

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-0136735

Owner: HPI Products, Inc.  
Address: P.O. Box 997, St. Joseph, MO 64502

Continuing Authority: Same as above  
Address: Same as above

Facility Name: HPI Products, Inc. – Sylvania Plant  
Facility Address: 222 Sylvania, St. Joseph, MO 64502

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

Receiving Stream: Unnamed Tributary to the Missouri River (U)  
First Classified Stream and ID: Missouri River (P) (00226), 2010 303(d) List  
USGS Basin & Sub-watershed No.: (10240011 –0103)

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 – Industrial Facility – SIC #2879

The use or operation of this facility does not require a waste water certified operator.

Storm water runoff from a Pesticides Formulating, Packaging, and Repackaging (PFPR) Facility with zero discharge required to waters of the state and the POTW.

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.

February 23, 2012  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

February 22, 2017  
Expiration Date

Dorothy Franklin, Director, Kansas City Regional Office

FACILITY DESCRIPTION (continued):

**Outfall #001**

Legal Description: NW ¼, NW ¼, Sec. 17, T57N, R35W, Buchanan County

UTM Coordinates: X = 340884, Y = 4403032

Design Flow is 0.613360 MGD.

Actual Flow is dependent upon precipitation.

Outfall #001 is a combined sewer diversion structure that drains 160,000 ft<sup>2</sup> of impervious surface, including most of the facility's roof, railroad right of way, a brick and gravel drive, several dry storage silos, above ground storage tanks, a secondary containment structure, a no-discharge loading pad for bulk liquids, and a covered loading pad for dry goods. There is also a coupling connector on the west side of the building that can be used for pneumatic loading of liquid to or from tankers. Sampling for reasons of compliance with this permit shall be conducted at the most significant point of storm water inflow at the diversion structure.

**Outfall #002**

Legal Description: SE ¼, SW ¼, Sec. 08, T57N, R35W, Buchanan County

UTM Coordinates: X = 340957, Y = 4403060

Design Flow is 0.123514 MGD.

Actual Flow is dependent upon precipitation.

Outfall #002 is a combined sewer inlet that drains 33,025 ft<sup>2</sup> of impervious surface consisting primarily of employee parking. The eastern side of the building, in this drainage area, has multiple drains that drain back-flow preventers and well as emergency eye wash stations. This side of the building also has a coupling connector that can be used for pneumatic loading of liquids to or from tankers. This drainage area has two combined sewer inlets that are relatively close together. The inlet that shall be sampled for reasons of compliance with this permit is the northern most structure.

**Outfall #003**

Legal Description: SE ¼, SW ¼, Sec. 08, T57N, R35W, Buchanan County

UTM Coordinates: X = 340912, Y = 4403228

Design Flow is 0.802978 MGD.

Actual Flow is dependent upon precipitation.

Outfall #003 is a combined sewer inlet that drains 17,675 ft<sup>2</sup> of impervious surface consisting of a covered truck loading dock. In case of spills, the loading area has a containment trench that is pumped when needed. Pumped contaminated water is taken to a permitted disposal facility. Sampling for reasons of compliance with this permit shall be conducted at the storm water inlet at the most significant point of inflow of storm water originating from the HPI facility.

**Outfall #004**

Legal Description: NE ¼, NW ¼, Sec. 17, T57N, R35W, Buchanan County

UTM Coordinates: X = 340914, Y = 4402936

Design Flow is 0.193545 MGD.

Actual Flow is dependent upon precipitation.

Outfall #004 is a low-lying area to the south of the facility building. This area is surrounded by berms that prevent accumulated water from running off of the property. The company stores unused process equipment in this area that might be used again in the future. This area is discussed further in the Effluent Limitations section below. Sampling for reasons of compliance with this permit shall be conducted at lowest point in this area where process equipment is stored and where storm water accumulates in the highest volume.

