but no greater than 24 hours after the spill occurs.

14. Acute Whole Effluent Toxicity (WET) tests shall be conducted as follows:

| SUMMARY OF ACUTE WET TESTING FOR THIS PERMIT | | | | | |
|--|------|-------------------------------------|-------------------|-------------|-------|
| OUTFALL | AEC | Acute Toxic Unit (TU _a) | FREQUENCY | SAMPLE TYPE | MONTH |
| #007 & #010 | 100% | * | once/permit cycle | grab | Any |

*Monitoring only

| Dilution Series | | | | | | |
|-----------------|-----|-----|-------|-------|---------------------------------------|---|
| 100% | 50% | 25% | 12.5% | 6.25% | (Control) 100% upstream, if available | (Control) 100% Lab Water, also called synthetic water |

- a) Freshwater Species and Test Methods
 - i. Species and short-term test methods for estimating the acute toxicity of NPDES effluents are found in the fifth edition of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/821/R-02/012, 2002; Table IA, 40 CFR Part 136). The permittee shall concurrently conduct 48-hour static non-renewal toxicity tests with the following vertebrate species:
 - The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0).
 And the following invertebrate species:
 - The daphnid, *Ceriodaphnia dubia* (Acute Toxicity Test Method 2002.0).

C. SPECIAL CONDITIONS (continued)

- ii. Chemical and physical analysis of an upstream control sample and effluent sample shall occur immediately upon being received by the laboratory, prior to any manipulation of the effluent sample beyond preservation methods consistent with federal guidelines for WET testing that are required to stabilize the sample during shipping. Where upstream receiving water is not available, synthetic laboratory control water may be used.
 - iii. Test conditions must meet all test acceptability criteria required by the EPA Method used in the analysis.
 - iv. Any and all chemical or physical analysis of the effluent sample performed in conjunction with the WET test shall be performed at the 100% Effluent concentration in addition to analysis performed upon any other effluent concentration.
 - v. All chemical analyses shall be performed and results shall be recorded in the appropriate field of the report form. The parameters for chemical analysis include Temperature (°C), pH (SU), Conductivity (µmohs/cm), Dissolved Oxygen (mg/L), Total Residual Chlorine (mg/L), Un-ionized Ammonia (mg/L), Total Alkalinity (mg/L), and Total Hardness (mg/L).
- b) Reporting of Acute Toxicity Monitoring Results
- i. WET test results shall be submitted to the St. Louis Regional Office, or by eDMR, with the permittee's Discharge Monitoring Reports once per permit cycle by Effective Date + 4 Years. The submittal shall include:
 - 1. A full laboratory report for all toxicity testing.
 - 2. Copies of chain-of-custody forms.
 - 3. The WET form provided by the Department upon permit issuance.
 - ii. The report must include a quantification of acute toxic units ($TU_a = 100/LC_{50}$) reported according to the test methods manual chapter on report preparation and test review. The Lethal Concentration, 50 Percent (LC_{50}) is the toxic or effluent concentration that would cause death in 50 percent of the test organisms over a specified period of time.
- c) Permit Reopener for Acute Toxicity
- In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address acute toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to acute toxicity.

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0004782
THE BOEING COMPANY

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for an Industrial Facility.

Part I – Facility Information

Facility Type: Industrial - Aircraft
Facility SIC Code(s): 3721

Facility Description:

The Boeing Company is a military contractor for the manufacturing and assembly of combat aircraft and missile parts.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

- No.

Application Date: 09/04/2013
Expiration Date: 03/05/2014
Last Inspection: 08/07/2012-08/08/2012 In Compliance ; Non-Compliance (see facility history below)

Facility Performance History & Comments:

On August 7-8, 2012, the United States Environmental Protection Agency (EPA) conducted a site visit of the facility. The compliance history noted in the inspection report from EPA lists multiple violations of effluent limitations for COD, TSS and Oil & Grease between 2009 and 2012. This section of the report also contained observations related to stormwater management, including developing a Stormwater Pollution Prevention Plan (SWPPP) to control stormwater runoff from areas with exposed materials like scrap metal. Other observations included improper identification of outfalls, reducing inflow and infiltration, and proper reporting procedures for Total Residual Chlorine (TRC). These observations resulted in the EPA issuing an Order for Compliance (Order) on February 22, 2013. This Order required the permittee to correct the deficiencies noted in the inspection report and Order, as listed above. On November 8, 2013, the EPA issued a termination of the Order, stating that the permittee had adequately met the requirements of the Order and the facility was back in compliance with the Clean Water Act (CWA).

OUTFALL(S) TABLE:

| OUTFALL | DESIGN FLOW (CFS) | TREATMENT LEVEL | EFFLUENT TYPE |
|---------|-------------------------|----------------------------------|--|
| 006 | Dependent upon rainfall | Best Management Practices (BMPs) | Stormwater |
| 007 | 0.17 | BMPs | Stormwater/Industrial Process Wastewater |
| 010 | 0.30 | BMPs | Stormwater/Industrial Process Wastewater |
| 012 | Dependent upon rainfall | BMPs | Stormwater |
| 013 | Dependent upon rainfall | BMPs | Stormwater |
| 014 | Dependent upon rainfall | BMPs | Stormwater |
| 015 | Dependent upon rainfall | BMPs | Stormwater |

Eliminated Outfalls:

- Outfall #001 – now owned by GKN Aerospace, which supplies structural parts to the Boeing Company
- Outfall #002 – now owned by Lambert - St. Louis International Airport (expansion completed 2005)
- Outfall #003 – now owned by Lambert - St. Louis International Airport (expansion completed 2005)
- Outfall #004 – now owned by Lambert - St. Louis International Airport (expansion completed 2005)
- Outfall #005 – now owned by First Industrial, L.P.
- Outfall #008 – now discharges to Outfall #007
- Outfall #009 – now discharges to Outfall #007
- Outfall #011 – now discharges to Outfall #012

Potential Stormwater Pollutant Sources – This table was revised from the previous operating permit modification to better characterize potential stormwater pollutant sources. The list provides a more accurate portrayal of the potential pollutant sources in the stormwater runoff and will aid in the permitting decisions.

A scale of Low, Moderate, or High was used to assess the likelihood of contamination from each of the sources identified. Many activities performed on the site vary in intensity, duration, and frequency; and therefore, have a varying likelihood of stormwater pollution. It is recommended that sampling requirements should be reflective of the relative risk of the potential stormwater pollutant source. Each outfall has been given a number indicating the potential risk for pollutant runoff from each source based on the scale of Low, Moderate, or High likelihood. Below is the description of the scale:

Low (1) – Activity is rarely performed or materials are rarely present or only present in small quantities on site. BMPs are permanent or structural rather than operational controls. Activity or material is performed or accessed by select, trained personnel, making operational failures due to staff error less likely. Instances of stormwater contamination have not been historically observed from these practices in the past.

Moderate (2) – Activity is occasional or seasonally performed. BMPs are operational controls relying on the performance of site personnel. Activities or materials are performed or accessed by a moderate number of personnel.

High (3) – Activity is frequently performed or materials are present on site the majority of the year or in large quantities. Activity or material is performed or accessed by many people, making failures due to staff error more likely. Instances of stormwater contamination may have been observed in the past.

Not Applicable (N/A) – indicated that the activity identified is not present in the area contributing stormwater runoff to the outfall.

Potential Stormwater Pollutant Sources (continued):

| Potential Stormwater Pollutant Source | Outfall Number | | | | | | | Apparent Cause of Pollutant Source |
|--|----------------|-----|-----|-----|-----|-----|-----|---|
| | 006 | 007 | 010 | 012 | 013 | 014 | 015 | |
| Excess Equipment Storage - Temporary | N/A | 1 | 1 | 1 | N/A | N/A | 1 | Equipment would develop undetected leak, or stored too long |
| Parking lot/Pavement de-icing (NaCl) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Seasonal potential source |
| Raw metal temporary staging (Al, Fe) | N/A | 2 | N/A | N/A | N/A | 1 | N/A | Staged unprotected, outdoors, long enough to leach |
| Empty Drum Storage (Temporary) | N/A | N/A | N/A | N/A | 1 | 1 | 1 | Drum are not empty and leak, or residual on drum |
| Haz Waste Collection, Storage, and Compactor | N/A | N/A | N/A | 1 | 1 | N/A | 1 | Waste not placed in proper container or liquids placed inside solid waste |
| Vehicle Fueling / Fuel Storage | N/A | 1 | 1 | 2 | 1 | 1 | 1 | Spills or leaks occur and not addressed |
| Non Haz Compactors | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Waste not placed in container or liquids placed inside, hydraulic leak |
| Electrical Substations oil leaks | N/A | 1 | 1 | 1 | 1 | 1 | 1 | Units develop leak and are not detected |
| Bulk Piles (mulch, soil, salt) | N/A | N/A | 1 | N/A | N/A | 1 | 2 | Bulk Piles not covered after use |
| Cooling Towers Overflows | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Mechanical Failure |
| Classified Paper Shredder | N/A | N/A | N/A | N/A | N/A | 1 | N/A | Good housekeeping not applied |
| Kitchen Grease Collection | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Grease container overflow and Secondary containment breach |
| Yards and Grounds Maintenance | 1 | 1 | 1 | N/A | 1 | 1 | 1 | |
| Recycling (plastic/wood/cans/metal) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Potential source if staging containers leak |
| Bulk Loading and Unloading Operations | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Accident occurs during material movement |
| Vehicle Parking (employee and company vehicles) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Fluid leaks, accidents |
| Non Haz/Solid Waste Collection/Solids Vacuum | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Waste not placed in container or liquids placed inside |

Part II – Receiving Stream Information

Receiving Water Body’s Water Quality

There are no stream surveys in the Department’s Water Quality Assessment System for either the unnamed tributary to Coldwater Creek (U) or Coldwater Creek (C) (1706). Coldwater Creek (C) (1706) is listed on the 2012 Missouri 303(d) List for Chloride, *Escherichia coli*, and Dissolved Oxygen. Currently, there is a proposed Total Maximum Daily Load (TMDL) determination on Public Notice, beginning May 23, 2014 and ending August 21, 2014. This draft TMDL addresses the pollutant *E. coli*. However, the TMDL is not effective and this permit cannot require any Load Allocations proposed in the draft TMDL.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- All Other Waters [10 CSR 20-7.015(8)]:

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

RECEIVING STREAM(S) TABLE: OUTFALL #006, #007, #010, #012, #013, #014, #015

| WATERBODY NAME | CLASS | WBID | DESIGNATED USES* | OUTFALL # | DISTANCE TO CLASSIFIED SEGMENT | 12-DIGIT HUC** |
|--------------------------------------|-------|------|-------------------------------------|-----------|--------------------------------|----------------|
| Unnamed tributary to Coldwater Creek | C | 3960 | AQL, GEN, HPP, IRR, LWW, SCR, WBC-B | 006 | 0.25 | 10300200-0802 |
| | | | | 007 | 0.10 | |
| | | | | 010 | 0.21 | |
| | | | | 012 | 0.50 | |
| | | | | 013 | 0.12 | |
| | | | | 014 | 0.10 | |
| | | | | 015 | 0.24 | |

* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery (CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW), General Criteria (GEN).

** - Hydrologic Unit Code

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

| RECEIVING STREAM (C, P) | LOW-FLOW VALUES (CFS) | | |
|--------------------------------------|-----------------------|------|-------|
| | 1Q10 | 7Q10 | 30Q10 |
| Unnamed tributary to Coldwater Creek | 0.0 | 0.0 | 0.1 |

MIXING CONSIDERATIONS:

Mixing Zone: Not Allowed [10 CSR 20-7.031(5)(A)4.B.(I)(a)].

Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(5)(A)4.B.(I)(b)].

Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

Not Applicable; The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

ANTI-BACKSLIDING:

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.

- Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

- The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).

Some of the previous permit limits or monitoring requirements were established using best professional judgment by the previous permit writer. However, in accordance with current stormwater permitting practices and utilization of benchmark values, best professional judgment has been used to remove some of the effluent limitations set for maximum daily limits (MDL), some of the monitoring only requirements (parameters completely removed from several outfalls) and all of the average monthly limits (AML). Stormwater events are acute occurrences that result in the greatest concentrations of pollutants being discharged in the first part of the runoff. This first flush can best be represented by a grab sample within the first hours of runoff. Additionally, stormwater events are highly variable. Recording an AML is not representative of the nature of these discharges. Many of these parameters that require just a MDL monitoring only requirement will now have a benchmark value associated with that monitoring only requirement. The following pollutants no longer have effluent limitations, but will have associated benchmark values.

pH has been adjusted for all outfalls. With the same respect to precipitation events, chronic effluent limitations should not be applied to highly variable and non-continuous discharges. Therefore, the technology pH standard will be applied to stormwater discharges. Non-contact cooling water discharges will be granted a range from 6.0 SU to the pH of the public water supply water distributed to consumers. No pollutants are added at this site. The pH of the receiving stream does not appear to be impacted by the discharge. The metals translator for evaluating copper effluent limitations contains a large data set for pH records from the receiving stream. This data set shows all values within the water quality standard pH range of 6.5-9.0 SU. The new limits are still protective of water quality.

There will be no changes to industrial activities onsite or the composition of the stormwater discharge as a result of this renewal. The benchmark concentrations and required corrective actions are protective of the applicable water quality standards.

ANTIDegradation:

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the Department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- Renewal no degradation proposed and no further review necessary.

BIOSOLIDS & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address: <http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ422 through WQ449.

Not applicable; This condition is not applicable to the permittee for this facility.

COMPLIANCE AND ENFORCEMENT:

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Not Applicable; The permittee/facility is not currently under Water Protection Program enforcement action.

REASONABLE POTENTIAL ANALYSIS (RPA):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Applicable; A RPA was conducted on appropriate parameters for this facility. With respect to the metals translator study submitted by the permittee and the volume of data available for copper between 2009 and 2014, the permit writer decided to conduct a reasonable potential analysis for total recoverable copper at outfall #007 and #010. The WLA Modeling section below and Part IV of the factsheet provide more detail on the submitted study and how it has influenced effluent limitations for total recoverable copper in this permit. Please see **APPENDIX A – RPA RESULTS**. The permit writer did not conduct a RPA on any other parameter in this permit. However, the permit writer used best professional judgment to make reasonable potential determinations for certain parameters in stormwater discharges. Please see Part IV for more information.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable; This permit does not contain a SOC.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Applicable; A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

SPILL REPORTING:

Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.

VARIANCE:

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable; This operating permit is not drafted under premises of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Applicable; Wasteload allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(C_s \times Q_s) + (C_e \times Q_e)}{(Q_e + Q_s)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration
Cs = upstream concentration
Qs = upstream flow
Ce = effluent concentration
Qe = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

Number of Samples "n":

Additionally, in accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance, which should be, at a minimum, be targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of "n" for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for "n" must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is "n = 4" at a minimum. For Total Ammonia as Nitrogen, "n = 30" is used.

WLA MODELING:

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

Applicable; A metals translator study was submitted to the Department by Barr Engineering on behalf of the Boeing Company for determining site-specific metal translators for copper. The metals translator study, titled *Site-Specific Effluent Limitations Determination – Metals Translator/Water-Effect Ratio Study* dated October 2014 with revisions dated February 2015, was submitted in an effort to develop copper conversion factors specific to the receiving stream for outfall #007 and #010. Barr Engineering used EPA’s metals translator study guidance titled *The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion*. The study consisted of sample collection of receiving water upstream of the outfalls, adjacent to the outfalls, and downstream of the outfalls. These samples were analyzed for several parameters including dissolved and total recoverable copper. Per the EPA’s guidance, the dissolved fractions were calculated by dividing the dissolved copper by the total recoverable copper for each sample. These fractions were then averaged using a geometric mean calculation to get a final conversion factor for each outfall. These site-specific conversion factors replaced the default conversion factors for calculating total recoverable criteria. The final effluent limitations were based on the site-specific total recoverable criteria developed for copper. The study has not been included in this permit but is available upon request.

WATER QUALITY STANDARDS:

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

WHOLE EFFLUENT TOXICITY (WET) TEST:

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Applicable;

Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures that the provisions in the 10 CSR 20-6.010(8)(A)7. and the Water Quality Standards 10 CSR 20-7.031(3)(D),(F),(G),(I)2.A & B are being met. Under [10 CSR 20-6.010(8)(A)4], the Department may require other terms and conditions that it deems necessary to assure compliance with the Clean Water Act and related regulations of the Missouri Clean Water Commission. In addition the following MCWL apply: §§644.051.3 requires the Department to set permit conditions that comply with the MCWL and CWA; 644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits, pretreatment, etc...); and 644.051.5 is the basic authority to require testing conditions. WET test will be required by all facilities meeting the following criteria:

- Facility is a designated Major.
- Facility continuously or routinely exceeds its design flow.
- Facility that exceeds its design population equivalent (PE) for BOD₅ whether or not its design flow is being exceeded.
- Facility (whether primarily domestic or industrial) that alters its production process throughout the year.
- Facility handles large quantities of toxic substances, or substances that are toxic in large amounts.
- Facility has Water Quality-based Effluent Limitations for toxic substances (other than NH₃)
- Facility is a municipality with a Design Flow ≥ 22,500 gpd.
- Other – please justify.

303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable; Coldwater Creek is listed on the 2012 Missouri 303(d) List for Chloride, *Escherichia coli*, and Dissolved Oxygen.

– The source of the Chloride and *E. coli* impairments has been listed as urban runoff/storm sewer. This facility contains large areas of impervious surfaces that may contribute to the Chloride impairment during runoff from stormwater events. The proposed 2014 TMDL for Coldwater Creek does not consider industrial or non-domestic facilities as contributors to the *E. coli* impairment. The proposed 2014 303(d) De-Listed Waters removes Dissolved Oxygen as impairment to Coldwater Creek. Therefore, the permit writer has used best professional judgment to include monitoring requirements for Chloride only in this permit.

Part IV – Effluent Limits Determination

Effluent limitations derived and established in the below Effluent Limitations Tables are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

Due to the nature of the discharges from these outfalls being stormwater, only a maximum daily limit (MDL) or monitoring requirement will be implemented for many of the parameters listed below. Stormwater events are acute occurrences that result in the greatest concentrations of pollutants being discharged in the first part of the runoff. This first flush can best be represented by a grab sample within the first hours of runoff. Additionally, stormwater events are highly variable. Recording an average monthly limit (AML) is not representative of the nature of these discharges. Many of these parameters that require just a MDL monitoring only requirement will now have a benchmark value associated with that monitoring only requirement. These benchmark values will be listed under the individual discussion and derivation of each parameter containing such a value.

Benchmarks

Benchmark concentrations are **not** effluent limitations; benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective action(s) may be necessary to comply with the technology based effluent limitations (TBEL). Failure to take corrective action is a violation of the permit. Benchmark exceedance alone is not a permit violation.

The benchmarks listed in the derivation discussion below have been determined to be feasible, affordable and protective of water quality. These benchmark values are consistent with other stormwater permits including the Environmental Protection Agency's (EPA) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). The facility will be required to monitor for all these parameters and if the benchmarks are exceeded at all in the following permit cycle, then the permit writer will use best professional judgment to determine if effluent limitations will be necessary to protect water quality.

Outfall #006– Stormwater Outfall

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | **** | YES | */* |
| PRECIPITATION | Inches | 6 | * | - | - | YES | *** |
| COD | MG/L | 6 | ** | - | **** | YES | */* |
| TSS | MG/L | 6 | ** | - | **** | YES | */* |
| SETTLABLE SOLIDS | ML/L/HR | 6 | ** | - | **** | YES | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-9.0 | - | **** | YES | 6.5-9.0 |
| OIL & GREASE (MG/L) | MG/L | 6 | ** | - | **** | YES | 15/10 |
| CHLORIDE | MG/L | 6 | * | - | - | YES | *** |
| NITROGEN, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| PHOSPHORUS, TOTAL AS P | MG/L | 1 | * | - | - | YES | *** |
| ALUMINUM, TOTAL RECOVERABLE | µg/L | 6 | * | - | - | YES | *** |
| CHROMIUM (III), TOTAL RECOVERABLE | µg/L | 6 | **** | - | **** | YES | */* |
| CHROMIUM (VI), DISSOLVED | µg/L | 6 | ** | - | **** | YES | */* |
| COPPER, TOTAL RECOVERABLE | µg/L | 6 | ** | - | **** | YES | */* |
| IRON, TOTAL RECOVERABLE | µg/L | 6 | * | - | - | YES | *** |
| LEAD, TOTAL RECOVERABLE | µg/L | 6 | * | - | - | YES | *** |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | **** | - | **** | YES | PASS/FAIL |

* - Monitoring requirement only.
 ** - Monitoring requirement only with a benchmark value.
 *** - Parameter not previously established in previous state operating permit.
 **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #006 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Precipitation.** Due to the nature of the discharge being stormwater only, the permittee will be required to monitor for this parameter during stormwater flows from these outfalls. The permittee will be required to record the amount of rainfall that occurred during the event that was chosen for sampling. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. The value reported for this outfall should be used to evaluate the BMPs employed at all stormwater outfalls at this site.
- **Chemical Oxygen Demand (COD).** Monitoring only with a benchmark value. It is the permit writer’s best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated in the previous permit is protective of water quality. Thus, the permit writer has used best professional judgment to continue requiring a Benchmark Value of 141 mg/L.

DMR Data Ranges (Benchmark Value of 141 from previous permit):

Outfall #006: 9 - 101 mg/L (2014 Renewal Application = 110 mg/L, 59 mg/L, 31 mg/L)

- **Total Suspended Solids (TSS)**. Monitoring only with a benchmark value. Although the nature of the discharge is stormwater only, the DMR history shows that the facility have reached levels beyond the Benchmark Value of 100 mg/L listed in the previous permit. The excursions of the Benchmark Value occurred once for Outfall #006 (212 mg/L in 2009). Therefore, it is the permit writer's best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated by taking the 99th percentile of the data set being examined for this permit renewal (June 30, 2009 – March 31, 2014) is 94 mg/L. The MSGP has Benchmark Values of 100 mg/L for many industrial categories, including the Air Transportation category. Although the SIC #3721 does not have a Benchmark Value for TSS, the DMR history proves that this facility has a potential to impair the stream due to high TSS results. Thus, the permit writer has used best professional judgment to require a Benchmark Value of 100 mg/L.

DMR Data Ranges (Benchmark Value of 100 from previous permit):

Outfall #006: 6 - 212 mg/L (2014 Renewal Application = 212 mg/L, 212 mg/L, 32 mg/L)

- **Settleable Solids**. Effluent limitations have been removed from the permit and replaced with benchmark values. The DMR data ranges from 0.1 - 0.5 mL/L/hr, which is well below the previous permit effluent limitations. Therefore, it is the permit writer's best professional judgment to remove effluent limitations and implement a benchmark value of 1.5 mL/L/hr.
- **pH**. – 6.0-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. Precipitation events produce increased stream flows beyond the normal low-flow values. The water quality standards apply to instream pH range during normal low-flow. The permit writer has used best professional judgment to determine that increased stream flows provides sufficient buffering capacity to allow the discharge pH to neutralize within the water quality standards once the stream returns to normal low-flow. For this reason, the technology range will be applied at this stormwater outfall.
- **Oil & Grease**. Effluent limitations have been removed from the permit and replaced with benchmark values. Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The DMR data shows a range of 1-6 mg/L. Much of the area draining to Outfall #006 is parking lot and office buildings. It is the permit writer's best professional judgment that this area does not have reasonable potential to exceed water quality standards for this parameter. However, because the facility is a military aircraft and missile manufacturing facility, monitoring will remain in the permit. Additionally, a benchmark value will be implemented at the acute standard of 15 mg/L.
- **Chlorides**. The receiving stream is listed on the 2012 303(d) List for impairment of this parameter. The source is listed as urban runoff/storm sewer. Additionally, the EPA inspection report from the August 7-8, 2012 inspection indicates that the facility uses salt as the primary de-icing agent. Due to the area of impervious surface, and these outfalls being related to stormwater runoff, it is the permit writer's best professional judgment to require monitoring only for this parameter. Once sufficient data has been collected, a reasonable potential analysis will be conducted to determine if effluent limitations will be necessary. Effluent limitations or removal of this parameter may also occur once a TMDL has been developed.
- **Nitrogen, total N**. Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Phosphorous, total P**. Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.

Metals

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

| METAL | CONVERSION FACTORS | |
|--------------|--------------------|---------|
| | ACUTE | CHRONIC |
| Aluminum | N/A | N/A |
| Chromium III | 0.316 | 0.860 |
| Chromium VI | N/A | N/A |
| Copper | 0.960 | 0.960 |
| Iron | N/A | N/A |
| Lead | 0.695 | 0.695 |

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 193 mg/L due to effluent being stormwater.
 N/A = not applicable.

