

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, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0117692

Owner: Hazmat, Inc.  
Address: 1650 Spruce Street, Suite 410, Riverside, CA, 92507

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Hazmat, Inc.  
Facility Address: 6300 Stadium Drive, Kansas City, MO 64129

Legal Description: See page two  
UTM Coordinates: See page two

Receiving Stream: Tributary to the Blue River (U)  
First Classified Stream and ID: Blue River (P) (00418), 303(d) List  
USGS Basin & Sub-watershed No.: (10300101 – 0106)

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

**FACILITY DESCRIPTION**

All Outfalls – SIC # 4953 – The use or operation of this facility does not require the services of a certified operator.

Stormwater runoff from a facility engaged in collection and storage of hazardous wastes.

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 Section 644.051.6 of the Law.

August 1, 2013  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

July 31, 2016  
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (continued)

**Outfall #003** – Stormwater only

Legal Description: NE ¼, SW ¼, Sec.24, T49N, R33W, Jackson County

UTM Coordinates: X = 369332, Y = 4324365

Design Flow is 0.238 MGD

Actual Flow is dependent upon precipitation

**Outfall #001** – Eliminated

**Outfall #002** – Eliminated

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 8	
					PERMIT NUMBER MO-0117692	
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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #003</u> (Note 1)						
Flow	MGD	*		*	Once/quarter**	24 hr. estimate
pH – Units	SU	***		***	Once/quarter**	grab****
Chemical Oxygen Demand	mg/L	90		60	Once/quarter**	grab****
Settleable Solids	mL/L/hr	1.5		1.0	Once/quarter**	grab****
Oil & Grease	mg/L	15		10	Once/quarter**	grab****
Total Petroleum Hydrocarbons (Note 1)	mg/L	10		10	Once/quarter**	grab****
Conductivity	µS/cm @ 25°C	*		*	Once/quarter**	grab****
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2013</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM, OR WATER WITH A VISIBLE SHEEN.						
Total Toxic Organics (Note 2)		*		*	Once/year*****	grab****
Stored Hazardous Waste (Note 3)		*		*	Once/year*****	grab****
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2014</u> .						
Whole Effluent Toxicity (WET) test (Note 4)	% Survival	See Special Condition #15			Once/permit cycle	grab****
MONITORING REPORTS SHALL BE SUBMITTED <u>ONCE/PERMIT CYCLE</u> ; THE FIRST REPORT IS DUE <u>by AUGUST 28, 2016</u> .						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

\* Monitoring requirement only

\*\* Sample once per quarter in the months that a discharge occurs (see table below for reporting details).

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

\*\*\* 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.

\*\*\*\* Stormwater samples shall be collected within the first 60 minutes of discharge resulting from a storm event of 0.1 inches or greater. Storm events include rainfall as well as run-off from the melting of frozen precipitation.

\*\*\*\*\* Sample once per year in any month that a discharge occurs.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- Note 1** The Suggested analytical method for testing TPH is non-halogenated Organic by Gas Chromatography Method 8015 (also known as OA1 & OA2)
- Note 2** Test for all chemicals listed in 40 CFR 122 Appendix D, Tables II, III, IV, and V that have been present at the facility in the three years prior to the sampling event (see referenced regulation for complete list).
- Note 3** Permittee shall test for all hazardous wastes stored at the facility within the previous three years prior to the sampling event. Contact the Hazardous Waste Program to determine analysis method for characterization.
- Note 4** A WET test may be conducted at any time during the time period between permit issuance and December 31, 2015. The final due date for the WET test results is January 28, 2016; however, WET test results should be submitted to the Water Protection Program as soon as possible once they are received. If no discharge occurs before December 31, 2015, report “no-discharge” and contact the Water Protection Program for guidance.

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.
  - (d) Address any situation where the discharge prevents full maintenance of the beneficial or designated uses of the receiving stream. This includes violations of General Criteria, which are applicable at all times including mixing zones.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.

C. SPECIAL CONDITIONS (continued)

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 in Part A of the permit by the Director.
- (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.

6. The discharge of any pollutant not documented in the application for this permit is prohibited. This includes any chemical, biological material, radiological material, or any other material that may affect the ability of the receiving stream to fully support its beneficial and designated uses.

7. There shall be no discharge of a solid waste to waters of the state.

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

9. This facility is not authorized, neither by this permit nor the Hazardous Waste or Solid Waste Programs, to handle solid wastes or to treat hazardous wastes. If the facility obtains approval from those programs to conduct said activities, the facility must submit an application to modify this permit accordingly to the Water Protection Program.

10. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. 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. An assessment of all stormwater discharges associated with this facility. This must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.
- b. 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 storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #12 below.
- c. The SWPPP must include a schedule for monthly site inspections and a brief written report. The inspections must include observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken. The Department must be notified within fifteen (15) days by letter of any corrections of deficiencies. Deficiencies that consist of minor repairs or maintenance must be corrected within seven (7) days. Deficiencies that require additional time or installation of a treatment device to correct should be detailed in the written notification. Installation of a treatment device, such as an oil water separator, may require a construction permit. Inspection reports must be kept on site with the SWPPP. These must be made available to department personnel upon request.

C. SPECIAL CONDITIONS (continued)

- d. A provision for designating an individual to be responsible for environmental matters.
- e. 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 DNR.

12. Permittee shall adhere to the following minimum Best Management Practices:
- (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 BMP's 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 solid waste from entry into waters of the state.
  - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property.
13. The purpose of the SWPPP and the BMPs listed therein is to prevent pollutants from entering waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR20-2.010(56)] of waters of the state, or failed to achieve compliance with benchmarks. Corrective action means the facility took steps to eliminate the deficiency.
14. All spills must be **cleaned up** within 24 hours or as soon as possible, and a written report of the incident supplied with the facility's Discharge Monitoring Report. The following spills must be **reported** to the department at the earliest practicable moment, but no greater than 24 hours after the spill occurs:
- (a) Any spill, of any material, that leaves the property of the facility;
  - (b) Any spill, of any material outside of secondary containment and exposed to precipitation, greater than 25 gallons or equivalent volume of solid material.

The department may require the submittal of a written report detailing measures taken to clean up the spill within 5 days of the spill. Whether the written report is submitted with the Discharge Monitoring Report or required to be submitted within 5 days, it must include the type of material spilled, volume, date of spill, date clean-up completed, clean-up method, and final disposal method. If the spill occurs outside of normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436. Leaving a message on a department staff member voice-mail does not satisfy this reporting requirement.

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.

Federal Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

15. Whole Effluent Toxicity (WET) Test shall be conducted as follows:

SUMMARY OF ACUTE WET TESTING FOR THIS PERMIT				
OUTFALL	AEC	FREQUENCY	SAMPLE TYPE	MONTH
003	100%	Once/Permit Cycle	grab****	Any before December 31, 2015

\*\*\*\* Stormwater samples shall be collected within the first 60 minutes of discharge resulting from a storm event of 0.1 inches or greater. Storm events include rainfall as well as run-off from the melting of frozen precipitation.

C. SPECIAL CONDITIONS (continued)

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

(a) Test Schedule and Follow-Up Requirements

- (1) Perform a MULTIPLE-dilution acute WET test in the months and at the frequency specified above. For tests which are successfully passed, submit test results using the Department's WET test report form #MO-780-1899 along with complete copies of the test reports as received from the laboratory, including copies of chain-of-custody forms within 30 calendar days of availability to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102. If the effluent passes the test, do not repeat the test until the next test period.
  - (a) Chemical and physical analysis of the upstream control 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.
  - (b) 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.
  - (c) All chemical analyses included in the Missouri Department of Natural Resources WET test report form #MO-780-1899 shall be performed and results shall be recorded in the appropriate field of the report form.
- (2) The WET test will be considered a failure if mortality observed in effluent concentrations for either specie, equal to or less than the AEC, is significantly different (at the 95% confidence level;  $p = 0.05$ ) than that observed in the upstream receiving-water control sample. Where upstream receiving water is not available, synthetic laboratory control water may be used.
- (3) All failing test results along with complete copies of the test reports as received from the laboratory, INCLUDING THOSE TESTS CONDUCTED UNDER CONDITION (3) BELOW, shall be reported to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the availability of the results.
- (4) If the effluent fails the test for BOTH test species, a multiple dilution test shall be performed for BOTH test species within 30 calendar days and biweekly thereafter (for storm water, tests shall be performed on the next and subsequent storm water discharges as they occur, but not less than 7 days apart) until one of the following conditions are met: Note: Written request regarding single species multiple dilution accelerated testing will be address by THE WATER PROTECTION PROGRAM on a case by case basis.
  - (i) THREE CONSECUTIVE MULTIPLE-DILUTION TESTS PASS. No further tests need to be performed until next regularly scheduled test period.
  - (ii) A TOTAL OF THREE MULTIPLE-DILUTION TESTS FAIL.
- (5) Follow-up tests do not negate an initial failed test.
- (6) The permittee shall submit a summary of all test results for the test series along with complete copies of the test reports as received from the laboratory to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the third failed test.
- (7) Additionally, the following shall apply upon failure of the third follow up MULTIPLE DILUTION test The permittee should contact THE WATER PROTECTION PROGRAM within 14 calendar days from availability of the test results to ascertain as to whether a TIE or TRE is appropriate. If the permittee does not contact THE WATER PROTECTION PROGRAM upon the third follow up test failure, a toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE) is automatically triggered. The permittee shall submit a plan for conducting a TIE or TRE to the WATER PROTECTION PROGRAM within 60 calendar days of the date of the automatic trigger or DNR's direction to perform either a TIE or TRE. This plan must be approved by DNR before the TIE or TRE is begun. A schedule for completing the TIE or TRE shall be established in the plan approval.
- (8) Upon DNR's approval, the TIE/TRE schedule may be modified if toxicity is intermittent during the TIE/TRE investigations. A revised WET test schedule may be established by DNR for this period.
- (9) If a previously completed TIE has clearly identified the cause of toxicity, additional TIEs will not be required as long as effluent characteristics remain essentially unchanged and the permittee is proceeding according to a DNR approved schedule to complete a TRE and reduce toxicity. Regularly scheduled WET testing as required in the permit, without the follow-up requirements, will be required during this period.
- (10) When WET test sampling is required to run over one DMR period, each DMR report shall contain a copy of the

C. SPECIAL CONDITIONS (continued)

Department's WET test report form that was generated during the reporting period.

(11) Submit a concise summary in tabular format of all WET test results with the annual report.

(b) Test Conditions

- (1) Test Type: Acute Static non-renewal
- (2) All tests, including repeat tests for previous failures, shall include both test species listed below unless approved by the department on a case by case basis.
- (3) Test species: Ceriodaphnia dubia and Pimephales promelas (fathead minnow). Organisms used in WET testing shall come from cultures reared for the purpose of conducting toxicity tests and cultured in a manner consistent with the most current USEPA guidelines. All test animals shall be cultured as described in the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.
- (4) Test period: 48 hours at the "Allowable Effluent Concentration" (AEC) specified above.
- (5) Upstream receiving stream water shall be used as dilution water. If upstream water is unavailable or if mortality in the upstream water exceeds 10%, "reconstituted" water will be used as dilution water. Procedures for generating reconstituted water will be supplied by the MDNR upon request.
- (6) Tests will be run with 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent, and reconstituted water.
- (7) If reconstituted-water control mortality for a test species exceeds 10%, the entire test will be rerun.
- (8) If upstream control mortality exceeds 10%, the entire test will be rerun using reconstituted water as the dilutant.
- (9) Whole-effluent-toxicity test shall be consistent with the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms

PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date. Failure to apply for renewal may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

TERMINATION

In order to terminate this permit, the permittee shall notify the department by submitting Form J, included with the State Operating Permit. The permittee shall complete Form J and mail it to the department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the department and approved prior to initiating closure activities.

DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0117692**  
**WASTE EXPRESS, INC.**

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 a Major , Minor , Industrial Facility ; Variance ;  
 Master General Permit ; General Permit Covered Facility ; and/or permit with widespread public interest .

**Part I – Facility Information**

Facility Type:                      Industry  
 Facility SIC Code(s):            4953

Facility Description:

Stormwater runoff from a facility engaged in collection and storage of hazardous wastes.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?  
 - No.

Application Date:                April 27, 2011  
 Expiration Date:                June 1, 2011

No compliance inspections were conducted by water pollution staff during the previous permit cycle; however, this facility is inspected quarterly by Hazardous Waste Program staff. Jimmy Coles from the Kansas City Regional Office conducted a site visit on November 10, 2011 for the purpose of permit renewal. No apparent violations were noted.

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (MGD)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#003	0.238	BMP*	Stormwater Only	0.35**

\*Best Management Practices

\*\* Distance is to the nearest storm water outlet to the Blue River, not necessarily the shortest route to the river.

**Outfall #001**

Legal Description: NE ¼, NW ¼, Sec.24, T49N, R33W, Jackson County  
 UTM Coordinates: X = 369332, Y = 4324365  
 Receiving Stream: Tributary to the Blue River (U)  
 First Classified Stream and ID: Blue River (P) (00418), 2006 303(d) List  
 USGS Basin & Sub-watershed No.: (10300101 – 0106)

Receiving Water Body's Water Quality & Facility Performance History:

There were no effluent limit exceedances during the previous permit cycle and all Total Toxic Organics analyses resulted in "non-detect".

Comments:

The previous permit for this facility contained Outfalls #001 and #002 that have historically been included since the permit was first issued. These outfalls were located such that the only water that would run through them would have been storm water collected by the roof and discharged through the downspouts and from the employee parking lot. The original reason for monitoring water from the roof was that the facility, in the past, conducted blending of waste fuels on a platform on the roof. This practice has long since been discontinued; therefore, monitoring these discharges is now unnecessary.