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PAGE NUMBER 3 of 8	
					PERMIT NUMBER MO-0136735	
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
<b>All Outfalls (Note 1)</b>						
Flow	MGD	*		*	once/month	24 hr. estimate
Chemical Oxygen Demand	mg/L	90		60	once/month	grab
pH – Units	SU	**		**	once/month	grab
Conductivity	µS/cm @ 25°C	*		*	once/month	grab
Raw, Intermediate, and Final Products (Note 2)		***		***	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>APRIL 28, 2012</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
Whole Effluent Toxicity (WET) test	% Survival	See Special Condition #17		Twice/permit cycle in 2012 and 2015		grab. (Note 1)
MONITORING REPORTS SHALL BE SUBMITTED <u>TWICE/PERMIT CYCLE</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2013</u> . THE SECOND REPORT IS DUE <u>JANUARY 28, 2016</u> .						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO THE SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)**

- \* Monitoring requirement only.
- \*\* pH is to be maintained in the range of 6.5 – 9.0 standard pH units.
- \*\*\* Daily maximum and monthly average limits for raw, intermediate, and final products are non-detect for all parameters tested for. Any value above the laboratory reporting limit is a violation of this permit and shall be verbally reported within 24 hours as per Standard Conditions Part I.

Note 1 Storm water samples shall be collected within the first 60 minutes of storm events of 0.1 inches or greater, that result in a discharge. Storm events include rainfall as well as run-off from the melting of frozen precipitation.

Note 2 Permittee shall collect representative storm water samples at each of the outfalls listed in the facility description for this permit. Samples shall be analyzed for all raw, intermediate, and final products stored, handled, produced, or spilled in a manner that creates any potential for exposure to storm water in the previous twelve (12) months.

C. SPECIAL CONDITIONS

1. Permittee shall submit within 30 days of its completion, a full copy of the Final Site Characterization Report required by the Consent Decree with the United States of America and the State of Missouri. Upon review of the full copy of the Final Site Characterization Report by Water Protection Program Staff, and based upon its findings or any other findings resulting from Department of Natural Resources or US Environmental Protection Agency investigations, this permit may be reopened and modified to incorporate effluent limitations and/or conditions deemed necessary to protect waters of the state.
2. The physical components of the facility shall conform to 10 CSR 20-8.500, secondary containment for agrichemical facilities. This includes an air gap separation or reduced pressure principle backflow prevention assembly in the water supply line that serves the agrichemical facility [10 CSR 20-8.500(10)].
3. Other than routine testing, if a discharge outside the building from an emergency eye-wash or shower station occurs, every reasonable effort shall be made to prevent the discharge from entering the storm sewer or waters of the state and to clean the area of all potential storm water contaminants prior to the next precipitation event.
4. No process related equipment shall be stored in a manner where it is exposed to storm water until it has been thoroughly cleaned inside of an operational containment area, tested, and certified to be free of all pesticide, herbicide, and fungicide residue. Water used to clean process related equipment shall be properly disposed of at a permitted hazardous waste disposal facility.
5. Loading or unloading of products by pneumatic conveyance shall be conducted in a manner that minimizes the risk of spills and eliminates all potential for spilled product to reach any outfall or waters of the state.
6. This permit does not authorize the discharge of accumulated water in secondary containment structures. Secondary containment structures shall be sealed to prevent the release of accumulated storm water to the surface or into the ground.
7. All loading pads for silos, truck docks, and storage tanks shall be kept free of all debris at all times. Water that has accumulated in load pads and secondary containment areas shall be free of unsightly odor or turbidity, offensive odor, oil, scum, excessive floating debris, and substances or conditions in sufficient amounts to cause the formation of putrescent, unsightly, or harmful bottom deposits.
8. All personnel involved in handling, mixing, or storage of agrichemicals shall be provided training by the owner in the proper methods of handling, mixing, and storage of agrichemicals. Proof of training may consist of documentation of dates of training, personnel attending, and subject matter. Documentation of training under programs that provide training in proper methods of handling, mixing, and storage of agrichemicals may suffice to meet this requirement.
9. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

10. 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.

C. SPECIAL CONDITIONS (continued)

- (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.

11. Water Quality Standards

- (a) 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;

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.

12. Report as no-discharge when a discharge does not occur during the report period.

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

14. 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 DNR 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 permittee shall amend the SWPPP whenever there is a change in design, construction operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to waters of the state or if the SWPPP proves to be ineffective in controlling pollutants in discharges associated with industrial activity.

