

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No. MO-0136948

Owner: Honeywell International
Address: 101 Columbia Road, Morristown, NJ 07962

Continuing Authority: Same as above
Address: Same as above

Facility Name: Honeywell Performance Materials and Technologies
Facility Address: 6400 North Brown Station Road, Columbia MO 65202

Legal Description: See Page 2
UTM Coordinates: See Page 2

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

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

FACILITY DESCRIPTION

Production of paraffin wax lubricants used in the rigid PVC industry. Raw materials consist primarily of high/low melt paraffin wax, stearic acid, oxidized polyethylene (high and low density), calcium hydroxide and other proprietary additives. Stormwater from the facility discharges through outfalls 001, 002, and 003. Outfalls 001 and 002 discharge to surface water and 003 discharges to surface water from an engineered wetland with sediment forebay. Outfall 003 also discharges minimal amounts of power washing water used to clean particulate wax from perforated aluminum sheets and associated equipment. See page 2.

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.

July 6, 2012
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

July 5, 2017
Expiration Date

John Madros, Director, Water Protection Program

FACILITY DESCRIPTION (continued):

Outfall 001, Stormwater SIC # 2821

Legal Description: NW ¼, NE ¼, Sec. 21, T49N, R12W, Boone County
UTM Coordinates: X= 563271, Y= 4319053
Receiving Stream: Unnamed Tributary to Bear Creek (U)
First Classified Stream and ID: Bear Cr. (C) 1015.00
USGS Basin & Sub-watershed No.: 10300102 - 0706
Actual Flow: 0.153 MGD Dependent on Precipitation

Outfall 002, Stormwater SIC # 2821

Legal Description: NW ¼, NE ¼, Sec. 21, T49N, R12W, Boone County
UTM Coordinates: X= 563306, Y= 4319052
Receiving Stream: Unnamed Tributary to Bear Creek (U)
First Classified Stream and ID: Bear Cr. (C) 1015.00
USGS Basin & Sub-watershed No.: 10300102 - 0706
Actual Flow: 0.112 MGD Dependent on Precipitation

Outfall 003, Stormwater SIC # 2821

Legal Description: NW ¼, NE ¼, Sec. 21, T49N, R12W, Boone County
UTM Coordinates: X= 563319, Y= 4319095
Receiving Stream: Unnamed Tributary to Bear Creek (U)
First Classified Stream and ID: Bear Cr. (C) 1015.00
USGS Basin & Sub-watershed No.: 10300102 - 0706
Actual Flow: 0.255 MGD Dependent on Precipitation

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 9	
					PERMIT NUMBER MO-0136948	
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
Outfall #001, 002, and 003 (Note 2)						
Flow	MGD	*		*	once/quarter*****	24 hr. Estimate
Chemical Oxygen Demand	mg/L	*		*	once/quarter*****	24 hr. comp**
Total Suspended Solids	mg/L	*		*	once/quarter*****	24 hr. comp**
pH – Units	SU	***		***	once/quarter*****	grab
Oil & Grease	mg/L	*		*	once/quarter*****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2012</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
Chemicals listed in 40 CFR 122 Appendix D (See pages 7-9) (Note 1)	µg/L	*		*	once/year	grab
Other Soluble Bulk Materials****	µg/L	*		*	once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2013</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampling device.
- *** 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.
- **** Other soluble bulk materials that are not listed in 40 CFR 122 Appendix D that are stored outside and exposed to storm water must also be monitored.
- ***** Sample once per quarter in the months of March, June, September, and December. See Table Below.

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

Note 1- Sampling and analysis of storm water discharges for any chemicals listed in 40 CFR 122 Appendix D stored outdoors, and other soluble materials stored outdoors must occur at least once per year, and reported by January 28th. The department may also require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or evidence of offsite impacts from activities at the facility. If such an action is needed, the department will specify in writing the sampling requirements, including such information as location and extent. It is a violation of this permit to fail to comply with said written notification to sample.