- **Aluminum, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = N/A, Acute Criteria = 750 µg/L. The permittee has indicated this parameter as “Believed Present” for Outfall #006, with a sample result of 0.607 µg/L. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Large amounts of scrap metal storage occur within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- **Chromium (III), Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 127 µg/L, Acute Criteria = 976 µg/L. Parameter removed. The DMR data results show a range from 10 - 43 µg/L. Due to no reasonable potential to exceed water quality standards for this parameter; the permit writer has used best professional judgment to remove the monitoring requirement for this parameter.
- **Chromium (VI), Dissolved.** Protection of Aquatic Life Chronic Criteria = 10 µg/L, Acute Criteria = 15 µg/L. Monitoring only with a benchmark value. The DMR data results show a range from 5 - 43 µg/L. Due to the potential to exceed water quality standards for this parameter; the permit writer has used best professional judgment to continue monitoring for this parameter. Stormwater causes a “first flush” occurrence, which contains the highest concentrations of pollutants in the discharge. In order to capture this “first flush”, the Benchmark Value will be based on the Acute Criteria of 15 µg/L.

No mixing considerations or conversion factors:

Acute = 15 µg/L = WLA

- **Copper, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 15.7 µg/L, Acute Criteria = 25 µg/L. Monitoring only with a benchmark value. The DMR’s show a range of 3.8 – 35.3 µg/L. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. For this reason, it is the permit writer’s best professional judgment to require monitoring only for this parameter while implementing a Benchmark Value. Stormwater causes a “first flush” occurrence, which contains the highest concentrations of pollutants in the discharge. In order to capture this “first flush”, the Benchmark Value will be based on the Acute Criteria of 25 µg/L.

Acute Benchmark = 25/0.960 = 26 µg/L

- **Iron, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 1000 µg/L, Acute Criteria = N/A. The permittee has indicated that this parameter is “Believed Present” in the discharge from Outfall #006, with sample results of 0.768 µg/L. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Large amounts of scrap metal storage occur within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- **Lead, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 4.2 µg/L, Acute Criteria = 109. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Additionally, the MSGP contains this parameter as a Benchmark Value for scrap recycling and auto salvage yards. Due to the types of metals materials exposed at this site, these activities have been considered similar enough to add this parameter. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- **Acute Whole Effluent Toxicity.** Monitoring only requirement removed from permit. The previous permit did not grant the request for removal of this requirement from the stormwater outfalls due to a failure from Outfall #015. The permittee conducted an additional WET test on each outfall since the previous permit issuance and all results showed the facility passed. Therefore, with consideration to the understanding from the previous permit and due to the nature of the discharge being stormwater, the permit writer has used best professional judgment to remove this parameter from these outfalls.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|--------------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| Chlorides | once/quarter | once/quarter |
| Nitrogen, Total as N | once/quarter | once/quarter |
| Phosphorus, Total as P | once/quarter | once/quarter |
| Aluminum, Total Recoverable | once/quarter | once/quarter |
| Chromium (VI), Total Dissolved | once/quarter | once/quarter |
| Copper, Total Recoverable | once/quarter | once/quarter |
| Iron, Total Recoverable | once/quarter | once/quarter |
| Lead, Total Recoverable | once/quarter | once/quarter |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters. Sampling frequency shall be conducted during the following condition. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #007 & Outfall #010

The previous permit separated flows from this outfall into Base Flow and High Flow. Base Flow is a discharge of non-contact cooling water during dry weather. High Flow is a discharge of non-contact cooling water during precipitation events, which increase the volume of the discharge. Additionally, High Flow can be caused by a flushing of the non-contact cooling water storage tank through the system, which occurs approximately once every 5 years. For this reason, the derivation section of the factsheet has been separated to distinguish the parameters to be monitored for during each discharge type.

In addition to the separated flows, the permittee submitted a metals translator study for calculating site-specific total recoverable copper effluent limitations. The Department has reviewed and approved the final study, which will be implemented in this permit. The purpose of the metals translator study was to obtain a site-specific conversion factor for calculating total recoverable criteria for protection of aquatic life from dissolved criteria, as metals are listed in 10 CSR 20-7.031 (except mercury). This conversion factor is related to the ratio of dissolved to total recoverable metal in the receiving stream. The study submitted by the permittee resulted in a site-specific conversion factor that was calculated by taking the geometric mean of the ratios, or dissolved fractions. In accordance with the EPA’s *The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion*, the default conversion factor for copper will be replaced with the geometric mean of the dissolved fractions. This results in site-specific total recoverable water quality criteria for these outfalls. The permit writer will calculate one limit for outfall #007 and one limit for outfall #010, without distinction between Base Flow and High Flow conditions. This is how the study was developed and this is how the department will implement the results. The effluent limitations for total recoverable copper will be calculated immediately below. All other parameters, with consideration to Base Flow and High Flow for these outfalls are discussed in more detail following the total recoverable copper derivation. The study is available upon request.

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|---------------------------|------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| OUTFALL #007 | | | | | | | |
| COPPER, TOTAL RECOVERABLE | µg/L | 1, 3, 5, 6 | 71 | | 27 | YES | 17/8 |
| OUTFALL #010 | | | | | | | |
| COPPER, TOTAL RECOVERABLE | µg/L | 1, 3, 5, 6 | 70 | | 32 | YES | 17/8 |

- * - Monitoring requirement only.
- ** - Monitoring requirement only with a benchmark value.
- *** - Parameter not previously established in previous state operating permit.
- **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

DERIVATION AND DISCUSSION OF LIMITS:

Metals

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the “Technical Support Document For Water Quality-based Toxic Controls” (EPA/505/2-90-001) and “The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From A Dissolved Criterion” (EPA 823-B-96-007). General warm-water fishery criteria apply and a water hardness of 222.25 mg/L for Outfall #007 and 225 mg/L for Outfall #010 is used in the conversion below.

The permittee submitted site-specific data for total recoverable metals, dissolved metals, hardness to evaluate partitioning for development of site-specific translators. The submitted metals translator study is discussed above. The permit writer used discharge monitoring report data from 2009 to 2014 and the values reported on the study, which were collected between 2013 and 2014.

| OUTFALL | METAL | CONVERSION FACTORS | |
|---------|--------|--------------------|---------|
| | | ACUTE | CHRONIC |
| #007 | Copper | 0.420 | 0.420 |
| #010 | Copper | 0.427 | 0.427 |

Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 222.25 mg/L for Outfall #007 and 225 mg/L for Outfall #010

OUTFALL #007

- **Copper, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 18.5 µg/L, Acute Criteria = 29.7 µg/L.

Chronic = 18.5/0.420 = 43.95 µg/L
Acute = 29.7/0.420 = 70.72 µg/L

Chronic WLA: $C_e = ((0.17 + 0.0)43.95 - (0.0 * 0.0))/0.17$
 $C_e = 43.95 \mu\text{g/L}$

Acute WLA: $C_e = ((0.17 + 0.0)70.72 - (0.0 * 0.0))/0.17$
 $C_e = 70.72 \mu\text{g/L}$

$LTA_c = 43.95 (0.352) = 15.47 \mu\text{g/L}$ [CV = 1.07, 99th Percentile]
 $LTA_a = 70.72 (0.191) = 13.51 \mu\text{g/L}$ [CV = 1.07, 99th Percentile]

Use most protective number of LTA_c or LTA_a.

MDL = 13.51 (5.22) = 70.52 µg/L [CV = 1.07, 99th Percentile]
AML = 13.51 (2.02) = 27.29 µg/L [CV = 1.07, 95th Percentile, n = 4]

OUTFALL #010

- **Copper, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 18.7 µg/L, Acute Criteria = 30.0 µg/L.

Chronic = 18.7/0.427 = 43.69 µg/L
Acute = 30.0/0.427 = 70.37 µg/L

Chronic WLA: $C_e = ((0.17 + 0.0)43.69 - (0.0 * 0.0))/0.17$
 $C_e = 43.69 \mu\text{g/L}$

Acute WLA: $C_e = ((0.17 + 0.0)70.37 - (0.0 * 0.0))/0.17$
 $C_e = 70.37 \mu\text{g/L}$

$LTA_c = 43.69 (0.464) = 20.25 \mu\text{g/L}$ [CV = 0.74, 99th Percentile]
 $LTA_a = 70.37 (0.268) = 18.80 \mu\text{g/L}$ [CV = 0.74, 99th Percentile]

Use most protective number of LTA_c or LTA_a.

MDL = 18.80 (3.74) = 70.31 µg/L [CV = 0.74, 99th Percentile]
AML = 18.80 (1.69) = 31.78 µg/L [CV = 0.74, 95th Percentile, n = 4]

Outfall #007 – Base Flow - Process Water Outfalls (process flows only)

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | | * | No | */* |
| COD | MG/L | 6 | ** | | ** | No | **/** |
| TSS | MG/L | 6 | ** | | ** | No | **/** |
| SETTLABLE SOLIDS | ML/L/HR | 6 | 1.5 | | 1.0 | No | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-9.0 | | 6.0-9.0 | No | 6.0-POTABLE pH |
| OIL & GREASE (MG/L) | MG/L | 1, 3, 6 | **** | | **** | YES | 15/10 |
| TOTAL RESIDUAL CHLORINE | µg/L | 1, 3, 6 | 17 | | 8 | No | 17/8 |
| CHROMIUM (III), TOTAL RECOVERABLE | µg/L | 1, 3, 6 | **** | | **** | YES | */* |
| CHROMIUM (VI), DISSOLVED | µg/L | 1, 3, 6 | **** | | **** | YES | */* |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | * | | | YES | PASS/FAIL |

* - Monitoring requirement only.
** - Monitoring requirement only with a benchmark value.
*** - Parameter not previously established in previous state operating permit.

**** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 5. State or Federal Regulation/Law | 5. Water Quality Model |
| 6. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 7. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 8. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #007 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only. The DMR's data ranges from 8-66 mg/L from Outfall #007. These ranges are well below the Benchmark Value of 141 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 141 mg/L established for the other outfalls. It is the permit writer's best professional judgment to maintain the monitoring only requirement and continue to employ the Benchmark Value of 141 mg/L for this parameter.
- **Total Suspended Solids (TSS).** Monitoring only. The DMR's data ranges from 6-31 mg/L from Outfall #007. These ranges are well below the Benchmark Value of 100 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 100 mg/L established for the other outfalls. It is the permit writer's best professional judgment to maintain the monitoring only requirement but employ the Benchmark Value of 100 mg/L for this parameter.
- **Settleable Solids.** Due to the nature of the discharge being stormwater, effluent limitations for Settleable Solids will remain in the permit. The DMR's shows that the facility is capable of meeting the existing limits at each outfall. This is consistent with other stormwater and general permits issued in the State of Missouri. The facility will be required to meet a Daily Maximum limit of 1.5 mL/L/hr and a Monthly Average limit of 1.0 mL/L/hr.
- **pH.** – 6.5 to 9.0 SU. The Water Quality Standard 10 CSR 20-7.031(5)(E) states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units. The state rules do not allow flexibility for pH in continuous discharges. The previous permit allowed for a deviation of the state rules without the required proper demonstration of compliance with the water quality standards. Until such demonstration has been made in accordance with 10 CSR 20-7.015(9)(I)1., then the water quality standards shall apply at the discharge point.
- **Oil & Grease.** Effluent limitations for this parameter removed from Base Flow discharge requirements. The Base Flow consists of non-contact cooling water. The permit writer has used best professional judgment to determine that this type of discharge does not have reasonable potential to exceed water quality standards for this parameter.

- **Total Residual Chlorine (TRC).** Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A]. Background TRC = 0.0 µg/L. No mixing considerations, therefore, default statistical analyses will be conducted for both outfalls. The facility uses potable water distributed by the City of St. Louis. The DMR data shows a range of 1.36 – 2560 µg/L. Due to the high values reported, the permit writer has used best professional judgment to continue requiring effluent limitations for this parameter.

Chronic WLA: $C_e = 10 \mu\text{g/L}$

Acute WLA: $C_e = 19 \mu\text{g/L}$

$LTA_c = 10 (0.527) = 5.3 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

$LTA_a = 19 (0.321) = 6.1 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

$MDL = 5.3 (3.11) = 16.5 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

$AML = 5.3 (1.55) = 8.2 \mu\text{g/L}$

[CV = 0.6, 95th Percentile, n = 4]

Total Residual Chlorine effluent limits of 17 µg/L daily maximum and 8 µg/L monthly average are recommended if chlorine is used as a disinfectant. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

Metals

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

| METAL | CONVERSION FACTORS | |
|--------------|--------------------|---------|
| | ACUTE | CHRONIC |
| Chromium III | 0.316 | 0.860 |
| Chromium VI | N/A | N/A |

Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 162 mg/L due to effluent being industrial process water. N/A = not applicable.

- **Chromium (III), Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 110 µg/L, Acute Criteria = 846 µg/L. The previous permit required monitoring only for this parameter. The DMR's show a range of 5.5 - 10 µg/L during Base Flow. The Base Flow consists of non-contact cooling water. The permit writer has used best professional judgment to determine that this type of discharge does not have reasonable potential to exceed water quality standards for this parameter. Therefore, this parameter has been removed from the Base Flow discharge monitoring requirements.
- **Chromium (VI), Dissolved.** Protection of Aquatic Life Chronic Criteria = 10 µg/L, Acute Criteria = 15 µg/L. The previous permit required monitoring only for this parameter. The DMR's show a range of 4 - 7 µg/L during Base Flow. The Base Flow consists of non-contact cooling water. The permit writer has used best professional judgment to determine that this type of discharge does not have reasonable potential to exceed water quality standards for this parameter. Therefore, this parameter has been removed from the Base Flow discharge monitoring requirements.
- **Acute Whole Effluent Toxicity.** Monitoring requirement only. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards. Due to the number of toxic pollutants that have potential to cause impairment to the receiving stream during a storm event, the permit writer has used best professional judgment to require WET testing for all outfalls.

Acute and/or Chronic Allowable Effluent Concentrations (AECs) for facilities that discharge to unclassified, Class C, Class P (with default Mixing Considerations), or Lakes [10 CSR 20-7.031(5)(A)4.B.(IV)(b)] are 100%, 50%, 25%, 12.5%, & 6.25%.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|--------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Total Residual Chlorine | once/quarter | once/quarter |
| Total Recoverable Copper | once/quarter | once/quarter |
| Acute WET Test | once/permit cycle | once/permit cycle |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge and non-contact cooling water. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters.

- **WET Test.** WET Testing schedules and intervals are established in accordance with the Department’s Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. It is recommended that WET testing be conducted during the period of lowest stream flow.

Acute

No less than Once/Permit Cycle:

Other, please justify. The facility is required to monitor for other water quality-based parameters. Effluent limitations will be determined during the next permit renewal.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being influenced by stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #007 – High Flow - Process Water Outfalls (process flows with system flush or during stormwater runoff)

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|--------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | **** | YES | */* |
| COD | MG/L | 6 | ** | - | **** | YES | **/** |
| TSS | MG/L | 6 | ** | - | **** | YES | **/** |
| SETTLABLE SOLIDS | M/L/HR | 6 | 1.5 | - | **** | YES | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-10.5 | - | **** | YES | 6.0-POTABLE pH |
| OIL & GREASE (MG/L) | MG/L | 1, 3, 6 | 15 | - | **** | YES | 15/10 |
| CHLORIDE | MG/L | 6 | * | - | - | YES | *** |
| TOTAL RESIDUAL CHLORINE | µg/L | 1, 3, 6 | 17 | - | * | YES | 17/8 |
| NITROGEN, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| PHOSPHORUS, TOTAL AS P | MG/L | 1 | * | - | - | YES | *** |
| ALUMINUM, TOTAL RECOVERABLE | µg/L | 1, 3, 6 | * | - | - | YES | *** |
| CHROMIUM (III), TOTAL RECOVERABLE | µg/L | 1, 3, 6 | *** | - | **** | YES | */* |
| CHROMIUM (VI), DISSOLVED | µg/L | 1, 3, 6 | ** | - | **** | YES | */* |
| IRON, TOTAL RECOVERABLE | µg/L | 1, 3, 6 | * | - | **** | YES | *** |
| LEAD, TOTAL RECOVERABLE | µg/L | 6 | * | - | **** | YES | *** |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | * | - | * | YES | PASS/FAIL |

* - Monitoring requirement only.
 ** - Monitoring requirement only with a benchmark value.
 *** - Parameter not previously established in previous state operating permit.
 **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #007 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only. The DMR’s data ranges from 8-66 mg/L from Outfall #007. These ranges are well below the Benchmark Value of 141 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 141 mg/L established for the other outfalls. It is the permit writer’s best professional judgment to maintain the monitoring only requirement and continue to employ the Benchmark Value of 141 mg/L for this parameter.
- **Total Suspended Solids (TSS).** Monitoring only. The DMR’s data ranges from 6-31 mg/L from Outfall #007. These ranges are well below the Benchmark Value of 100 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 100 mg/L established for the other outfalls. It is the permit writer’s best professional judgment to maintain the monitoring only requirement but employ the Benchmark Value of 100 mg/L for this parameter.
- **Settleable Solids.** Due to the nature of the discharge being stormwater or high flush flows mixing with the Base Flow, the permit writer has used best professional judgment to continue only the MDL of 1.5 mL/L/hr. The volume of additional water being discharged during a precipitation event or flush event will act as a first flush characteristic on the receiving stream. During these High Flow discharges, AML monitoring is not representative of that flow. Additionally, the DMR data show a range of 0.1-0.2 mL/L/hr during High Flow. For these reasons, the permit writer will only implement the MDL of 1.5 mL/L/hr during High Flow.

- **pH.** – 6.5 to 9.0 SU. The Water Quality Standard 10 CSR 20-7.031(5)(E) states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units. The state rules do not allow flexibility for pH in continuous discharges. The previous permit allowed for a deviation of the state rules without the required proper demonstration of compliance with the water quality standards. Until such demonstration has been made in accordance with 10 CSR 20-7.015(9)(I)1., then the water quality standards shall apply at the discharge point.
- **Oil & Grease.** Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The facility's vehicle repair shop is located on the site that drains to this outfall. This vehicle repair operation is conducted in a building; however, risk of gasoline, oil, lubricant or other petroleum products leaks or spills exists at this location. Therefore, it is the permit writer's best professional judgment to continue implementing the MDL of 15 mg/L. The AML has been removed from this outfall during High Flow, as long term averages do not capture the first flush characteristics.
- **Chlorides.** The receiving stream is listed on the 2012 303(d) List for impairment of this parameter. The source is listed as urban runoff/storm sewer. Additionally, the EPA inspection report from the August 7-8, 2012 inspection indicates that the facility uses salt as the primary de-icing agent. Due to the area of impervious surface, and these outfalls being related to stormwater runoff, it is the permit writer's best professional judgment to require monitoring only for this parameter. Once sufficient data has been collected, a reasonable potential analysis will be conducted to determine if effluent limitations will be necessary. Effluent limitations or removal of this parameter may also occur once a TMDL has been developed.
- **Total Residual Chlorine (TRC).** Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A]. Background TRC = 0.0 µg/L. No mixing considerations, therefore, default statistical analyses will be conducted for both outfalls. The facility uses potable water distributed by the City of St. Louis. The DMR data shows a range of 30 – 2,520 µg/L. Due to the high values reported, the permit writer has used best professional judgment to continue requiring effluent limitations for this parameter. Only the MDL will be required during High Flow, as long term averages do not capture the first flush characteristics.

Chronic WLA: $C_c = 10 \mu\text{g/L}$

Acute WLA: $C_c = 19 \mu\text{g/L}$

$LTA_c = 10 (0.527) = 5.3 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

$LTA_a = 19 (0.321) = 6.1 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

MDL = 5.3 (3.11) = 16.5 µg/L

[CV = 0.6, 99th Percentile]

AML = 5.3 (1.55) = 8.2 µg/L

[CV = 0.6, 95th Percentile, n = 4]

Total Residual Chlorine effluent limits of 17 µg/L daily maximum and 8 µg/L monthly average are recommended if chlorine is used as a disinfectant. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

- **Nitrogen, total N.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Phosphorous, total P.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.

Metals

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

| METAL | CONVERSION FACTORS | |
|--------------|--------------------|---------|
| | ACUTE | CHRONIC |
| Aluminum | N/A | N/A |
| Chromium III | 0.316 | 0.860 |
| Chromium VI | N/A | N/A |
| Iron | N/A | N/A |
| Lead | 0.721 | 0.721 |

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 162 mg/L due to effluent being industrial process water. N/A = not applicable.

- Aluminum, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = N/A, Acute Criteria = 750 µg/L. The permittee has indicated this parameter as “Believed Present” for Outfall #007, with a sample result of 0.906 µg/L. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Large amounts of scrap metal storage occur within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- Chromium (III), Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 110 µg/L, Acute Criteria = 846 µg/L. The previous permit required monitoring only for this parameter. The DMR’s show a range of 5 - 12 µg/L from Outfall #007. The permit writer has used best professional judgment to determine there is no reasonable potential to exceed water quality standards for this parameter from this outfall. Therefore, the parameter has been removed from the permit.
- Chromium (VI), Dissolved.** Protection of Aquatic Life Chronic Criteria = 10 µg/L, Acute Criteria = 15 µg/L. The previous permit required monitoring only for this parameter. The DMR’s show a range of 4 - 25 µg/L from Outfall #007. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Large amounts of scrap metal storage occur within this drainage area. For this reason, along with data above water quality standards, it is the permit writer’s best professional judgment to continue monitoring only for this parameter. In addition, a benchmark value will be set at the acute water quality standard of 15 µg/L. This will capture the “first flush” characteristic of High Flow. The AML monitoring requirement will be removed from High Flow requirements, as it is not representative of the “first flush” characteristic.

No mixing considerations or conversion factors:

Acute = 15 µg/L = Benchmark Value

- Iron, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 1000 µg/L, Acute Criteria = N/A. The permittee has indicated that this parameter is “Believed Present” in the discharge from Outfall #007, with sample results of 1.06 µg/L. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Large amounts of scrap metal storage occur within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- Lead, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 4.2 µg/L, Acute Criteria = 109. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Additionally, the MSGP contains this parameter as a Benchmark Value for scrap recycling and auto salvage yards. Due to the types of metals materials exposed at this site, these activities have been considered similar enough to add this parameter. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.

- **Acute Whole Effluent Toxicity.** Monitoring requirement only. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards. Due to the number of toxic pollutants that have potential to cause impairment to the receiving stream during a storm event, the permit writer has used best professional judgment to require WET testing for all outfalls.

Acute and/or Chronic Allowable Effluent Concentrations (AECs) for facilities that discharge to unclassified, Class C, Class P (with default Mixing Considerations), or Lakes [10 CSR 20-7.031(5)(A)4.B.(IV)(b)] are 100%, 50%, 25%, 12.5%, & 6.25%.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|--------------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| Chlorides | once/quarter | once/quarter |
| Total Residual Chlorine | once/quarter | once/quarter |
| Nitrogen, Total as N | once/quarter | once/quarter |
| Phosphorus, Total as P | once/quarter | once/quarter |
| Aluminum, Total Recoverable | once/quarter | once/quarter |
| Chromium (VI), Total Dissolved | once/quarter | once/quarter |
| Copper, Total Recoverable | once/quarter | once/quarter |
| Iron, Total Recoverable | once/quarter | once/quarter |
| Lead, Total Recoverable | once/quarter | once/quarter |
| Acute WET Test | once/permit cycle | once/permit cycle |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge and non-contact cooling water. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

- **WET Test.** WET Testing schedules and intervals are established in accordance with the Department's Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. It is recommended that WET testing be conducted during the period of lowest stream flow.

Acute

No less than **Once/Permit Cycle:**

Other, please justify. The facility is required to monitor for other water quality-based parameters. Effluent limitations will be determined during the next permit renewal.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being influenced by stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #010 – Base Flow - Process Water Outfalls (process flows only)

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | * | No | */* |
| COD | MG/L | 6 | ** | - | ** | No | **/** |
| TSS | MG/L | 6 | ** | - | ** | No | **/** |
| SETTLABLE SOLIDS | ML/L/HR | 6 | 1.5 | - | 1.0 | No | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-10.5 | - | 6.0-10.5 | YES | 6.0-POTABLE pH |
| OIL & GREASE (MG/L) | MG/L | 1, 3, 6 | **** | - | **** | YES | 15/10 |
| TOTAL RESIDUAL CHLORINE | µg/L | 1, 3, 6 | 17 | - | 8 | No | 17/8 |
| CHROMIUM (III), TOTAL RECOVERABLE | µg/L | 1, 3, 6 | **** | - | **** | YES | */* |
| CHROMIUM (VI), DISSOLVED | µg/L | 1, 3, 6 | **** | - | **** | No | */* |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | * | - | - | YES | PASS/FAIL |

- * - Monitoring requirement only.
- ** - Monitoring requirement only with a benchmark value.
- *** - Parameter not previously established in previous state operating permit.
- **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #010 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only. The DMR’s data ranges from 8-89 mg/L from Outfall #010. These ranges are well below the Benchmark Value of 141 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 141 mg/L established for the other outfalls. It is the permit writer’s best professional judgment to maintain the monitoring only requirement and continue to employ the Benchmark Value of 141 mg/L for this parameter.
- **Total Suspended Solids (TSS).** Monitoring only. The DMR’s data ranges from 6-27 mg/L from Outfall #010. These ranges are well below the Benchmark Value of 100 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 100 mg/L established for the other outfalls. It is the permit writer’s best professional judgment to maintain the monitoring only requirement but employ the Benchmark Value of 100 mg/L for this parameter.
- **Settleable Solids.** Due to the nature of the discharge being stormwater, effluent limitations for Settleable Solids will remain in the permit. The DMR’s shows that the facility is capable of meeting the existing limits at each outfall. This is consistent with other stormwater and general permits issued in the State of Missouri. The facility will be required to meet a Daily Maximum limit of 1.5 mL/L/hr and a Monthly Average limit of 1.0 mL/L/hr.
- **pH.** – 6.5 to 9.0 SU. The Water Quality Standard 10 CSR 20-7.031(5)(E) states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units. The state rules do not allow flexibility for pH in continuous discharges. The previous permit allowed for a deviation of the state rules without the required proper demonstration of compliance with the water quality standards. Until such demonstration has been made in accordance with 10 CSR 20-7.015(9)(I)1., then the water quality standards shall apply at the discharge point.
- **Oil & Grease.** Effluent limitations for this parameter removed from Base Flow discharge requirements. The Base Flow consists of non-contact cooling water. The permit writer has used best professional judgment to determine that this type of discharge does not have reasonable potential to exceed water quality standards for this parameter.