The SWPPP must include the following:

- (a) A site map showing an outline of the drainage area of each stormwater outfall, each existing structural control measure to reduce pollutants in stormwater runoff, and each surface water body.
- (b) An assessment of all storm water discharges associated with this facility including the following components:
  - (1) A list of all potential contaminants used in any activities at the facility and an annual estimate of amounts that will be used in the described activities.
  - (2) A narrative description of all known significant materials that have been treated, stored, or disposed in a manner that allows exposure to stormwater during the five year period prior to the issue date of this permit; the method of on-site storage or disposal; materials management practices employed to minimize contact of these materials with stormwater runoff; and materials loading and access areas.
  - (3) For each area of the plant that generates stormwater, a prediction of the direction of flow and an estimate of the types of pollutants which are likely to be present in stormwater discharges.
- (c) 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. In addition to the minimum BMPs listed in SPECIAL CONDITIONS #15 below, the location and description of existing structural and

C. SPECIAL CONDITIONS (continued)

non-structural control measures to reduce pollutants in stormwater runoff and a description of any treatment the stormwater receives shall be included in the SWPPP.

- (d) The SWPPP must include a preventive maintenance program which includes a schedule for site inspections twice per month with brief written reports. The inspections must include observation and evaluation of structural and non-structural BMP effectiveness, deficiencies, and corrective measures that will be taken. The preventive maintenance program shall include schedules for routine maintenance of structural BMPs (e.g. cleaning catch basins, containment areas, and stormwater inlets) as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface or ground waters. 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 DNR personnel upon request.
  - (e) A provision for designating an individual to be responsible for environmental matters.
  - (f) 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.
15. 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 as well as all pesticide, herbicide, and fungicide products.
  - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), storage containers (such as drums, cans, or cartons), and all pesticide, herbicide, and fungicide products so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
  - (d) Provide good housekeeping practices on the site to keep 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.
16. 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 **ten (10) 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.

C. SPECIAL CONDITIONS (continued)

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

SUMMARY OF ACUTE WET TESTING FOR THIS PERMIT				
OUTFALLS	AEC	FREQUENCY	SAMPLE TYPE	MONTH
001, 002, & 003	100%	Twice/Permit Cycle in 2012 and 2015	Grab	Any month in 2012 and 2015

Dilution Series							
AEC%	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.
  - (i) 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.
  - (ii) 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.
  - (iii) 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 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) Failure of a WET test is a violation of this permit. Follow-up tests do not negate an initial failed test. In addition, the failure of a follow-up test will constitute a separate permit violation.
- (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.

C. SPECIAL CONDITIONS (continued)

- (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 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

D. RECORDS, RETENTION AND RECORDING

All sampling data shall be maintained by the permittee for a period of five (5) years and shall be supplied to the Department of Natural Resources upon request (supersedes Standard Conditions Part I, Section A:7. Records Retention). A copy of all of the sampling data must be submitted with an application for reissuance of this permit.

E. 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.

F. 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.

G. 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.

H. 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 INITIAL ISSUANCE**  
**OF**  
**MO-0136735**  
**HPI PRODUCTS, INC. – SYLVANIE PLANT**

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: Industrial  
 Facility SIC Code(s): 2879

**Facility Description:**

Storm water runoff from a Pesticides Formulating, Packaging, and Repackaging (PFPR) Facility with zero discharge required to waters of the state and the POTW.

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

Application Date: 04/27/2011  
 Expiration Date: N/A  
 Last Inspection: N/A

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (GPD)*	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	613,360	BMP**	Stormwater	0.05
#002	123,513.5	BMP**	Stormwater	0.10
#003	66,104.5	BMP**	Stormwater	0.20
#004	193,545	BMP**	Stormwater	0.05

\* Stormwater design flows were calculated using total square footage of the drainage area for each outfall supplied with the permit application, an assumption of a 1.0 runoff coefficient, and the expected rainfall for the 25 year – 24 hour storm event found in the Missouri Climate Atlas.