Note 2- Storm water samples shall be collected within the first 60 minutes of discharge occurring as a result of precipitation events of 0.1 inches or greater. Precipitation events include rainfall as well as run-off from the melting of frozen precipitation.

D. SPECIAL CONDITIONS

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

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

2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.

4. 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;
 - (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.

5. 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.

6. Report as no-discharge when a discharge does not occur during the report period.
7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

D. SPECIAL CONDITIONS (continued)

8. The permittee shall comply with any applicable requirements listed in 10 CSR 20-9, unless the facility has received written notification that the Department has approved a modification to the requirements. The monitoring frequencies contained in this permit shall not be construed by the permittee as a modification of the monitoring frequencies listed in 10 CSR 20-9. If a modification of the monitoring frequencies listed in 10 CSR 20-9 is needed, the permittee shall submit a written request to the department for review and, if deemed necessary, approval.
9. The following Benchmarks are considered necessary to protect water quality and shall not be exceeded. The BMPs at the facility should be designed to meet these benchmarks during rainfall events up to the 1-in-10 year, 24 hour rain event.

Benchmarks Table

Parameter	Benchmark
Chemical Oxygen Demand ₅	90 mg/L
Total Suspended Solids	50 mg/L
pH – Units	6.5-9.0 Standard Units
Oil & Grease	10 mg/L
Chemicals listed in 40 CFR 122 Appendix D	Non Detect
Other Soluble Bulk Materials	Non Detect

10. Chemicals listed in 40 CFR 122 Appendix D appear in this permit beginning on page 7 of this permit. Sampling must occur **only** for chemicals which are currently or have been stored or disposed of outside in the last three years in open or unsecured containers, loaded or unloaded, or treated and exposed to storm water. A secure container shall be deemed to be a container with a lid which has never been opened since it was originally sealed.
11. Other soluble bulk materials that are not listed in 40 CFR 122 Appendix D that are stored outside and exposed to storm water must also be monitored. If permittee has questions concerning which parameters to sample and test for, contact the Water Protection Program.
12. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared within 30 days and implemented within 90 days of permit issuance. The SWPPP must be kept on-site and should not be sent to DNR unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document:

Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.

The SWPPP must include the following:

- (a) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #13 below.
- (b) The SWPPP must include a schedule for twice per month site inspections and brief written reports. The inspections must include observation and evaluation of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to DNR personnel upon request.
- (c) A provision for designating an individual to be responsible for environmental matters.
- (d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of DNR.

D. SPECIAL CONDITIONS (continued)

13. 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 trash from entry into waters of the state.
 - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.

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

Appendix D, To Part 122 - NPDES Permit Application Testing Requirements (122.21)

Table II - Organic Toxic Pollutants In Each Of Four Fractions In Analysis By Gas Chromatography/Mass Spectroscopy (GS/MS).