- **Total Residual Chlorine (TRC).** Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A]. Background TRC = 0.0 µg/L. No mixing considerations, therefore, default statistical analyses will be conducted for both outfalls. The facility uses potable water distributed by the City of St. Louis. The DMR data shows a range of 40 – 7260 µg/L. Due to the high values reported, the permit writer has used best professional judgment to continue requiring effluent limitations for this parameter.

Chronic WLA: $C_e = 10 \mu\text{g/L}$

Acute WLA: $C_e = 19 \mu\text{g/L}$

$LTA_c = 10 (0.527) = 5.3 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

$LTA_a = 19 (0.321) = 6.1 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

$MDL = 5.3 (3.11) = 16.5 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

$AML = 5.3 (1.55) = 8.2 \mu\text{g/L}$

[CV = 0.6, 95th Percentile, n = 4]

Total Residual Chlorine effluent limits of 17 µg/L daily maximum and 8 µg/L monthly average are recommended if chlorine is used as a disinfectant. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

Metals

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

| METAL | CONVERSION FACTORS | |
|--------------|--------------------|---------|
| | ACUTE | CHRONIC |
| Chromium III | 0.316 | 0.860 |
| Chromium VI | N/A | N/A |

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 162 mg/L due to effluent being industrial process water. N/A = not applicable.

- **Chromium (III), Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 110 µg/L, Acute Criteria = 846 µg/L. The previous permit required monitoring only for this parameter. The DMR's show a range of 4 - 62 µg/L during Base Flow. The Base Flow consists of non-contact cooling water. The permit writer has used best professional judgment to determine that this type of discharge does not have reasonable potential to exceed water quality standards for this parameter. Therefore, this parameter has been removed from the Base Flow discharge monitoring requirements.
- **Chromium (VI), Dissolved.** Protection of Aquatic Life Chronic Criteria = 10 µg/L, Acute Criteria = 15 µg/L. The previous permit required monitoring only for this parameter. The DMR's show a range of 4.5 - 9 µg/L during Base Flow. The Base Flow consists of non-contact cooling water. The permit writer has used best professional judgment to determine that this type of discharge does not have reasonable potential to exceed water quality standards for this parameter. Therefore, this parameter has been removed from the Base Flow discharge monitoring requirements.

- **Acute Whole Effluent Toxicity.** Monitoring requirement only. Monitoring is required to determine if reasonable potential exists for this facility’s discharge to exceed water quality standards. Due to the number of toxic pollutants that have potential to cause impairment to the receiving stream during a storm event, the permit writer has used best professional judgment to require WET testing for all outfalls.

Acute and/or Chronic Allowable Effluent Concentrations (AECs) for facilities that discharge to unclassified, Class C, Class P (with default Mixing Considerations), or Lakes [10 CSR 20-7.031(5)(A)4.B.(IV)(b)] are 100%, 50%, 25%, 12.5%, & 6.25%.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|---------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Total Residual Chlorine | once/quarter | once/quarter |
| Copper, Total Recoverable | once/quarter | once/quarter |
| Acute WET Test | once/permit cycle | once/permit cycle |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge and non-contact cooling water. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters.

- **WET Test.** WET Testing schedules and intervals are established in accordance with the Department’s Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. It is recommended that WET testing be conducted during the period of lowest stream flow.

Acute

No less than **Once/Permit Cycle:**

Other, please justify. The facility is required to monitor for other water quality-based parameters. Effluent limitations will be determined during the next permit renewal.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being influenced by stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #010 – High Flow - Process Water Outfalls (process flows with system flush or during stormwater runoff)

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | **** | YES | */* |
| COD | MG/L | 6 | ** | - | **** | YES | **/** |
| TSS | MG/L | 6 | ** | - | **** | YES | **/** |
| SETTLABLE SOLIDS | ML/L/HR | 6 | 1.5 | - | **** | YES | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-10.5 | - | **** | YES | 6.0- POTABLE PH |
| OIL & GREASE (MG/L) | MG/L | 1, 3, 6 | 15 | - | **** | YES | 15/10 |
| CHLORIDE | MG/L | 6 | * | - | - | YES | *** |
| TOTAL RESIDUAL CHLORINE | µg/L | 6 | 17 | - | * | YES | 17/8 |
| NITROGEN, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| PHOSPHORUS, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| ALUMINUM, TOTAL RECOVERABLE | µg/L | 6 | * | - | **** | YES | *** |
| CHROMIUM (III), TOTAL RECOVERABLE | µg/L | 6 | *** | - | **** | YES | */* |
| CHROMIUM (VI), DISSOLVED | µg/L | 6 | ** | - | **** | YES | */* |
| IRON, TOTAL RECOVERABLE | µg/L | 6 | * | - | **** | YES | *** |
| LEAD, TOTAL RECOVERABLE | µg/L | 6 | * | - | **** | YES | *** |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | * | - | - | YES | PASS/FAIL |

* - Monitoring requirement only.
 ** - Monitoring requirement only with a benchmark value.
 *** - Parameter not previously established in previous state operating permit.
 **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #010 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only. The DMR’s data ranges from 8-89 mg/L from Outfall #010. These ranges are well below the Benchmark Value of 141 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 141 mg/L established for the other outfalls. It is the permit writer’s best professional judgment to maintain the monitoring only requirement and continue to employ the Benchmark Value of 141 mg/L for this parameter.
- **Total Suspended Solids (TSS).** Monitoring only. The DMR’s data ranges from 6-27 mg/L from Outfall #010. These ranges are well below the Benchmark Value of 100 mg/L established in the previous permit. This shows that the facility is capable of meeting the Benchmark Value of 100 mg/L established for the other outfalls. It is the permit writer’s best professional judgment to maintain the monitoring only requirement but employ the Benchmark Value of 100 mg/L for this parameter.
- **Settleable Solids.** Due to the nature of the discharge being stormwater or high flush flows mixing with the Base Flow, the permit writer has used best professional judgment to continue only the MDL of 1.5 mL/L/hr. The volume of additional water being discharged during a precipitation event or flush event will act as a first flush characteristic on the receiving stream. During these High Flow discharges, AML monitoring is not representative of that flow. For these reasons, the permit writer will only implement the MDL of 1.5 mL/L/hr during High Flow.

- **pH.** – 6.5 to 9.0 SU. The Water Quality Standard 10 CSR 20-7.031(5)(E) states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units. The state rules do not allow flexibility for pH in continuous discharges. The previous permit allowed for a deviation of the state rules without the required proper demonstration of compliance with the water quality standards. Until such demonstration has been made in accordance with 10 CSR 20-7.015(9)(I)1., then the water quality standards shall apply at the discharge point.
- **Oil & Grease.** Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The facility's grounds maintenance office and storage is located within this drainage area. Some of the equipment used for maintaining the grounds is stored outdoors, while other equipment is under cover; however, risk of gasoline, oil, lubricant or other petroleum products leaks or spills exists at this location. Therefore, it is the permit writer's best professional judgment to continue implementing the MDL of 15 mg/L. The AML has been removed from this outfall during High Flow, as long term averages do not capture the first flush characteristics.
- **Chlorides.** The receiving stream is listed on the 2012 303(d) List for impairment of this parameter. The source is listed as urban runoff/storm sewer. Additionally, the EPA inspection report from the August 7-8, 2012 inspection indicates that the facility uses salt as the primary de-icing agent. Furthermore, it is noted that the salt storage area is located within this drainage area. This storage consists of three concrete walls surrounding an area of pavement. Once salt is placed within this designated area, it is covered with a tarp. This storage is seasonal. Along with the reasons listed above and due to the area of impervious surface, and these outfalls being related to stormwater runoff, it is the permit writer's best professional judgment to require monitoring only for this parameter. Once sufficient data has been collected, a reasonable potential analysis will be conducted to determine if effluent limitations will be necessary. Effluent limitations or removal of this parameter may also occur once a TMDL has been developed.
- **Total Residual Chlorine (TRC).** Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A]. Background TRC = 0.0 µg/L. No mixing considerations, therefore, default statistical analyses will be conducted for both outfalls. The facility uses potable water distributed by the City of St. Louis. The DMR data shows a range of 50 – 1,510 µg/L. Due to the high values reported, the permit writer has used best professional judgment to continue requiring effluent limitations for this parameter. Only the MDL will be required during High Flow, as long term averages do not capture the first flush characteristics.

Chronic WLA: $C_e = 10 \mu\text{g/L}$

Acute WLA: $C_e = 19 \mu\text{g/L}$

$LTA_c = 10 (0.527) = 5.3 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

$LTA_a = 19 (0.321) = 6.1 \mu\text{g/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

MDL = 5.3 (3.11) = 16.5 µg/L

[CV = 0.6, 99th Percentile]

AML = 5.3 (1.55) = 8.2 µg/L

[CV = 0.6, 95th Percentile, n = 4]

Total Residual Chlorine effluent limits of 17 µg/L daily maximum and 8 µg/L monthly average are recommended if chlorine is used as a disinfectant. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

- **Nitrogen, total N.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Phosphorous, total P.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.

Metals

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

| METAL | CONVERSION FACTORS | |
|--------------|--------------------|---------|
| | ACUTE | CHRONIC |
| Aluminum | N/A | N/A |
| Chromium III | 0.316 | 0.860 |
| Chromium VI | N/A | N/A |
| Iron | N/A | N/A |
| Lead | 0.721 | 0.721 |

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 162 mg/L due to effluent being industrial process water. N/A = not applicable.

- Aluminum, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = N/A, Acute Criteria = 750 µg/L. The permittee has indicated this parameter as “Believed Present” for Outfall #010, with a sample result of 0.097 µg/L. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Some storage of scrap metal and grounds maintenance equipment occurs within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- Chromium (III), Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 110 µg/L, Acute Criteria = 846 µg/L. The previous permit required monitoring only for this parameter. The DMR’s show a range of 5 - 10 µg/L from Outfall #010. The permit writer has used best professional judgment to determine there is no reasonable potential to exceed water quality standards for this parameter from this outfall. Therefore, the parameter has been removed from the permit.
- Chromium (VI), Dissolved.** Protection of Aquatic Life Chronic Criteria = 10 µg/L, Acute Criteria = 15 µg/L. The previous permit required monitoring only for this parameter. The DMR’s show a range of 5 - 50 µg/L from Outfall #010. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Some storage of scrap metal and grounds maintenance equipment occurs within this drainage area. These sources do appear to contribute or have potential to contribute to excursions above water quality standards. For this reason, along with data above water quality standards, it is the permit writer’s best professional judgment to continue monitoring only for this parameter. In addition, a benchmark value will be set at the acute water quality standard of 15 µg/L. This will capture the “first flush” characteristic of High Flow. The AML monitoring requirement will be removed from High Flow requirements, as it is not representative of the “first flush” characteristic.

No mixing considerations or conversion factors:

Acute = 15 µg/L = Benchmark Value

- Iron, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 1000 µg/L, Acute Criteria = N/A. The permittee has indicated that this parameter is “Believed Present” in the discharge from Outfall #010, with sample results of 0.097 µg/L. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Some storage of scrap metal and grounds maintenance equipment occurs within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- Lead, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 4.2 µg/L, Acute Criteria = 109. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Some storage of scrap metal and grounds maintenance equipment occurs within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.

- **Acute Whole Effluent Toxicity.** Monitoring requirement only. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards. Due to the number of toxic pollutants that have potential to cause impairment to the receiving stream during a storm event, the permit writer has used best professional judgment to require WET testing for all outfalls.

Acute and/or Chronic Allowable Effluent Concentrations (AECs) for facilities that discharge to unclassified, Class C, Class P (with default Mixing Considerations), or Lakes [10 CSR 20-7.031(5)(A)4.B.(IV)(b)] are 100%, 50%, 25%, 12.5%, & 6.25%.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|--------------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| Chlorides | once/quarter | once/quarter |
| Total Residual Chlorine | once/quarter | once/quarter |
| Nitrogen, Total as N | once/quarter | once/quarter |
| Phosphorus, Total as P | once/quarter | once/quarter |
| Aluminum, Total Recoverable | once/quarter | once/quarter |
| Chromium (VI), Total Dissolved | once/quarter | once/quarter |
| Copper, Total Recoverable | once/quarter | once/quarter |
| Iron, Total Recoverable | once/quarter | once/quarter |
| Lead, Total Recoverable | once/quarter | once/quarter |
| Acute WET Test | once/permit cycle | once/permit cycle |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge and non-contact cooling water. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

- **WET Test.** WET Testing schedules and intervals are established in accordance with the Department's Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. It is recommended that WET testing be conducted during the period of lowest stream flow.

Acute

No less than **Once/Permit Cycle:**

Other, please justify. The facility is required to monitor for other water quality-based parameters. Effluent limitations will be determined during the next permit renewal.

Sampling Type Justification:

Sampling Type shall be grab sample, due to the nature of the discharge being influenced by stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #012 – Stormwater Outfall

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | **** | YES | */* |
| COD | MG/L | 6 | ** | - | **** | YES | */* |
| TSS | MG/L | 6 | ** | - | **** | YES | */* |
| SETTLABLE SOLIDS | ML/L/HR | 6 | ** | - | **** | YES | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-9.0 | - | **** | YES | 6.5-9.0 |
| OIL & GREASE (MG/L) | MG/L | 6 | 15 | - | **** | YES | 15/10 |
| CHLORIDE | MG/L | 6 | * | - | | YES | *** |
| AMMONIA AS N | MG/L | 6 | **** | - | **** | YES | */* |
| TEMPERATURE | °F | 6 | **** | - | **** | YES | */* |
| NITROGEN, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| PHOSPHORUS, TOTAL AS P | MG/L | 1 | * | - | - | YES | *** |
| ALUMINUM, TOTAL RECOVERABLE | µg/L | 6 | ** | - | **** | YES | */* |
| CADMIUM, TOTAL RECOVERABLE | µg/L | 6 | ** | - | **** | YES | */* |
| CHROMIUM (III), TOTAL RECOVERABLE | µg/L | 6 | **** | - | **** | YES | */* |
| CHROMIUM (VI), DISSOLVED | µg/L | 6 | ** | - | **** | YES | */* |
| COPPER, TOTAL RECOVERABLE | µg/L | 6 | **** | - | **** | YES | */* |
| IRON, TOTAL RECOVERABLE | µg/L | 6 | * | - | - | YES | *** |
| LEAD, TOTAL RECOVERABLE | µg/L | 6 | * | - | - | YES | *** |
| SILVER, TOTAL RECOVERABLE | µg/L | 6 | **** | - | **** | YES | */* |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | **** | - | **** | YES | PASS/FAIL |

* - Monitoring requirement only.
 ** - Monitoring requirement only with a benchmark value.
 *** - Parameter not previously established in previous state operating permit.
 **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #012 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only with a benchmark value. It is the permit writer’s best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated in the previous permit is protective of water quality. Thus, the permit writer has used best professional judgment to continue requiring a Benchmark Value of 141 mg/L.

DMR Data Ranges (Benchmark Value of 141 from previous permit):

Outfall #012: 10 – 46 mg/L (2014 Renewal Application = 46 mg/L, 17 mg/L)

- **Total Suspended Solids (TSS)**. Monitoring only with a benchmark value. Although the nature of the discharge is stormwater only, the DMR history shows that the facility have reached levels beyond the Benchmark Value of 100 mg/L listed in the previous permit. The excursions of the Benchmark Value occurred once for Outfall #012 (105 mg/L in 2011). Therefore, it is the permit writer's best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated by taking the 99th percentile of the data set being examined for this permit renewal (June 30, 2009 – March 31, 2014) is 94 mg/L. The MSGP has Benchmark Values of 100 mg/L for many industrial categories, including the Air Transportation category. Although the SIC #3721 does not have a Benchmark Value for TSS, the DMR history proves that this facility has a potential to impair the stream due to high TSS results. Thus, the permit writer has used best professional judgment to require a Benchmark Value of 100 mg/L.

DMR Data Ranges (Benchmark Value of 100 from previous permit):

Outfall #012: 6 – 105 mg/L (2014 Renewal Application = 105 mg/L, 11 mg/L)

- **Settleable Solids**. Effluent limitations have been removed from the permit and replaced with benchmark values. The DMR data ranges from 0.1 - 0.9 mL/L/hr, which is well below the previous permit effluent limitations. Therefore, it is the permit writer's best professional judgment to remove effluent limitations and implement a benchmark value of 1.5 mL/L/hr.
- **pH**. – 6.0-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. Precipitation events produce increased stream flows beyond the normal low-flow values. The water quality standards apply to instream pH range during normal low-flow. The permit writer has used best professional judgment to determine that increased stream flows provides sufficient buffering capacity to allow the discharge pH to neutralize within the water quality standards once the stream returns to normal low-flow. For this reason, the technology range will be applied at this stormwater outfall.
- **Oil & Grease**. Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 15 mg/L daily maximum. Due to the nature of the facility being stormwater associated with a military aircraft and missile manufacturing facility, it is the permit writer's best professional judgment to continue implementing the MDL for this parameter. The AML has been removed, as the discharge is stormwater runoff. The area of the site that drains to this outfall contains an aircraft fueling station. The fuel storage and fueling station are enclosed with secondary containment. However, to ensure this secondary containment functions properly, the MDL effluent limitation will remain in the permit.
- **Chlorides**. The receiving stream is listed on the 2012 303(d) List for impairment of this parameter. The source is listed as urban runoff/storm sewer. Additionally, the EPA inspection report from the August 7-8, 2012 inspection indicates that the facility uses salt as the primary de-icing agent. Due to the area of impervious surface, and these outfalls being related to stormwater runoff, it is the permit writer's best professional judgment to require monitoring only for this parameter. Once sufficient data has been collected, a reasonable potential analysis will be conducted to determine if effluent limitations will be necessary. Effluent limitations or removal of this parameter may also occur once a TMDL has been developed.
- **Total Ammonia Nitrogen**. Due to the nature of the discharge being stormwater only, the permittee will not be required to monitor for this pollutant during stormwater flows from these outfalls. The previous permit contained this parameter for Outfall #012 to determine the reasonable potential to exceed water quality standards. The DMR data ranges from 0.10 – 1.68 mg/L. Only two sample points, in the summer months, exceed 1.0 mg/L of ammonia as N. For this reason, and the fact these outfall discharge stormwater, it is the permit writer's best professional judgment that the discharges will not cause an exceedance of water quality standards for this parameter.
- **Temperature**. Due to the nature of the discharge being stormwater only, the permittee will not be required to monitor for this pollutant during stormwater flows from these outfalls. The previous permit contained this parameter for Outfall #012 to determine the effect of seasonal variation of ammonia as N. However, the Department now uses a two season method for calculating final effluent limitations for ammonia as N. Therefore, it is the permit writer's best professional judgment that the discharge will not cause an exceedance in temperature in the receiving stream during discharges of stormwater only.
- **Nitrogen, total N**. Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Phosphorous, total P**. Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.

Metals

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

| METAL | CONVERSION FACTORS | |
|--------------|--------------------|---------|
| | ACUTE | CHRONIC |
| Aluminum | N/A | N/A |
| Cadmium | 0.916 | 0.881 |
| Chromium III | 0.316 | 0.860 |
| Chromium VI | N/A | N/A |
| Copper | 0.960 | 0.960 |
| Iron | N/A | N/A |
| Lead | 0.721 | 0.721 |
| Silver | 0.850 | N/A |

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 193 mg/L due to effluent being stormwater.
 N/A = not applicable.

- Aluminum, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = N/A, Acute Criteria = 750 µg/L. This parameter was listed in the previous permit for Outfall #012 in an effort to collect data to determine if this outfall has the potential to exceed water quality standards. The DMR’s show a range of 50 – 1,040 µg/L. Due to the excursion of the water quality standards, the permit writer has used best professional judgment to determine this outfall has reasonable potential to have future exceedances. Therefore, monitoring will continue with a benchmark value. Stormwater causes a “first flush” occurrence, which contains the highest concentrations of pollutants in the discharge. In order to capture this “first flush”, the Benchmark Value will be based on the Acute Criteria of 750 µg/L.

No mixing considerations:

Benchmark Value = 750/N/A = 750 µg/L

- Cadmium, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 0.4 µg/L, Acute Criteria = 9.0 µg/L. This parameter was listed in the previous permit for Outfall #012 in an effort to collect data to determine if this outfall has the potential to exceed water quality standards. The DMR’s show a range of 2.0 - 400 µg/L. Due to the excursion of the water quality standards, the permit writer has used best professional judgment to determine this outfall has reasonable potential to have future exceedances. Therefore, monitoring will continue with a benchmark value. Stormwater causes a “first flush” occurrence, which contains the highest concentrations of pollutants in the discharge. In order to capture this “first flush”, the Benchmark Value will be based on the Acute Criteria of 10 µg/L.

Benchmark Value = 9.0/0.924 = 10 µg/L

- Chromium (III), Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 127 µg/L, Acute Criteria = 976 µg/L. This parameter was listed in the previous permit for Outfall #012 in an effort to collect data to determine if this outfall has the potential to exceed water quality standards. The DMR’s show a range of 10 - 15 µg/L from Outfall #012. The permit writer has used best professional judgment to determine there is no reasonable potential to exceed water quality standards for this parameter from this outfall. Therefore, the parameter has been removed from the permit.

- **Chromium (VI), Dissolved.** Protection of Aquatic Life Chronic Criteria = 10 µg/L, Acute Criteria = 15 µg/L. This parameter was listed in the previous permit for Outfall #012 in an effort to collect data to determine if this outfall has the potential to exceed water quality standards. The DMR's show a range of 5 - 19 µg/L from Outfall #012. If an effluent limitation were to be implemented, it would be set at the acute water quality standard of 15 µg/L. This would be based on the discharge being stormwater runoff and the "first flush" characteristic of the event. Although it does not appear that there are sources with potential to cause concentrations of this parameter in the discharge, the DMR data shows values above the water quality standard. For this reason, it is the permit writer's best professional judgment to require monitoring only for this parameter while implementing a Benchmark Value. Stormwater causes a "first flush" occurrence, which contains the highest concentrations of pollutants in the discharge. In order to capture this "first flush", the Benchmark Value will be based on the Acute Criteria of 15 µg/L.

No mixing considerations:

Benchmark Value = 15/N/A = 15 µg/L

- **Copper, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 15.7 µg/L, Acute Criteria = 25 µg/L. This parameter was listed in the previous permit for Outfall #012 in an effort to collect data to determine if this outfall has the potential to exceed water quality standards. The DMR's show a range of 4.2 - 12.2 µg/L from Outfall #012. The permit writer has used best professional judgment to determine there is no reasonable potential to exceed water quality standards for this parameter from this outfall. Therefore, the parameter has been removed from the permit.
- **Iron, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 1000 µg/L, Acute Criteria = N/A. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Some storage of scrap metal and grounds maintenance equipment occurs within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer's best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- **Lead, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 4.2 µg/L, Acute Criteria = 109. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. Some storage of scrap metal and grounds maintenance equipment occurs within this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer's best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- **Silver, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = N/A, Acute Criteria = 10 µg/L. This parameter was listed in the previous permit for Outfall #012 in an effort to collect data to determine if this outfall has the potential to exceed water quality standards. The DMR's show a range of 4.8 - 10 µg/L. If an effluent limitation were to be implemented, it would be set at the acute water quality standard of 12 µg/L. This would be based on the discharge being stormwater runoff and the "first flush" characteristic of the event. The permit writer has also considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that there are minimal sources that have potential to contribute to this pollutant in the discharge. For these reasons, it is the permit writer's best professional judgment to determine that this outfall does not have reasonable potential to exceed water quality standards for this parameter. Therefore, the parameter has been removed from this outfall.