\*\* Best Management Practices

#### Outfall #001

Legal Description: NW ¼, NW ¼, Sec. 17, T57N, R35W, Buchanan County  
UTM Coordinates: X = 340884, Y = 4403032  
Receiving Stream: Unnamed Tributary to the Missouri River (U)  
First Classified Stream and ID: Missouri River (P) (00226), 2010 303(d) List  
USGS Basin & Sub-watershed No.: (10240011 – 0103)

Outfall #001 is a combined sewer diversion structure\* that drains 160,000 ft<sup>2</sup> of impervious surface, including most of the facility's roof, railroad right of way, a brick and gravel drive, several dry storage silos, above ground storage tanks, a secondary containment structure, a no-discharge loading pad for bulk liquids, and a covered loading pad for dry goods. There is also a coupling connector on the west side of the building that can be used for pneumatic loading of liquid to or from tankers. Sampling for reasons of compliance with this permit shall be conducted at the most significant point of storm water inflow at the diversion structure.

#### Outfall #002

Legal Description: SE ¼, SW ¼, Sec. 08, T57N, R35W, Buchanan County  
UTM Coordinates: X = 340957, Y = 4403060  
Receiving Stream: Unnamed Tributary to the Missouri River (U)  
First Classified Stream and ID: Missouri River (P) (00226), 2010 303(d) List  
USGS Basin & Sub-watershed No.: (10240011 – 0103)

Outfall #002 is a combined sewer inlet\* that drains 33,025 ft<sup>2</sup> of impervious surface consisting primarily of employee parking. The eastern side of the building, in this drainage area, has multiple drains that drain back-flow preventers and well as emergency eye wash stations. This side of the building also has a coupling connector that can be used for pneumatic loading of liquids to or from tankers. This drainage area has two combined sewer inlets that are relatively close together. The inlet that shall be sampled for reasons of compliance with this permit is the northern most structure.

#### Outfall #003

Legal Description: SE ¼, SW ¼, Sec. 08, T57N, R35W, Buchanan County  
UTM Coordinates: X = 340912, Y = 4403228  
Receiving Stream: Unnamed Tributary to the Missouri River (U)  
First Classified Stream and ID: Missouri River (P) (00226), 2010 303(d) List  
USGS Basin & Sub-watershed No.: (10240011 – 0103)

Outfall #003 is a combined sewer inlet\* that drains 17,675 ft<sup>2</sup> of impervious surface consisting of a covered truck loading dock. In case of spills, the loading area has a containment trench that is pumped when needed. Pumped contaminated water is taken to a permitted disposal facility.

\* Note that, under normal circumstances, storm water flows at Outfalls #001 - #003 are sent to the POTW; however, during heavy or prolonged precipitation events, the combined sewer diversion structure reroutes storm water flows, for all three outfalls, from the POTW, directly to the Missouri River.

#### Outfall #004

Legal Description: NE ¼, NW ¼, Sec. 17, T57N, R35W, Buchanan County  
UTM Coordinates: X = 340914, Y = 4402936  
Receiving Stream: Unnamed Tributary to the Missouri River (U)  
First Classified Stream and ID: Missouri River (P) (00226), 2010 303(d) List  
USGS Basin & Sub-watershed No.: (10240011 – 0103)

Outfall #004 is a low-lying area to the south of the facility building. This area is surrounded by berms that prevent accumulated water from running off of the property. The company stores unused process equipment in this area that might be used again in the future. This area is discussed further in the Effluent Limitations section below.

#### Comments:

The HPI Products, Inc. – Sylvania Plant is a Pesticide Formulating, Packaging, and Repackaging (PFPR) Facility located in St. Joseph, MO in the industrial bottom section. The facility has been in operation since the early 1980's. This portion of the City of St. Joseph is on the city's combined sewer system. As such the facility has never obtained a NPDES permit for its storm water discharges. HPI Products, Inc., following the documentation of numerous hazardous waste violations related to the company's storage and disposal of process wastes and byproducts, has entered into a Consent Decree, Civil No. 5:08-cv-06133-DGK, with the United States of America, and the State of Missouri. The majority of this consent decree involves the hazardous waste violations at several of HPI Products, Inc.'s St. Joseph facilities. The following three items in the consent decree, however, involve storm water:

1. HPI Products, Inc. is to apply for a Site Specific Storm Water Permit for the 222 Sylvania facility.
2. There shall be "zero discharge" to the POTW of any process materials.