<u>Volatiles</u>		<u>Base/Neutral</u>	
1	Vacrolein	1B	acenaphthene
2	Vacrylonitrile	2B	acenaphthylene
3	Vbenzene	3B	anthracene
5	Vbromoform	4B	benzidine
6	Vcarbon tetrachloride	5B	benzo(a)anthracene
7	Vchlorobenzene	6B	benzo(a)pyrene
8	Vchlorodibromomethane	7B	3,4-benzofluoranthene
9	Vchloroethane	8B	benzo(ghi)perylene
10	V2-chloroethylvinyl ether	9B	benzo(k)fluoranthene
11	Vchloroform	10B	bis(2-chloroethoxy)methane
12	Vdichlorobromomethane	11B	bis(2-chloroethyl)ether
14	V1,1-dichloroethane	12B	bis(2-chloroisopropyl)ether
15	V1,2-dichloroethane	13B	bis(2-ethylhexyl)phthalate
16	V1,1-dichloroethylene	14B	4-bromophenyl phenyl ether
17	V1,2-dichloropropane	15B	butylbenzyl phthalate
18	V1,3-dichloropropylene	16B	2-chloronaphthalene
19	Vethylbenzene	17B	4-chlorophenyl phenyl ether
20	Vmethyl bromide	18B	chrysene
21	Vmethyl chloride	19B	dibenzo(a,h)anthracene
22	Vmethylene chloride	20B	1,2-dichlorobenzene
23	V1,1,2,2-tetrachloroethane	21B	1,3-dichlorobenzene
24	Vtetrachloroethylene	22B	1,4-dichlorobenzene
25	Vtoluene	23B	3,3'-dichlorobenzidine
26	V1,2-trans-dichloroethylene	24B	diethyl phthalate
27	V1,1,1-trichloroethane	25B	dimethyl phthalate
28	V1,1,2-trichloroethane	26B	di-n-butyl phthalate
29	Vtrichloroethylene	27B	2,4-dinitrotoluene
31	Vvinyl chloride	28B	2,6-dinitrotoluene
		29B	di-n-octyl phthalate
		30B	1,2-diphenylhydrazine (as azobenzene)
		31B	fluoranthene
		32B	fluorene
		33B	hexachlorobenzene
		34B	hexachlorobutadiene
		35B	hexachlorocyclopentadiene
		36B	hexachloroethane
		37B	indeno(1,2,3-cd)pyrene
		38B	isophorone
		39B	naphthalene
		40B	nitrobenzene
		41B	N-nitrosodimethylamine
		42B	N-nitrosodi-n-propylamine
		43B	N-nitrosodiphenylamine
		44B	phenanthrene
		45B	pyrene
		46B	1,2,4-trichlorobenzene
<u>Acid Compounds</u>			
1A	2-chlorophenol		
2A	2,4-dichlorophenol		
3A	2,4-dimethylphenol		
4A	4,6-dinitro-o-cresol		
5A	2,4 dinitrophenol		
6A	2-nitrophenol		
7A	4-nitrophenol		
8A	p-chloro-m-cresol		
9A	pentachlorophenol		
10A	phenol		
11A	2,4,6-trichlorophenol		

(continued on next page)

Appendix D, To Part 122 - NPDES Permit Application Testing Requirements (122.21)

<u>Pesticides</u>	<u>Table IV – Conventional and Nonconventional Pollutants Required to be Tested by Existing Dischargers if Expected to be Present</u>
1 Paldrin	Bromide
2 Palpha-BHC	Chlorine, Total Residual
3 Pbeta-BHC	Color
4 Pgamma-BHC	Fecal Coliform
5 Pdelta-BHC	Fluoride
6 Pchlordan	Nitrate-Nitrite
7 P4,4'-DDT	Nitrogen, Total Organic
8 P4,4'-DDE	Oil and Grease
9 P4,4'-DDD	Phosphorus, Total
10 Pieldrin	Radioactivity
11 Palpha-endosulfan	Sulfate
12 Pbeta-endosulfan	Sulfide
13 Pendosulfan sulfate	Sulfite
14 Pendrin	Surfactants
15 Pendrin aldehyde	Aluminum, Total
16 Pheptachlor	Barium, Total
17 Pheptachlor epoxide	Boron, Total
18 PPCB-1242	Cobalt, Total
19 PPCB-1254	Iron, Total
20 PPCB-1221	Magnesium, Total
21 PPCB-1232	Molybdenum, Total
22 PPCB-1248	Manganese, Total
23 PPCB-1260	Tin, Total
24 PPCB-1016	Titanium, Total
25 Ptoxaphene	

Table III – Other Toxic Pollutants
(Metals and Cyanide) and Total Phenols

- Antimony, Total
- Arsenic, Total
- Beryllium, Total
- Cadmium, Total
- Chromium, Total
- Copper, Total
- Lead, Total
- Mercury, Total
- Nickel, Total
- Selenium, Total
- Silver, Total
- Thallium, Total
- Zinc, Total
- Cyanide, Total
- Phenols, Total