Theoretical Effluent Limitation = 10/0.850 = 12 µg/L

- **Acute Whole Effluent Toxicity.** Monitoring only requirement removed from permit. The previous permit did not grant the request for removal of this requirement from the stormwater outfalls due to a failure from Outfall #015. The permittee conducted an additional WET test on each outfall since the previous permit issuance and all results showed the facility passed. Therefore, with consideration to the understanding from the previous permit and due to the nature of the discharge being stormwater, the permit writer has used best professional judgment to remove this parameter from these outfalls.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|--------------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| Chlorides | once/quarter | once/quarter |
| Nitrogen, Total as N | once/quarter | once/quarter |
| Phosphorus, Total as P | once/quarter | once/quarter |
| Aluminum, Total Recoverable | once/quarter | once/quarter |
| Cadmium, Total Recoverable | once/quarter | once/quarter |
| Chromium (VI), Total Dissolved | once/quarter | once/quarter |
| Iron, Total Dissolved | once/quarter | once/quarter |
| Lead, Total Dissolved | once/quarter | once/quarter |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters. Sampling frequency shall be conducted during the following condition. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #013 – Stormwater Outfall

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | **** | YES | */* |
| COD | MG/L | 6 | ** | - | **** | YES | */* |
| TSS | MG/L | 6 | ** | - | **** | YES | */* |
| SETTLABLE SOLIDS | ML/L/HR | 6 | ** | - | **** | YES | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-9.0 | - | **** | YES | 6.5-9.0 |
| OIL & GREASE (MG/L) | MG/L | 6 | ** | - | **** | YES | 15/10 |
| CHLORIDE | MG/L | 6 | * | - | - | YES | *** |
| NITROGEN, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| PHOSPHORUS, TOTAL AS P | MG/L | 1 | * | - | - | YES | *** |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | **** | - | **** | YES | PASS/FAIL |

- * - Monitoring requirement only.
- ** - Monitoring requirement only with a benchmark value.
- *** - Parameter not previously established in previous state operating permit.
- **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #013 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only with a benchmark value. It is the permit writer's best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated in the previous permit is protective of water quality. Thus, the permit writer has used best professional judgment to continue requiring a Benchmark Value of 141 mg/L.

DMR Data Ranges (Benchmark Value of 141 from previous permit):

Outfall #013: 9 – 86 mg/L (2014 Renewal Application = 86 mg/L, 26 mg/L)

- **Total Suspended Solids (TSS).** Monitoring only with a benchmark value. Due to nature of the discharge, it is the permit writer's best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated by taking the 99th percentile of the data set being examined for this permit renewal (June 30, 2009 – March 31, 2014) is 94 mg/L. The MSGP has Benchmark Values of 100 mg/L for many industrial categories, including the Air Transportation category. Although the SIC #3721 does not have a Benchmark Value for TSS, the DMR history proves that this facility has a potential to impair the stream due to high TSS results. Thus, the permit writer has used best professional judgment to require a Benchmark Value of 100 mg/L.

DMR Data Ranges (Benchmark Value of 100 from previous permit):

Outfall #013: 6 – 49 mg/L (2014 Renewal Application = 49 mg/L, 17 mg/L)

- **Settleable Solids.** Effluent limitations have been removed from the permit and replaced with benchmark values. The DMR data ranges from 0.1 - 0.2 mL/L/hr, which is well below the previous permit effluent limitations. Therefore, it is the permit writer's best professional judgment to remove effluent limitations and implement a benchmark value of 1.5 mL/L/hr.
- **pH.** – 6.0-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. Precipitation events produce increased stream flows beyond the normal low-flow values. The water quality standards apply to instream pH range during normal low-flow. The permit writer has used best professional judgment to determine that increased stream flows provides sufficient buffering capacity to allow the discharge pH to neutralize within the water quality standards once the stream returns to normal low-flow. For this reason, the technology range will be applied at this stormwater outfall.
- **Oil & Grease.** Effluent limitations have been removed from the permit and replaced with benchmark values. Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The DMR data shows a range of 2-6 mg/L. Much of the area draining to Outfall #013 is parking lot and manufacturing enclosed in buildings. It is the permit writer's best professional judgment that this area does not have reasonable potential to exceed water quality standards for this parameter. However, because the facility is a military aircraft and missile manufacturing facility, monitoring will remain in the permit. Additionally, a benchmark value will be implemented at the acute standard of 15 mg/L.
- **Chlorides.** The receiving stream is listed on the 2012 303(d) List for impairment of this parameter. The source is listed as urban runoff/storm sewer. Additionally, the EPA inspection report from the August 7-8, 2012 inspection indicates that the facility uses salt as the primary de-icing agent. Due to the area of impervious surface, and these outfalls being related to stormwater runoff, it is the permit writer's best professional judgment to require monitoring only for this parameter. Once sufficient data has been collected, a reasonable potential analysis will be conducted to determine if effluent limitations will be necessary. Effluent limitations or removal of this parameter may also occur once a TMDL has been developed.
- **Nitrogen, total N.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.

- **Phosphorous, total P.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Acute Whole Effluent Toxicity.** Monitoring only requirement removed from permit. The previous permit did not grant the request for removal of this requirement from the stormwater outfalls due to a failure from Outfall #015. The permittee conducted an additional WET test on each outfall since the previous permit issuance and all results showed the facility passed. Therefore, with consideration to the understanding from the previous permit and due to the nature of the discharge being stormwater, the permit writer has used best professional judgment to remove this parameter from these outfalls.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| Chlorides | once/quarter | once/quarter |
| Nitrogen, Total as N | once/quarter | once/quarter |
| Phosphorus, Total as P | once/quarter | once/quarter |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters. Sampling frequency shall be conducted during the following condition. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #014 – Stormwater Outfall

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | **** | YES | */* |
| COD | MG/L | 6 | ** | - | **** | YES | */* |
| TSS | MG/L | 6 | ** | - | **** | YES | */* |
| SETTLABLE SOLIDS | ML/L/HR | 6 | ** | - | **** | YES | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-9.0 | - | **** | YES | 6.5-9.0 |
| OIL & GREASE (MG/L) | MG/L | 6 | 15 | - | **** | YES | 15/10 |
| CHLORIDE | MG/L | 6 | * | - | - | YES | *** |
| NITROGEN, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| PHOSPHORUS, TOTAL AS P | MG/L | 1 | * | - | - | YES | *** |
| ALUMINUM, TOTAL RECOVERABLE | µg/L | 6 | * | - | **** | YES | */* |
| IRON, TOTAL RECOVERABLE | µg/L | 6 | * | - | **** | YES | *** |
| LEAD, TOTAL RECOVERABLE | µg/L | 6 | * | - | **** | YES | *** |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | **** | - | **** | YES | PASS/FAIL |

* - Monitoring requirement only.
 ** - Monitoring requirement only with a benchmark value.
 *** - Parameter not previously established in previous state operating permit.
 **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #014 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Although the nature of the discharge is stormwater only, the DMR history shows that the facility have reached levels beyond the Benchmark Value of 141 mg/L listed in the previous permit. The excursions of the Benchmark Value occurred once for Outfall #014 (558 mg/L in 2009). Therefore, it is the permit writer’s best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated in the previous permit is protective of water quality. Thus, the permit writer has used best professional judgment to continue requiring a Benchmark Value of 141 mg/L.

DMR Data Ranges (Benchmark Value of 141 from previous permit):

Outfall #014: 10 – 558 mg/L (2014 Renewal Application = 52 mg/L, 44 mg/L, 21 mg/L)

- **Total Suspended Solids (TSS).** Monitoring only with a benchmark value. Due to nature of the discharge, it is the permit writer’s best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. Therefore, it is the permit writer’s best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated by taking the 99th percentile of the data set being examined for this permit renewal (June 30, 2009 – March 31, 2014) is 94 mg/L. The MSGP has Benchmark Values of 100 mg/L for many industrial categories, including the Air Transportation category. Although the SIC #3721 does not have a Benchmark Value for TSS, the DMR history proves that this facility has a potential to impair the stream due to high TSS results. Thus, the permit writer has used best professional judgment to require a Benchmark Value of 100 mg/L.

DMR Data Ranges (Benchmark Value of 100 from previous permit):

Outfall #014: 6 – 78 mg/L (2014 Renewal Application = 49 mg/L, 17 mg/L)

- **Settleable Solids.** Effluent limitations have been removed from the permit and replaced with benchmark values. The DMR data ranges from 0.1 - 0.2 mL/L/hr, which is well below the previous permit effluent limitations. Therefore, it is the permit writer's best professional judgment to remove effluent limitations and implement a benchmark value of 1.5 mL/L/hr.
- **pH.** – 6.0-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. Precipitation events produce increased stream flows beyond the normal low-flow values. The water quality standards apply to instream pH range during normal low-flow. The permit writer has used best professional judgment to determine that increased stream flows provides sufficient buffering capacity to allow the discharge pH to neutralize within the water quality standards once the stream returns to normal low-flow. For this reason, the technology range will be applied at this stormwater outfall.
- **Oil & Grease.** Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The DMR data shows a range from 2-39 mg/L. Due to this excursion of the effluent limitation, the permit writer has used best professional judgment to continue the MDL of 15 mg/L. However, due to the nature of the discharge being stormwater, the AML has been removed from the permit. The MDL will capture the “first flush” characteristic of the stormwater event. The AML will not be representative of this “first flush” characteristics.
- **Chlorides.** The receiving stream is listed on the 2012 303(d) List for impairment of this parameter. The source is listed as urban runoff/storm sewer. Additionally, the EPA inspection report from the August 7-8, 2012 inspection indicates that the facility uses salt as the primary de-icing agent. Due to the area of impervious surface, and these outfalls being related to stormwater runoff, it is the permit writer's best professional judgment to require monitoring only for this parameter. Once sufficient data has been collected, a reasonable potential analysis will be conducted to determine if effluent limitations will be necessary. Effluent limitations or removal of this parameter may also occur once a TMDL has been developed.
- **Nitrogen, total N.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Phosphorous, total P.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.

Metals

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

| METAL | CONVERSION FACTORS | |
|----------|--------------------|---------|
| | ACUTE | CHRONIC |
| Aluminum | N/A | N/A |
| Iron | N/A | N/A |
| Lead | 0.695 | 0.695 |

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 193 mg/L due to effluent being stormwater.
 N/A = not applicable.

- **Aluminum, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = N/A, Acute Criteria = 750 µg/L. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. There is outdoor storage of metals parts along the buildings in this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer's best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.

- **Iron, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 1000 µg/L, Acute Criteria = N/A. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. There is outdoor storage of metals parts along the buildings in this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- **Lead, Total Recoverable.** Protection of Aquatic Life Chronic Criteria = 5.1 µg/L, Acute Criteria = 131. The permit writer has considered the potential sources of stormwater pollutants listed on page 3 of the factsheet. It appears that sources that may contain concentrations of metals drain to all outfalls during stormwater events. There is outdoor storage of metals parts along the buildings in this drainage area. The general permit MO-R60A for scrap metal recycling facilities requires monitoring for this parameter. For these reasons, it is the permit writer’s best professional judgment to require monitoring only for this parameter. This parameter will be reevaluated during the following permit renewal to determine reasonable potential to violate water quality standards from this outfall.
- **Acute Whole Effluent Toxicity.** Monitoring only requirement removed from permit. The previous permit did not grant the request for removal of this requirement from the stormwater outfalls due to a failure from Outfall #015. The permittee conducted an additional WET test on each outfall since the previous permit issuance and all results showed the facility passed. Therefore, with consideration to the understanding from the previous permit and due to the nature of the discharge being stormwater, the permit writer has used best professional judgment to remove this parameter from these outfalls.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|-----------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| Chlorides | once/quarter | once/quarter |
| Nitrogen, Total as N | once/quarter | once/quarter |
| Phosphorus, Total as P | once/quarter | once/quarter |
| Aluminum, Total Recoverable | once/quarter | once/quarter |
| Iron, Total Recoverable | once/quarter | once/quarter |
| Lead, Total Recoverable | once/quarter | once/quarter |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters. Sampling frequency shall be conducted during the following condition. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Outfall #015 – Stormwater Outfall

EFFLUENT LIMITATIONS TABLE:

| PARAMETER | UNIT | Basis for Limits | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------------------|---------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| FLOW | GPD | 1 | * | - | **** | YES | */* |
| COD | MG/L | 6 | ** | - | **** | YES | */* |
| TSS | MG/L | 6 | ** | - | **** | YES | */* |
| SETTLABLE SOLIDS | ML/L/HR | 6 | ** | - | **** | YES | 1.5/1.0 |
| pH | SU | 1, 6 | 6.0-9.0 | - | **** | YES | 6.5-9.0 |
| OIL & GREASE (MG/L) | MG/L | 6 | ** | - | **** | YES | 15/10 |
| CHLORIDE | MG/L | 6 | * | - | - | YES | *** |
| NITROGEN, TOTAL AS N | MG/L | 1 | * | - | - | YES | *** |
| PHOSPHORUS, TOTAL AS P | MG/L | 1 | * | - | - | YES | *** |
| WHOLE EFFLUENT TOXICITY (WET) TEST | TUa | 6 | **** | - | **** | YES | PASS/FAIL |

- * - Monitoring requirement only.
- ** - Monitoring requirement only with a benchmark value.
- *** - Parameter not previously established in previous state operating permit.
- **** - Parameter removed from permit.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

OUTFALL #015 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only with a benchmark value. It is the permit writer’s best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated in the previous permit is protective of water quality. Thus, the permit writer has used best professional judgment to continue requiring a Benchmark Value of 141 mg/L.

DMR Data Ranges (Benchmark Value of 141 from previous permit):

Outfall #015: 8 – 149 mg/L (2014 Renewal Application = 149 mg/L, 40 mg/L, 29 mg/L)

- **Total Suspended Solids (TSS).** Monitoring only with a benchmark value. Due to nature of the discharge, it is the permit writer’s best professional judgment to continue the monitoring only requirement with an adjusted Benchmark Value. The Benchmark Value calculated by taking the 99th percentile of the data set being examined for this permit renewal (June 30, 2009 – March 31, 2014) is 94 mg/L. The MSGP has Benchmark Values of 100 mg/L for many industrial categories, including the Air Transportation category. Although the SIC #3721 does not have a Benchmark Value for TSS, the DMR history proves that this facility has a potential to impair the stream due to high TSS results. Thus, the permit writer has used best professional judgment to require a Benchmark Value of 100 mg/L.

DMR Data Ranges (Benchmark Value of 100 from previous permit):

Outfall #015: 5 – 162 mg/L (2014 Renewal Application = 162 mg/L, 66 mg/L, 24 mg/L)

- **Settleable Solids.** Effluent limitations have been removed from the permit and replaced with benchmark values. The DMR data ranges from 0.1 - 0.4 mL/L/hr, which is well below the previous permit effluent limitations. Therefore, it is the permit writer’s best professional judgment to remove effluent limitations and implement a benchmark value of 1.5 mL/L/hr.

- **pH.** – 6.0-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. Precipitation events produce increased stream flows beyond the normal low-flow values. The water quality standards apply to instream pH range during normal low-flow. The permit writer has used best professional judgment to determine that increased stream flows provides sufficient buffering capacity to allow the discharge pH to neutralize within the water quality standards once the stream returns to normal low-flow. For this reason, the technology range will be applied at this stormwater outfall.
- **Oil & Grease.** Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The DMR data shows a range of 2-6 mg/L. Much of the area draining to Outfall #015 is parking lot and office buildings. It is the permit writer’s best professional judgment that this area does not have reasonable potential to exceed water quality standards for this parameter. However, because the facility is a military aircraft and missile manufacturing facility, monitoring will remain in the permit. Additionally, a benchmark value will be implemented at the acute standard of 15 mg/L.
- **Chlorides.** The receiving stream is listed on the 2012 303(d) List for impairment of this parameter. The source is listed as urban runoff/storm sewer. Additionally, the EPA inspection report from the August 7-8, 2012 inspection indicates that the facility uses salt as the primary de-icing agent. Due to the area of impervious surface, and these outfalls being related to stormwater runoff, it is the permit writer’s best professional judgment to require monitoring only for this parameter. Once sufficient data has been collected, a reasonable potential analysis will be conducted to determine if effluent limitations will be necessary. Effluent limitations or removal of this parameter may also occur once a TMDL has been developed.
- **Nitrogen, total N.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Phosphorous, total P.** Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD.
- **Acute Whole Effluent Toxicity.** Monitoring only requirement removed from permit. The previous permit did not grant the request for removal of this requirement from the stormwater outfalls due to a failure from Outfall #015. The permittee conducted an additional WET test on each outfall since the previous permit issuance and all results showed the facility passed. Therefore, with consideration to the understanding from the previous permit and due to the nature of the discharge being stormwater, the permit writer has used best professional judgment to remove this parameter from these outfalls.

Minimum Sampling and Reporting Frequency Requirements.

| PARAMETER | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|------------------------|--------------------|---------------------|
| Flow | once/quarter | once/quarter |
| COD | once/quarter | once/quarter |
| TSS | once/quarter | once/quarter |
| Settleable Solids | once/quarter | once/quarter |
| pH | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| Chlorides | once/quarter | once/quarter |
| Nitrogen, Total as N | once/quarter | once/quarter |
| Phosphorus, Total as P | once/quarter | once/quarter |

Sampling Frequency Justification:

Sampling and Reporting Frequency were set at quarterly requirements, due to this being a stormwater discharge. Flow has been reduced to a quarterly frequency as well, due to lack of technical or regulatory justification for daily sampling. Flow must be measured during the sampling event, just like all other parameters. Sampling frequency shall be conducted during the following condition. All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**.

Sampling Type Justification

Sampling Type shall be grab sample, due to the nature of the discharge being stormwater. Stormwater runoff has a first flush component, which washes out the highest concentrations of pollutants in the first part of the rain event. Grab samples capture this first flush and will provide the most representative sample during discharge events.

Part V– Administrative Requirements

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than three years old, that data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

PUBLIC NOTICE:

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

- The Public Notice period for this operating permit began on July 24, 2015 and ended on August 24, 2015. The permittee submitted comments during the Public Notice period. These comments and the department's responses are summarized below.

1. The permittee requested a pH range of 6.0 – the pH of the potable water supply for non-contact cooling water discharges. The department did not grant this request. The permittee has not made proper demonstration for deviation from the water quality standards as specified in 10 CSR 20-7.015(9)(I)1. Therefore, the department will maintain water quality standards for Outfall #007 and #010.
2. The permittee requested a pH range of 6.0 – 9.0 SU for all stormwater discharges. The department granted this request, understanding that severe precipitation events cause increased flows in the discharge and instream that provide buffering capacity for the pH to return to the water quality standards range of 6.5-9.0 SU once the stream returns to normal low-flow.
3. The permittee requested that groundwater be added to the facility descriptions for outfalls #007, #010, and #013. The department granted this request. The addition of this type of water to the discharges does not impact the permit requirements.

Due to the changes in effluent limitations for pH ranges at all of the outfalls, the permit will be required to be placed on an additional Public Notice period. This Public Notice period began on November 20, 2015 and ended on December 21, 2015. No comments were received during this Public Notice period. The permit writer revised the address to include a physical address instead of a mailing address. Additionally, the permit tables for several outfalls erroneously contained Chromium (VI), Total Recoverable instead of Chromium (VI), Dissolved. This has been corrected. These changes do not have any impact on permit conditions, and the changes do not warrant additional Public Notice.

DATE OF FACT SHEET: AUGUST 29, 2014

COMPLETED BY:

LOGAN COLE, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
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APPENDIX A – RPA RESULTS:

| Parameter | CMC* | RWC Acute* | CCC* | RWC Chronic* | n** | Range max/min | CV*** | MF | RP Yes/No |
|---------------------------|------|------------|------|--------------|-------|---------------|-------|------|-----------|
| Metals | | | | | | | | | |
| Outfall #007 | | | | | | | | | |
| Copper, Total Recoverable | 70.7 | 121.58 | 43.9 | 121.58 | 75.00 | 62.1/0.0043 | 1.07 | 1.96 | YES |
| Outfall #010 | | | | | | | | | |
| Copper, Total Recoverable | 70.4 | 44.14 | 43.7 | 44.14 | 66.00 | 25.5/0.0035 | 0.74 | 1.73 | YES |

N/A – Not Applicable

* - Units are (µg/L) unless otherwise noted.

** - If the number of samples is 10 or greater, then the CV value must be used in the WQBEL for the applicable constituent.

*** - Coefficient of Variation (CV) is calculated by dividing the Standard Deviation of the sample set by the Mean of the same sample set.

RWC – Receiving Water Concentration. It is the concentration of a toxicant or the parameter toxicity in the receiving water after mixing (if applicable).

n – Is the number of samples.

MF – Multiplying Factor. 99% Confidence Level and 99% Probability Basis.

RP – Reasonable Potential. It is where an effluent is projected or calculated to cause an excursion above a water quality standard based on a number of factors including, as a minimum, the four factors listed in 40 CFR 122.44(d)(1)(ii).

Reasonable Potential Analysis is conducted as per (TSD, EPA/505/2-90-001, Section 3.3.2). A more detailed version including calculations of this RPA is available upon request.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
2. **Monitoring Requirements.**
 - a. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
 - b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee’s sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**
 - a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
 - b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

Section B – Reporting Requirements

1. **Planned Changes.**
 - a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - i. 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
 - ii. 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);
 - iii. The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
 - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.
2. **Non-compliance Reporting.**
 - a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



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- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - ii. Any upset which exceeds any effluent limitation in the permit.
 - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
 - c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
 4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
 5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
 6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
 7. **Discharge Monitoring Reports.**
 - a. Monitoring results shall be reported at the intervals specified in the permit.
 - b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
 - c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.
- b. 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 10 days before the date of the bypass.
 - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
 - c. Prohibition of bypass.
 - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 2. There were 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
 3. The permittee submitted notices as required under paragraph 2. b. of this section.
 - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.
3. **Upset Requirements.**
 - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, 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 properly operated; and
 - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
 - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
 - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section C – Bypass/Upset Requirements

1. **Definitions.**
 - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
 - b. *Severe Property Damage*: 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.
 - c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit 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.
2. **Bypass Requirements.**
 - a. 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 also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
 - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement



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REVISED
AUGUST 1, 2014

- imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a 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.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up 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.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- i. Violations of any terms or conditions of this permit or the law;
- ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
- iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- iv. Any reason set forth in the Law or Regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
- c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department 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 Department upon request, copies of records required to be kept by this permit.
11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.
12. **Closure of Treatment Facilities.**
 - a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
 - b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.
13. **Signatory Requirement.**
 - a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
 - b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
 - c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

111-23 NPDES
MO-0004782

WATER PROTECTION PROGRAM

SEP - 4 2013

August 28, 2013

RECEIVED

Ms. Amanda Sappington
Industrial Permits Unit
Water Protection Program
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO. 65102

Reference: NPDES Permit Number MO-0004782

Enclosures:

- (1) Form A - Application for Construction or Operating Permit
- (2) Form C - Application for Discharge Permit – Manufacturing, Commercial, Mining and Silviculture Operations
- (3) Form D - Application for Discharge Permit – Primary Industries
- (4) Boeing-St. Louis maps
- (5) Boeing-St. Louis Outfall Location / Description

Dear Ms. Amanda Sappington:

Please, find enclosed discharge permit applications for the Boeing Company – St. Louis. These applications are being submitted for Outfalls 006-015, located in St. Louis County. During the permit review process we would like to discuss the possibilities of combining some Outfalls.

If you should have question relating to information found within the submitted permit applications, please contact me at (314) 777-9172.