The area of concern, for purposes of this storm water permit, is the gravel lot to the north of the main facility building. It is in this area that empty drum and bulk containers are stored after the contents have been removed and they have been properly cleaned. The City of Kansas City, MO has required this facility to berm this entire area such that there is no discharge of storm water under normal circumstances. As such, all stormwater from this area flows to a low lying spot in the middle of the gravel lot where it either soaks into the ground or evaporates. The facility has indicated that under extreme precipitation events, such as the 1 in 25 year, 24 hour storm, storm water would discharge from the property at the point that is now called Outfall #003, to an empty lot to the east and eventually into the city's storm drains. At the north end of the main building, included in the main bermed area, is a loading dock where all wastes are loaded and unloaded. The facility will be required to test accumulated water for any parameters from 40 FCR 122, Appendix D, Table II, III, IV, and V as well as any other hazardous wastes that have been present at the facility within the previous three calendar years prior to discharge of that water. Sampling results must return "non-detects" for all tested parameters and results must be submitted to the KCRO prior to discharge of the water. Alternatively the facility may collect the water and have it treated at a permitted hazardous waste treatment facility.

**Part II – Operator Certification Requirements**

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.020(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Check boxes below that are applicable to the facility;

- Owned or operated by or for:
  - Municipalities
  - Public Sewer District:
  - County
  - Public Water Supply Districts:
  - Private sewer company regulated by the Public Service Commission:
  - State or Federal agencies:

Each of the above entities are only applicable if they have a Population Equivalent greater than two hundred (200) and/or fifty (50) or more service connections.

Not Applicable ; This facility is not required to have a certified operator.

**Part III – Receiving Stream Information**

**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/or 1<sup>st</sup> 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:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC	EDU**
Tributary to the Blue River	U	N/A	General Criteria	103001010106	Central Plains/Blackwater/Lamine

\* - 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).

\*\* - Ecological Drainage Unit

**RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:**

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Tributary to the Blue River (U)	0	0	0

**MIXING CONSIDERATIONS :**

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

**RECEIVING STREAM MONITORING REQUIREMENTS:**

No receiving water monitoring requirements recommended at this time.

**Part IV – 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.

- All limits in this operating permit are at least as protective as those previously established; therefore, backsliding does not apply.

**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.

**AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:**

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the Department.

**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://dnr.mo.gov/env/wpp/pub/index.html>, 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.

**PRETREATMENT PROGRAM:**

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable ;

The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

**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.

Not Applicable ;

A RPA was not conducted for this facility.

**REMOVAL EFFICIENCY:**

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals.

Not Applicable ;

Influent monitoring is not being required to determine percent removal.

**SANITARY SEWER OVERFLOWS (SSO) AND INFLOW AND INFILTRATION (I&I):**

Sanitary Sewer Overflows (SSOs) are defined as an untreated or partially treated sewage release are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSO's have a variety of causes including blockages, line breaks, and sewer defects that allow excess storm water and ground water to (1) enter and overload the collection system, and (2) overload the treatment facility. Additionally, SSO's can be also be caused by lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations.

Additionally, Missouri RSMo §644.026.1 mandates that the Department require proper maintenance and operation of treatment facilities and sewer systems and proper disposal of residual waste from all such facilities.

- Not applicable. This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

**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.

**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.

Not Applicable ; Wasteload allocations were not calculated.

**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.

Not Applicable ; A WLA study was either not submitted or determined not applicable by Department staff.

**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 (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 NH<sub>3</sub>)
- Facility is a municipality or domestic discharger with a Design Flow  $\geq$  22,500 gpd.
- Other – please justify.

**40 CFR 122.41(M) - BYPASSES:**

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from “bypassing” untreated or partially treated sewage (wastewater) beyond the headworks. A bypass, which includes blending, is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri’s Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar devices designed for peak wet weather flows.

– Not Applicable, this facility does not bypass.

**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 ; The Blue River is listed on the 2006 Missouri 303(d) List for bacteria from urban non-point sources.

– This facility is not considered to contribute to the impairment of the Blue River.

**Part V – Effluent Limits Determination**

**Outfall #003 – Main Facility Outfall**

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	SAME
SETTLABLE SOLIDS	mg/L	9	1.5		1.0	NO	SAME
pH	SU	2	6.5 – 9.0		6.5 – 9.0	YES	6.0 – 9.0
CHEMICAL OXYGEN DEMAND	mg/L	9	90		60	YES	*
OIL & GREASE (MG/L)	mg/L	2	15		10	NO	SAME
TOTAL PETROLEUM HYDROCARBONS	mg/L	9	10		10	NO	SAME
CONDUCTIVITY	µS/cm @ 25°C	9	*		*	YES	**
WHOLE EFFLUENT TOXICITY (WET) TEST	% Survival	11	Please see WET Test in the Derivation and Discussion Section below.				

\* - Monitoring requirement only.

\*\* - Parameter not previously established in previous state operating permit.

**Basis for Limitations Codes:**

- |  |                                    |
|--|------------------------------------|
| 1. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 3. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 4. Lagoon Policy                         | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy                        | 11. WET Test Policy                |
| 6. Antidegradation Review                |                                    |

**OUTFALL #001 – 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).** Daily maximum of 90 mg/L and a monthly average of 60 mg/L. These limits are protective and have been proven to be attainable at industrial facilities through best management practices. High COD is indicative that monitoring for additional pollutants may be needed.
- **Settleable Solids.** Effluent limitations have been retained from previous operating permit.
- **pH.** pH shall be maintained within the range of 6.5 – 9.0 standard pH units [10 CSR 20-7.031(4)(E)]
- **Conductivity.** Monitoring requirement only. High conductivity is indicative that monitoring for additional pollutants may be needed.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Total Petroleum Hydrocarbons.** Effluent limitations have been retained from the previous operating permit.
- **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:** With the operations of this facility and the fact that it is bermed to prevent stormwater discharges except under extreme circumstances, this frequency ensures that if a discharge does occur from Outfall #003 during the previous cycle, a WET test will be conducted. More frequent discharges are not expected.

## **Part VI – Finding of Affordability**

Pursuant to Section 644.145, RSMo., the Department is required to determine whether a permit or decision is affordable and makes a finding of affordability for certain permitting and enforcement decisions. This requirement applies to discharges from combined or separate sanitary sewer systems or publically-owned treatment works.

Not Applicable;

The Department is not required to determine findings of affordability because the facility is not a **combined or separate sanitary sewer system for a publically-owned treatment works**.

## **Part VII – 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. **Permit Synchronization date for this permit is: March 30, 2019. Since this is a modification for a new owner, the permit will be issued for 3 years.**

### **PUBLIC NOTICE:**

- The Public Notice period for this operating permit was from January 27, 2012 to February 27, 2012. No comments were received during the public notice period.

**DATE OF FACT SHEET:** APRIL 11, 2012

### **COMPLETED BY:**

**JIMMY COLES  
NPDES PERMITS UNIT  
KANSAS CITY REGIONAL OFFICE  
(816) 622-7051  
[jimmy.coles@dnr.mo.gov](mailto:jimmy.coles@dnr.mo.gov)**

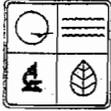
**MODIFICATION FOR TRANSFER:** JULY 18, 2013

### **COMPLETED BY:**

**ALAN MOREAU  
INDUSTRIAL PERMITS UNIT  
(573) 522-2553  
[alan.moreau@dnr.mo.gov](mailto:alan.moreau@dnr.mo.gov)**

AP5020

APR 27 2011



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

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED

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- 117692 Expiration Date 12-23-2011

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 Waste Express Inc		TELEPHONE WITH AREA CODE 816 924 5884	
ADDRESS (PHYSICAL) 6300 STADIUM DRIVE		FAX 816 924 1453	
CITY KANSAS CITY	STATE MO	ZIP CODE 64129	

3. OWNER

NAME Waste Express		E-MAIL ADDRESS		TELEPHONE WITH AREA CODE 816 924 5884	
ADDRESS (MAILING) 6300 Stadium Drive		CITY KANSAS CITY		FAX 816 924 1453	
		STATE MO	ZIP CODE 64129		

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

4. CONTINUING AUTHORITY

NAME		TELEPHONE WITH AREA CODE			
ADDRESS (MAILING)		FAX		STATE ZIP CODE	

5. OPERATOR

NAME		CERTIFICATE NUMBER		TELEPHONE WITH AREA CODE	
ADDRESS (MAILING)		CITY		FAX	
				STATE ZIP CODE	

6. FACILITY CONTACT

NAME Tom Hovick		TITLE [cell 913-523-5717]		TELEPHONE WITH AREA CODE 816 924 5884	
				FAX 816 924 1453	

7. ADDITIONAL FACILITY INFORMATION

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

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 4953 and NAICS \_\_\_\_\_ 002 - SIC 4953 and NAICS \_\_\_\_\_  
003 - SIC \_\_\_\_\_ and NAICS \_\_\_\_\_ 004 - SIC \_\_\_\_\_ and NAICS \_\_\_\_\_

MO 780-1479 (01-09)

OUTFALL #001 AND #002 - STORMWATER RUNOFF FROM FACILITY ENGAGED IN COLLECTION, STORAGE, PROCESSING AND DISPOSAL OF REFUSE INCLUDING HAZARDOUS WASTE

**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: CITY OF KANSAS CITY MISSOURI

ADDRESS: 1001 HARRISON	CITY: KANSAS CITY	STATE: MO	ZIP CODE: 64106
------------------------	-------------------	-----------	-----------------

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): Tom Hayes General Manager	TELEPHONE WITH AREA CODE: 816 924 5884
SIGNATURE: <i>Tom Hayes</i>	DATE SIGNED: 04-25-2011

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? \$1,350.00
- 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?

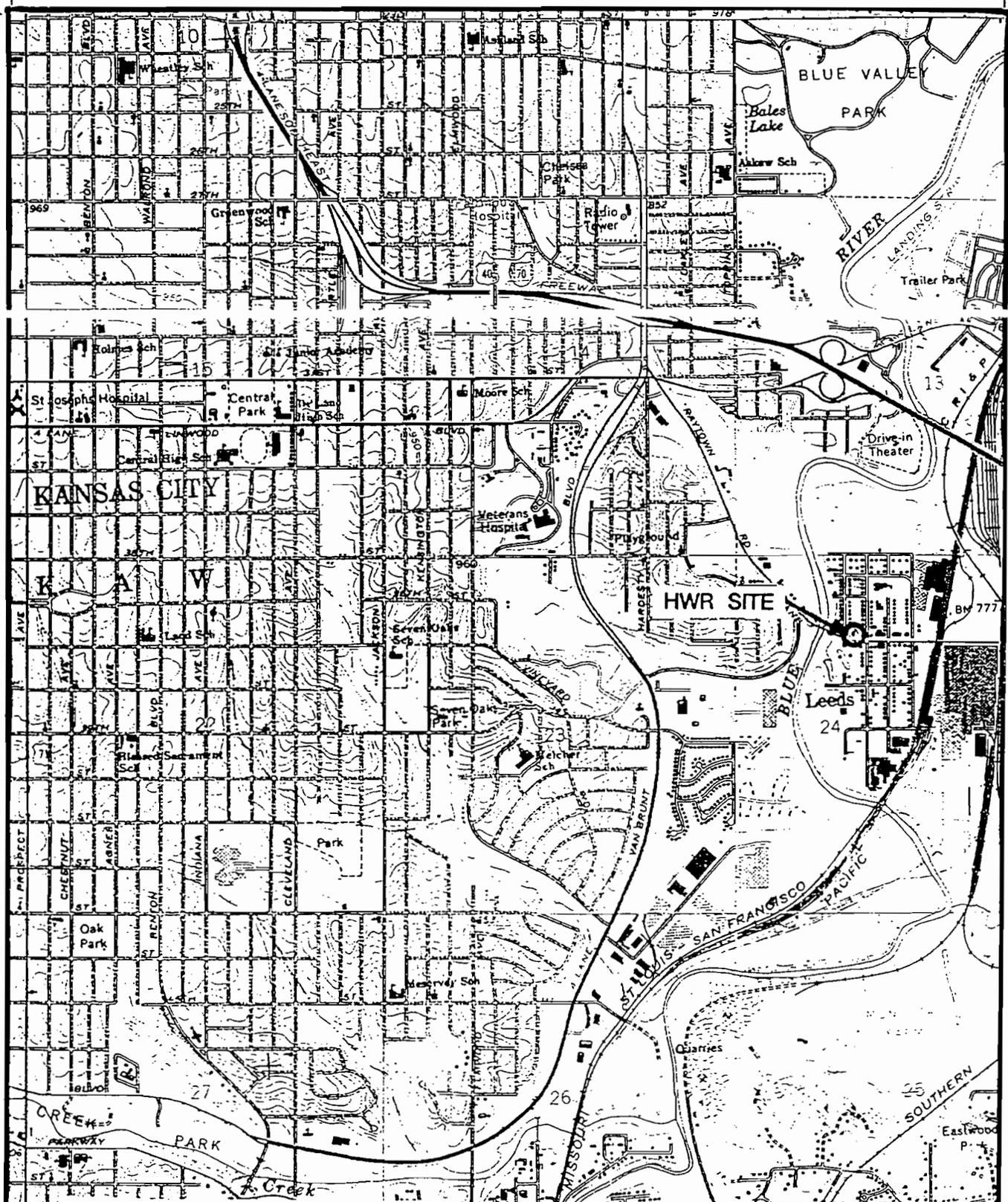
LEGAL DESCRIPTION:

SUBDIVISION OF LOTS 10 THROUGH 19 INCLUSIVE, TOGETHER WITH ALL OF THE VACATED ALLEY LYING SOUTH OF AND ADJACENT TO LOT 156, AND THE SOUTH ONE-HALF OF VACATED ALLEY LYING NORTH OF AND ADJACENT TO LOTS 10, 11 AND 12, RENICKS FIRST ADDITION TO LEEDS, A SUB DIVISION IN KANSAS CITY, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF, EXCEPT THAT PART IN STADIUM DRIVE (PLATTED 37<sup>TH</sup> STREET).