Table V – Toxic Pollutants and Hazardous
Substances Required to be Identified by Existing
Dischargers if Expected to be Present

Toxic Pollutants

Asbestos

Hazardous Substances

- Acetaldehyde
- Allyl alcohol
- Allyl chloride
- Amyl acetate
- Aniline
- Benzonitrile
- Benzyl chloride
- Butyl acetate
- Butylamine
- Captan
- Carbaryl
- Carbofuran

(continued on next page)

Appendix D, To Part 122 - NPDES Permit Application Testing Requirements (122.21)

Table V (continued)

Hazardous Substances (continued)

Carbon disulfide	Pyrethrins
Chlorpyrifos	Quinoline
Coumaphos	Resorcinol
Cresol	Strontium
Crotonaldehyde	Strychnine
Cyclohexane	Styrene
2,4-D(2,4-Dichlorophenoxy acetic acid)	2,4,5-T(2,4,5-Trichlorophenoxy acetic acid)
Diazinon	TDE(Tetrachlorodiphenylethane)
Dicamba	2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Dichlobenil	Trichlorofan
Dichlone	Triethanolamine dodecylbenzenesulfonate
2,2-Dichloropropionic acid	Triethylamine
Dichlorvos	Trimethylamine
Diethyl amine	Uranium
Dimethyl amine	Vanadium
Dintrobenzene	Vinyl acetate
Diquat	Xylene
Disulfoton	Xylenol
Diuron	Zirconium
Epichlorohydrin	
Ethion	
Ethylene diamine	
Ethylene dibromide	
Formaldehyde	
Furfural	
Guthion	
Isoprene	
Isopropanolamine Dodecylbenzenesulfonate	
Kelthane	
Kepone	
Malathion	
Mercaptodimethur	
Methoxychlor	
Methyl mercaptan	
Methyl methacrylate	
Methyl parathion	
Mevinphos	
Mexacarbate	
Monoethyl amine	
Monomethyl amine	
Naled	
Napthenic acid	
Nitrotoluene	
Parathion	
Phenolsulfanate	
Phosgene	
Propargite	
Propylene oxide	

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF ISSUANCE
OF
MO-0136948
HONEYWELL PERFORMANCE MATERIALS & TECHNOLOGIES

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): 2821

Facility Description:

Production of paraffin wax lubricants used in the rigid PVC industry. Raw materials consist primarily of high/low melt paraffin wax, stearic acid, oxidized polyethylene (high and low density), calcium hydroxide and other proprietary additives. Stormwater from the facility discharges through outfalls 001, 002, and 003. Outfalls 001 and 002 discharge to surface water and 003 discharges to surface water from an engineered wetland with a sedimentation forebay. Outfall 003 also discharges minimal amounts of power washing water used to clean particulate wax from perforated aluminum sheets and associated equipment. This facility was previously permitted via MOR23A117 which has been terminated and replaced with MO-0136948 upon request and application of the facility.

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

Application Date: 03-07-2012
Last Inspection: 05/11/2009 In Compliance

OUTFALL(S) TABLE:

OUTFALL	AVERAGE FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	0.237	BMP	Stormwater	3.17
002	0.174	BMP	Stormwater	3.17
003	0.40	BMP, Retention	Stormwater	3.17

Outfall 001, Stormwater SIC # 2821

Legal Description: NW ¼, NE ¼, Sec. 21, T49N, R12W, Boone County
UTM Coordinates: X= 563271, Y= 4319053
Receiving Stream: Unnamed Tributary to Bear Creek (U)
First Classified Stream and ID: Bear Cr. (C) 1015.00
USGS Basin & Sub-watershed No.: 10300102 - 0706
Actual Flow: 0.153 MGD Dependent on Precipitation