3. HPI Products, Inc. shall develop a Site Characterization Report of the facility and a plan to remediate contamination discovered by the characterization.

Items 2 and 3 above have been incorporated into this permit by means of effluent limitations and narrative conditions.

Effluent Limitations

Categorical Standards for PFPR Facilities, [40 CFR Part 455], provide two options that facilities may pursue under normal circumstances. The first option is “zero discharge” to surface water. The second option is the voluntary implementation of a Pollution Prevention (P2) Program that reduces that amount of pollutants discharges through Best Management Practices (BMPs). Due to the compliance history at this facility, the only option available is zero discharge to surface water and, as required by the consent decree, zero discharge to the POTW. There are four storm water inlets around this facility that drain to the combined sewer. During small precipitation events, collected storm water is treated at the POTW. During large or prolonged precipitations events a combined sewer diversion structure (see Appendix #1. Figure 1.) reroutes storm water directly to the Missouri River approximately 0.05 miles from the facility. Since all of these inlets provide potential, however small it may be, to send contaminated storm water to both the river and the POTW, monitoring will be required. If storm water were to come into contact with process water, raw, intermediate, or final products at this facility it would become process water. The department has no historical data from this facility indicating if the BMPs employed are effective at protecting water quality of storm water runoff. As such monthly monitoring of stormwater will be required at these three inlets. The facility will monitor for indicator parameters that should identify if storm water discharges contain contaminants. Additionally if any raw, intermediate, or final products are stored, handled, processed, or spilled in a manner that could expose them to storm water, the facility will be required to sample for these compounds monthly for one year. The department does not automatically assume that storm water runoff from this facility is contaminated. The monitoring requirements contained in this permit are intended only to provide sufficient data to be reasonably certain that the HPI’s BMPs are effective.

The southern portion of this facility’s property does not drain to the combined sewer. It is a low-lying area that has berms around it preventing storm water from leaving the property. Contained in this area is a large amount of old process equipment that is no longer in use, but which the company wishes to keep for potential future use. Storm water in this area is exposed to this old equipment and accumulates in a depression until it either soaks into the Missouri River Alluvium or evaporates. If present, contaminated storm water has the potential to reach the alluvium and, therefore, the Missouri River. The facility will be required to monitor accumulated storm water in this area monthly as well for the same parameters as the other three outfalls.

Once sufficient sampling data has been obtained to demonstrate that this facility’s BMPs are sufficient and effective and prevention of storm water contamination the facility may request that the monitoring frequency be reduced or, if impeccable permit compliance has been demonstrated, that monitoring requirements be eliminated and a BMP and SWPPP only permit be issued. Approval of this request, as well as what is considered a sufficient amount of data, will be at the discretion of the department. These changes, along with any others, will be contingent upon the results of the site characterization described below.

Site Characterization

This permit contains a special condition regarding the mandated site characterization for this facility. Once the characterization is completed a final copy of the Site Characterization report shall be submitted to MO DNR NPDES Permit Staff for review. If any contamination of ground water is noted or if soil contamination is found that has the potential to reach ground water, permit staff may reopen this permit to require the installation of ground water monitoring wells. Moreover, permit staff may reopen the permit to incorporate other conditions or limitations that are appropriate to the findings of the site characterization.

**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 20-9.010(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:

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*	8-DIGIT HUC	EDU**
Unnamed Tributary to the Missouri River	U	N/A	General Criteria	10240011	Central Plains/ Nishnabotna/ Platte
Missouri River	P	226	LWW, AQL, WBC-B, IND, SCR, DWS, IRR		

\* - 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:**

Mixing considerations not allowed; therefore Missouri River low-flow values are not relevant.

**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.

- New permit, 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.

- Existing facility, 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.

Applicable .

The permittee/facility is currently under enforcement action due to a Consent Decree with the United States of America and The State of Missouri. The consent decree requires the facility to obtain a site specific NPDES permit, to maintain zero discharge to the POTW, and to develop and submit a site characterization report and a plan to address potential soil and groundwater contamination. These components have been incorporated into the permit by means of special conditions and effluent limitations.