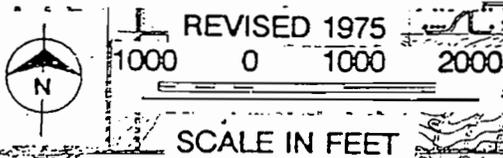
E ½ NW ¼ Sec 24 T49 R33 Jackson County

Outfall #1 SW corner of LOT 15 Renicks First Addition to Leeds

Outfall #2 NE Corner of LOT 10 Renicks First Addition to Leeds



Source: USGS 7.5 MINUTE SERIES  
 JACKSON COUNTY QUADRANGLE

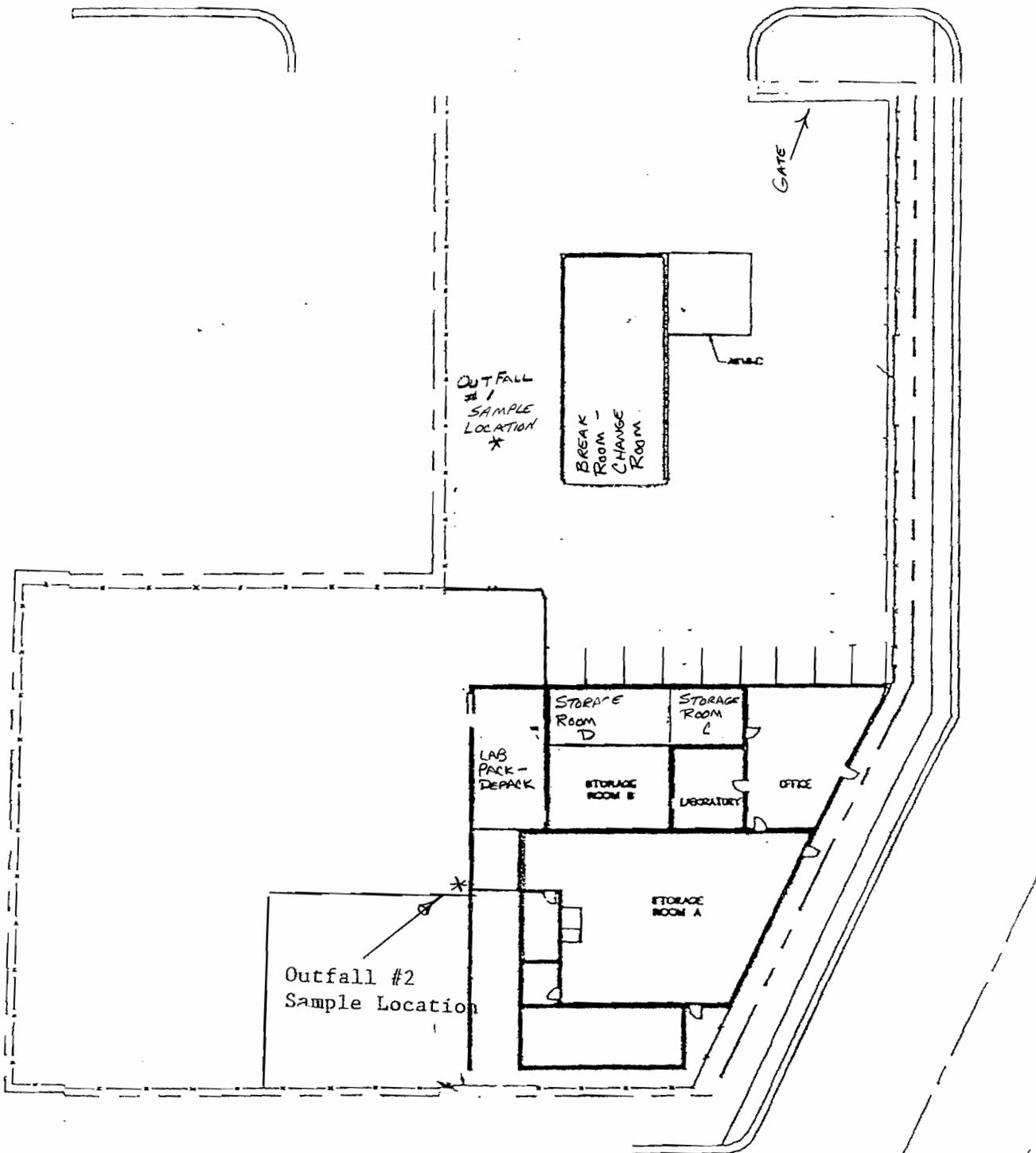


**Burns  
 &  
 McDonnell  
 Waste  
 Consultants,  
 Inc.**

Figure 1-1  
 HWR SITE LOCATION  
 GENERAL TOPOGRAPHIC MAP  
 HWRI, JACKSON COUNTY

07.07

FRISBOLT AVENUE



OUTFALL #1  
SAMPLE LOCATION \*

BREAK ROOM  
CHANGE ROOM

STORAGE ROOM D

STORAGE ROOM L

LAB PACK - REPACK

STORAGE ROOM B

LABORATORY

OFFICE

STORAGE ROOM A

Outfall #2  
Sample Location \*

BEACON AVENUE



Continued from the Front

**IV. Narrative Description of Pollutant Sources**

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
1	60,828 ft <sup>2</sup>	60,828 ft <sup>2</sup>			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water: method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

CURRENT OWNER/OPERATOR HAS HAD CONTROL OF SITE SINCE JUNE, 1991. PREVIOUS STORAGE MAY HAVE INCLUDED ANY OR ALL OF MATERIALS LISTED IN RCRA PERMIT. COPY OF LIST OF PERMITTED MATERIALS IS ATTACHED.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
001, 002	PARKING LOT AND SURROUNDING LAND HAS BEEN REGRADED TO REDUCE THE QUANTITY OF INCIDENT STORMWATER LEAVING THE FACILITY.	

**V. Nonstormwater Discharges**

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
TOM HAYES		

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

NO TESTING REQUIRED; ABSENCE OF ILLEGAL CONNECTIONS IS OBVIOUS.

**VI. Significant Leaks or Spills**

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

NO SIGNIFICANT SPILLS OF TOXIC OR HAZARDOUS POLLUTANTS HAS OCCURRED AT THE SITE IN THE LAST THREE YEARS.

Continued from Page 2

EPA ID Number (copy from Item 1 of Form 1)

**VII. Discharge Information**

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.  
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

Yes (list all such pollutants below)  No (go to Section IX)

CHLORINE, TOTAL RESIDUAL  
NITRATE - NITRITE  
NITROGEN, TOTAL KEDAH  
OIL AND GREASE  
SULFATE  
SULFIDE  
SULFITE

ALUMINUM, TOTAL  
BARIUM TOTAL

**VIII. 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 a receiving water in relation to your discharge within the last 3 years?

Yes (list all such pollutants below)  No (go to Section IX)

**IX. Contract Analysis Information**

Were any of the analyses reported in Item VII 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 Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

**X. Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (Type Or Print) <b>Tom Hayes General Manager</b>	B. Area Code and Phone No. <b>816 929 5884</b>
C. Signature <b>Tom Hayes</b>	D. Date Signed <b>4/25/2011</b>



Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
CHLORINE, TOTAL RESIDUAL						
NITRATE-NITRITE						
NITROGEN, TOTAL KjEDAHN						
OIL AND GREASE						
SULFATE						
SULFIDE						
SULFITE						
ALUMINUM, TOTAL						
BARIUM, TOTAL						
ARSENIC, TOTAL						
CADMIUM, TOTAL						
CHROMIUM, TOTAL						
LEAD, TOTAL						
MERCURY, TOTAL						
NICKEL, TOTAL						
SELENIUM, TOTAL						
SILVER, TOTAL						
CYANIDE, TOTAL						
PHENOLS, TOTAL						
ACRYLONITRILE						
BENZENE						
CARBON TETRACHLORIDE						
CHLORO BENZENE						
CHLOROFORM						
1,2-DICHLOROETHANE						
1,1-DICHLOROETHYLENE						
ETHYLBENZENE						
METHYLENE CHLORIDE						
TETRACHLOROETHYLENE						
TOLUENE						

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

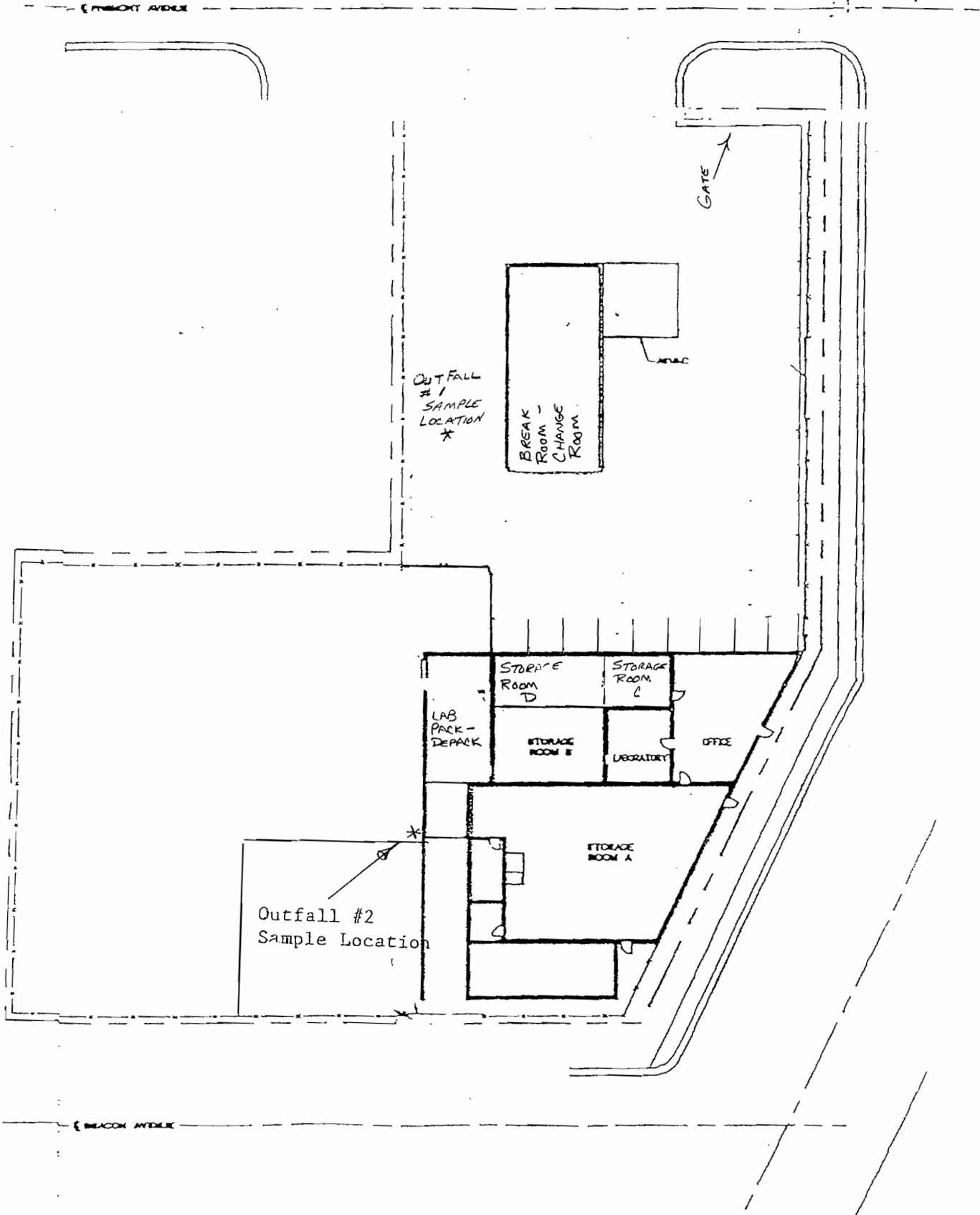
Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
1,1,1-TRICHLOROETHANE						
1,1,2-TRICHLOROETHANE						
1,1,1-CHLOROETHYLENE						
VINYL CHLORIDE						
4-NITROPHENOL						
PENTACHLOROPHENOL						
PHENOL						
2,4,6-TRICHLOROPHENOL						
BENZIDINE						
1,4-DICHLOROBENZENE						
DI-N-BUTYL PHTHALATE						
2,4-DINITROTOLUENE						
HEXACHLOROBENZENE						
HEXACHLOROBLITADIENE						
HEXACHLOROETHANE						
NAPHTHALENE						
NITROBENZENE						
CHLORDANE						
ENDRIN						
HEPTACHLOR						
TOXAPHENE						
ACETALDEHYDE						
ANILINE						
CARBON DISULFIDE						
CRESOL						
CYCLOHEXANE						
2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)						
DIMETHYLAMINE						
FORMALDEHYDE						
METHOXYCHLOR						

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.





EMBERT AVENUE

GATE

OUTFALL #1  
SAMPLE LOCATION \*

BREAK ROOM  
CHANGE ROOM

LAB PACK - DEPACK  
STORAGE ROOM D  
STORAGE ROOM C  
STORAGE ROOM B  
LABORATORY  
OFFICE

Outfall #2  
Sample Location \*

STORAGE ROOM A

BEACON AVENUE



Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

September 29, 2010

Mr. Tom Hayes  
Amerex (Waste Express)  
6300 Stadium Dr  
Kansas City, MO 64129

RE: Project: Water Run 10  
Pace Project No.: 6085605

Dear Mr. Hayes:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Trudy Gipson

trudy.gipson@pacelabs.com  
Project Manager

Enclosures

## REPORT OF LABORATORY ANALYSIS

Page 1 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## CERTIFICATIONS

Project: Water Run 10  
Pace Project No.: 6085605

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219  
A2LA Certification #: 2456.01  
Arkansas Certification #: 05-008-0  
Illinois Certification #: 001191  
Iowa Certification #: 118  
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055  
Nevada Certification #: KS000212008A  
Oklahoma Certification #: 9205/9935  
Texas Certification #: T104704407-08-TX  
Utah Certification #: 9135995665

---

## REPORT OF LABORATORY ANALYSIS

Page 2 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**SAMPLE SUMMARY**

Project: Water Run 10  
Pace Project No.: 6085605

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6085605001	OL142D	Water	09/15/10 13:00	09/16/10 13:50
6085605002	OL143BR	Water	09/15/10 13:00	09/16/10 13:50
6085605003	TRIP BLANK 1	Water	09/15/10 00:00	09/16/10 13:50
6085605004	TRIP BLANK 2	Water	09/15/10 00:00	09/16/10 13:50

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**SAMPLE ANALYTE COUNT**

Project: Water Run 10  
Pace Project No.: 6085605

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6085605001	OL142D	EPA 625	SRM	60
		EPA 624 Low	HMW	39
		EPA 1664A	SRM1	1
		EPA 1664A	SRM1	1
		SM 2540F	EKN	1
		SM 4500-H+B	AJM	1
		EPA 410.4	SRM1	1
6085605002	OL143BR	EPA 625	SRM	60
		EPA 624 Low	HMW	39
		EPA 1664A	SRM1	1
		EPA 1664A	SRM1	1
		SM 2540F	EKN	1
		SM 4500-H+B	AJM	1
		EPA 410.4	SRM1	1