Sincerely,



Gary Buford
Environment, Health, and Safety
Dept. 107E, Bldg. 111, Mailcode S111-2491

AP 16313



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
**FORM A – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
 UNDER MISSOURI CLEAN WATER LAW**

RECEIVED

| FOR AGENCY USE ONLY | |
|-------------------------|----------------------|
| CHECK NUMBER | |
| DATE RECEIVED 9/4/13 | FEE SUBMITTED 088 |

Note ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

- An operating permit and antidegradation review public notice
- A construction permit following an appropriate operating permit and antidegradation review public notice
- A construction permit and concurrent operating permit and antidegradation review public notice
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
- An operating permit for a new or unpermitted facility Construction Permit # _____
- An operating permit renewal: permit # MO- MO-0004782 Expiration Date March 5, 2014
- An operating permit modification: permit # MO- Reason: _____

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) YES NO

2. FACILITY

| | | | |
|-----------------------------------|-------------------|--|-------------------|
| NAME The Boeing Company | | TELEPHONE WITH AREA CODE (314) 777-9172 | |
| | | FAX (314) 234-7177 | |
| ADDRESS (PHYSICAL) PO Box 516. | CITY St. Louis | STATE MO | ZIP CODE 63166 |

3. OWNER

| | | | |
|--|-----------------|---------------------------------------|--|
| NAME The Boeing Company | | E-MAIL ADDRESS gary.s.buford@boein | TELEPHONE WITH AREA CODE (314) 777-9172 |
| | | | FAX (314) 234-7177 |
| ADDRESS (MAILING) 100 North Riverside | CITY Chicago | STATE ILL | ZIP CODE 60606-1596 |

3.1 Request review of draft permit prior to public notice? YES NO

4. CONTINUING AUTHORITY

| | | | |
|--|-----------------|--------------------------|------------------------|
| NAME The Boeing Company | | TELEPHONE WITH AREA CODE | |
| | | FAX | |
| ADDRESS (MAILING) 100 North Riverside | CITY Chicago | STATE ILL. | ZIP CODE 60606-1596 |

5. OPERATOR

| | | |
|-------------------|---------------------------|--------------------------|
| NAME N/A | CERTIFICATE NUMBER N/A | TELEPHONE WITH AREA CODE |
| | | FAX |
| ADDRESS (MAILING) | CITY | STATE ZIP CODE |

6. FACILITY CONTACT

| | | |
|---------------------|---------------------------------|--|
| NAME Gary Buford | TITLE Environmental Engineer | TELEPHONE WITH AREA CODE (314) 777-9172 |
| | | FAX (314) 234-7177 |

7. ADDITIONAL FACILITY INFORMATION

7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)

001 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

003 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

004 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 – SIC 3721 and NAICS _____ 002 – SIC _____ and NAICS _____
 003 – SIC _____ and NAICS _____ 004 – SIC _____ and NAICS _____

8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION
(Complete all forms that are applicable.)

- A. Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? YES NO
 If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).
- B. Is your facility considered a "Primary Industry" under EPA guidelines: YES NO
 If yes, complete Forms C and D.
- C. Is application for storm water discharges only? YES NO
 If yes, complete EPA Form 2F.
- D. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.
- E. Is wastewater land applied? If yes, complete Form I. YES NO
- F. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? YES NO
 If yes, complete Form R.

9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions.
(PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).

| | | | |
|-----------------------------------|-----------------|-------------|-------------------|
| NAME Norfolk Southern Railroad | | | |
| ADDRESS 6403 Graham Road | CITY Berkely | STATE MO | ZIP CODE 63134 |

10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.

| | |
|---|--|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director Environment, Health, and Safety | TELEPHONE WITH AREA CODE (314) 777-9238 |
|---|--|

| | |
|--|------------------------|
| SIGNATURE  | DATE SIGNED 8/29/17 |
|--|------------------------|

MO 780-1479 (01-09)

BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

- Appropriate Fees?
- Map at 1" = 2000' scale?
- Signature?
- Form C, if applicable?
- Form D, if applicable?
- Form 2F, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?

7.1 Legal Description of Outfalls

Outfalls 001-005, 008, and 009 are historic outfalls no longer covered by the permit

- Outfall 006:** NW ¼, Sec. 4, T46N, R6E
Latitude/Longitude +3845219/-09020550
- Outfall 007:** NW ¼, Sec. 4, T46N, R6E
Latitude/Longitude +3845283/-09020572
- Outfall 010:** NW ¼, Sec. 4 projected, T46N, R6E, Land Grant 369
Latitude/Longitude +3845240/-09020281
- Outfall 012:** SE ¼, Sec. 5 projected, T46N, R6E, Land Grant 369
Latitude/Longitude +3845103/-09021272
- Outfall 013:** NW ¼, Sec. 4, T46N, R6E
Latitude/Longitude +3845290/-09021024
- Outfall 014:** T47N, R6E, Land Grant 369
Latitude/Longitude +3845362/-09020445
- Outfall 015:** NE ¼, Sec. 4 projected, T46N, R6E, Land Grant 369
Latitude/Longitude +3845212/-09020263

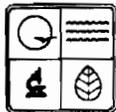
7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes

Outfalls 001-005, 008, and 009 are historic outfalls no longer covered by the permit

- Outfall 006:** SIC - 3721, NAICS - 336411
- Outfall 007:** SIC - 3721, NAICS - 336411
- Outfall 010:** SIC - 3721, NAICS - 336411
- Outfall 012:** SIC - 3721, NAICS - 336411
- Outfall 013:** SIC - 3721, NAICS - 336411
- Outfall 014:** SIC - 3721, NAICS - 336411
- Outfall 015:** SIC - 3721, NAICS - 336411

RECEIVED

SEP - 4 2013



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3721 B. SECOND _____

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

| | |
|-----------------------------------|--|
| OUTFALL NUMBER (LIST) | RECEIVING WATER |
| 006, 007, 010, 012, 013, 014, 015 | Tributary to Cold Water Creek / Missouri River |

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?
 YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION
 A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?
 YES (COMPLETE B.) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?
 YES (COMPLETE C.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | |
| | | | |

2.60 IMPROVEMENTS
 A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.
 YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|----------------------|---|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.
 MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

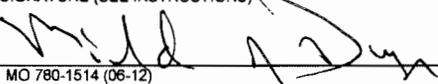
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|--------------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |
| Teklab, Inc. | 5445 Horseshoe Lake Road, Colinsville, Il. 62234 | 618-344-1004 | All listed |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director \ Environment, Health, and Safety | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS)  | DATE SIGNED 8/29/17 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
 (Use the same format)
 SEE INSTRUCTIONS

FORM C
 TABLE 1 FOR 3.00 ITEM A AND B

| | | | |
|-------------------------------------|--|--------------------|--|
| INTAKE AND EFFLUENT CHARACTERISTICS | | OUTFALL NO. 006 | |
|-------------------------------------|--|--------------------|--|

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | |
|------------------------------------|------------------------|-------------|--|----------|---|----------|--------------------|------------------|----------------------|--|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| A. Biochemical Oxygen Demand (BOD) | <5.0 | <36.7 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | |
| B. Chemical Oxygen Demand (COD) | 110 | 807 | 59 | 295 | 31 | 10.5 | 22 | mg/l. | lb | | |
| C. Total organic Carbon (TOC) | 2.2 | 16 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | |
| D. Total Suspended Solids (TSS) | 212 | 1556 | 212 | 1060 | 32.3 | 11 | 18 | mg/l. | lb | | |
| E. Ammonia (as N) | 0.08 | 0.59 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | |
| F. Flow | VALUE 0.88 | | VALUE 0.600 | | VALUE 0.041 | | 22 | mgd. | | VALUE | |
| G. Temperature (winter) | VALUE 20 | | VALUE n/a | | VALUE 10.7 | | 9 | °C | | VALUE | |
| H. Temperature (summer) | VALUE 27 | | VALUE n/a | | VALUE 19.4 | | 9 | °C | | VALUE | |
| I. pH | MINIMUM 6.9 | MAXIMUM 9.3 | | MAXIMUM | | | 18 | STANDARD UNITS | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| A. Bromide (24959-67-9) | | X | | | | | | | | | | | |
| B. Chlorine Total Residual | | X | <0.03 | <0.21 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | |
| C. Color | | X | 40 | 294 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | |
| D. Fecal Coliform | | X | 50 | 538 | n/a | n/a | n/a | n/a | 1 | CFU/100ml. | lb/d | | |
| E. Fluoride (16984-48-8) | | X | | | | | | | 1 | | | | |
| F. Nitrate-Nitrate (as N) | X | | 0.644 | 4.7 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | B. NO. OF ANALYSES |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| G. Nitrogen Total Organic (as N) | X | | 0.42 | 3.1 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | X | | 6 | 44 | 6 | 30 | 4 | 1.36 | 17 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | X | | 0.118 | 0.87 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | 11 | 80.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | 0.02 | 0.15 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | <2 | 14.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 0.30 | 2.2 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | X | | 0.607 | 4.5 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.017 | 0.12 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | 0.008 | 0.06 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | 0.07 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | X | | 0.768 | 5.6 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 1.67 | 12.3 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | 0.0074 | 0.05 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 1.67 | 12.3 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | 0.15 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | | X | 0.018 | 0.13 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | <0.05 | <0.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 2M. Beryllium, Total (7440-41-7) | | X | <0.001 | <0.008 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 3M. Magnesium, Total (7439-95-4) | | X | 1.67 | 12.3 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 4M. Molybdenum, Total (7439-98-7) | | X | 0.007 | 0.05 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 5M. Tin, Total (7440-31-5) | | X | <0.02 | <0.15 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 6M. Titanium, Total (7440-32-6) | | X | 0.018 | 0.13 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 7M. Mercury, Total (7439-97-6) | | X | 0.0008 | 0.0006 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 8M. Selenium, Total (7782-49-2) | | X | <0.05 | <0.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 9M. Thallium, Total (7440-28-0) | | X | <0.05 | <0.4 | n/a | n/a | n/a | n/a | 1 | mg/l. | lbs | | | |
| 10M. Phenols, Total | | X | <0.005 | <0.04 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |

RECEIVED

SEP - 4 2011



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT
WATER PROTECTION PROGRAM
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

FOR AGENCY USE ONLY

CHECK NO.

DATE RECEIVED

FEE SUBMITTED

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3721 B. SECOND _____
C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST) RECEIVING WATER
006, 007, 010, 012, 013, 014, 015 Tributary to Cold Water Creek / Missouri River

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE C) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|---|--------------------------|--------------|
| | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL. YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

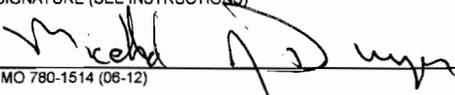
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---------------------------------|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) | TELEPHONE NUMBER WITH AREA CODE |
| Mike Dwyer, Director \ Environment, Health, and Safety | (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS) | DATE SIGNED |
|  | 8/29/13 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
(Use the same format)
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
007H

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | D. NO. OF ANALYSES | 3. UNITS (specify if blank) | | 4. INTAKE (optional) | | B. NO. OF ANALYSES |
|------------------------------------|------------------------|-------------|--|----------|--------------------|-----------------------------|---------|--------------------------|----------|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| A. Biochemical Oxygen Demand (BOD) | <5 | 30 | n/a | n/a | 1 | mg/l. | lb | | | |
| B. Chemical Oxygen Demand (COD) | 81 | 486 | 81 | 48.6 | 21 | mg/l. | lb | | | |
| C. Total organic Carbon (TOC) | 2.7 | 16.2 | n/a | n/a | 1 | mg/l | lb | | | |
| D. Total Suspended Solids (TSS) | 29 | 174 | 29 | 17.4 | 5 | mg/l. | lb | | | |
| E. Ammonia (as N) | 0.06 | 0.36 | n/a | n/a | 1 | mg/l. | lb | | | |
| F. Flow | VALUE 0.718 | | VALUE 0.072 | | 4 | mgd. | | VALUE | | |
| G. Temperature (winter) | VALUE 19 | | VALUE n/a | | 9 | °C | | VALUE | | |
| H. Temperature (summer) | VALUE 27 | | VALUE n/a | | 9 | °C | | VALUE | | |
| I. pH | MINIMUM 6.9 | MAXIMUM 9.3 | | MAXIMUM | 21 | STANDARD UNITS | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | B. NO. OF ANALYSES |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|------------------|---------|--------------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS | |
| A. Bromide (24859-67-9) | | X | n/a | n/a | n/a | n/a | n/a | n/a | mg/l. | lb/d | | | |
| B. Chlorine Total Residual | X | | 0.04 | 0.33 | n/a | n/a | n/a | n/a | mg/l | lb | | | |
| C. Color | | X | 60 | 490 | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | n/a | n/a | CFU/100ml. | n/a | | | |
| E. Fluoride (16984-48-6) | X | | n/a | n/a | n/a | n/a | n/a | n/a | mg/l. | lb | | | |
| F. Nitrate-Nitrate (as N) | X | | 0.354 | 2.85 | n/a | n/a | n/a | n/a | mg/l. | lb | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|--|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | X | | 0.61 | 4.98 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | X | | <6 | <49 | <6 | 17 | 4.1 | 1.6 | 21 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | X | | 0.155 | 1.3 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ⁴⁻) (14808-79-8) | | X | 11 | 90 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | 0.02 | 0.16 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| L. Sulfite (as SO ³⁻) (14265-45-3) | | X | <2 | 16.3 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 1.3 | 10.6 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | X | | 0.906 | 7.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.024 | 0.2 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | 0.014 | 0.11 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.082 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | X | | 1.06 | 8.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 3.0 | 25 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | <0.01 | <0.082 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 0.028 | 0.23 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | 0.16 | n/a | n/a | n/a | n/a | n/a | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | X | | 0.024 | 0.2 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|------------------|---------|--------------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| | | | | | | | | | | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | <0.5 | <4.45 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 2M. Beryllium, Total (7440-41-7) | | X | <0.01 | <0.089 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 3M. Magnesium, Total (7439-95-4) | | X | 3.0 | 26.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 4M. Molybdenum, Total (7439-98-7) | | X | <0.01 | <0.089 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 5M. Tin, Total (7440-31-5) | | X | <0.02 | <0.178 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 6M. Titanium, Total (7440-32-6) | | X | 0.024 | 0.21 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 7M. Mercury, Total (7439-97-6) | | X | 0.0001 | 0.0009 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 8M. Selenium, Total (7782-49-2) | | X | <0.05 | <0.445 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 9M. Thallium, Total (7440-28-0) | | X | <0.05 | <0.445 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 10M. Phenols, Total | | X | <0.005 | <0.045 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |

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MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT -
MANUFACTURING, COMMERCIAL MINING,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3721 B. SECOND _____

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

| | |
|-----------------------------------|--|
| OUTFALL NUMBER (LIST) | RECEIVING WATER |
| 006, 007, 010, 012, 013, 014, 015 | Tributary to Cold Water Creek / Missouri River |

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS
Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE C) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

1. MAXIMUM QUANTITY

2. AFFECTED OUTFALLS
(list outfall numbers)

| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|---|--------------------------|--------------|
| | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL. YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

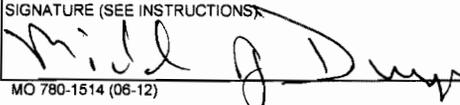
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director \ Environment, Health, and Safety | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS)  | DATE SIGNED 8/29/13 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
(Use the same format)
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
007B

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES | |
|------------------------------------|------------------------|-------------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--------------------|----------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| A. Biochemical Oxygen Demand (BOD) | 5 | 0.72 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | | |
| B. Chemical Oxygen Demand (COD) | 66 | 31.7 | 48.5 | 17.9 | 17.2 | 4.6 | 17 | mg/l. | lb | | | |
| C. Total organic Carbon (TOC) | 1.7 | 0.245 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| D. Total Suspended Solids (TSS) | 31 | 14.9 | 31 | 6.6 | 15.2 | 4.1 | 17 | mg/l. | lb | | | |
| E. Ammonia (as N) | 0.11 | 0.016 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | | |
| F. Flow | VALUE 0.057 / 0.017 | | VALUE 0.044 | | VALUE 0.032 | | 17 | mgd. | | VALUE | | |
| G. Temperature (winter) | VALUE 21 | | VALUE 21 | | VALUE 15.8 | | 8 | °C | | VALUE | | |
| H. Temperature (summer) | VALUE 28 | | VALUE 28 | | VALUE 20.7 | | 9 | °C | | VALUE | | |
| I. pH | MINIMUM 7.0 | MAXIMUM 9.6 | | MINIMUM | MAXIMUM | | 17 | STANDARD UNITS | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

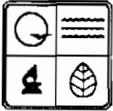
| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | | 6. INTAKE (optional) | | B. NO. OF ANALYSES |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|----------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | |
| A. Bromide (24959-67-9) | | X | 0.8 | 0.12 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | | | |
| B. Chlorine Total Residual | X | | <0.05 | <0.01 | n/a | n/a | <0.043 | <0.015 | 5 | mg/l | lb | | | | |
| C. Color | | X | 15 | n/a | n/a | n/a | units | units | 1 | n/a | n/a | | | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | CFU/100ml. | n/a | | | | |
| E. Fluoride (16984-48-8) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | mg/l. | lb | | | | |
| F. Nitrate-Nitrate (as N) | X | | 0.487 | 5.24 | n/a | n/a | n/a | n/a | n/a | mg/l. | lb | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|------------------|---------|--------------------------|----------------------|--------------------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | D. NO. OF ANALYSES | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | | X | 0.64 | 0.9 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| H. Oil and Grease | | X | <6 | <2.88 | n/a | n/a | <4.4 | <1.2 | mg/l | lb/d | | | | |
| I. Phosphorus (as P) Total (7723-14-0) | | X | 0.195 | 0.028 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| J. Sulfate (as SO ⁴) (14808-79-8) | | X | 144 | 20.7 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| K. Sulfide (as S) | | X | <0.05 | <0.007 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| L. Sulfite (as SO ³) (14265-45-3) | | X | <2 | <0.288 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| M. Surfactants | | X | 0.35 | 0.05 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| N. Aluminum Total (7429-90-5) | | X | 0.0851 | 0.012 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| O. Barium Total (7440-39-3) | | X | 0.115 | 0.017 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| P. Boron Total (7440-42-8) | | X | 0.093 | 0.0134 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.001 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| R. Iron Total (7439-89-6) | | X | 0.13 | 0.019 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| S. Magnesium Total (7439-95-4) | | X | 25.5 | 3.67 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| T. Molybdenum Total (7439-98-7) | | X | 0.0049 | <0.002 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| U. Manganese Total (7439-96-5) | | X | 0.0459 | 0.007 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | <0.003 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |
| W. Titanium Total (7440-32-6) | | X | 0.0022 | <0.002 | n/a | n/a | n/a | n/a | mg/l | lb/d | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|------------------|----------------------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | <0.5 | 0.072 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 2M. Beryllium, Total (7440-41-7) | | X | <0.0011 | <0.002 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 3M. Magnesium, Total (7439-95-4) | | X | 25.5 | 3.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 4M. Molybdenum, Total (7439-98-7) | | X | 0.0049 | <0.002 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 5M. Tin, Total (7440-31-5) | | X | <0.02 | <0.003 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 6M. Titanium, Total (7440-32-6) | | X | 0.0022 | <0.003 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 7M. Mercury, Total (7439-97-6) | | X | 0.0011 | <0.002 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 8M. Selenium, Total (7782-49-2) | | X | <0.05 | <0.007 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 9M. Thallium, Total (7440-28-0) | | X | <0.05 | <0.007 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| 10M. Phenols, Total | | X | <0.025 | <0.036 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |

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MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)
A. FIRST 3721 B. SECOND _____
C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.
OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

| OUTFALL NUMBER (LIST) | RECEIVING WATER |
|-----------------------------------|--|
| 006, 007, 010, 012, 013, 014, 015 | Tributary to Cold Water Creek / Missouri River |

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS
Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | | | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE c.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|----------------------|---|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL. YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

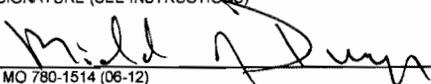
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director \ Environment, Health, and Safety | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS)  | DATE SIGNED 8/29/17 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
(Use the same format)
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
010B

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES |
|------------------------------------|------------------------|----------------|--|----------|-----------------------------|------------------|---------|--------------------------|----------------------|--|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | |
| A. Biochemical Oxygen Demand (BOD) | <5 | <1.32 | n/a | n/a | 1 | mg/l. | lb/d | | | | |
| B. Chemical Oxygen Demand (COD) | 41 | 21.7 | 34 | 12.6 | 17 | mg/l. | lb/d | | | | |
| C. Total organic Carbon (TOC) | 0.7 | 0.185 | n/a | n/a | 1 | mg/l | lb/d | | | | |
| D. Total Suspended Solids (TSS) | 27 | 14 | n/a | n/a | 17 | mg/l. | lb/d | | | | |
| E. Ammonia (as N) | <0.1 | <0.003 | n/a | n/a | 1 | mg/l. | lb/d | | | | |
| F. Flow | VALUE 0.063 | | VALUE 0.044 | | 17 | mgd. | | VALUE | | | |
| G. Temperature (winter) | VALUE 21 | | VALUE 15.4 | | 8 | °C | | VALUE | | | |
| H. Temperature (summer) | VALUE 25 | | VALUE 17 | | 9 | °C | | VALUE | | | |
| I. pH | MINIMUM 7.4 | MAXIMUM 9.8 | MINIMUM | MAXIMUM | 17 | STANDARD UNITS | | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | B. NO. OF ANALYSES |
|--|---------------------|--------------------|------------------------|--|---|--------------------|-------------------|----------|--------------------------|----------|----------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | B. MAXIMUM 30 DAY VALUE (if available) | C. LONG TERM AVRG. VALUE (if available) | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| A. Bromide (24959-67-9) | | X | ND | | | 1 | mg/l | lb | | | | | |
| B. Chlorine Total Residual | X | | <0.05 | n/a | <0.034 | 5 | mg/l | lb | | | | | |
| C. Color | | X | 10 | n/a | n/a | 1 | n/a | n/a | | | | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | CFU/100ml. | n/a | | | | | |
| E. Fluoride (16984-48-8) | | X | n/a | n/a | n/a | n/a | mg/l. | lb | | | | | |
| F. Nitrate-Nitrate (as N) | | X | 3.2 | n/a | n/a | 1 | mg/l. | lb | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | | X | 0.52 | 0.137 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | | X | <6 | <3.2 | n/a | n/a | <4.0 | <0.88 | 17 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | | X | 0.046 | 0.012 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | 133 | 35 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | <0.05 | <0.013 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| L. Sulfite (as SO ₃) (14285-45-3) | | X | <2 | <0.528 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 0.21 | 0.55 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | | X | 0.957 | 0.25 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.232 | 0.06 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | 0.065 | 0.017 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.003 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | | X | 0.136 | 0.036 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 42.3 | 11.2 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | <0.01 | <0.003 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 0.0262 | 0.069 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | <0.005 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | | X | <0.01 | <0.003 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|---------|--------------------------|-----|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | X | | 0.04 | 0.011 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 2M. Beryllium, Total (7440-41-7) | X | | <0.001 | <0.001 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 3M. Magnesium, Total (7439-95-4) | X | | 42.3 | 11 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 4M. Molybdenum, Total (7439-98-7) | X | | <0.01 | <0.03 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 5M. Tin, Total (7440-31-5) | X | | <0.02 | <0.005 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 6M. Titanium, Total (7440-32-6) | X | | <0.01 | <0.01 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 7M. Mercury, Total (7439-97-6) | X | | <0.0002 | <0.0002 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 8M. Selenium, Total (7782-49-2) | X | | <0.05 | <0.013 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 9M. Thallium, Total (7440-28-0) | X | | <0.05 | <0.013 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| 10M. Phenols, Total | X | | <0.025 | <0.007 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | X | | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (2) Beta Total | X | | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (3) Radium Total | X | | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (4) Radium 226 Total | X | | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

SEP - 4 2013



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT
WATER POLLUTION PROGRAM
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3721 B. SECOND _____
C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST) 006, 007, 010, 012, 013, 014, 015 RECEIVING WATER Tributary to Cold Water Creek / Missouri River

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS
Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | | | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE C) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|----------------------|---|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL: YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

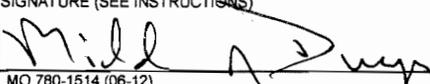
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---------------------------------|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) | TELEPHONE NUMBER WITH AREA CODE |
| Mike Dwyer, Director \ Environment, Health, and Safety | (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS) | DATE SIGNED |
|  | 8/29/13 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
 (Use the same format)
 SEE INSTRUCTIONS