**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 ;

This is not a domestic wastewater permit.

**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.

**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 ≥ 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 ;

This section of the Missouri River or is listed on the 2010 Missouri 303(d) List for Bacteria.

- This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of the Missouri River.

**Part V – Effluent Limits Determination**

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

**All Outfalls**

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	MGD	1, 9	*		*	N/A	N/A
pH	SU	1, 9	6.5 – 9.0		6.5 – 9.0	N/A	N/A
Conductivity	µS/cm @ 25°C	9	*		*	N/A	N/A
COD	mg/L	9	90		60	N/A	N/A
Raw, Intermediate, and Final Products (Note 1)		9	Non-Detect		Non-Detect	N/A	N/A
Whole Effluent Toxicity (WET) Test	% Survival	11	Please see WET Test in the Derivation and Discussion Section below.				

\* - Monitoring requirement only.

\*\* - For DO the Daily Maximum is a Daily Minimum and the Monthly Average is a Monthly Average Minimum.

\*\*\* - # of colonies/100mL; the Monthly Average for *E. coli* is a geometric mean.

\*\*\*\* - 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                |

## ALL OUTFALLS – 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.
- **pH.** pH shall be maintained within the range of 6.5 – 9.0 standard pH units, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**
- **Chemical Oxygen Demand.** 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.
- **Conductivity.** Monitoring requirement only. High conductivity is indicative that monitoring for additional pollutants may be needed.
- **Raw, Intermediate, and Final Products.** Non-detect of all products stored, handled, produced, or spilled in a manner that creates any potential for exposure to storm water in the previous twelve (12) months. Non-detect limits ensure compliance with the effective consent decree, [40 CFR Part 455], and groundwater quality standards.
- **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 TWICE/PERMIT CYCLE:**

The typical frequency for facilities which handle large amounts of toxic substances is twice per year as per the Water Protection Program’s Permit Manual. The WET test frequency in this permit has been set to twice per permit cycle; in 2012 and 2015. The rationale for this alternate frequency is as follows. The permittee is already required to sample for all products at storm water inlets and the low-lying area to the south. The permittee must complete a site characterization that will determine if soil or ground water contamination has occurred. This characterization will not be completed until well after this permit has been issued. The 2012 WET test will provide immediate information regarding the toxicity of storm water runoff. This information would be useful in the site characterization and, if significant mortality is seen, may trigger a Toxicity Identification Evaluation and a permit modification to include further monitoring. The 2015 WET test will confirm that storm water is or is not toxic prior to the next permit renewal. If the facility develops and follows a good Storm Water Pollution Prevention Plan and follows the mandates in the Consent Decree, more frequent WET testing would not be warranted.

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

## **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.**

Applicable; The Department is required to determine findings of affordability because the permit applies to 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.

### **PUBLIC NOTICE:**

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

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

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

(Individual permit writers may leave the below check boxes and discussion during the drafting of the Factsheet; however, once one of the boxes below is applicable, the permit writer will need to check the appropriate box and fill in the needed items. At that time the permit writer may or may not (SOP of each RO at this time) remove the unchecked boxes. **Please remove this reminder.**

- The Public Notice period for this operating permit was from January 6, 2012 to February 6, 2012. No responses received or responses to the Public Notice of this operating permit do not warrant the modification of effluent limits and/or the terms and conditions of this permit.

This permit was originally scheduled to be placed on public notice on December 23, 2011, with copies having been sent out by mail earlier in that week, but was withdrawn under threat of objection by the U.S. EPA. EPA had concerns about changes that had been made in the language protecting Missouri's Narrative Water Quality Standards. The change had been made in an attempt to accommodate recent changes in Missouri's Statutes. EPA found the new language deficient. This permit is being placed back on to public notice, with the previous version of the Narrative Criteria protection.

**DATE OF FACT SHEET:** AUGUST 16, 2011

### **COMPLETED BY:**

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## Part VIII – Appendices

### APPENDIX #1 – FACILITY MAPS



Figure 1. Aerial view of HPI Products, Inc at 222 Sylvania St. Outfalls #001, #002, and #003 are combined sewer storm water inlets. Outfall #004 is a low-lying are where storm water soaks into the alluvium. CSO is a City of St. Joseph combined sewer overflow outfall.