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: Water Run 10  
Pace Project No.: 6085605

Sample: OL142D	Lab ID: 6085605001	Collected: 09/15/10 13:00	Received: 09/16/10 13:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>625 MSSV</b>								
Analytical Method: EPA 625 Preparation Method: EPA 625								
Acenaphthene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	83-32-9	
Acenaphthylene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	208-96-8	
Anthracene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	120-12-7	
Benzidine	ND ug/L		50.0	1	09/21/10 00:00	09/27/10 21:05	92-87-5	
Benzo(a)anthracene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	56-55-3	
Benzo(a)pyrene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	50-32-8	
Benzo(b)fluoranthene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	191-24-2	
Benzo(k)fluoranthene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	207-08-9	
4-Bromophenylphenyl ether	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	101-55-3	
Butylbenzylphthalate	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	85-68-7	
4-Chloro-3-methylphenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	59-50-7	
bis(2-Chloroethoxy)methane	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	111-91-1	
bis(2-Chloroethyl) ether	ND ug/L		6.0	1	09/21/10 00:00	09/27/10 21:05	111-44-4	
bis(2-Chloroisopropyl) ether	ND ug/L		6.0	1	09/21/10 00:00	09/27/10 21:05	39638-32-9	
2-Chloronaphthalene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	91-58-7	
2-Chlorophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	95-57-8	
4-Chlorophenylphenyl ether	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	7005-72-3	
Chrysene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	53-70-3	
3,3'-Dichlorobenzidine	ND ug/L		20.0	1	09/21/10 00:00	09/27/10 21:05	91-94-1	
2,4-Dichlorophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	120-83-2	
Diethylphthalate	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	84-66-2	
2,4-Dimethylphenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	105-67-9	
Dimethylphthalate	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	131-11-3	
Di-n-butylphthalate	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/L		25.0	1	09/21/10 00:00	09/27/10 21:05	534-52-1	
2,4-Dinitrophenol	ND ug/L		50.0	1	09/21/10 00:00	09/27/10 21:05	51-28-5	
2,4-Dinitrotoluene	ND ug/L		6.0	1	09/21/10 00:00	09/27/10 21:05	121-14-2	
2,6-Dinitrotoluene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	606-20-2	
Di-n-octylphthalate	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	117-84-0	
1,2-Diphenylhydrazine	ND ug/L		8.0	1	09/21/10 00:00	09/27/10 21:05	122-66-7	
bis(2-Ethylhexyl)phthalate	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	117-81-7	
Fluoranthene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	206-44-0	
Fluorene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	86-73-7	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	87-68-3	
Hexachlorobenzene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	118-74-1	
Hexachlorocyclopentadiene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	77-47-4	
Hexachloroethane	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	67-72-1	
Indeno(1,2,3-cd)pyrene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	193-39-5	
Isophorone	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	78-59-1	
Naphthalene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	91-20-3	
Nitrobenzene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	98-95-3	
2-Nitrophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	88-75-5	
4-Nitrophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	100-02-7	
N-Nitrosodimethylamine	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	62-75-9	
N-Nitroso-di-n-propylamine	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	621-64-7	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 5 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: Water Run 10  
Pace Project No.: 6085605

Sample: OL142D Lab ID: 6085605001 Collected: 09/15/10 13:00 Received: 09/16/10 13:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>625 MSSV</b>		Analytical Method: EPA 625 Preparation Method: EPA 625						
N-Nitrosodiphenylamine	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	86-30-6	
Pentachlorophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	87-86-5	
Phenanthrene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	85-01-8	
Phenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	108-95-2	
Pyrene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	129-00-0	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	120-82-1	
2,4,6-Trichlorophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:05	88-06-2	
Nitrobenzene-d5 (S)	65 %		47-125	1	09/21/10 00:00	09/27/10 21:05	4165-60-0	
2-Fluorobiphenyl (S)	61 %		49-125	1	09/21/10 00:00	09/27/10 21:05	321-60-8	
Terphenyl-d14 (S)	78 %		48-125	1	09/21/10 00:00	09/27/10 21:05	1718-51-0	
Phenol-d6 (S)	26 %		20-125	1	09/21/10 00:00	09/27/10 21:05	13127-88-3	
2-Fluorophenol (S)	34 %		20-125	1	09/21/10 00:00	09/27/10 21:05	367-12-4	
2,4,6-Tribromophenol (S)	85 %		48-125	1	09/21/10 00:00	09/27/10 21:05	118-79-6	

**624 Volatile Organics** Analytical Method: EPA 624 Low

Acrolein	ND ug/L		100	1		09/22/10 16:29	107-02-8	
Acrylonitrile	ND ug/L		20.0	1		09/22/10 16:29	107-13-1	
Benzene	ND ug/L		1.0	1		09/22/10 16:29	71-43-2	
Bromodichloromethane	ND ug/L		1.0	1		09/22/10 16:29	75-27-4	
Bromoform	ND ug/L		1.0	1		09/22/10 16:29	75-25-2	
Bromomethane	ND ug/L		1.0	1		09/22/10 16:29	74-83-9	
Carbon tetrachloride	ND ug/L		1.0	1		09/22/10 16:29	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		09/22/10 16:29	108-90-7	
Chloroethane	ND ug/L		1.0	1		09/22/10 16:29	75-00-3	
2-Chloroethylvinyl ether	ND ug/L		10.0	1		09/22/10 16:29	110-75-8	
Chloroform	ND ug/L		1.0	1		09/22/10 16:29	67-66-3	
Chloromethane	ND ug/L		1.0	1		09/22/10 16:29	74-87-3	
Dibromochloromethane	ND ug/L		1.0	1		09/22/10 16:29	124-48-1	
1,2-Dichlorobenzene	ND ug/L		1.0	1		09/22/10 16:29	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		09/22/10 16:29	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		09/22/10 16:29	106-46-7	
1,1-Dichloroethane	ND ug/L		1.0	1		09/22/10 16:29	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		09/22/10 16:29	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		09/22/10 16:29	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		09/22/10 16:29	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		09/22/10 16:29	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		09/22/10 16:29	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		09/22/10 16:29	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		09/22/10 16:29	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		09/22/10 16:29	100-41-4	
Methylene chloride	ND ug/L		1.0	1		09/22/10 16:29	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		09/22/10 16:29	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		09/22/10 16:29	127-18-4	
Toluene	ND ug/L		1.0	1		09/22/10 16:29	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		09/22/10 16:29	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		09/22/10 16:29	79-00-5	
Trichloroethene	ND ug/L		1.0	1		09/22/10 16:29	79-01-6	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 6 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: Water Run 10  
Pace Project No.: 6085605

Sample: OL142D	Lab ID: 6085605001	Collected: 09/15/10 13:00	Received: 09/16/10 13:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>624 Volatile Organics</b>		Analytical Method: EPA 624 Low						
Trichlorofluoromethane	ND ug/L		1.0	1		09/22/10 16:29	75-69-4	
Vinyl chloride	ND ug/L		1.0	1		09/22/10 16:29	75-01-4	
Dibromofluoromethane (S)	97 %		80-120	1		09/22/10 16:29	1868-53-7	
4-Bromofluorobenzene (S)	107 %		80-120	1		09/22/10 16:29	460-00-4	
Toluene-d8 (S)	99 %		80-120	1		09/22/10 16:29	2037-26-5	
1,2-Dichloroethane-d4 (S)	98 %		80-120	1		09/22/10 16:29	17060-07-0	
Preservation pH	7.0		1.0	1		09/22/10 16:29		
<b>HEM, Oil and Grease</b>		Analytical Method: EPA 1664A						
Oil and Grease	ND mg/L		5.0	1		09/24/10 10:31		
<b>1664 SGT-HEM, TPH</b>		Analytical Method: EPA 1664A						
Total Petroleum Hydrocarbons	ND mg/L		5.0	1		09/28/10 07:51		
<b>2540F Total Settleable Solids</b>		Analytical Method: SM 2540F						
Total Settleable Solids	ND mL/L/hr		0.20	1		09/17/10 12:26		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH at 25 Degrees C	7.4 Std. Units		0.10	1		09/16/10 20:30		H6
<b>410.4 COD</b>		Analytical Method: EPA 410.4						
Chemical Oxygen Demand	ND mg/L		10.0	1		09/21/10 16:26		

### ANALYTICAL RESULTS

Project: Water Run 10  
Pace Project No.: 6085605

Sample: OL143BR Lab ID: 6085605002 Collected: 09/15/10 13:00 Received: 09/16/10 13:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>625 MSSV</b>		Analytical Method: EPA 625 Preparation Method: EPA 625						
Acenaphthene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	83-32-9	
Acenaphthylene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	208-96-8	
Anthracene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	120-12-7	
Benzidine	ND	ug/L	50.0	1	09/21/10 00:00	09/27/10 21:43	92-87-5	
Benzo(a)anthracene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	56-55-3	
Benzo(a)pyrene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	207-08-9	
4-Bromophenylphenyl ether	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	101-55-3	
Butylbenzylphthalate	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	59-50-7	
bis(2-Chloroethoxy)methane	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	6.0	1	09/21/10 00:00	09/27/10 21:43	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	6.0	1	09/21/10 00:00	09/27/10 21:43	39638-32-9	
2-Chloronaphthalene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	91-58-7	
2-Chlorophenol	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	7005-72-3	
Chrysene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	53-70-3	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	1	09/21/10 00:00	09/27/10 21:43	91-94-1	
2,4-Dichlorophenol	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	120-83-2	
Diethylphthalate	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	84-66-2	
2,4-Dimethylphenol	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	105-67-9	
Dimethylphthalate	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	131-11-3	
Di-n-butylphthalate	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	25.0	1	09/21/10 00:00	09/27/10 21:43	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	1	09/21/10 00:00	09/27/10 21:43	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	6.0	1	09/21/10 00:00	09/27/10 21:43	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	606-20-2	
Di-n-octylphthalate	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	8.0	1	09/21/10 00:00	09/27/10 21:43	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	117-81-7	
Fluoranthene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	206-44-0	
Fluorene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	87-68-3	
Hexachlorobenzene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	77-47-4	
Hexachloroethane	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	193-39-5	
Isophorone	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	78-59-1	
Naphthalene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	91-20-3	
Nitrobenzene	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	98-95-3	
2-Nitrophenol	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	88-75-5	
4-Nitrophenol	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	5.0	1	09/21/10 00:00	09/27/10 21:43	621-64-7	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 8 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: Water Run 10  
Pace Project No.: 6085605

Sample: OL143BR	Lab ID: 6085605002	Collected: 09/15/10 13:00	Received: 09/16/10 13:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>625 MSSV</b>		Analytical Method: EPA 625 Preparation Method: EPA 625						
N-Nitrosodiphenylamine	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:43	86-30-6	
Pentachlorophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:43	87-86-5	
Phenanthrene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:43	85-01-8	
Phenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:43	108-95-2	
Pyrene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:43	129-00-0	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:43	120-82-1	
2,4,6-Trichlorophenol	ND ug/L		5.0	1	09/21/10 00:00	09/27/10 21:43	88-06-2	
Nitrobenzene-d5 (S)	59 %		47-125	1	09/21/10 00:00	09/27/10 21:43	4165-60-0	
2-Fluorobiphenyl (S)	68 %		49-125	1	09/21/10 00:00	09/27/10 21:43	321-60-8	
Terphenyl-d14 (S)	94 %		48-125	1	09/21/10 00:00	09/27/10 21:43	1718-51-0	
Phenol-d6 (S)	25 %		20-125	1	09/21/10 00:00	09/27/10 21:43	13127-88-3	
2-Fluorophenol (S)	33 %		20-125	1	09/21/10 00:00	09/27/10 21:43	367-12-4	
2,4,6-Tribromophenol (S)	94 %		48-125	1	09/21/10 00:00	09/27/10 21:43	118-79-6	
<b>624 Volatile Organics</b>		Analytical Method: EPA 624 Low						
Acrolein	ND ug/L		100	1		09/22/10 16:50	107-02-8	
Acrylonitrile	ND ug/L		20.0	1		09/22/10 16:50	107-13-1	
Benzene	ND ug/L		1.0	1		09/22/10 16:50	71-43-2	
Bromodichloromethane	ND ug/L		1.0	1		09/22/10 16:50	75-27-4	
Bromoform	ND ug/L		1.0	1		09/22/10 16:50	75-25-2	
Bromomethane	ND ug/L		1.0	1		09/22/10 16:50	74-83-9	
Carbon tetrachloride	ND ug/L		1.0	1		09/22/10 16:50	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		09/22/10 16:50	108-90-7	
Chloroethane	ND ug/L		1.0	1		09/22/10 16:50	75-00-3	
2-Chloroethylvinyl ether	ND ug/L		10.0	1		09/22/10 16:50	110-75-8	
Chloroform	ND ug/L		1.0	1		09/22/10 16:50	67-66-3	
Chloromethane	ND ug/L		1.0	1		09/22/10 16:50	74-87-3	
Dibromochloromethane	ND ug/L		1.0	1		09/22/10 16:50	124-48-1	
1,2-Dichlorobenzene	ND ug/L		1.0	1		09/22/10 16:50	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		09/22/10 16:50	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		09/22/10 16:50	106-46-7	
1,1-Dichloroethane	ND ug/L		1.0	1		09/22/10 16:50	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		09/22/10 16:50	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		09/22/10 16:50	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		09/22/10 16:50	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		09/22/10 16:50	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		09/22/10 16:50	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		09/22/10 16:50	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		09/22/10 16:50	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		09/22/10 16:50	100-41-4	
Methylene chloride	ND ug/L		1.0	1		09/22/10 16:50	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		09/22/10 16:50	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		09/22/10 16:50	127-18-4	
Toluene	ND ug/L		1.0	1		09/22/10 16:50	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		09/22/10 16:50	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		09/22/10 16:50	79-00-5	
Trichloroethene	ND ug/L		1.0	1		09/22/10 16:50	79-01-6	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 9 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: Water Run 10  
Pace Project No.: 6085605