Outfall 002, Stormwater SIC # 2821

Legal Description: NW ¼, NE ¼, Sec. 21, T49N, R12W, Boone County
 UTM Coordinates: X= 563306, Y= 4319052
 Receiving Stream: Unnamed Tributary to Bear Creek (U)
 First Classified Stream and ID: Bear Cr. (C) 1015.00
 USGS Basin & Sub-watershed No.: 10300102 - 0706
 Actual Flow: 0.112 MGD Dependent on Precipitation

Outfall 003, Stormwater SIC # 2821

Legal Description: NW ¼, NE ¼, Sec. 21, T49N, R12W, Boone County
 UTM Coordinates: X= 563319, Y= 4319095
 Receiving Stream: Unnamed Tributary to Bear Creek (U)
 First Classified Stream and ID: Bear Cr. (C) 1015.00
 USGS Basin & Sub-watershed No.: 10300102 - 0706
 Actual Flow: 0.255 MGD Dependent on Precipitation

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:

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 1st classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

RECEIVING STREAM(S) TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC	EDU**
Unnamed Tributary of Bear Creek	U	NA	General Criteria	10300102 - 0706	Ozark/Moreau/ Loutre
Bear Creek	C	1015	AQL, LWW, SCR, WBC-B		

* - 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
Unnamed Tributary of Bear Creek	0.0	0.0	0.0

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)].

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 in MOR23A117 ; 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.

-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.

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.

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.

Not Applicable ;

At this time, the permittee is not required to conduct WET test for this facility.

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

Not Applicable ;

This facility does not discharge to a 303(d) listed stream.

Part V – Effluent Limits Determination

Outfall #001, 002, 003 – Stormwater Outfalls

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.

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE
FLOW	GPD	9	*		*
COD	MG/L	9	*		*
TSS	MG/L	9	*		*
PH	SU	1	*		*
OIL AND GREASE	MG/L	1	*		*
Chemicals listed in 40 CFR 122 Appendix D	µg/L	9	*		*
Other Soluble Bulk Materials	µg/L	9	*		*

* - Monitoring requirement only.

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, 002, 003 – DERIVATION AND DISCUSSION OF LIMITS:

- Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of stormwater discharged from each outfall is needed to assure compliance with permitted limitations. If the permittee is unable to obtain 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), Total Suspended Solids (TSS), pH, Oil and Grease, Chemicals listed in 40 CFR 122 Appendix D and Other Soluble Bulk Material.** This permit includes benchmarks to evaluate the effectiveness of the Storm Water Pollution Prevention Plan. Exceedance of a benchmark during sampling event requires an evaluation of BMPs and correction of the deficiency that caused the exceedance. Because of the level of risk to human health and the environment associated with the pollutants that appear in Appendix D, and because discharge of these pollutants are preventable by good BMPs, the benchmark is set at no detection of these pollutants. Discharges of other soluble bulk materials that do not appear in Appendix D are also preventable with appropriate BMPs. Quarterly sampling and reporting is required for COD, TSS, pH and Oil and Grease.
- Benchmarks Table.** The following Benchmarks are considered necessary to protect water quality and shall not be exceeded. The BMPs at the facility should be designed to meet these benchmarks during rainfall events up to the 1-in-10 year, 24 hour rain event.

Parameter	Benchmark
Chemical Oxygen Demand ₅	90 mg/L
Total Suspended Solids	50 mg/L
pH – Units	6.5-9.0 Standard Units
Oil & Grease	10 mg/L
Chemicals listed in 40 CFR 122 Appendix D	Non Detect
Other Soluble Bulk Materials	Non Detect

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.

PUBLIC NOTICE:

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

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

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

- The Public Notice period for this operating permit is tentatively schedule in April 2012. The public notice period ended on June 11, 2012 and no comment were received.

DATE OF FACT SHEET: MARCH 27, 2012

COMPLETED BY:

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