APPENDIX #1 – FACILITY MAPS CONTINUED

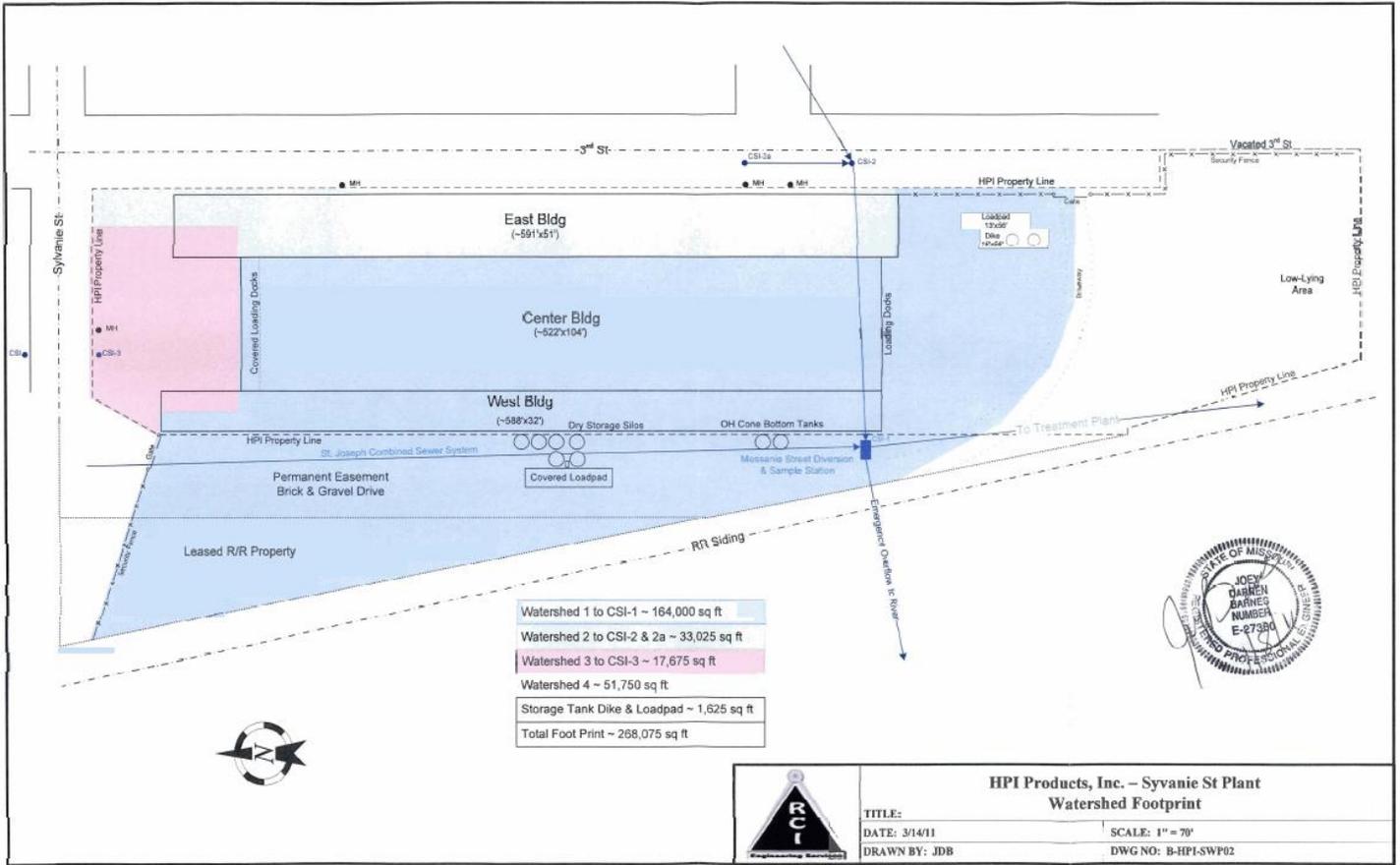


Figure 2. Diagram of HPI Products, Inc at 222 Sylvania showing the four drainage areas for the facility.