FORM C
 TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.
 010H

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES | |
|------------------------------------|------------------------|-------------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--------------------|----------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| A. Biochemical Oxygen Demand (BOD) | <5 | 75 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| B. Chemical Oxygen Demand (COD) | 89 | 1335 | 89 | 1335 | 27.3 | 26 | 17 | mg/l. | lb/d | | | |
| C. Total organic Carbon (TOC) | 1.3 | 19.5 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| D. Total Suspended Solids (TSS) | 26 | 390 | 26 | 31.2 | 14.8 | 14 | 17 | mg/l. | lb/d | | | |
| E. Ammonia (as N) | 0.2 | 3.0 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| F. Flow | VALUE 1.8 | VALUE 0.147 | | | VALUE 0.114 | | 17 | mgd. | | VALUE | | |
| G. Temperature (winter) | VALUE 19 | VALUE n/a | | | VALUE 10.7 | | 9 | °C | | VALUE | | |
| H. Temperature (summer) | VALUE 26 | VALUE n/a | | | VALUE 17 | | 9 | °C | | VALUE | | |
| I. pH | MINIMUM 6.8 | MAXIMUM 9.3 | | MAXIMUM | | | 18 | STANDARD UNITS | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | B. NO. OF ANALYSES | |
|--|---------------------|--------------------|---------------------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|----------|--------------------|--|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (if available) | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | |
| A. Bromide (24959-67-9) | | X | | | | | | | | | | | | | |
| B. Chlorine Total Residual | X | | 0.99 | 20.7 | n/a | n/a | 0.12 | 0.114 | 17 | mg/l | lb | | | | |
| C. Color | | X | 10 | 209 | n/a | n/a | n/a | n/a | 1 | n/a | n/a | | | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | n/a | n/a | 1 | CFU/100ml. | n/a | | | | |
| E. Fluoride (16984-48-8) | | X | n/a | n/a | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | | | |
| F. Nitrate-Nitrate (as N) | X | | 0.213 | 4.5 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | X | | 0.32 | 6.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | X | | <6 | <90 | <6 | <7.2 | 4.35 | <4.13 | 17 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | X | | 0.042 | 0.63 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | 6 | 125 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | <0.05 | <1.1 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | <2 | <41.8 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 0.48 | 10 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | X | | 0.097 | 2 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.01 | 0.21 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | 0.006 | 0.13 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.21 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | X | | 0.097 | 2.03 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 1.45 | 30.3 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | <0.01 | <0.21 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 0.005 | 0.105 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | <0.42 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | X | | 0.003 | 0.06 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|---------|----------------------|--------------------------|-----|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCEN- TRATION | B. MASS | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | 0.047 | <1.05 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 2M. Beryllium, Total (7440-41-7) | | X | <0.001 | <0.023 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 3M. Magnesium, Total (7439-95-4) | | X | 1.45 | 32.6 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 4M. Molybdenum, Total (7439-98-7) | | X | <0.01 | <0.225 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 5M. Tin, Total (7440-31-5) | | X | <0.02 | <0.45 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 6M. Titanium, Total (7440-32-6) | | X | 0.0032 | 0.072 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 7M. Mercury, Total (7439-97-6) | | X | <0.0002 | <0.002 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 8M. Selenium, Total (7782-49-2) | | X | <0.05 | <1.12 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 9M. Thallium, Total (7440-28-0) | | X | <0.05 | <1.12 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| 10M. Phenols, Total | | X | <0.005 | <1.12 | n/a | n/a | n/a | n/a | mg/l | lbs | 1 | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |



SEP - 4 2011

MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT
 WATER PROTECTION PROGRAM
 MANUFACTURING, COMMERCIAL, MINING,
 SILVICULTURE OPERATIONS, PROCESS & STORM WATER

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
 The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
 MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3721 B. SECOND _____
 C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

| | |
|-----------------------------------|--|
| OUTFALL NUMBER (LIST) | RECEIVING WATER |
| 006, 007, 010, 012, 013, 014, 015 | Tributary to Cold Water Creek / Missouri River |

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?
 YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | | | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?
 YES (COMPLETE B) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?
 YES (COMPLETE c.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.
 YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|----------------------|---|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL. YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

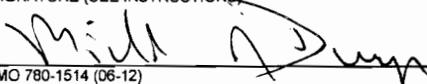
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director \ Environment, Health, and Safety | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS)  | DATE SIGNED 8/29/17 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
 (Use the same format)
 SEE INSTRUCTIONS

FORM C
 TABLE 1 FOR 3.00 ITEM A AND B

| | | | |
|-------------------------------------|--|--------------------|--|
| INTAKE AND EFFLUENT CHARACTERISTICS | | OUTFALL NO. 012 | |
|-------------------------------------|--|--------------------|--|

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES | |
|------------------------------------|------------------------|-------------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--------------------|----------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| A. Biochemical Oxygen Demand (BOD) | <5 | <68.5 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | | |
| B. Chemical Oxygen Demand (COD) | 46 | 630 | n/a | n/a | 17 | 175 | 17 | mg/l. | lb | | | |
| C. Total organic Carbon (TOC) | 1.0 | 13.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb | | | |
| D. Total Suspended Solids (TSS) | 105 | 1438 | n/a | n/a | 11 | 113 | 17 | mg/l. | lb | | | |
| E. Ammonia (as N) | 0.38 | | n/a | n/a | n/a | n/a | 1 | mg/l. | lb | | | |
| F. Flow | VALUE 1.64 | | VALUE n/a | | VALUE 1.24 | | 17 | mgd. | | VALUE | | |
| G. Temperature (winter) | VALUE 17 | | VALUE | | VALUE 11.3 | | 8 | °C | | VALUE | | |
| H. Temperature (summer) | VALUE 26 | | VALUE | | VALUE 18.5 | | 9 | °C | | VALUE | | |
| I. pH | MINIMUM 7.0 | MAXIMUM 9.6 | MINIMUM | MAXIMUM | | | 17 | STANDARD UNITS | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | |
|--|---------------------|--------------------|---------------------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (if available) | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS |
| A. Bromide (24959-67-9) | | X | nd | n/a | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | |
| B. Chlorine Total Residual | | X | 0.04 | <0.55 | n/a | n/a | <0.043 | <0.44 | 1 | mg/l | lb/d | | |
| C. Color | | X | 15 | 205 | n/a | n/a | n/a | n/a | 1 | units | n/a | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | CFU/100ml. | n/a | | |
| E. Fluoride (16984-48-8) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | mg/l. | lb/d | | |
| F. Nitrate—Nitrate (as N) | X | | 1.26 | 17 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|-------------------------|----------|--------------------------|----------|--------------------|------------------|---------|--------------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE | | C. LONG TERM AVRG. VALUE | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | <0.05 | <1.0 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 2M. Beryllium, Total (7440-41-7) | | X | <0.001 | <0.02 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 3M. Magnesium, Total (7439-95-4) | | X | 0.0065 | 0.13 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 4M. Molybdenum, Total (7439-98-7) | | X | 0.0038 | 0.076 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 5M. Tin, Total (7440-31-5) | | X | <0.02 | <.04 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 6M. Titanium, Total (7440-32-6) | | X | 0.005 | 0.1 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 7M. Mercury, Total (7439-97-6) | | X | 0.00006 | 0.0016 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 8M. Selenium, Total (7782-49-2) | | X | <0.05 | <1.0 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 9M. Thallium, Total (7440-28-0) | | X | <0.05 | <1.0 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 10M. Phenols, Total | | X | <0.005 | <1.0 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | | X | 0.49 | 6.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | X | | 8 | 110 | n/a | n/a | 4.5 | 46.4 | 17 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | | X | 0.033 | 0.45 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | 7 | 96 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | <0.05 | <0.67 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | <2 | <27.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 0.3 | 4.11 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | | X | 0.182 | 2.5 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.009 | 0.12 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | 0.006 | 0.08 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.14 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | | X | 0.173 | 2.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 1.37 | 17.8 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | 0.0038 | 0.05 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 0.0065 | 0.09 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | <0.27 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | | X | 0.005 | 0.07 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |

SEP - 4 2011



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT
WATER PROTECTION PROGRAM
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3721 B. SECOND _____
C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

| | |
|-----------------------------------|--|
| OUTFALL NUMBER (LIST) | RECEIVING WATER |
| 006, 007, 010, 012, 013, 014, 015 | Tributary to Cold Water Creek / Missouri River |

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS
Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B.) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE C.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|----------------------|---|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL. YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director \ Environment, Health, and Safety | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS)  | DATE SIGNED 8/29/13 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
(Use the same format)
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
013

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | | |
|------------------------------------|------------------------|----------------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| A. Biochemical Oxygen Demand (BOD) | <5 | <29 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| B. Chemical Oxygen Demand (COD) | 86 | 499 | n/a | n/a | 26.3 | 116 | 17 | mg/l. | lb/d | | | |
| C. Total organic Carbon (TOC) | 4 | 232 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| D. Total Suspended Solids (TSS) | 49 | 284 | n/a | n/a | 16.7 | 73.5 | 17 | mg/l. | lb/d | | | |
| E. Ammonia (as N) | 0.44 | 2.6 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| F. Flow | VALUE 0.699 | | VALUE n/a | | VALUE 0.531 | | 17 | mgd. | | VALUE | | |
| G. Temperature (winter) | VALUE 19 | | VALUE | | VALUE 12 | | 8 | °C | | VALUE | | |
| H. Temperature (summer) | VALUE 26 | | VALUE | | VALUE 18.5 | | 9 | °C | | VALUE | | |
| I. pH | MINIMUM 6.5 | MAXIMUM 8.5 | MINIMUM | MAXIMUM | | | 17 | STANDARD UNITS | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| A. Bromide (24959-67-9) | | X | ND | ND | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| B. Chlorine Total Residual | | X | 0.07 | 0.406 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| C. Color | | X | 60 | 348 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | CFU/100ml. | n/a | | | |
| E. Fluoride (16984-48-8) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | mg/l. | lb/d | | | |
| F. Nitrate (as N) | X | | 2.49 | 14.4 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | | 5. INTAKE (optional) | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|------------------|---------|--------------------------|----------------------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | | X | 0.76 | 4.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | X | | <6 | 34.8 | n/a | n/a | <4 | <17.6 | 17 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | | X | 0.178 | 1.03 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | 9 | 52 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | 0.03 | 0.174 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | <2 | <11.6 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 1.51 | 8.76 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | | X | 0.651 | 3.78 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.023 | 0.13 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | 0.008 | 0.05 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.06 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | | X | 0.728 | 4.2 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 3.89 | 22.6 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | <0.01 | <0.06 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 0.05 | 0.29 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | <0.12 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | | X | 0.019 | <0.11 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|--------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | <0.05 | <0.42 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 2M. Beryllium, Total (7440-41-7) | | X | <0.001 | <0.008 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 3M. Magnesium, Total (7439-95-4) | | X | 3.89 | 32.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 4M. Molybdenum, Total (7439-98-7) | | X | <0.01 | <0.084 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 5M. Tin, Total (7440-31-5) | | X | <0.02 | <0.17 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 6M. Titanium, Total (7440-32-6) | | X | 0.019 | 0.16 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 7M. Mercury, Total (7439-97-6) | | X | 0.00007 | 0.0006 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 8M. Selenium, Total (7782-49-2) | | X | <0.05 | <0.417 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 9M. Thallium, Total (7440-28-0) | | X | <0.05 | <0.417 | n/a | n/a | n/a | n/a | 1 | mg/l | lbs | | | |
| 10M. Phenols, Total | | X | <0.005 | <0.042 | n/a | n/a | n/a | n/a | 1 | m/l | lbs | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |



3 SEP 4 2013

RECEIVED

MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C – APPLICATION FOR DISCHARGE PERMIT –
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

TE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
 The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
 MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3721 B. SECOND _____
 C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

| | |
|-----------------------------------|--|
| OUTFALL NUMBER (LIST) | RECEIVING WATER |
| 006, 007, 010, 012, 013, 014, 015 | Tributary to Cold Water Creek / Missouri River |

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER <i>(list)</i> | 2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i> | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION <i>(in days)</i> |
|------------------------------------|--|--|--|------------------------------|------------------|---|--------------------|---------------------------------|
| | | A. DAYS PER WEEK <i>(specify average)</i> | B. MONTHS PER YEAR <i>(specify average)</i> | A. FLOW RATE <i>(in mgd)</i> | | B. TOTAL VOLUME <i>(specify with units)</i> | | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE C.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS <i>(list outfall numbers)</i> |
|---------------------|---------------------|---|---|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i> | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|----------------------|---|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL. YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

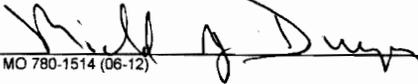
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---------------------------------|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) | TELEPHONE NUMBER WITH AREA CODE |
| Mike Dwyer, Director \ Environment, Health, and Safety | (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS) | DATE SIGNED |
|  | 8/29/13 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
 (Use the same format)
 SEE INSTRUCTIONS

FORM C
 TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
 014

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | | |
|------------------------------------|------------------------|-------------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| A. Biochemical Oxygen Demand (BOD) | <5 | 35 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| B. Chemical Oxygen Demand (COD) | 52 | 364 | 44.5 | 17.4 | 21 | 110 | 18 | mg/l. | lb/d | | | |
| C. Total organic Carbon (TOC) | 1.3 | 9.1 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| D. Total Suspended Solids (TSS) | 49 | 343 | n/a | n/a | 16.8 | 82 | 18 | mg/l. | lb/d | | | |
| E. Ammonia (as N) | 0.05 | 0.35 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| F. Flow | VALUE 0.840 | | VALUE 0.047 | | VALUE 0.587 | | 18 | mgd. | VALUE | | | |
| G. Temperature (winter) | VALUE 18 | | VALUE n/a | | VALUE 12.8 | | 8 | °C | VALUE | | | |
| H. Temperature (summer) | VALUE 25 | | VALUE n/a | | VALUE 18.2 | | 9 | °C | VALUE | | | |
| I. pH | MINIMUM 6.6 | MAXIMUM 9.3 | MINIMUM | MAXIMUM | | | 17 | STANDARD UNITS | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | | |
|--|---------------------|--------------------|---------------------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (if available) | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| A. Bromide (24959-67-9) | | X | ND | n/a | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| B. Chlorine Total Residual | | X | 0.03 | 0.21 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| C. Color | | X | 40 | 280 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | CFU/100ml. | n/a | | | |
| E. Fluoride (16964-48-8) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | mg/l. | lb/d | | | |
| F. Nitrate-Nitrate (as N) | | X | 0.153 | 1.07 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | | X | 0.45 | 3.15 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | | X | <6 | <252 | n/a | n/a | <4.1 | <20.1 | 16 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | | X | 0.049 | 0.07 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ⁴) (14808-79-8) | | X | 6 | 42 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | <0.5 | <0.35 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| L. Sulfite (as SO ³) (14265-45-3) | | X | <2 | <14 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 0.31 | 2.2 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | | X | 0.07 | 0.49 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.005 | 0.035 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | 0.0065 | 0.046 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.07 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | | X | 0.092 | 0.064 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 0.194 | 1.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | <0.01 | <0.07 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 0.0034 | 0.024 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | <0.02 | <0.14 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | | X | 0.0021 | 0.147 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|------------------|---------|--------------------------|-----|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 2M. Beryllium, Total (7440-41-7) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 3M. Magnesium, Total (7439-95-4) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 4M. Molybdenum, Total (7439-98-7) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 5M. Tin, Total (7440-31-5) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 6M. Titanium, Total (7440-32-6) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 7M. Mercury, Total (7439-97-6) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 8M. Selenium, Total (7782-49-2) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 9M. Thallium, Total (7440-28-0) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| 10M. Phenols, Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT -
MANUFACTURING, COMMERCIAL, MINING, WATER PROTECTION PROGRAM,
SILVICULTURE OPERATIONS, PROCESS & STORM WATER

SEP - 4 2013

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0004782

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)
A. FIRST 3721 B. SECOND _____
C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.
OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC. _____ T. _____ R. _____ See Attachment #1 _____ COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER
OUTFALL NUMBER (LIST) 006, 007, 010, 012, 013, 014, 015 RECEIVING WATER Tributary to Cold Water Creek / Missouri River

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS
Military contractor for the manufacturing and assembly of combat aircraft and missile parts.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER (list) | 2. OPERATION(S) CONTRIBUTING FLOW (list) | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION (in days) |
|-----------------------------|--|---------------------------------------|---|-----------------------|------------------|--------------------------------------|--------------------|--------------------------|
| | | A. DAYS PER WEEK (specify average) | B. MONTHS PER YEAR (specify average) | A. FLOW RATE (in mgd) | | B. TOTAL VOLUME (specify with units) | | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| 007B | BLDG. 102 ARC HEAT LAB contributes significant intermittent flows when in operation. | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B.) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE C.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION. EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS (list outfall numbers) |
|---------------------|---------------------|--|--|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. (specify) | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|----------------------|---|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| Schedule of Compliance | | Outfalls 007 and 010 | Schedule of Compliance to meet final effluent limits relating to chlorine and copper. | 3/6/12 | 3/6/12 |

B. OPTIONAL. YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS THAT MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR ARE YOU PLANNING. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

Whole Effluent Toxicity Test performed at all permitted Outfalls in May 2013.

3.20 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|---------|--|-------------------------------------|-------------------------------|
| AECOM | 4303 West LaPorte Avenue, Fort Collins, Colorado, 80521-2154 | 970-416-0916 | WET |

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director \ Environment, Health, and Safety | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE (SEE INSTRUCTIONS)  | DATE SIGNED 8/29/13 |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.
(Use the same format)
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.
015

| 1. POLLUTANT | 2. EFFLUENT | | | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES |
|------------------------------------|------------------------|-------------|--|----------|---|----------|-----------------------------|------------------|---------|--------------------------|----------------------|--|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | |
| A. Biochemical Oxygen Demand (BOD) | 27 | 140 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | | |
| B. Chemical Oxygen Demand (COD) | 149 | 775 | 39.5 | 13.4 | 29 | 20.8 | 17 | mg/l. | lb/d | | | | |
| C. Total organic Carbon (TOC) | 3.6 | 18.7 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | | |
| D. Total Suspended Solids (TSS) | 162 | 842 | 66 | 22.4 | 35 | 25.1 | 17 | mg/l. | lb/d | | | | |
| E. Ammonia (as N) | 0.58 | 3.0 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | | |
| F. Flow | VALUE 0.624 | | VALUE 0.04 | | VALUE 0.086 | | 17 | mgd. | | VALUE | | | |
| G. Temperature (winter) | VALUE 21 | | VALUE | | VALUE 131 | | 8 | °C | | VALUE | | | |
| H. Temperature (summer) | VALUE 27 | | VALUE | | VALUE 19.2 | | 9 | °C | | VALUE | | | |
| I. pH | MINIMUM 6.8 | MAXIMUM 9.3 | MINIMUM | MAXIMUM | | | 17 | STANDARD UNITS | | | | | |

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.
PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | B. NO. OF ANALYSES | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--------------------|----------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| A. Bromide (24959-87-9) | | X | ND | ND | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| B. Chlorine Total Residual | | X | <0.05 | >0.26 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| C. Color | | X | 10 | 52 | n/a | n/a | n/a | n/a | 1 | n/a | n/a | | | |
| D. Fecal Coliform | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | CFU/100ml. | n/a | | | |
| E. Fluoride (16984-48-8) | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | mg/l. | lb/d | | | |
| F. Nitrate-Nitrate (as N) | X | | 0.236 | 1.2 | n/a | n/a | n/a | n/a | n/a | mg/l. | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen Total Organic (as N) | X | | 1.42 | 7.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| H. Oil and Grease | X | | <6 | <31.2 | n/a | n/a | <4.2 | <3.0 | 17 | mg/l | lb/d | | | |
| I. Phosphorus (as P) Total (7723-14-0) | | X | 0.189 | 0.983 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | 6 | 30 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| K. Sulfide (as S) | | X | 0.04 | 0.208 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | <2 | <10.4 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| M. Surfactants | | X | 0.28 | 1.5 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| N. Aluminum Total (7429-90-5) | | X | 1.16 | 6.0 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| O. Barium Total (7440-39-3) | | X | 0.0172 | 0.09 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| P. Boron Total (7440-42-8) | | X | <0.02 | <0.10 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| Q. Cobalt Total (7440-48-4) | | X | <0.01 | <0.052 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| R. Iron Total (7439-89-6) | X | | 1.23 | 6.4 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |
| S. Magnesium Total (7439-95-4) | | X | 1.5 | 7.8 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| T. Molybdenum Total (7439-98-7) | | X | <0.01 | <0.05 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| U. Manganese Total (7439-96-5) | | X | 0.02 | 0.104 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| V. Tin Total (7440-31-5) | | X | 0.02 | 0.104 | n/a | n/a | n/a | n/a | 1 | mg/l | lb/d | | | |
| W. Titanium Total (7440-32-6) | | X | 0.029 | 0.151 | n/a | n/a | n/a | n/a | 1 | mg/l. | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|------------------|---------|--------------------------|----------------------|--------------------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | D. NO. OF ANALYSES | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | <0.05 | <0.39 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 2M. Beryllium, Total (7440-41-7) | | X | <0.001 | <0.008 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 3M. Magnesium, Total (7439-95-4) | | X | 0.194 | 1.5 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 4M. Molybdenum, Total (7439-98-7) | | X | <0.01 | <0.078 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 5M. Tin, Total (7440-31-5) | | X | <0.02 | <0.16 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 6M. Titanium, Total (7440-32-6) | | X | 0.0021 | 0.016 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 7M. Mercury, Total (7439-97-6) | | X | 0.00008 | 0.0006 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 8M. Selenium, Total (7782-49-2) | | X | <0.05 | <0.39 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 9M. Thallium, Total (7440-28-0) | | X | <0.05 | <0.39 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| 10M. Phenols, Total | | X | <0.005 | <0.039 | n/a | n/a | n/a | n/a | mg/l | lbs | | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (2) Beta Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (3) Radium Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| (4) Radium 226 Total | | X | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

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MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM D - APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

TABLE II

NPDES # (IF ASSIGNED) OUTFALL NUMBER
MO-0004782 006

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------------|-------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | | ✓ | <0.05 | <0.4 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 2M. Beryllium, Total (7440-41-7) | ✓ | | ✓ | <0.001 | <0.008 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 3M. Magnesium Total (7439-95-4) | ✓ | | ✓ | 1.67 | 12.3 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 4M. Molybdenum Total (7439-98-7) | ✓ | | ✓ | 0.007 | 0.05 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 5M. Tin Total (7440-31-5) | ✓ | | ✓ | <0.02 | 0.15 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 6M. Titanium Total (7440-32-6) | ✓ | | ✓ | 0.018 | 0.13 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 7M. Mercury, Total (7439-97-6) | ✓ | | ✓ | 0.00008 | 0.0006 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 8M. Selenium, Total (7782-49-2) | ✓ | | ✓ | <0.05 | <0.4 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 9M. Thallium, Total (7440-28-0) | ✓ | | ✓ | <0.05 | <0.4 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 10M. Phenols, Total | ✓ | | ✓ | <0.005 | <0.04 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| DIOXIN | | | | | | | | | | | | | |
| 2,3,7,8 – Tetra – chlorodibenzo-P- Dioxin (1764-01-6) | | | ✓ | | | | | | | | | | |

CONTINUED FROM PAGE 3

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------|---------|--------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | | | | |
| 1V. Acrolein (107-02-6) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2V. Acrylonitrile (107-13-1) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3V. Benzene (71-43-2) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5V. Bromoform (75-25-2) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6V. Carbon Tetrachloride (56-23-5) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7V. Chlorobenzene (108-90-7) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9V. Chloroethane (75-00-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11V. Chloroform (67-66-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13V. Dichloro- difluoromethane (75-71-8) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14V. 1,1 - Dichloroethane (75-34-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15V. 1,2 - Dichloroethane (107-06-2) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16V. 1,1 - Dichloroethylene (75-35-4) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17V. 1,2 - Dichloropropane (78-87-5) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18V. 1,2 - Dichloropropylene (542-75-6) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19V. Ethylbenzene (100-41-4) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20V. Methyl Bromide (74-83-9) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21V. Methyl Chloride (74-87-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

MO 780-1516 (02-12)

PAGE 3

CONTINUE ON PAGE 4

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | | 5. INTAKE (optional) | | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|----------------------|---------|--------------------------|--|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN-TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23V. 1,1,2,2 - Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27V. 1,1,1 - Tri-chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28V. 1,1,2 - Tri-chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29V. Trichloro-ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30V. Trichloro-fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

| | | | | | | | | | | | | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|----|----|-----|-----|-----|-----|---|------|------|--|--|--|
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2A. 2,4 - Dichloro-phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3A. 2,4 - Dimethyl-phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4A. 4,6 - Dinitro - O-Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5A. 2,4 - Dinitro-phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6A. 2-Nitrophenol (88-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8A. P - Chloro - M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9A. Pentachloro-phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10A. Phenol (108-952) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11A. 2,4,6 - Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 7B. 3,4 - Benzofluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 20B. 1,2-Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 21B. 1,3-Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | 4. UNITS | | 5. INTAKE (optional) | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|-------------------|---------|--------------------------|----------|-------------------|
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | A. CONCEN-TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | | | | | | | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASENEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1, 4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23B. 3, 3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24B. Diethyl Phthalate (84-86-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26B. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31B. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 32B. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 33B. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 34B. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 35B. Hexachloro-cyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 36B. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 37B. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 38B. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 39B. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 40B. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 41B. N-Nitro-sodiumethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------------------|--------------------|--------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |

GC/MS FRACTION - PESTICIDES

| | | | | | | | | | | | | |
|-------------------------------------|--------------------------|--------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|--|
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 6P. Chlordane (57-74-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 7P. 4,4'-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | lb/d | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------|---------|--------------------------|----------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GCIMS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 18P. PCB-1242 (53469-21-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 19P. PCB-1254 (11097-69-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 20P. PCB-1221 (11104-28-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 21P. PCB-1232 (11141-16-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 22P. PCB-1248 (12672-29-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 23P. PCB-1260 (11096-82-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 24P. PCB-1016 (12674-11-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 25P. Toxaphene (8001-35-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| J. RADIOACTIVITY | | | | | | | | | | | | | | | |
| (1) Alpha Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (2) Beta Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (3) Radium Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (4) Radium 226 Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|-------------|--|------------------------------------|-------------------------------|
| Teklab Inc. | 5445 Horseshoe Lake Collinsville Ill. 62234 | (618) 344-1004 | All |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|--|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director-EHS | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE  | DATE SIGNED 8/29/17 |

RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES SEP - 4 2013
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM D - APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES

WATER PROTECTION PROGRAM

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

The Boeing Company - St. Louis

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

TABLE II

| | |
|-------------------------------------|------------------------|
| NPDES # (IF ASSIGNED) MO-0004782 | OUTFALL NUMBER 007B |
|-------------------------------------|------------------------|

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|-------------------|----------|--|--|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES | | | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | ☐ | ✓ | <0.5 | <0.072 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2M. Beryllium, Total (7440-41-7) | ✓ | ☐ | ✓ | <0.0011 | <0.002 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3M. Magnesium Total (7439-95-4) | ✓ | ☐ | ✓ | 25.5 | 3.7 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4M. Molybdenum Total (7439-98-7) | ✓ | ☐ | ✓ | 0.0049 | <0.002 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5M. Tin Total (7440-31-5) | ✓ | ☐ | ✓ | <0.02 | <0.003 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6M. Titanium Total (7440-32-6) | ✓ | ☐ | ✓ | 0.0022 | <0.003 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7M. Mercury, Total (7439-97-6) | ✓ | ☐ | ✓ | 0.00011 | <0.002 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8M. Selenium, Total (7782-49-2) | ✓ | ☐ | ✓ | <0.05 | <0.007 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9M. Thallium, Total (7440-28-0) | ✓ | ☐ | ✓ | <0.05 | <0.007 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10M. Phenols, Total | ✓ | ☐ | ✓ | <0.025 | <0.036 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| DIOXIN | | | | | | | | | | | | | | | |
| 2.3.7.8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | ✓ | ☐ | ✓ | | | | | | | | | | | | |

DESCRIBE RESULTS

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|---|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (if available) | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| 1V. Acrolein (107-02-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2V. Acrylonitrile (107-13-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3V. Benzene (71-43-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5V. Bromoform (75-25-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6V. Carbon Tetrachloride (56-23-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7V. Chlorobenzene (108-90-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9V. Chloroethane (75-00-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11V. Chloroform (67-66-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13V. Dichlorodifluoromethane (75-71-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14V. 1,1 - Dichloroethane (75-34-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15V. 1,2 - Dichloroethane (107-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16V. 1,1 - Dichloroethylene (75-35-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17V. 1,2 - Dichloropropane (78-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18V. 1,2 - Dichloropropylene (542-75-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19V. Ethylbenzene (100-41-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20V. Methyl Bromide (74-83-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21V. Methyl Chloride (74-87-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

NPDES # (IF ASSIGNED) MO-0004782
 EFFLUENT OUTFALL NUMBER 007B

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|----------------------|------------------------------|----------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN. TRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23V. 1,1,2,2 - Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27V. 1,1,1 - Tri-chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28V. 1,1,2 - Tri-chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29V. Trichloro-ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30V. Trichloro-fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

GC/MS FRACTION - ACID COMPOUNDS

| | | | | | | | | | | | | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|----|----|-----|-----|-----|-----|---|------|------|--|--|--|
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2A. 2,4 - Dichloro-phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3A. 2,4 - Dimethyl-phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4A. 4,6 - Dinitro - O-Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5A. 2,4 - Dinitro - phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6A. 2-Nitrophenol (88-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8A. P - Chloro - M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9A. Pentachloro-phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10A. Phenol (108-95-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11A. 2,4,6 - Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|----------------------|------------------------------|--|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN. TRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7B. 3,4 - Benzofluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19B. Dibenz (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20B. 1,2-Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21B. 1,3-Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|------------------|---------|--------------------|----------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24B. Diethyl Phthalate (84-66-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26B. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31B. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 32B. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 33B. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 34B. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 35B. Hexachloro-cyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 36B. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 37B. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 38B. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 39B. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 40B. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 41B. N-Nitro-sodiumethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|-------------------|----------------------|--|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN-TRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 43B. N-Nitro-sodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 46B. 1,2,4-Tri chlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

GC/MS FRACTION - PESTICIDES

| | | | | | | | | | | | | | | |
|-------------------------------------|--------------------------|--------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|--|--|
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 6P. Chlordane (57-14-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 7P. 4,4'-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

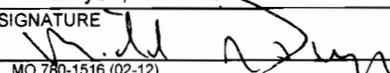
WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|-------------|---|------------------------------------|-------------------------------|
| Teklab Inc. | 5445 Horseshoe Lake Road Collinsville Ill. 62234 | (618) 344-1004 | All |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|--|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director EHS | TELEPHONE NUMBER WITH AREA CODE (314) 344-1004 |
| SIGNATURE  | DATE SIGNED 8/19/13 |



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
**FORM D – APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES**

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

| | |
|-------------------------------------|------------------------|
| TABLE II | |
| NPDES # (IF ASSIGNED) MO-0004782 | OUTFALL NUMBER 007H |

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------------------|--------------------|--------------------------|-------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | | ✓ | <0.5 | <4.45 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 2M. Beryllium, Total (7440-41-7) | ✓ | | ✓ | <0.01 | <0.089 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 3M. Magnesium Total (7439-95-4) | ✓ | | ✓ | 3.0 | 26.7 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 4M. Molybdenum Total (7439-98-7) | ✓ | | ✓ | <0.01 | <0.089 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 5M. Tin Total (7440-31-5) | ✓ | | ✓ | <0.02 | <0.178 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 6M. Titanium Total (7440-32-6) | ✓ | | ✓ | 0.024 | 0.21 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 7M. Mercury, Total (7439-97-6) | ✓ | | ✓ | 0.0001 | 0.0009 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 8M. Selenium, Total (7782-49-2) | ✓ | | ✓ | <0.05 | <0.445 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 9M. Thallium, Total (7440-28-0) | ✓ | | ✓ | <0.05 | <0.445 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 10M. Phenols, Total | ✓ | | ✓ | <0.005 | <0.045 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |

| DIOXIN | | DESCRIBE RESULTS |
|--|---|------------------|
| ✓ | | |
| 2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | ✓ | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|------------------------------|--|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| 1V. Acrolein (107-02-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2V. Acrylonitrile (107-13-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3V. Benzene (71-43-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5V. Bromoform (75-25-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6V. Carbon Tetrachloride (56-23-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7V. Chlorobenzene (108-90-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9V. Chloroethane (75-00-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11V. Chloroform (67-66-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13V. Dichloro-difluoromethane (75-71-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14V. 1,1 - Dichloroethane (75-34-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15V. 1,2 - Dichloroethane (107-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16V. 1,1 - Dichloroethylene (75-35-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17V. 1,2 - Dichloropropane (78-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18V. 1,2 - Dichloropropylene (542-75-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19V. Ethylbenzene (100-41-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20V. Methyl Bromide (74-83-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21V. Methyl Chloride (74-87-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

NPDES # (IF ASSIGNED) MO-0004782
 OUTFALL NUMBER 007H

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|-------------------|----------------------|------------------------------|--|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ASSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN-TRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23V. 1,1,2,2 - Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27V. 1,1,1 - Tri - chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28V. 1,1,2 - Tri- chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29V. Trichloro - ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30V. Trichloro - fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

GC/MS FRACTION - ACID COMPOUNDS

| | | | | | | | | | | | | | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|----|----|-----|-----|-----|-----|---|------|------|--|--|--|
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2A. 2,4 - Dichloro - phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3A. 2,4 - Dimethyl - phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4A. 4,6 - Dinitro - O- Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5A. 2,4 - Dinitro - phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6A. 2-Nitrophenol (98-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8A. P - Chloro - M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9A. Pentachloro - phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10A. Phenol (108-95-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11A. 2,4,6 - Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|---|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (if available) | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7B. 3,4 - Benzofluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15B. Butyl Benzyl Phthalate (85-88-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (705-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20B. 1,2 - Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21B. 1,3 - Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
007H

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24B. Diethyl Phthalate (84-66-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26B. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31B. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 32B. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 33B. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 34B. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 35B. Hexachlorocyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 36B. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 37B. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 38B. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 39B. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 40B. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 41B. N-Nitrosodimethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|------------------------------|--|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

GC/MS FRACTION - PESTICIDES

| | | | | | | | | | | | | | | | |
|-------------------------------------|--------------------------|--------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|--|--|--|
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 6P. Chlordane (57-74-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 7P. 4,4'-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

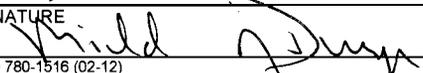
WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|--------------|--|------------------------------------|-------------------------------|
| Teklab, Inc. | 5445 Horseshoe Lake Road, Col Collinsville, Ill 62234 | (618) 344-1005 | All |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer Director of Environment, Health, and Safety | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE  | DATE SIGNED 8/29/17 |

RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES SEP - 4 2013
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM D - APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

| TABLE II | |
|-----------------------|----------------|
| NPDES # (IF ASSIGNED) | OUTFALL NUMBER |
| MO-0004782 | 010B |

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|-------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | ☐ | ✓ | 0.04 | 0.011 | N/A | N/A | N/A | N/A | 1 | | | |
| 2M. Beryllium, Total (7440-41-7) | ✓ | ☐ | ✓ | <0.001 | <0.001 | N/A | N/A | N/A | N/A | 1 | | | |
| 3M. Magnesium Total (7439-95-4) | ✓ | ☐ | ✓ | 42.3 | 11.17 | N/A | N/A | N/A | N/A | 1 | | | |
| 4M. Molybdenum Total (7439-98-7) | ✓ | ☐ | ✓ | <0.01 | <0.003 | N/A | N/A | N/A | N/A | 1 | | | |
| 5M. Tin Total (7440-31-5) | ✓ | ☐ | ✓ | <0.02 | <0.005 | N/A | N/A | N/A | N/A | 1 | | | |
| 6M. Titanium Total (7440-32-6) | ✓ | ☐ | ✓ | <0.01 | 0.0026 | N/A | N/A | N/A | N/A | 1 | | | |
| 7M. Mercury, Total (7439-97-6) | ✓ | ☐ | ✓ | <0.0002 | <0.001 | N/A | N/A | N/A | N/A | 1 | | | |
| 8M. Selenium, Total (7782-49-2) | ✓ | ☐ | ✓ | <0.05 | <0.013 | N/A | N/A | N/A | N/A | 1 | | | |
| 9M. Thallium, Total (7440-28-0) | ✓ | ☐ | ✓ | <0.05 | <0.013 | N/A | N/A | N/A | N/A | 1 | | | |
| 10M. Phenols, Total | ✓ | ☐ | ✓ | <0.025 | <0.007 | N/A | N/A | N/A | N/A | 1 | | | |
| DIOXIN | | | | | | | | | | | | | |
| 2.3.7.8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | ✓ | ☐ | ✓ | | | | | | | | | | |

| DESCRIBE RESULTS | |
|--|--|
| 2.3.7.8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|------------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| 1V. Acrolein (107-02-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 2V. Acrylonitrile (107-13-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 3V. Benzene (71-43-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 5V. Bromoform (75-25-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 6V. Carbon Tetrachloride (56-23-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 7V. Chlorobenzene (108-90-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 8V. Chlorodibromomethane (124-48-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 9V. Chloroethane (75-00-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 11V. Chloroform (67-66-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 12V. Dichlorobromomethane (75-27-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 13V. Dichlorodifluoromethane (75-71-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 14V. 1,1-Dichloroethane (75-34-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 15V. 1,2-Dichloroethane (107-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 16V. 1,1-Dichloroethylene (75-35-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 17V. 1,2-Dichloropropane (78-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 18V. 1,2-Dichloropropylene (542-75-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 19V. Ethylbenzene (100-41-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 20V. Methyl Bromide (74-83-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 21V. Methyl Chloride (74-87-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

CONTINUED FROM THE FRONT

NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
010B

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|----------------------|----------------------------------|----------|-------------------|--|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. CONCENTRATION | | B. NO OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 23V. 1,1,2,2 - Tetra- chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 27V. 1,1,1 - Tri- chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 28V. 1,1,2 - Tr- chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 29V. Trichloro - ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 30V. Trichloro - fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |

GC/MS FRACTION - ACID COMPOUNDS

| | | | | | | | | | | | | | | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|----|----|-----|-----|-----|-----|---|------|------|--|--|--|--|
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 2A. 2,4 - Dichloro - phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 3A. 2,4 - Dimethyl - phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 4A. 4,6 - Dinitro - O- Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 5A. 2,4 - Dinitro - phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 6A. 2-Nitrophenol (88-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 8A. P - Chloro - M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 9A. Pentachloro - phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 10A. Phenol (108-952) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |
| 11A. 2,4,6 - Trichloro- phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|----------------------|---------|--------------------------|----------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7B. 3,4 - Benzofluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20B. 1,2 - Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21B. 1,3 - Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "x" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|------------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) | | B. NO. OF ANALYSES |
| | | | | CONCENTRATION | (2) MASS | CONCENTRATION | (2) MASS | CONCENTRATION | (2) MASS | | | | CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASENEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24B. Diethyl Phthalate (84-66-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26B. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31B. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 32B. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 33B. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 34B. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 35B. Hexachlorocyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 36B. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 37B. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 38B. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 39B. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 40B. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 41B. N-Nitrosodimethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--|--------------------|
| | A. YES/NO REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| GC/MS FRACTION - BASENEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | |
| 1F. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 6P. Chlordane (57-14-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 7P. 4,4'-DDT (50-28-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | | |

NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
0108

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | | 4. UNITS | | 5. INTAKE (optional) | |
|--|--------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------|--------------------------|----------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 18P. PCB-1242 (53469-21-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 19P. PBC-1254 (11097-69-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 20P. PCB-1221 (11104-28-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 21P. PCB-1232 (11141-16-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 22P. PCB-1248 (12672-29-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 23P. PCB-1260 (11096-82-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 24P. PCB-1016 (12674-11-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 25P. Toxaphene (8001-35-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| J. RADIOACTIVITY | | | | | | | | | | | | | | | |
| (1) Alpha Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (2) Beta Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (3) Radium Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (4) Radium 226 Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

Blank space for listing pollutants.

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

Blank space for explaining sources and levels of pollutants.

3.00 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|-------------|---|------------------------------------|-------------------------------|
| Teklab Inc. | 5445 Horseshoe Lake Road Collinsville Ill. 62234 | (618) 344-1004 | All |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director EHS | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE <i>Mike A. Dwyer</i> | DATE SIGNED 8/25/13 |

RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES - 4 2013
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM D - APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES WATER PROTECTION PROGRAM

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

TABLE II

| | |
|-------------------------------------|------------------------|
| NPDES # (IF ASSIGNED) MO-0004782 | OUTFALL NUMBER 010H |
|-------------------------------------|------------------------|

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|--------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | | ✓ | 0.047 | <1.05 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 2M. Beryllium, Total (7440-41-7) | ✓ | | ✓ | <0.001 | <0.023 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 3M. Magnesium Total (7439-95-4) | ✓ | | ✓ | 1.45 | 32.6 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 4M. Molybdenum Total (7439-98-7) | ✓ | | ✓ | <0.01 | <0.225 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 5M. Tin Total (7440-31-5) | ✓ | | ✓ | <0.02 | <0.45 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 6M. Titanium Total (7440-32-6) | ✓ | | ✓ | 0.0032 | 0.072 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 7M. Mercury, Total (7439-97-6) | ✓ | | ✓ | <0.0002 | 0.002 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 8M. Selenium, Total (7782-49-2) | ✓ | | ✓ | <0.05 | <1.12 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 9M. Thallium, Total (7440-28-0) | ✓ | | ✓ | <0.05 | <1.12 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 10M. Phenols, Total | ✓ | | ✓ | <0.005 | <1.12 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |

DIOXIN

| | | | | | | | | | | | | | |
|--|---|--|---|--|--|--|--|--|--|--|--|--|--|
| 2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | ✓ | | ✓ | | | | | | | | | | |
|--|---|--|---|--|--|--|--|--|--|--|--|--|--|

MO 780-1516 (02-12)

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| 1V. Acrolein (107-02-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2V. Acrylonitrile (107-13-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3V. Benzene (71-43-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5V. Bromoform (75-25-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6V. Carbon Tetrachloride (56-23-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7V. Chlorobenzene (108-90-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9V. Chloroethane (75-00-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11V. Chloroform (67-66-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13V. Dichloro-difluoromethane (75-71-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14V. 1,1 - Dichloroethane (75-34-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15V. 1,2 - Dichloroethane (107-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16V. 1,1 - Dichloroethylene (75-35-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17V. 1,2 - Dichloropropane (78-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18V. 1,2 - Dichloropropylene (542-75-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19V. Ethylbenzene (100-41-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20V. Methyl Bromide (74-83-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21V. Methyl Chloride (74-87-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

NPDES # (IF ASSIGNED) MO-0004782 OUTFALL NUMBER 010H

| 1. POLLUTANT AND CMS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|-------------------|----------------------|---|--|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN-TRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION (2) MASS | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23V. 1,1,2,2 - Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27V. 1,1,1 - Tri-chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28V. 1,1,2 - Tri-chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29V. Trichloro-ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30V. Trichloro-fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

GCMS FRACTION - ACID COMPOUNDS

| | | | | | | | | | | | | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|----|----|-----|-----|-----|-----|---|------|------|--|--|--|
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2A. 2,4 - Dichloro-phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3A. 2,4 - Dimethyl-phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4A. 4,6 - Dinitro - O-Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5A. 2,4 - Dinitro-phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6A. 2-Nitrophenol (88-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8A. P - Chloro - M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9A. Pentachloro-phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10A. Phenol (108-952) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11A. 2,4,6 - Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|----------------------|----------------------------------|--|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. CONCENTRATION | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| GCMS FRACTION - BASENEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7B. 3,4 - Benzofluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20B. 1,2 - Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21B. 1,3 - Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

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NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
010H

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "x" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|------------------|---------|--|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 24B. Diethyl Phthalate (84-66-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 25B. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 26B. Di-N-Butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 31B. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 32B. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 33B. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 34B. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 35B. Hexachloro-cyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 36B. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 37B. Indeno (1,2,3-c-d) Pyrene (193-36-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 38B. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 39B. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 40B. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 41B. N-Nitro-sodimethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

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| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|-----------------------------------|----------|--------------------|------------------|----------------------|--------------------------|--|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

GC/MS FRACTION - PESTICIDES

| | | | | | | | | | | | | | | | |
|------------------------------------|--------------------------|--------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|--|--|--|
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 6P. Chlordane (67-74-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 7P. 4,4-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 8P. 4,4-DOE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 9P. 4,4-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 13P. Endosulfan Sulfate (103-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d | | | |

MO 780-1516 (02-12)

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NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
010H

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | | |
|--|--------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|--|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | |
| 17P. Heptachlor Epoxide (1024-57-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 18P. PCB-1242 (53469-21-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 19P. PBC-1254 (11097-69-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 20P. PCB-1221 (11104-28-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 21P. PCB-1232 (11141-16-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 22P. PCB-1248 (12672-29-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 23P. PCB-1260 (11096-82-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 24P. PCB-1016 (12674-11-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| 26P. Toxaphene (8001-35-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| J. RADIOACTIVITY | | | | | | | | | | | | | | | | |
| (1) Alpha Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| (2) Beta Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| (3) Radium Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |
| (4) Radium 226 Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | | | |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

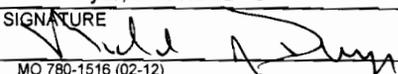
WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|--------------|---|------------------------------------|-------------------------------|
| Teklab, Inc. | 5445 Horseshoe Lake Collinsville, Ill. 62234 | (618) 344-1004 | All |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|--|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director EHS | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE  | DATE SIGNED 8/28/17 |



RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH 2013
FORM D – APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

WATER PROTECTION PROGRAM

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

TABLE II

NPDES # (IF ASSIGNED) OUTFALL NUMBER
MO-0004782 012

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|--|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | | ✓ | <0.05 | <1.0 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 2M. Beryllium, Total (7440-41-7) | ✓ | | ✓ | <0.001 | <0.02 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 3M. Magnesium Total (7439-95-4) | ✓ | | ✓ | 0.0065 | 0.13 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 4M. Molybdenum Total (7439-98-7) | ✓ | | ✓ | 0.0038 | 0.076 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 5M. Tin Total (7440-31-5) | ✓ | | ✓ | <0.02 | <0.4 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 6M. Titanium Total (7440-32-6) | ✓ | | ✓ | 0.005 | 0.1 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 7M. Mercury, Total (7439-97-6) | ✓ | | ✓ | 0.00006 | 0.0016 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 8M. Selenium, Total (7782-49-2) | ✓ | | ✓ | <0.05 | <1.0 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 9M. Thallium, Total (7440-28-0) | ✓ | | ✓ | <0.05 | <1.0 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 10M. Phenols, Total | ✓ | | ✓ | <0.005 | <1.0 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| DIOXIN | | | | | | | | | | | | |
| 2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | ✓ | | ✓ | | | | | | | | | |

DESCRIBE RESULTS

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------------|-------------------|--|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 2V. Acrylonitrile (107-13-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 3V. Benzene (71-43-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 5V. Bromoform (75-25-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 6V. Carbon Tetrachloride (56-23-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 7V. Chlorobenzene (108-90-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 8V. Chlorodibromomethane (124-48-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 9V. Chloroethane (75-00-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 11V. Chloroform (67-66-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 12V. Dichlorobromomethane (75-27-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 13V. Dichlorodifluoromethane (75-71-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 14V. 1,1 - Dichloroethane (75-34-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 15V. 1,2 - Dichloroethane (107-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 16V. 1,1 - Dichloroethylene (75-35-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 17V. 1,2 - Dichloropropane (78-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 18V. 1,2 - Dichloropropylene (542-75-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 19V. Ethylbenzene (100-41-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 20V. Methyl Bromide (74-83-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |
| 21V. Methyl Chloride (74-87-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|--------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 23V. 1,1,2,2 - Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 27V. 1,1,1 - Tri-chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 28V. 1,1,2 - Tri-chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 29V. Trichloro-ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 30V. Trichloro-fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |

GC/MS FRACTION - ACID COMPOUNDS

| | | | | | | | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|----|-----|-----|-----|---|------|------|
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 2A. 2,4 - Dichloro-phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 3A. 2,4 - Dimethyl-phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 4A. 4,6 - Dinitro - O-Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 5A. 2,4 - Dinitro-phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 6A. 2-Nitrophenol (88-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 8A. p - Chloro - M Cresol (69-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 9A. Pentachloro-phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 10A. Phenol (108-952) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 11A. 2,4,6 - Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7B. 3,4 - Benzofluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20B. 1,2-Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21B. 1,3-Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|-------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | |
| 22B. 1, 4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 23B. 3, 3'-Dichlorobenzidine (91-34-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 24B. Diethyl Phthalate (84-56-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 25B. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 26B. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 31B. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 32B. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 33B. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 34B. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 35B. Hexachloro-cyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 36B. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 37B. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 38B. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 39B. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 40B. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 41B. N-Nitrosodimethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|----------------------|--------------------------|----------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | | lb/d | | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | | lb/d | | |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | | lb/d | | |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | | lb/d | | |
| 46B. 1,2,4-Tri chlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | | lb/d | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 6P. Chlordane (57-74-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 7P. 4,4'-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | | lb/d | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|--------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 18P. PCB-1242 (53469-21-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 19P. PBC-1254 (11097-69-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 20P. PCB-1221 (11104-28-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 21P. PCB-1232 (11141-16-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 22P. PCB-1248 (12672-29-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 23P. PCB-1260 (11096-82-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 24P. PCB-1016 (12674-11-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 25P. Toxaphene (8001-35-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| J. RADIOACTIVITY | | | | | | | | | | | | |
| (1) Alpha Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (2) Beta Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (3) Radium Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4) Radium 226 Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

- YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

- YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

- YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|-------------|---|------------------------------------|-------------------------------|
| Teklab Inc. | 5445 Horseshoe Lake Collinsville, Ill. 62234 | (618) 344-1004 | All |
| | | | |
| | | | |
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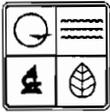
4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|--|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director EHS | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE  | DATE SIGNED 8/29/17 |



RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM D - APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES

WATER PROTECTION PROGRAM

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

TABLE II

NPDES # (IF ASSIGNED) OUTFALL NUMBER
MO-0004782 013

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------------|---------|--------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. MASS | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | | ✓ | <0.05 | <0.42 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 2M. Beryllium, Total (7440-41-7) | ✓ | | ✓ | <0.001 | <0.008 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 3M. Magnesium Total (7439-95-4) | ✓ | | ✓ | 3.89 | 32.4 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 4M. Molybdenum Total (7439-98-7) | ✓ | | ✓ | <0.01 | <0.084 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 5M. Tin Total (7440-31-5) | ✓ | | ✓ | <0.02 | <0.17 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 6M. Titanium Total (7440-32-6) | ✓ | | ✓ | 0.019 | 0.16 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 7M. Mercury, Total (7439-97-6) | ✓ | | ✓ | 0.00007 | 0.0006 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 8M. Selenium, Total (7782-49-2) | ✓ | | ✓ | <0.05 | <0.417 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 9M. Thallium, Total (7440-28-0) | ✓ | | ✓ | <0.05 | <0.417 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 10M. Phenols, Total | ✓ | | ✓ | <0.005 | <0.042 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| DIOXIN | | | | | | | | | | | | | | |
| 2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | ✓ | | ✓ | | | | | | | | | | | |