Sample: OL143BR	Lab ID: 6085605002	Collected: 09/15/10 13:00	Received: 09/16/10 13:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>624 Volatile Organics</b>		Analytical Method: EPA 624 Low						
Trichlorofluoromethane	ND ug/L		1.0	1		09/22/10 16:50	75-69-4	
Vinyl chloride	ND ug/L		1.0	1		09/22/10 16:50	75-01-4	
Dibromofluoromethane (S)	98 %		80-120	1		09/22/10 16:50	1868-53-7	
4-Bromofluorobenzene (S)	107 %		80-120	1		09/22/10 16:50	460-00-4	
Toluene-d8 (S)	97 %		80-120	1		09/22/10 16:50	2037-26-5	
1,2-Dichloroethane-d4 (S)	98 %		80-120	1		09/22/10 16:50	17060-07-0	
Preservation pH	7.0		1.0	1		09/22/10 16:50		
<b>HEM, Oil and Grease</b>		Analytical Method: EPA 1664A						
Oil and Grease	ND mg/L		5.0	1		09/24/10 10:31		
<b>1664 SGT-HEM, TPH</b>		Analytical Method: EPA 1664A						
Total Petroleum Hydrocarbons	ND mg/L		5.0	1		09/28/10 07:51		
<b>2540F Total Settleable Solids</b>		Analytical Method: SM 2540F						
Total Settleable Solids	ND mL/L/hr		0.20	1		09/17/10 12:26		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH at 25 Degrees C	7.1 Std. Units		0.10	1		09/16/10 20:30		H6
<b>410.4 COD</b>		Analytical Method: EPA 410.4						
Chemical Oxygen Demand	ND mg/L		10.0	1		09/21/10 16:27		

### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

QC Batch: OEXT/25598 Analysis Method: EPA 625  
QC Batch Method: EPA 625 Analysis Description: 625 MSS  
Associated Lab Samples: 6085605001, 6085605002

METHOD BLANK: 702614 Matrix: Water  
Associated Lab Samples: 6085605001, 6085605002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	5.0	09/24/10 19:32	
1,2-Diphenylhydrazine	ug/L	ND	8.0	09/24/10 19:32	
2,4,6-Trichlorophenol	ug/L	ND	5.0	09/24/10 19:32	
2,4-Dichlorophenol	ug/L	ND	5.0	09/24/10 19:32	
2,4-Dimethylphenol	ug/L	ND	5.0	09/24/10 19:32	
2,4-Dinitrophenol	ug/L	ND	50.0	09/24/10 19:32	
2,4-Dinitrotoluene	ug/L	ND	6.0	09/24/10 19:32	
2,6-Dinitrotoluene	ug/L	ND	5.0	09/24/10 19:32	
2-Chloronaphthalene	ug/L	ND	5.0	09/24/10 19:32	
2-Chlorophenol	ug/L	ND	5.0	09/24/10 19:32	
2-Nitrophenol	ug/L	ND	5.0	09/24/10 19:32	
3,3'-Dichlorobenzidine	ug/L	ND	20.0	09/24/10 19:32	
4,6-Dinitro-2-methylphenol	ug/L	ND	25.0	09/24/10 19:32	
4-Bromophenylphenyl ether	ug/L	ND	5.0	09/24/10 19:32	
4-Chloro-3-methylphenol	ug/L	ND	5.0	09/24/10 19:32	
4-Chlorophenylphenyl ether	ug/L	ND	5.0	09/24/10 19:32	
4-Nitrophenol	ug/L	ND	5.0	09/24/10 19:32	
Acenaphthene	ug/L	ND	5.0	09/24/10 19:32	
Acenaphthylene	ug/L	ND	5.0	09/24/10 19:32	
Anthracene	ug/L	ND	5.0	09/24/10 19:32	
Benidine	ug/L	ND	50.0	09/24/10 19:32	
Benzo(a)anthracene	ug/L	ND	5.0	09/24/10 19:32	
Benzo(a)pyrene	ug/L	ND	5.0	09/24/10 19:32	
Benzo(b)fluoranthene	ug/L	ND	5.0	09/24/10 19:32	
Benzo(g,h,i)perylene	ug/L	ND	5.0	09/24/10 19:32	
Benzo(k)fluoranthene	ug/L	ND	5.0	09/24/10 19:32	
bis(2-Chloroethoxy)methane	ug/L	ND	5.0	09/24/10 19:32	
bis(2-Chloroethyl) ether	ug/L	ND	6.0	09/24/10 19:32	
bis(2-Chloroisopropyl) ether	ug/L	ND	6.0	09/24/10 19:32	
bis(2-Ethylhexyl)phthalate	ug/L	ND	5.0	09/24/10 19:32	
Butylbenzylphthalate	ug/L	ND	5.0	09/24/10 19:32	
Chrysene	ug/L	ND	5.0	09/24/10 19:32	
Di-n-butylphthalate	ug/L	ND	5.0	09/24/10 19:32	
Di-n-octylphthalate	ug/L	ND	5.0	09/24/10 19:32	
Dibenz(a,h)anthracene	ug/L	ND	5.0	09/24/10 19:32	
Diethylphthalate	ug/L	ND	5.0	09/24/10 19:32	
Dimethylphthalate	ug/L	ND	5.0	09/24/10 19:32	
Fluoranthene	ug/L	ND	5.0	09/24/10 19:32	
Fluorene	ug/L	ND	5.0	09/24/10 19:32	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	09/24/10 19:32	
Hexachlorobenzene	ug/L	ND	5.0	09/24/10 19:32	
Hexachlorocyclopentadiene	ug/L	ND	5.0	09/24/10 19:32	
Hexachloroethane	ug/L	ND	5.0	09/24/10 19:32	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 11 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

METHOD BLANK: 702614 Matrix: Water

Associated Lab Samples: 6085605001, 6085605002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Indeno(1,2,3-cd)pyrene	ug/L	ND	5.0	09/24/10 19:32	
Isophorone	ug/L	ND	5.0	09/24/10 19:32	
N-Nitroso-di-n-propylamine	ug/L	ND	5.0	09/24/10 19:32	
N-Nitrosodimethylamine	ug/L	ND	5.0	09/24/10 19:32	
N-Nitrosodiphenylamine	ug/L	ND	5.0	09/24/10 19:32	
Naphthalene	ug/L	ND	5.0	09/24/10 19:32	
Nitrobenzene	ug/L	ND	5.0	09/24/10 19:32	
Pentachlorophenol	ug/L	ND	5.0	09/24/10 19:32	
Phenanthrene	ug/L	ND	5.0	09/24/10 19:32	
Phenol	ug/L	ND	5.0	09/24/10 19:32	
Pyrene	ug/L	ND	5.0	09/24/10 19:32	
2,4,6-Tribromophenol (S)	%	85	48-125	09/24/10 19:32	
2-Fluorobiphenyl (S)	%	70	49-125	09/24/10 19:32	
2-Fluorophenol (S)	%	41	20-125	09/24/10 19:32	
Nitrobenzene-d5 (S)	%	63	47-125	09/24/10 19:32	
Phenol-d6 (S)	%	28	20-125	09/24/10 19:32	
Terphenyl-d14 (S)	%	63	48-125	09/24/10 19:32	

LABORATORY CONTROL SAMPLE: 702615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	39.4	79	44-142	
1,2-Diphenylhydrazine	ug/L	50	35.2	70	10-150	
2,4,6-Trichlorophenol	ug/L	50	38.8	78	37-144	
2,4-Dichlorophenol	ug/L	50	38.2	76	39-135	
2,4-Dimethylphenol	ug/L	50	33.2	66	32-119	
2,4-Dinitrophenol	ug/L	50	35.4J	71	10-191	
2,4-Dinitrotoluene	ug/L	50	41.1	82	39-139	
2,6-Dinitrotoluene	ug/L	50	38.7	77	50-158	
2-Chloronaphthalene	ug/L	50	38.0	76	60-118	
2-Chlorophenol	ug/L	50	31.9	64	23-134	
2-Nitrophenol	ug/L	50	38.4	77	29-182	
3,3'-Dichlorobenzidine	ug/L	50	48.9	98	10-150	
4,6-Dinitro-2-methylphenol	ug/L	50	40.9	82	10-181	
4-Bromophenylphenyl ether	ug/L	50	41.5	83	53-127	
4-Chloro-3-methylphenol	ug/L	50	36.9	74	22-147	
4-Chlorophenylphenyl ether	ug/L	50	41.8	84	25-158	
4-Nitrophenol	ug/L	50	32.6	65	10-132	
Acenaphthene	ug/L	50	37.4	75	47-145	
Acenaphthylene	ug/L	50	37.6	75	33-145	
Anthracene	ug/L	50	39.4	79	27-133	
Benzidine	ug/L	50	14.3J	29	1-150	
Benzo(a)anthracene	ug/L	50	39.2	78	33-143	
Benzo(a)pyrene	ug/L	50	40.3	81	17-163	
Benzo(b)fluoranthene	ug/L	50	39.2	78	24-159	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 12 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

LABORATORY CONTROL SAMPLE: 702615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(g,h,i)perylene	ug/L	50	41.5	83	10-150	
Benzo(k)fluoranthene	ug/L	50	42.0	84	11-162	
bis(2-Chloroethoxy)methane	ug/L	50	34.5	69	33-184	
bis(2-Chloroethyl) ether	ug/L	50	33.3	67	12-158	
bis(2-Chloroisopropyl) ether	ug/L	50	30.6	61	36-166	
bis(2-Ethylhexyl)phthalate	ug/L	50	39.8	80	8-158	
Butylbenzylphthalate	ug/L	50	37.8	76	10-152	
Chrysene	ug/L	50	39.1	78	17-168	
Di-n-butylphthalate	ug/L	50	39.6	79	1-118	
Di-n-octylphthalate	ug/L	50	38.2	76	4-146	
Dibenz(a,h)anthracene	ug/L	50	41.5	83	10-150	
Diethylphthalate	ug/L	50	40.0	80	10-114	
Dimethylphthalate	ug/L	50	40.0	80	10-112	
Fluoranthene	ug/L	50	40.6	81	26-137	
Fluorene	ug/L	50	40.7	81	59-121	
Hexachloro-1,3-butadiene	ug/L	50	41.0	82	24-116	
Hexachlorobenzene	ug/L	50	41.4	83	10-152	
Hexachlorocyclopentadiene	ug/L	100	81.1	81	1-110	
Hexachloroethane	ug/L	50	36.3	73	40-113	
Indeno(1,2,3-cd)pyrene	ug/L	50	41.3	83	10-171	
Isophorone	ug/L	50	36.2	72	21-150	
N-Nitroso-di-n-propylamine	ug/L	50	33.6	67	10-150	
N-Nitrosodimethylamine	ug/L	50	29.7	59	10-150	
N-Nitrosodiphenylamine	ug/L	50	40.7	81	10-150	
Naphthalene	ug/L	50	36.7	73	21-133	
Nitrobenzene	ug/L	50	35.2	70	35-180	
Pentachlorophenol	ug/L	50	44.5	89	14-176	
Phenanthrene	ug/L	50	39.0	78	54-120	
Phenol	ug/L	50	13.4	27	5-112	
Pyrene	ug/L	50	38.7	77	52-115	
2,4,6-Tribromophenol (S)	%			96	48-125	
2-Fluorobiphenyl (S)	%			75	49-125	
2-Fluorophenol (S)	%			41	20-125	
Nitrobenzene-d5 (S)	%			70	47-125	
Phenol-d6 (S)	%			24	20-125	
Terphenyl-d14 (S)	%			80	48-125	

MATRIX SPIKE SAMPLE: 702616

Parameter	Units	6085605001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	50	37.2	74	44-142	
1,2-Diphenylhydrazine	ug/L	ND	50	38.1	76	10-150	
2,4,6-Trichlorophenol	ug/L	ND	50	38.9	78	37-144	
2,4-Dichlorophenol	ug/L	ND	50	37.7	75	39-135	
2,4-Dimethylphenol	ug/L	ND	50	35.4	71	32-119	
2,4-Dinitrophenol	ug/L	ND	50	23.2J	46	10-191	
2,4-Dinitrotoluene	ug/L	ND	50	40.2	80	39-139	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 13 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

MATRIX SPIKE SAMPLE:	702616						
Parameter	Units	6085605001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,6-Dinitrotoluene	ug/L	ND	50	37.5	75	50-158	
2-Chloronaphthalene	ug/L	ND	50	36.6	73	60-118	
2-Chlorophenol	ug/L	ND	50	32.8	66	23-134	
2-Nitrophenol	ug/L	ND	50	37.6	75	29-182	
3,3'-Dichlorobenzidine	ug/L	ND	50	44.7	89	10-150	
4,6-Dinitro-2-methylphenol	ug/L	ND	50	31.2	62	10-181	
4-Bromophenylphenyl ether	ug/L	ND	50	42.1	84	53-127	
4-Chloro-3-methylphenol	ug/L	ND	50	38.6	77	22-147	
4-Chlorophenylphenyl ether	ug/L	ND	50	40.9	82	25-158	
4-Nitrophenol	ug/L	ND	50	29.2	58	10-132	
Acenaphthene	ug/L	ND	50	37.3	75	47-145	
Acenaphthylene	ug/L	ND	50	36.4	73	33-145	
Anthracene	ug/L	ND	50	39.4	79	27-133	
Benzidine	ug/L	ND	50	2.7J	5	1-150	
Benzo(a)anthracene	ug/L	ND	50	40.4	81	33-143	
Benzo(a)pyrene	ug/L	ND	50	38.7	77	17-163	
Benzo(b)fluoranthene	ug/L	ND	50	38.0	76	24-159	
Benzo(g,h,i)perylene	ug/L	ND	50	37.8	76	10-150	
Benzo(k)fluoranthene	ug/L	ND	50	39.8	80	11-162	
bis(2-Chloroethoxy)methane	ug/L	ND	50	34.9	70	33-184	
bis(2-Chloroethyl) ether	ug/L	ND	50	33.4	67	12-158	
bis(2-Chloroisopropyl) ether	ug/L	ND	50	31.6	63	36-166	
bis(2-Ethylhexyl)phthalate	ug/L	ND	50	43.7	84	8-158	
Butylbenzylphthalate	ug/L	ND	50	42.8	86	10-152	
Chrysene	ug/L	ND	50	39.7	79	17-168	
Di-n-butylphthalate	ug/L	ND	50	40.0	80	1-118	
Di-n-octylphthalate	ug/L	ND	50	42.1	84	4-146	
Dibenz(a,h)anthracene	ug/L	ND	50	37.9	76	10-150	
Diethylphthalate	ug/L	ND	50	40.6	81	10-114	
Dimethylphthalate	ug/L	ND	50	39.2	78	10-112	
Fluoranthene	ug/L	ND	50	37.6	75	26-137	
Fluorene	ug/L	ND	50	39.2	78	59-121	
Hexachloro-1,3-butadiene	ug/L	ND	50	37.6	75	24-116	
Hexachlorobenzene	ug/L	ND	50	39.6	79	10-152	
Hexachlorocyclopentadiene	ug/L	ND	100	67.5	68	1-110	
Hexachloroethane	ug/L	ND	50	34.5	69	40-113	
Indeno(1,2,3-cd)pyrene	ug/L	ND	50	38.5	77	10-171	
Isophorone	ug/L	ND	50	35.4	71	21-150	
N-Nitroso-di-n-propylamine	ug/L	ND	50	32.7	65	10-150	
N-Nitrosodimethylamine	ug/L	ND	50	25.1	50	10-150	
N-Nitrosodiphenylamine	ug/L	ND	50	40.4	81	10-150	
Naphthalene	ug/L	ND	50	36.7	73	21-133	
Nitrobenzene	ug/L	ND	50	34.5	69	35-180	
Pentachlorophenol	ug/L	ND	50	35.6	71	14-176	
Phenanthrene	ug/L	ND	50	38.8	78	54-120	
Phenol	ug/L	ND	50	15.0	30	5-112	
Pyrene	ug/L	ND	50	47.0	94	52-115	
2,4,6-Tribromophenol (S)	%				89	48-125	

### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

MATRIX SPIKE SAMPLE:		702616					
Parameter	Units	6085605001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%				74	49-125	
2-Fluorophenol (S)	%				39	20-125	
Nitrobenzene-d5 (S)	%				72	47-125	
Phenol-d6 (S)	%				26	20-125	
Terphenyl-d14 (S)	%				92	48-125	

### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

QC Batch: MSV/31874      Analysis Method: EPA 624 Low  
QC Batch Method: EPA 624 Low      Analysis Description: 624 MSV  
Associated Lab Samples: 6085605001, 6085605002

METHOD BLANK: 703486      Matrix: Water

Associated Lab Samples: 6085605001, 6085605002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	09/22/10 14:41	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	09/22/10 14:41	
1,1,2-Trichloroethane	ug/L	ND	1.0	09/22/10 14:41	
1,1-Dichloroethane	ug/L	ND	1.0	09/22/10 14:41	
1,1-Dichloroethene	ug/L	ND	1.0	09/22/10 14:41	
1,2-Dichlorobenzene	ug/L	ND	1.0	09/22/10 14:41	
1,2-Dichloroethane	ug/L	ND	1.0	09/22/10 14:41	
1,2-Dichloropropane	ug/L	ND	1.0	09/22/10 14:41	
1,3-Dichlorobenzene	ug/L	ND	1.0	09/22/10 14:41	
1,4-Dichlorobenzene	ug/L	ND	1.0	09/22/10 14:41	
2-Chloroethylvinyl ether	ug/L	ND	10.0	09/22/10 14:41	
Acrolein	ug/L	ND	100	09/22/10 14:41	
Acrylonitrile	ug/L	ND	20.0	09/22/10 14:41	
Benzene	ug/L	ND	1.0	09/22/10 14:41	
Bromodichloromethane	ug/L	ND	1.0	09/22/10 14:41	
Bromoform	ug/L	ND	1.0	09/22/10 14:41	
Bromomethane	ug/L	ND	1.0	09/22/10 14:41	
Carbon tetrachloride	ug/L	ND	1.0	09/22/10 14:41	
Chlorobenzene	ug/L	ND	1.0	09/22/10 14:41	
Chloroethane	ug/L	ND	1.0	09/22/10 14:41	
Chloroform	ug/L	ND	1.0	09/22/10 14:41	
Chloromethane	ug/L	ND	1.0	09/22/10 14:41	
cis-1,2-Dichloroethene	ug/L	ND	1.0	09/22/10 14:41	
cis-1,3-Dichloropropene	ug/L	ND	1.0	09/22/10 14:41	
Dibromochloromethane	ug/L	ND	1.0	09/22/10 14:41	
Ethylbenzene	ug/L	ND	1.0	09/22/10 14:41	
Methylene chloride	ug/L	ND	1.0	09/22/10 14:41	
Tetrachloroethene	ug/L	ND	1.0	09/22/10 14:41	
Toluene	ug/L	ND	1.0	09/22/10 14:41	
trans-1,2-Dichloroethene	ug/L	ND	1.0	09/22/10 14:41	
trans-1,3-Dichloropropene	ug/L	ND	1.0	09/22/10 14:41	
Trichloroethene	ug/L	ND	1.0	09/22/10 14:41	
Trichlorofluoromethane	ug/L	ND	1.0	09/22/10 14:41	
Vinyl chloride	ug/L	ND	1.0	09/22/10 14:41	
1,2-Dichloroethane-d4 (S)	%	97	80-120	09/22/10 14:41	
4-Bromofluorobenzene (S)	%	108	80-120	09/22/10 14:41	
Dibromofluoromethane (S)	%	93	80-120	09/22/10 14:41	
Toluene-d8 (S)	%	96	80-120	09/22/10 14:41	

### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

LABORATORY CONTROL SAMPLE: 703487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.9	104	71-122	
1,1,2,2-Tetrachloroethane	ug/L	20	18.5	92	62-126	
1,1,2-Trichloroethane	ug/L	20	19.0	95	77-131	
1,1-Dichloroethane	ug/L	20	19.9	100	71-119	
1,1-Dichloroethene	ug/L	20	20.2	101	55-136	
1,2-Dichlorobenzene	ug/L	20	18.1	91	68-121	
1,2-Dichloroethane	ug/L	20	19.4	97	75-120	
1,2-Dichloropropane	ug/L	20	18.5	93	70-123	
1,3-Dichlorobenzene	ug/L	20	18.6	93	69-118	
1,4-Dichlorobenzene	ug/L	20	18.4	92	70-117	
2-Chloroethylvinyl ether	ug/L	20	18.6	93	50-140	
Acrolein	ug/L	200	227	114	10-130	
Acrylonitrile	ug/L	200	185	92	67-130	
Benzene	ug/L	20	19.6	98	73-118	
Bromodichloromethane	ug/L	20	19.8	99	72-121	
Bromoform	ug/L	20	16.0	80	68-120	
Bromomethane	ug/L	20	23.7	118	23-180	
Carbon tetrachloride	ug/L	20	21.0	105	70-140	
Chlorobenzene	ug/L	20	18.5	93	78-117	
Chloroethane	ug/L	20	22.2	111	58-143	
Chloroform	ug/L	20	18.7	94	70-116	
Chloromethane	ug/L	20	16.0	80	4-176	
cis-1,2-Dichloroethene	ug/L	20	19.9	100	70-120	
cis-1,3-Dichloropropene	ug/L	20	19.9	99	72-127	
Dibromochloromethane	ug/L	20	21.5	108	72-131	
Ethylbenzene	ug/L	20	19.7	98	77-120	
Methylene chloride	ug/L	20	18.3	91	59-125	
Tetrachloroethene	ug/L	20	18.6	93	72-123	
Toluene	ug/L	20	18.7	94	68-126	
trans-1,2-Dichloroethene	ug/L	20	19.6	98	63-128	
trans-1,3-Dichloropropene	ug/L	20	19.3	96	66-127	
Trichloroethene	ug/L	20	20.0	100	73-124	
Trichlorofluoromethane	ug/L	20	20.9	104	60-134	
Vinyl chloride	ug/L	20	23.1	115	42-148	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Dibromofluoromethane (S)	%			99	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE SAMPLE: 703488

Parameter	Units	6085717002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	20	21.3	107	71-136	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	18.9	95	61-131	
1,1,2-Trichloroethane	ug/L	ND	20	19.1	95	71-136	
1,1-Dichloroethane	ug/L	ND	20	20.6	103	68-135	
1,1-Dichloroethene	ug/L	ND	20	22.1	111	48-170	

Date: 09/29/2010 11:03 AM

### REPORT OF LABORATORY ANALYSIS

Page 17 of 25

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

MATRIX SPIKE SAMPLE:		703488		6085717002		Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers			
1,2-Dichlorobenzene	ug/L	ND	20	17.8	89	67-119				
1,2-Dichloroethane	ug/L	ND	20	19.2	96	49-155				
1,2-Dichloropropane	ug/L	ND	20	19.2	96	66-135				
1,3-Dichlorobenzene	ug/L	ND	20	17.7	89	69-117				
1,4-Dichlorobenzene	ug/L	ND	20	17.5	88	68-116				
2-Chloroethylvinyl ether	ug/L	ND	20	18.6	93	1-130				
Acrolein	ug/L	ND	200	72.6J	36	1-185				
Acrylonitrile	ug/L	ND	200	177	88	52-151				
Benzene	ug/L	ND	20	20.4	102	78-122				
Bromodichloromethane	ug/L	ND	20	19.9	100	66-136				
Bromoform	ug/L	6.8	20	19.9	66	45-169				
Bromomethane	ug/L	ND	20	24.1	119	26-172				
Carbon tetrachloride	ug/L	ND	20	22.1	110	70-140				
Chlorobenzene	ug/L	ND	20	18.6	93	74-124				
Chloroethane	ug/L	ND	20	23.8	119	62-161				
Chloroform	ug/L	1.3	20	20.4	96	60-133				
Chloromethane	ug/L	ND	20	23.1	115	28-159				
cis-1,2-Dichloroethene	ug/L	ND	20	22.4	112	69-134				
cis-1,3-Dichloropropene	ug/L	ND	20	19.5	97	63-137				
Dibromochloromethane	ug/L	ND	20	21.2	105	53-149				
Ethylbenzene	ug/L	ND	20	19.6	98	70-136				
Methylene chloride	ug/L	ND	20	18.1	90	43-145				
Tetrachloroethene	ug/L	ND	20	19.1	95	70-134				
Toluene	ug/L	ND	20	19.4	97	55-144				
trans-1,2-Dichloroethene	ug/L	ND	20	20.7	104	57-153				
trans-1,3-Dichloropropene	ug/L	ND	20	19.1	95	59-130				
Trichloroethene	ug/L	ND	20	21.8	109	77-125				
Trichlorofluoromethane	ug/L	ND	20	22.2	111	69-144				
Vinyl chloride	ug/L	ND	20	24.9	124	54-151				
1,2-Dichloroethane-d4 (S)	%				97	80-120				
4-Bromofluorobenzene (S)	%				105	80-120				
Dibromofluoromethane (S)	%				100	80-120				
Toluene-d8 (S)	%				100	80-120				
Preservation pH			7.0		7.0					

**QUALITY CONTROL DATA**

Project: Water Run 10  
Pace Project No.: 6085605

QC Batch: WET/25596 Analysis Method: EPA 1664A  
QC Batch Method: EPA 1664A Analysis Description: 1664 HEM, Oil and Grease  
Associated Lab Samples: 6085605001, 6085605002

METHOD BLANK: 705392 Matrix: Water  
Associated Lab Samples: 6085605001, 6085605002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Oil and Grease	mg/L	ND	5.0	09/24/10 10:27	

LABORATORY CONTROL SAMPLE: 705393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	40	36.5	91	78-114	

MATRIX SPIKE SAMPLE: 705394

Parameter	Units	6085400003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	ND	44.4	40.6	91	78-114	

SAMPLE DUPLICATE: 705395

Parameter	Units	6085401001 Result	Dup Result	RPD	Max RPD	Qualifiers
Oil and Grease	mg/L	ND	1.5J		18	

### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

QC Batch: WET/25632      Analysis Method: EPA 1664A  
QC Batch Method: EPA 1664A      Analysis Description: 1664 SGT-HEM, TPH  
Associated Lab Samples: 6085605001, 6085605002

METHOD BLANK: 707057      Matrix: Water

Associated Lab Samples: 6085605001, 6085605002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Petroleum Hydrocarbons	mg/L	ND	5.0	09/28/10 07:50	

LABORATORY CONTROL SAMPLE: 707058

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Petroleum Hydrocarbons	mg/L	20	17.0	85	64-132	

MATRIX SPIKE SAMPLE: 707059

Parameter	Units	6085492001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Petroleum Hydrocarbons	mg/L	ND	20	18.1	86	64-132	

SAMPLE DUPLICATE: 707060

Parameter	Units	6085674002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Petroleum Hydrocarbons	mg/L	ND	2.6J		34	

**QUALITY CONTROL DATA**

Project: Water Run 10  
Pace Project No.: 6085605

---

QC Batch: WET/25457      Analysis Method: SM 2540F  
QC Batch Method: SM 2540F      Analysis Description: 2540F Total Settable Solids  
Associated Lab Samples: 6085605001, 6085605002

---

METHOD BLANK: 700878      Matrix: Water  
Associated Lab Samples: 6085605001, 6085605002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Settleable Solids	mL/L/hr	ND	0.20	09/17/10 12:26	

**QUALITY CONTROL DATA**

Project: Water Run 10  
Pace Project No.: 6085605

---

QC Batch:	WET/25451	Analysis Method:	SM 4500-H+B
QC Batch Method:	SM 4500-H+B	Analysis Description:	4500H+B pH
Associated Lab Samples:	6085605001, 6085605002		

---

SAMPLE DUPLICATE: 700861

Parameter	Units	6085515002 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.9	6.9	0	5	H6

### QUALITY CONTROL DATA

Project: Water Run 10  
Pace Project No.: 6085605

QC Batch: WETA/14030      Analysis Method: EPA 410.4  
QC Batch Method: EPA 410.4      Analysis Description: 410.4 COD  
Associated Lab Samples: 6085605001, 6085605002

METHOD BLANK: 702593      Matrix: Water

Associated Lab Samples: 6085605001, 6085605002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	ND	10.0	09/21/10 16:24	

LABORATORY CONTROL SAMPLE: 702594

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	50	51.8	104	90-110	

MATRIX SPIKE SAMPLE: 702595

Parameter	Units	6085728001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	ND	50	57.2	97	90-110	