DESCRIBE RESULTS

CONTINUED FROM PAGE 3

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|--------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 2V. Acrylonitrile (107-13-1) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 3V. Benzene (71-43-2) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 5V. Bromoform (75-25-2) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 6V. Carbon Tetrachloride (56-23-5) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 7V. Chlorobenzene (108-90-7) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 8V. Chlorodibromomethane (124-48-1) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 9V. Chloroethane (75-00-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 11V. Chloroform (67-66-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 12V. Dichlorobromomethane (75-27-4) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 13V. Dichlorodifluoromethane (75-71-8) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 14V. 1,1 - Dichloroethane (75-34-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 15V. 1,2 - Dichloroethane (107-06-2) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 16V. 1,1 - Dichloroethylene (75-35-4) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 17V. 1,2 - Dichloropropane (78-87-5) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 18V. 1,2 - Dichloropropylene (542-75-6) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 19V. Ethylbenzene (100-41-4) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 20V. Methyl Bromide (74-83-9) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 21V. Methyl Chloride (74-87-3) | ✓ | | ✓ | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |

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| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------------------|--------------------------|-------------------|
| | A. TESTING RE-REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 23V. 1,1,2,2 - Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 27V. 1,1,1 - Tri - chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 28V. 1,1,2 - Tri - chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 29V. Trichloro - ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 30V. Trichloro - fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | |
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 2A. 2,4 - Dichloro - phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 3A. 2,4 - Dimethyl - phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 4A. 4,6 - Dinitro - O - Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 5A. 2,4 - Dinitro - phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 6A. 2-Nitrophenol (88-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 8A. P - Chloro - M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 9A. Pentachloro - phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 10A. Phenol (108-952) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 11A. 2,4,6 - Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 7B. 3,4 - Benzo(a)fluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 14B. 4-Bromophenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 20B. 1,2 - Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 21B. 1,3 - Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |

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NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
013

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------------------|--------------------|--------------------------|-----------------------|--------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. MASS CONCENTRATION | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | |
| 228. 1, 4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 238. 3, 3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 248. Diethyl Phthalate (84-66-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 258. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 268. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 278. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 288. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 298. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 308. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 318. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 328. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 338. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 348. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 358. Hexachloro-cyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 368. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 378. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 388. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 398. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 408. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 418. N-Nitrosodimethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

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| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------------------|--------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | lb/d | |

GC/MS FRACTION - PESTICIDES

| | | | | | | | | | | | | |
|-------------------------------------|--------------------------|--------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 6P. Chlordane (57-74-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 7P. 4,4'-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | mg/l | lb/d |

CONTINUED FROM THE PAGE 7

NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
013

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | |
|--|--------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|----------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCEN- TRATION | (2) MASS | (1) CONCEN- TRATION | (2) MASS | (1) CONCEN- TRATION | (2) MASS | | | | | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 18P. PCB-1242 (53469-21-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 19P. PBC-1254 (11097-69-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 20P. PCB-1221 (11104-28-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 21P. PCB-1232 (11141-16-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 22P. PCB-1248 (12672-29-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 23P. PCB-1260 (11096-82-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 24P. PCB-1016 (12674-11-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 25P. Toxaphene (8001-35-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| J. RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (2) Beta Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (3) Radium Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4) Radium 226 Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|-------------|---|------------------------------------|-------------------------------|
| Teklab Inc. | 5445 Horseshoe Lake Collinsville, Ill. 62234 | (618) 344-1004 | All |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|--|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director EHS | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE  | DATE SIGNED 8/29/17 |



RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES SEP - 4 2013
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM D - APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

WATER PROTECTION PROGRAM

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

| | |
|-------------------------------------|-----------------------|
| TABLE II | |
| NPDES # (IF ASSIGNED) MO-0004782 | OUTFALL NUMBER 014 |

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|---|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|--|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | | ✓ | <0.05 | <0.54 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 2M. Beryllium, Total (7440-41-7) | ✓ | | ✓ | <0.001 | <0.011 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 3M. Magnesium Total (7439-95-4) | ✓ | | ✓ | 0.194 | 2.1 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 4M. Molybdenum Total (7439-98-7) | ✓ | | ✓ | <0.01 | <0.11 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 5M. Tin Total (7440-31-5) | ✓ | | ✓ | <0.02 | <0.22 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 6M. Titanium Total (7440-32-6) | ✓ | | ✓ | 0.0021 | 0.023 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 7M. Mercury, Total (7439-97-6) | ✓ | | ✓ | 0.00009 | <0.001 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 8M. Selenium, Total (7782-49-2) | ✓ | | ✓ | <0.05 | <0.54 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 9M. Thallium, Total (7440-28-0) | ✓ | | ✓ | <0.05 | <0.54 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 10M. Phenols, Total | ✓ | | ✓ | <0.005 | <0.054 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| DIOXIN | | | | | | | | | | | | |
| 2,3,7,8 – Tetra – chlorodibenzo-P- Dioxin (1764-01-6) | ✓ | | ✓ | | | | | | | | | |

CONTINUED FROM PAGE 3

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 2V. Acrylonitrile (107-13-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 3V. Benzene (71-43-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 5V. Bromoform (75-25-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 6V. Carbon Tetrachloride (66-23-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 7V. Chlorobenzene (108-90-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 8V. Chlorodibromomethane (124-48-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 9V. Chloroethane (75-00-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 11V. Chloroform (67-66-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 12V. Dichlorobromomethane (75-27-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 13V. Dichlorodifluoromethane (75-71-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 14V. 1,1 - Dichloroethane (75-34-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 15V. 1,2 - Dichloroethane (107-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 16V. 1,1 - Dichloroethylene (75-35-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 17V. 1,2 - Dichloropropane (78-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 18V. 1,2 - Dichloropropylene (542-75-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 19V. Ethylbenzene (100-41-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 20V. Methyl Bromide (74-83-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 21V. Methyl Chloride (74-87-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|--------------------|------------------|----------------------|--------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION (if available) | (2) MASS | | | | (1) CONCENTRATION | (2) MASS |
| GC/MS FRACTION – VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 23V. 1,1,2,2 – Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 26V. 1,2 – Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 27V. 1,1,1 – Tri-chloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 28V. 1,1,2 – Tri-chloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 29V. Trichloro-ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 30V. Trichloro-fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| GC/MS FRACTION – ACID COMPOUNDS | | | | | | | | | | | | |
| 1A. 2 – Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 2A. 2,4 – Dichloro-phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 3A. 2,4 – Dimethyl-phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 4A. 4,6 – Dinitro - O-Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 5A. 2,4 – Dinitro-phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 6A. 2-Nitrophenol (88-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 8A. P – Chloro – M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 9A. Pentachloro-phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 10A. Phenol (108-952) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 11A. 2,4,6 – Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|--------------------|------------------|---------|--------------------------|-------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | (1) CONCENTRATION | (2) MASS |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 7B. 3,4 - Benzo(a)fluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 20B. 1,2 - Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 21B. 1,3 - Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | |
| 22B. 1, 4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 23B. 3, 3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 24B. Diethyl Phthalate (84-66-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 25B. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 26B. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 27B. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 28B. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 29B. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 31B. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 32B. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 33B. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 34B. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 35B. Hexachloro-cyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 36B. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 37B. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 38B. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 39B. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 40B. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 41B. N-Nitro-sodiummethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |

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| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | (1) CONCENTRATION | (2) MASS |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 5P. δ-BHC (319-86-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 6P. Chlordane (57-74-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 7P. 4,4'-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |

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NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
014

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | | 5. INTAKE (optional) | | | | |
|--|--------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|-------------------|----------------------|---------|--------------------------|-----|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | | | (2) MASS | | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 18P. PCB-1242 (53469-21-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 19P. PBC-1254 (11097-69-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 20P. PCB-1221 (11104-28-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 21P. PCB-1232 (11141-16-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 22P. PCB-1248 (12672-29-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 23P. PCB-1260 (11096-82-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 24P. PCB-1016 (12674-11-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 25P. Toxaphene (8001-35-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| J. RADIOACTIVITY | | | | | | | | | | | | | | | |
| (1) Alpha Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (2) Beta Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (3) Radium Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4) Radium 226 Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

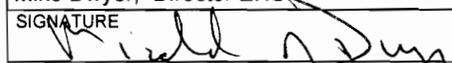
YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)

NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|-------------|-------------------------|------------------------------------|-------------------------------|
| Teklab Inc. | 5445 Horseshoe Lake | (618) 344-1004 | All |
| | Collinsville, Ill 62234 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|--|---------------------------------|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director EHS | TELEPHONE NUMBER WITH AREA CODE |
| SIGNATURE  | DATE SIGNED 8/29/17 |



RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM D - APPLICATION FOR DISCHARGE PERMIT
PRIMARY INDUSTRIES

SEP - 4 2013

| FOR AGENCY USE ONLY | |
|---------------------|---------------|
| CHECK NO. | |
| DATE RECEIVED | FEE SUBMITTED |

WATER PROTECTION PROGRAM

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
The Boeing Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO - 0004782

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below.

INDUSTRY CATEGORY

- | | |
|-----------------------------------|---|
| Adhesives and sealants | Ore mining |
| Aluminum forming | Organic chemicals manufacturing |
| Auto and other laundries | Paint and ink formulation |
| Battery manufacturing | Pesticides |
| Coal mining | Petroleum refining |
| Coil coating | Pharmaceutical preparations |
| Copper forming | Photographic equipment and supplies |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating | Plastic processing |
| Explosives manufacturing | Porcelain enameling |
| Foundries | Printing and publishing |
| Gum and wood chemicals | Pulp and paperboard mills |
| Inorganic chemicals manufacturing | Rubber processing |
| Iron and steel manufacturing | Soap and detergent manufacturing |
| Leather tanning and finishing | Steam electric power plants |
| Landfill | Textile mills |
| Mechanical products manufacturing | Timber products processing |
| Nonferrous metals manufacturing | |

**APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES**

TABLE II

| | |
|-------------------------------------|-----------------------|
| NPDES # (IF ASSIGNED) MO-0004782 | OUTFALL NUMBER 015 |
|-------------------------------------|-----------------------|

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|--------------------------|--------------------|----------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | ✓ | ☐ | ✓ | <0.05 | <0.39 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 2M. Beryllium, Total (7440-41-7) | ✓ | ☐ | ✓ | <0.001 | <0.008 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 3M. Magnesium Total (7439-95-4) | ✓ | ☐ | ✓ | 0.194 | 1.5 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 4M. Molybdenum Total (7439-98-7) | ✓ | ☐ | ✓ | <0.01 | <0.078 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 5M. Tin Total (7440-31-5) | ✓ | ☐ | ✓ | <0.02 | <0.16 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 6M. Titanium Total (7440-32-6) | ✓ | ☐ | ✓ | 0.0021 | 0.016 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 7M. Mercury, Total (7439-97-6) | ✓ | ☐ | ✓ | 0.00008 | 0.0006 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 8M. Selenium, Total (7782-49-2) | ✓ | ☐ | ✓ | <0.05 | <0.39 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 9M. Thallium, Total (7440-28-0) | ✓ | ☐ | ✓ | <0.05 | <0.39 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |
| 10M. Phenols, Total | ✓ | ☐ | ✓ | <0.005 | <0.039 | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | |

DIOXIN

| DESCRIBE RESULTS | | | | | | | | | | | | | |
|--|---|---|---|--|--|--|--|--|--|--|--|--|--|
| 2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6) | ✓ | ☐ | ✓ | | | | | | | | | | |

CONTINUED FROM THE FRONT

NPDES # (IF ASSIGNED)
MO-0004782

OUTFALL NUMBER
015

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 23V. 1,1,2,2 - Tetra-chloroethane (79-34-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 25V. Toluene (108-88-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 26V. 1,2 - Trans Dichloroethylene (156-60-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 27V. 1,1' - Trichloroethane (71-55-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 28V. 1,1,2 - Trichloroethane (79-00-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 29V. Trichloro - ethylene (79-01-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 30V. Trichloro - fluoromethane (75-69-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 31V. Vinyl Chloride (75-01-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2 - Chlorophenol (95-57-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2A. 2,4 - Dichloro - phenol (120-83-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3A. 2,4 - Dimethyl - phenol (105-67-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4A. 4,6 - Dinitro - O-Cresol (534-52-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5A. 2,4 - Dinitro - phenol (51-28-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6A. 2-Nitrophenol (98-75-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8A. P - Chloro - M Cresol (59-50-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9A. Pentachloro - phenol (87-86-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10A. Phenol (108-952) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11A. 2,4,6 - Trichloro-phenol (88-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|-------------------------|----------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| 1V. Acrolein (107-02-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 2V. Acrylonitrile (107-13-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 3V. Benzene (71-43-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 5V. Bromoform (75-25-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 6V. Carbon Tetrachloride (56-23-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 7V. Chlorobenzene (108-90-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 9V. Chloroethane (75-00-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 11V. Chloroform (67-66-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 13V. Dichlorodifluoromethane (75-71-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 14V. 1,1 - Dichloroethane (75-34-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 15V. 1,2 - Dichloroethane (107-06-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 16V. 1,1 - Dichloroethylene (75-35-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 17V. 1,2 - Dichloropropane (78-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 18V. 1,2 - Dichloropropylene (542-75-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 19V. Ethylbenzene (100-41-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 20V. Methyl Bromide (74-83-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |
| 21V. Methyl Chloride (74-87-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | ND | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|--------------------|--------------------|----------------------|--------------------------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 2B. Acenaphthylene (208-96-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 3B. Anthracene (120-12-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 4B. Benzidine (92-87-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 5B. Benzo (a) Anthracene (56-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 6B. Benzo (a) Pyrene (50-32-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 7B. 3,4 - Benzofluoranthene (205-99-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 12B. Bis (2-Chloroisopropyl) Ether (39638-32-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 16B. 2-Chloronaphthalene (91-58-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 18B. Chrysene (218-01-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 20B. 1,2-Dichlorobenzene (95-50-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |
| 21B. 1,3-Dichlorobenzene (541-73-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | |
|---|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|--------------------|--------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | |
| GC/MS FRACTION - BASENEUTRAL COMPOUNDS (continued) | | | | | | | | | | |
| 228. 1, 4-Dichlorobenzene (106-46-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 238. 3, 3'-Dichlorobenzidine (91-94-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 248. Diethyl Phthalate (84-66-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 258. Dimethyl Phthalate (131-11-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 268. Di-N-butyl Phthalate (84-74-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 278. 2,4-Dinitrotoluene (121-14-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 288. 2,6-Dinitrotoluene (606-20-2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 298. Di-N-Octyl Phthalate (117-84-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 308. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 318. Fluoranthene (206-44-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 328. Fluorene (86-73-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 338. Hexachlorobenzene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 348. Hexachlorobutadiene (87-68-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 358. Hexachlorocyclopentadiene (77-47-4) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 368. Hexachloroethane (67-72-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 378. Indeno (1,2,3-c-d) Pyrene (193-39-5) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 388. Isophorone (78-59-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 398. Naphthalene (91-20-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 408. Nitrobenzene (98-95-3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 418. N-Nitrosodimethylamine (62-75-9) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | 1 | mg/l | lb/d |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | |
|--|-------------------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | (1) CONCENTRATION | (2) MASS |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | |
| 42B. N-Nitroso N-Propylamine (621-64-7) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 43B. N-Nitrosodiphenylamine (86-30-6) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 44B. Phenanthrene (85-01-8) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 45B. Pyrene (129-00-0) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ND | N/A | N/A | N/A | N/A | N/A | 1 | mg/l | lb/d |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 2P. α-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 3P. β-BHC (319-84-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 4P. γ-BHC (58-89-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 5P. δ-BHC (319-96-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 6P. Chlordane (57-74-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 7P. 4,4'-DDT (50-29-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 8P. 4,4'-DDE (72-55-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 9P. 4,4'-DDD (72-54-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 10P. Dieldrin (60-57-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 11P. α-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 12P. β-Endosulfan (115-29-7) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 13P. Endosulfan Sulfate (1031-07-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 14P. Endrin (72-20-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 15P. Endrin Aldehyde (7421-93-4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |
| 16P. Heptachlor (76-44-8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | mg/l | lb/d |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | |
|--|--------------------------|--------------------------|-------------------------------------|------------------------|----------|--|----------|---|----------|----------------------|---------|--------------------------|----------|-------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 18P. PCB-1242 (53469-21-9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 19P. PBC-1254 (11097-69-1) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 20P. PCB-1221 (11104-28-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 21P. PCB-1232 (11141-16-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 22P. PCB-1248 (12672-29-6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 23P. PCB-1260 (11096-82-5) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 24P. PCB-1016 (12674-11-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| 25P. Toxaphene (8001-35-2) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| J. RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (2) Beta Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (3) Radium Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| (4) Radium 226 Total | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

- YES (LIST ALL SUCH POLLUTANTS BELOW) NO (GO TO B)

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

- YES (COMPLETE C BELOW) NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

- YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)
 NO (GO TO SECTION 4.00)

| A. NAME | B. ADDRESS | C. TELEPHONE NUMBER WITH AREA CODE | D. POLLUTANTS ANALYZED (list) |
|------------|---|------------------------------------|-------------------------------|
| Teklab Inc | 5445 Horseshoe Lake Collinsville Ill 62234 | (618) 344-1004 | All |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.00 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| | |
|--|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Mike Dwyer, Director EHS | TELEPHONE NUMBER WITH AREA CODE (314) 777-9238 |
| SIGNATURE  | DATE SIGNED 8/29/17 |

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Potential SW Pollutant Source

Outfall #

WATER PROTECTION PROGRAM

| | | |
|----------------------------------|-----------------------------------|--------------------------|
| Hydraulic Equipment Storage | 007, 010, 012, 014, 015 | Hydraulic Fluid |
| Parking lot de-icing (Nacl) | 006,007, 010, 012,013, 014, 015 | Chlorides |
| Scrap Metal Containers | 007, 010, 012, 013, 014, 015 | Coolants, metal chips |
| Empty Drum Storage | 010, 013, 014, 015 | Chemical residues |
| Haz Waste Compactor | 010, 012, 013, 015 | Chrome, solvents |
| Fueling Areas | 007, 010, 012,013, 014, 015 | fuel/oil |
| Non Haz Compactors | 006,007, 010, 012,013, 014, 015 | debris |
| Electrical Substations | 007, 010, 012, 013, 014, 015 | Oil |
| Bulk Piles (mulch, soil, salt) | 010, 015, 013,014 | Solids, chloride, cr, cu |
| Cooling Towers Overflows | 006, 007, 010, 012, 013, 014, 015 | chlorine, algaecides |
| Classified Paper Shredder | 14 | solids |
| Grease Collection | 006, 007, 010, 012,013, 014, 015 | Oil/Grease |
| <u>OUTDOOR ACTIVITIES</u> | | |
| Lawn Maintenance/Landscaping | 006, 007, 010, 012, 013, 014, 015 | |
| Employee Parking | 006, 007, 010, 012, 013, 014, 015 | |
| Parking Lot De-icing | 006, 007, 010, 012, 013, 014, 015 | |
| Fueling/Fuel Storage | 7, 010, 012,013, 014, 015 | |
| Recycling (plastic/wood/cans) | 006, 007, 010, 012, 013, 014, 015 | |
| Bulk loading/Unloading | 006, 007, 010, 012, 013, 014, 015 | |
| Bi-Annual herbicide application | 006, 007, 010, 012, 013, 014, 015 | |
| Kitchen Grease Management | 006, 007, 010, 012, 013, 014, 015 | |
| Hazardous Waste Management | 006, 007, 010, 012, 013, 014, 015 | |
| Construction / Maintenance | 006, 007, 010, 012, 013, 014, 015 | |
| Scrap Metal Management | 007, 010, 012, 013, 014, 015 | |
| Solids Vacuum/ collection | 007, 010, 012, 013, 014, 015 | |
| Vehicle operation | 006, 007, 010, 012, 013, 014, 015 | |
| Non-Hazardous Waste Mangement | 006, 007, 010, 012, 013, 014, 015 | |
| <u>INDOOR ACTIVITIES</u> | | |
| Chemical Processing | 007, 010 | |
| Painting/Priming | 007, 010, 012, 013, 014 | |
| Combustion Sources | 006, 007, 010, 012, 013, 014, 015 | |
| Food Preparation | 006, 007, 010, 012, 013, 014, 015 | |
| Haz Waste Handling | 006, 007, 010, 012, 013, 014, 015 | |
| Analytical Laboratory | 007, 010 | |
| Milling | 007, 010, 015 | |
| Soldering | 006, 007, 010, 012, 013, 014, 015 | |
| AFFF system | 12 | |
| Garage Services | 007, 010 | |
| Hydraulic Equipment Testing | 7 | |
| Erosion Sand Testing | 7 | |



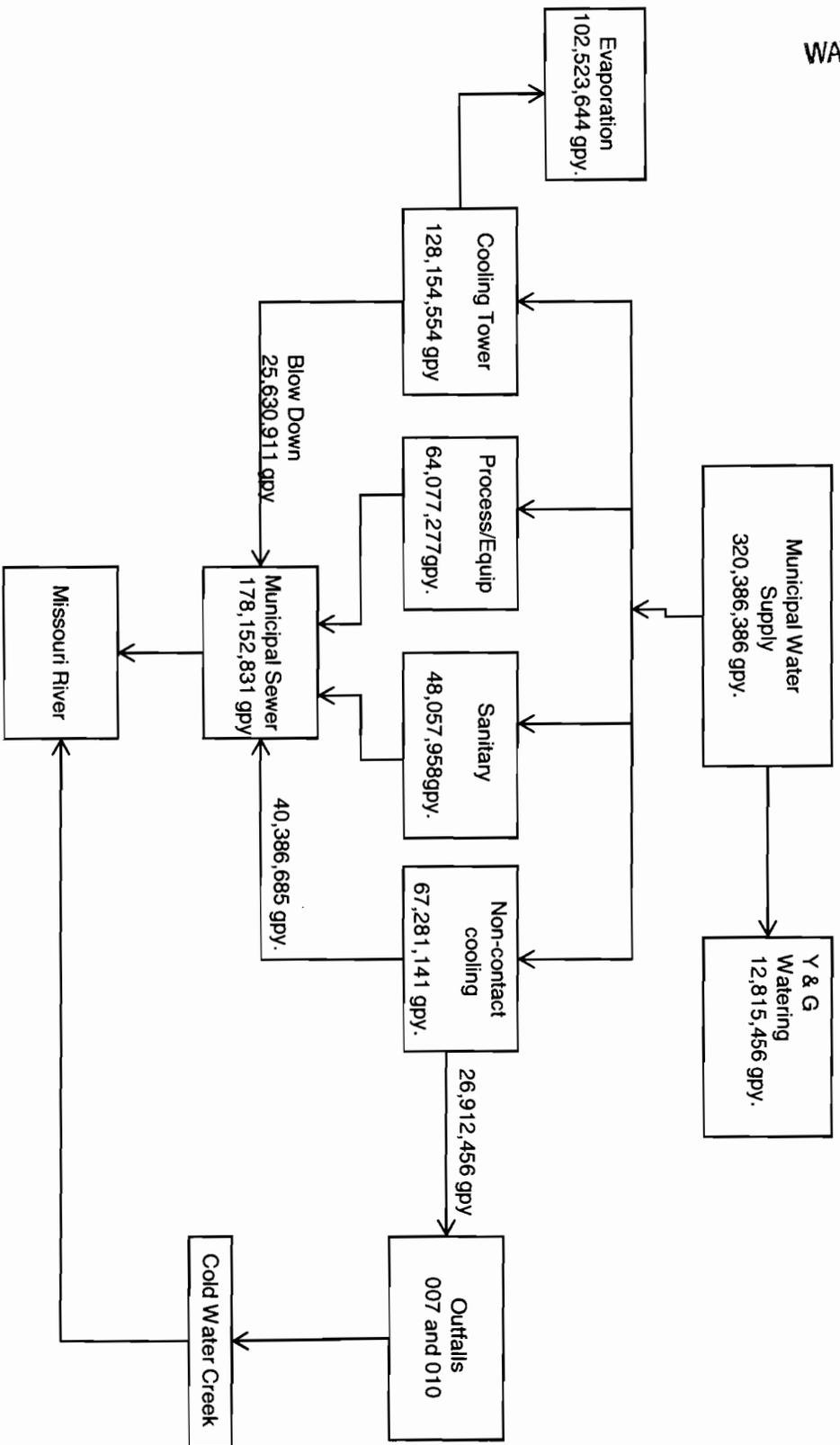
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WATER PROTECTION PROGRAM

Boeing - St. Louis

Schematic of Water Flow



Lee

NH

SEP - 4, 2013

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WATER PROTECTION PROGRAM