MATRIX SPIKE SAMPLE: 702597

Parameter	Units	6085515002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	10.9	50	62.0	102	90-110	

SAMPLE DUPLICATE: 702596

Parameter	Units	6085605001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand	mg/L	ND	6.4J		25	

## QUALIFIERS

Project: Water Run 10  
Pace Project No.: 6085605

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### ANALYTE QUALIFIERS

H6 Analysis initiated more than 15 minutes after sample collection.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Water Run 10  
Pace Project No.: 6085605

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6085605001	OL142D	EPA 625	OEXT/25598	EPA 625	MSSV/8015
6085605002	OL143BR	EPA 625	OEXT/25598	EPA 625	MSSV/8015
6085605001	OL142D	EPA 624 Low	MSV/31874		
6085605002	OL143BR	EPA 624 Low	MSV/31874		
6085605001	OL142D	EPA 1664A	WET/25596		
6085605002	OL143BR	EPA 1664A	WET/25596		
6085605001	OL142D	EPA 1664A	WET/25632		
6085605002	OL143BR	EPA 1664A	WET/25632		
6085605001	OL142D	SM 2540F	WET/25457		
6085605002	OL143BR	SM 2540F	WET/25457		
6085605001	OL142D	SM 4500-H+B	WET/25451		
6085605002	OL143BR	SM 4500-H+B	WET/25451		
6085605001	OL142D	EPA 410.4	WETA/14030		
6085605002	OL143BR	EPA 410.4	WETA/14030		



Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
(504) 469-0333

September 27, 2010

Mary Jane Walls  
Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219

RE: Project 20114125  
Project ID: 6085605 / Amerex

Dear Mary Jane Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on September 21, 2010. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown  
karen.brown@pacelabs.com



**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Cover 9/27/2010 17:14:56



## Laboratory Certifications

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
(504) 469-0333

---

Project: 20114125

Client: PACE KANSAS

Project ID: 6085605 / Amerex

---

Washington Department of Ecology C2078  
Oregon Environmental Laboratory Accreditation - LA200001  
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119  
Pennsylvania Dept. of Env Protection (NELAC) 68-04202  
Texas Commission on Env. Quality (NELAC) T104704405-09-TX  
Kansas Department of Health and Environment (NELAC) E-10266  
Florida Department of Health (NELAC) E87595  
Louisiana Dept. of Health and Hospitals (NELAC) LA100024  
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

---

9/27/2010 17:14:58



### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.



## Sample Cross Reference

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
(504) 469-0333

---

Project: 20114125

Client: PACE KANSAS

Project ID: 6085605 / Amerex

---

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
OL142D	20819616	Water	15-Sep-10 13:00	21-Sep-10 10:10
OL143BR	20819617	Water	15-Sep-10 13:00	21-Sep-10 10:10



## Project Narrative

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
(504) 469-0333

---

Project: 20114125

---

---

**Sample Receipt Condition:**

All samples were received in accordance with EPA protocol.

**Holding Times:**

All holding times were met.

**Blanks:**

All blank results were below reporting limits.

**Laboratory Control Samples:**

All LCS recoveries were within QC limits.

**Matrix Spikes and Duplicates:**

All MS/MSD recoveries or duplicate RPDs were within QC limits.

**Surrogates:**

All surrogate recoveries were within QC limits.



## QC Cross Reference

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
(504) 469-0333

---

Project: 20114125

---

Analytical Method	Batch	Sample used for QC
EPA 608	146841	Batch sample from another client
EPA 608	146842	Batch sample from another client

---

For the sample used as the original for the DUP or MS/MSD for the batch:

Narrative1 9/27/2010 17:15:25

Project sample means a sample from this project was used.

Client sample means a sample from the same client but in a different project was used.

Batch sample means a sample from a different client was used.

# Sample Results

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333



Client: PACE KANSAS

Client ID: OL142D

Project: 20114125

Project ID: 6085605 / Amerex

Site: None

Lab ID: 20819616

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 146841

Method: EPA 608

8081 Pests Water

Collected: 15-Sep-10

Received: 21-Sep-10

Prepared: 22-Sep-10

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
309-00-2	Aldrin	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
319-84-6	alpha-BHC	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
319-85-7	beta-BHC	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
319-86-8	delta-BHC	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
57-74-9	Chlordane	1	ND		0.500	0.250		22-Sep-10 19:36 SLF
72-54-8	4,4'-DDD	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
72-55-9	4,4'-DDE	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
50-29-3	4,4'-DDT	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
60-57-1	Dieldrin	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
959-98-8	Endosulfan I	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
33213-65-9	Endosulfan II	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
72-20-8	Endrin	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
7421-93-4	Endrin aldehyde	1	ND		0.100	0.0500		22-Sep-10 19:36 SLF
76-44-8	Heptachlor	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500	0.0250		22-Sep-10 19:36 SLF
8001-35-2	Toxaphene	1	ND		2.00	1.00		22-Sep-10 19:36 SLF

18 compound(s) reported

Protocol 9/27/2010 17:15:26

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.  
 MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

# Sample Results

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333



Client: PACE KANSAS

Client ID: OL142D Project: 20114125  
 Project ID: 6085605 / Amerex Site: None  
 Lab ID: 20819616 Matrix: Water % Moisture: n/a  
 Description: None Prep Level: Water Batch: 146842  
 Method: EPA 608  
8082 PCBs Water Collected: 15-Sep-10 Received: 21-Sep-10  
 Prepared: 22-Sep-10

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		1.00	0.500		22-Sep-10 18:52 SLF
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		1.00	0.500		22-Sep-10 18:52 SLF
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		1.00	0.500		22-Sep-10 18:52 SLF
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		1.00	0.500		22-Sep-10 18:52 SLF
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		1.00	0.500		22-Sep-10 18:52 SLF
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		1.00	0.500		22-Sep-10 18:52 SLF
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		1.00	0.500		22-Sep-10 18:52 SLF

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.  
 MDL denotes method detection limit

Protocol 9/27/2010 17:15:26  
 Limits are corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

# Sample Results

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
(504) 469-0333



Client: PACE KANSAS

Client ID: OL143BR

Project: 20114125

Project ID: 6085605 / Amerex

Site: None

Lab ID: 20819617

Matrix: Water

% Moisture: n/a

Description: None

Prep Level: Water

Batch: 146841

Method: EPA 608

8081 Pests Water

Collected: 15-Sep-10

Received: 21-Sep-10

Prepared: 22-Sep-10

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
309-00-2	Aldrin	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
319-84-6	alpha-BHC	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
319-85-7	beta-BHC	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
319-86-8	delta-BHC	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
57-74-9	Chlordane	1	ND		0.500	0.250		22-Sep-10 19:54 SLF
72-54-8	4,4'-DDD	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
72-55-9	4,4'-DDE	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
50-29-3	4,4'-DDT	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
60-57-1	Dieldrin	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
959-98-8	Endosulfan I	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
33213-65-9	Endosulfan II	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
72-20-8	Endrin	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
7421-93-4	Endrin aldehyde	1	ND		0.100	0.0500		22-Sep-10 19:54 SLF
76-44-8	Heptachlor	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500	0.0250		22-Sep-10 19:54 SLF
8001-35-2	Toxaphene	1	ND		2.00	1.00		22-Sep-10 19:54 SLF

18 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.  
MDL denotes method detection limit

Protocol 9/27/2010 17:15:26  
Limits are corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



# Sample Results

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333

Client: PACE KANSAS

Client ID: <u>OL143BR</u>	Project: <u>20114125</u>
Project ID: <u>6085605 / Amerex</u>	Site: <u>None</u>
Lab ID: <u>20819617</u>	Matrix: <u>Water</u> % Moisture: <u>n/a</u>
Description: <u>None</u>	Prep Level: <u>Water</u> Batch: <u>146842</u>
Method: <u>EPA 608</u>	Collected: <u>15-Sep-10</u> Received: <u>21-Sep-10</u>
<u>8082 PCBs Water</u>	Prepared: <u>22-Sep-10</u>

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		1.00	0.500		22-Sep-10 19:07 SLF
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		1.00	0.500		22-Sep-10 19:07 SLF
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		1.00	0.500		22-Sep-10 19:07 SLF
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		1.00	0.500		22-Sep-10 19:07 SLF
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		1.00	0.500		22-Sep-10 19:07 SLF
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		1.00	0.500		22-Sep-10 19:07 SLF
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		1.00	0.500		22-Sep-10 19:07 SLF

7 compound(s) reported

Protocol 9/27/2010 17:15:26

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.  
 MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



# Surrogate Recovery

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333

Batch: 146841

Project: 20114125

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20819754	146841 BLANK 1		70	64	43	43				
20819755	146841 LCS 1		78	73	54	55				
20819756	MW-1C MS 1		74	69	39	46				
20819757	MW-1C MSD 1		76	73	37	43				
20819616	OL142D		69	68	54	59				
20819617	OL143BR		66	66	57	63				

QC limits: 10-137 10-137 18-119 18-119

Sur 1: Decachlorobiphenyl (Conf)(S)  
 Sur 2: Decachlorobiphenyl (S)  
 Sur 3: Tetrachloro-m-xylene (Conf)(S)  
 Sur 4: Tetrachloro-m-xylene (S)

\* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.



## Surrogate Recovery

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333

Batch: 146842

Project: 20114125

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20819758	146842 BLANK 1		77	81	48	58				
20819759	146842 LCS 1		98	103	75	87				
20819760	MW-1C MS 1		96	100	77	75				
20819761	MW-1C MSD 1		94	101	69	73				
20819616	OL142D		84	84	65	78				
20819617	OL143BR		85	87	69	82				
QC limits:			10-137	10-137	18-119	18-119				
Sur 1: Decachlorobiphenyl (Conf)(S)										
Sur 2: Decachlorobiphenyl (S)										
Sur 3: Tetrachloro-m-xylene (Conf)(S)										
Sur 4: Tetrachloro-m-xylene (S)										

\* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.



# Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333

Batch: 146841

Project: 20114125

LCS: 20819755 22-Sep-10 19:19

Method: Water GC Semivolatile Organics

MS: 20819756 22-Sep-10 20:48

Units: ug/L

MSD: 20819757 22-Sep-10 21:06

Original for MS: Batch Sample 20819465

Parameter Name	LCS	LCS	LCS	MS	Sample	MS	MSD	MS	MSD	RPD	QC Limits		Max	Qu
	Spike	Found	%Rec	Spike	Found	Found	Found	%Rec	%Rec		LCS	MS/MSD	RPD	
Aldrin	0.500	0.0786	16	0.500		0.254	0.259	51	52	2	10-110	10-117	25	
alpha-BHC	0.500	0.316	63	0.500		0.368	0.377	74	75	2	21-132	10-158	25	
beta-BHC	0.500	0.338	68	0.500		0.411	0.411	82	82	0	28-135	10-164	21	
delta-BHC	0.500	0.333	67	0.500		0.658	0.571	132	114	14	26-140	10-160	22	
gamma-BHC (Lindane)	0.500	0.326	65	0.500		0.391	0.395	78	79	1	22-136	12-154	22	
4,4'-DDD	0.500	0.322	64	0.500		0.357	0.395	71	79	10	26-136	16-149	20	
4,4'-DDE	0.500	0.186	37	0.500		0.313	0.349	63	70	11	15-110	10-135	22	
4,4'-DDT	0.500	0.289	58	0.500		0.389	0.419	78	84	7	24-119	10-145	21	
Dieldrin	0.500	0.299	60	0.500		0.363	0.379	73	76	4	29-129	10-158	20	
Endosulfan I	0.500	0.272	54	0.500		0.318	0.334	64	67	5	10-114	10-128	21	
Endosulfan II	0.500	0.298	60	0.500		0.331	0.339	66	68	3	10-120	10-136	20	
Endosulfan sulfate	0.500	0.334	67	0.500		0.397	0.414	79	83	4	30-140	19-157	20	
Endrin	0.500	0.327	65	0.500		0.400	0.417	80	83	4	26-167	32-163	20	
Endrin aldehyde	0.500	0.302	60	0.500		0.356	0.341	71	68	4	24-138	12-147	20	
Heptachlor	0.500	0.174	35	0.500		0.339	0.377	68	75	11	10-120	10-147	23	
Heptachlor epoxide	0.500	0.299	60	0.500		0.367	0.381	73	76	4	24-126	11-145	20	

16 compound(s) reported

\* denotes recovery outside of QC limits.  
 MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.



# Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333

**Batch:** 146842

**Project:** 20114125

**LCS:** 20819759 22-Sep-10 18:37

**Method:** Water GC Semivolatile Organics

**MS:** 20819760 22-Sep-10 19:53

**Units:** ug/L

**MSD:** 20819761 22-Sep-10 20:08

**Original for MS:** Batch Sample 20819465

Parameter Name	LCS	LCS	LCS	MS	Sample	MS	MSD	MS	MSD	RPD	QC Limits		Max	Qu
	Spike	Found	%Rec	Spike	Found	Found	Found	%Rec	%Rec		LCS	MS/MSD	RPD	
PCB-1016 (Aroclor 1016)	10.0	6.22	62	10.0		7.98	7.59	80	76	5	10-116	10-117	20	
PCB-1260 (Aroclor 1260)	10.0	6.69	67	10.0		6.96	6.73	70	67	3	11-110	13-113	20	

2 compound(s) reported

\* denotes recovery outside of QC limits.  
 MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.



# Blank Results

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333

Blank ID: 146841 BLANK 1

Project: 20114125

Lab ID: 20819754

Prep Level: Water

Batch: 146841

Method: Water GC Semivolatile Organics

Prepared: 22-Sep-10

Units: ug/L

Reporting

CAS Num	Analyte	Dilution	Result	Qu	Limit	MDL	Analysis
309-00-2	Aldrin	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
319-84-6	alpha-BHC	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
319-85-7	beta-BHC	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
319-86-8	delta-BHC	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
57-74-9	Chlordane	1	ND		0.500	0.250	22-Sep-10 19:01 SLF
72-54-8	4,4'-DDD	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
72-55-9	4,4'-DDE	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
50-29-3	4,4'-DDT	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
60-57-1	Dieldrin	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
959-98-8	Endosulfan I	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
33213-65-9	Endosulfan II	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
72-20-8	Endrin	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
7421-93-4	Endrin aldehyde	1	ND		0.100	0.0500	22-Sep-10 19:01 SLF
76-44-8	Heptachlor	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500	0.0250	22-Sep-10 19:01 SLF
8001-35-2	Toxaphene	1	ND		2.00	1.00	22-Sep-10 19:01 SLF

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.  
 MDL denotes method detection limit

Protocol Blank 9/27/2010 17:15:30  
 Limits are corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



**Blank Results**

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 (504) 469-0333

**Blank ID:** 146842 BLANK 1

**Project:** 20114125

**Lab ID:** 20819758

**Prep Level:** Water

**Batch:** 146842

**Method:** Water GC Semivolatile Organics

**Prepared:** 22-Sep-10

**Units:** ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		1.00	0.500	22-Sep-10 18:22 SLF
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		1.00	0.500	22-Sep-10 18:22 SLF
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		1.00	0.500	22-Sep-10 18:22 SLF
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		1.00	0.500	22-Sep-10 18:22 SLF
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		1.00	0.500	22-Sep-10 18:22 SLF
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		1.00	0.500	22-Sep-10 18:22 SLF
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		1.00	0.500	22-Sep-10 18:22 SLF

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.  
 MDL denotes method detection limit

Protocol Blank 9/27/2010 17:15:30

Limits are corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.



## Definitions/Qualifiers

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
(504) 469-0333

---

Project: 20114125

---

Value	Description
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

20114125 PASI-KANS

Chain of Custody

20114125



Workorder: 6085605 Workorder Name: Water Run 10

Owner Received Date: 9/16/2010 Results Requested By: 9/27/2010

Trudy Gipson  
Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
Phone (913)599-5665  
Fax (913)599-1759

Pace Analytical New Orleans  
1000 Riverbend Blvd  
Suite F  
St. Rose, LA 70087  
Phone (504)469-0333

608 Pesticides/CBS

Transfers	Released By	Date/Time	Received By	Date/Time	LAB USE ONLY
1	OL142D	9/15/2010 13:00	6085605001	Water	X
2	OL143BR	9/15/2010 13:00	6085605002	Water	X
3					
4					
5					

Transfers Released By Date/Time Received By Date/Time

1 *Trudy Gipson* 9/15/10 13:00 *Trudy Gipson* 9/16/10 10:00

2 *Trudy Gipson* 9/15/10 13:00 *Trudy Gipson* 9/16/10 10:00

3

Cooler Temperature on Receipt 2.0 °C Custody Seal (Y) or (N) Received on Ice (Y) or (N) Samples Intact (Y) or (N)



1000 Riverbend Blvd., Suite F  
St. Rose, LA 70087

### Sample Condition Upon Receipt

20114125 PASI-KANS



Project #: 20

Courier:  Pace Courier  Hackbarth  Fed X  UPS  DHL  USPS  Customer  Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact:  Yes  No

Thermometer Used:  Therm Fisher IR 1  
 Therm Fisher IR 2  
 Therm Fisher IR 4

Type of Ice:  Wet  Blue  None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and initials of person examining contents: 9-21-10

Temp must be measured from Temperature blank when present

Comments:

Temperature Blank Present??	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1	
Chain of Custody Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2	
Chain of Custody Complete:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8	
Filtered vol. Rec. for Diss. tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10	
All containers received within manufacture's precautionary and/or expiration dates.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11	
All containers needing preservation have been checked (except VOA, coliform, & O&G).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13	if No, was preservative added? <input type="checkbox"/> Yes <input type="checkbox"/> No If added record lot no.: HNO3 _____ H2SO4 _____
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17	
Pace Trip Blank Lot # (if purchased):	N/A	18	

Client Notification/ Resolution:

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_





### Sample Condition Upon Receipt

Client Name: Waste Express Project # 6085605

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other \_\_\_\_\_  
 Tracking #: \_\_\_\_\_ Pace Shipping Label Used?  Yes  No  
 Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No

Optional
Proj. Due Date: <u>9/28/10</u>
Proj. Name: <u>Water Run IO</u>

Packing Material:  Bubble Wrap  Bubble Bags  Foam  None  Other \_\_\_\_\_  
 Thermometer Used: T-191 T-194 Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature: 27, 0.6  
 Temperature should be above freezing to 6°C

Date and Initials of person examining contents: <u>JM</u> <u>9/16/10</u> <u>AMS</u>
---

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>Self-Sol., pH</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>water</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>JM</u> Lot # of added preservative _____
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>002310-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>MA</u> <u>MA</u>

Client Notification/ Resolution: Copy COC to Client? Y / (N) Field Data Required? Y / N  
 Person Contacted: Tom Hayes Date/Time: 9-16-10  
 Comments/ Resolution: Per client - also need COC analyzed. AMS

001-002: Sub-NOLA-7 608 Pest/PCBS AMS 9-17-10

Project Manager Review: AMS Date: 9-17-10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

6519

## **Instructions – Form 2F**

### **Application for Permit to Discharge Storm Water Associated with Industrial Activity**

#### **Who Must File Form 2F**

Form 2F must be completed by operators of facilities which discharge storm water associated with industrial activity or by operators of storm water discharges that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.

Operators of discharges which are composed entirely of storm water must complete Form 2F (EPA Form 3510-2F) in conjunction with Form 1 (EPA Form 3510-1).

Operators of discharges of storm water which are combined with process wastewater (process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater) must complete and submit Form 2F, Form 1, and Form 2C (EPA Form 3510-2C).

Operators of discharges of storm water which are combined with nonprocess wastewater (nonprocess wastewater includes noncontact cooling water and sanitary wastes which are not regulated by effluent guidelines or a new source performance standard, except discharges by educational, medical, or commercial chemical laboratories) must complete Form 1, Form 2F, and Form 2E (EPA Form 3510 2E).

Operators of new sources or new discharges of storm water associated with industrial activity which will be combined with other nonstormwater new sources or new discharges must submit Form 1, Form 2F, and Form 2D (EPA Form 3510-2D).

#### **Where to File Applications**

The application forms should be sent to the EPA Regional Office which covers the State in which the facility is located. Form 2F must be used only when applying for permits in States where the NPDES permits program is administered by EPA. For facilities located in States which are approved to administer the NPDES permits program, the State environmental agency should be contacted for proper permit application forms and instructions.

Information on whether a particular program is administered by EPA or by a State agency can be obtained from your EPA Regional Office. Form 1, Table 1 of the "General Instructions" lists the addresses of EPA Regional Offices and the States within the jurisdiction of each Office.

#### **Completeness**

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

#### **Public Availability of Submitted Information**

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. Section 402(j) of the Clean Water Act requires that all permit applications will be available to the public. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form, Form 1, or Form 2C you may claim as confidential, but claims for information which are effluent data will be denied.

If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

#### **Definitions**

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

#### **EPA ID Number**

Fill in your EPA Identification Number at the top of each odd numbered page of Form 2F. You may copy this number directly from item I of Form 1.

**Item I**

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

**Item 11-A**

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing the same information.

**Item 11-B**

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

**Item III**

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including:

each of its drainage and discharge structures;

the drainage area of each storm water outfall;

paved areas and building within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34);

each well where fluids from the facility are injected underground; and

springs, and other surface water bodies which receive storm water discharges from the facility;

**Item IV-A**

For each outfall, provide an estimate of the area drained by the outfall which is covered by impervious surfaces. For the purpose of this application, impervious surfaces are surfaces where storm water runs off at rates that are significantly higher than background rates (e.g., predevelopment levels) and include paved areas, building roofs, parking lots, and roadways. Include an estimate of the total area (including all impervious and pervious areas) drained by each outfall. The site map required under item III can be used to estimate the total area drained by each outfall.

**Item IV-B**

Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of these materials; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Significant materials should be identified by chemical name, form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101 (14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

**Item IV-C**

For each outfall, structural controls include structures which enclose material handling or storage areas, covering materials, berms, dikes, or diversion ditches around manufacturing, production, storage or treatment units, retention ponds, etc. Nonstructural controls include practices such as spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures that are used to prevent or minimize the potential for releases of pollutants.

#### Item V

Provide a certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by an NPDES permit. Tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. Part B must include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test. All non-storm water discharges must be identified in a Form 2C or Form 2E which must accompany this application (see beginning of instructions under section titled "Who Must File Form 2F" for a description of when Form 2C and Form 2E must be submitted).

#### Item VI

Provide a description of existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years.

#### Item VII-A, B, and C

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

#### General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants addressed in Parts B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Parts B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See specific instructions on the form and below for Parts A through C.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent.

- A. Sampling:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or storm water discharges. You may contact EPA or your State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used (you are not required to analyze a flow-weighted composite for these parameters). For all other pollutants both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

A grab sample shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable), and a flow-weighted composite shall be taken for the entire event or for the first three hours of the event.

Grab and composite samples are defined as follows:

**Grab sample:** An individual sample of at least 100 milliliters collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

**Flow-weighted Composite sample:** A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of fifteen minutes between aliquot collections. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. Where GC/MS Volatile Organic Analysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in storm water treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rainfall), protocols for collecting samples under 40 CFR Part 136, and additional time for submitting data on a case-by-case basis.

- B. Reporting:** All levels must be reported as concentration and mass (note: grab samples are reported in terms of concentration). You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 and VII-2 if the separate sheets contain all the required information in a format which is constant with pages VII-1 and VII-2 in spacing and identification of pollutants and columns. Use the following abbreviations in the columns headed "Units."

Concentration		Mass	
ppm	parts per million	lbs	pounds
mg/l	milligrams per liter	ton	tons (English tons)
ppb	parts per billion	mg	milligrams
ug/l	micrograms per liter	g	grams
kg	kilograms	T	tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless:

- (1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or
- (2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- (3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA. If you measure only one grab sample and one flow-weighted composite

**INSTRUCTIONS FOR COMPLETING FORM A  
APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT**

1. Check which option is applicable. **Do not check more than one item.** Construction and operating permit refer to permits issued by the Department of Natural Resources' Water Protection Program, Water Pollution Control Branch. Effective Sept. 1, 2008, a facility will be required to use **MISSOURI'S ANTI-DEGRADATION RULE AND IMPLEMENTATION PROCEDURE**. For more information, this document can be reviewed at [www.dnr.mo.gov/env/wpp/docs/aip-cwc-appr-050708.pdf](http://www.dnr.mo.gov/env/wpp/docs/aip-cwc-appr-050708.pdf). This procedure will be applicable to new and expanded wastewater facilities and requires the proposed discharge to a water body to undergo a level of Antidegradation Review, which documents that the use of a water body's available assimilative capacity is justified.
- 1.1 An operating permit and antidegradation review public notice requires a Water Quality/Antidegradation Review Sheet to be submitted with the application (No fee required).

**CONSTRUCTION PERMIT FEES**

  - A. \$750 for a sewage treatment facility with a design flow of less than 500,000 gallons per day.
  - B. \$2,200 for a sewage treatment facility with a design flow of 500,000 gallons per day or more.

Different application and construction fees are applicable if only sewer and/or lift stations are to be constructed.

**OPERATING PERMIT FEES**

**If the application is for a site-specific permit re-issuance, send no fees..** You will be invoiced separately by the department.

Discharges covered by section 644.052.4 RSMo. (Primary or Categorical Facilities)

  - \$3,500 for a design flow under 1 mgd
  - \$5,000 for a design flow of 1 mgd or more
  - A. Discharges covered by section 644.052.5 RSMo. (Secondary or Non-Categorical Facilities).
  - \$1,500 for a design flow under 1 million gallons per day (mpg)
  - \$2,500 for a design flow of 1 mgd or more

**SITE-SPECIFIC STORM WATER DISCHARGE FEES**

  - A. \$1,350 for a design flow under 1 mgd.
  - B. \$2,350 for a design flow of 1 mgd or more.

**OPERATING PERMIT MODIFICATIONS**, including transfers, are subject to the following fees:

  - A. Municipals - \$200 each.
  - B. All others - 25 percent of annual fee.

Note: Facility name and address changes where owner, operator and continuing authority remain the same are not considered transfers.

Incomplete permit applications and/or related engineering documents will be returned by the department if they are not completed in the time frame established in a comment letter from the department to the owner. Permit fees for returned applications shall be forfeited. Permit fees for applications being processed by the department that are withdrawn by the applicant shall be forfeited.
2. Facility - Provide the name by which this facility is known locally. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Also include the street address or location of the facility. If the facility lacks a street name or route number, give the names of the closest intersection, highway, county road, etc.
3. Owner - Provide the legal name and address of owner.
- 3.1 Prior to submitting a permit to public notice, the department shall provide the permit applicant 10 days to review the draft permit for nonsubstantive drafting errors. In the interest of expediting permit issuance, permit applicants may waive the opportunity to review draft permits prior to public notice. Check YES to review the draft permit prior to public notice. Check NO to waive the process and expedite the permit.
4. Continuing Authority - Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility. The regulatory requirement regarding continuing authority is available at [www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf](http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf) or contact the appropriate Department of Natural Resources Regional Office.
5. Operator - Provide the name, certificate number and telephone number of the person operating the facility.
6. Provide the name, title and work telephone number of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by the department, if necessary.
- 7.1 An outfall is the point at which wastewater is discharged. Outfalls should be given in terms of the legal description of the facility. Global Positioning System, or GPS, is a satellite-based navigation system. The department prefers that a GPS receiver is used at the outfall pipe and the displayed coordinates submitted. If access to a GPS receiver is not available, please use a mapping system to approximate the coordinates; the department's mapping system is available at [www.dnr.mo.gov/internetmapviewer/](http://www.dnr.mo.gov/internetmapviewer/).
- 7.2 List only your primary Standard Industrial Classification, or SIC, and North American Industry Classification System code for each outfall. The SIC system was devised by the U.S. Office of Management and Budget to cover all economic activities. To find the correct SIC code, an applicant may check his or her unemployment insurance forms or contact the Missouri Division of Employment Security, 573-751-3215. The primary SIC code is that of the operation that generates the most revenue. If this information is not available, the number of employees or, secondly, production rate may be used to determine your SIC code. Additional information is on the Web for Standard Industrial Codes at [www.osha.gov/pls/imis/sicsearch.html](http://www.osha.gov/pls/imis/sicsearch.html) and for the North American Industry Classification System at [www.census.gov/naics](http://www.census.gov/naics) or contact the appropriate Department of Natural Resources Regional Office.
- 7.3