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-0001180
Owner:	SRG Global, Inc.
Address:	101 Meatte Avenue, Portageville, MO 63873
Continuing Authority:	SRG Global, Inc. –Portageville
Address:	101 Meatte Avenue, Portageville, MO 63873
Facility Name:	Siegel-Robert Automotive; D.B.A. SRG Global, Inc. –Portageville
Facility Address:	101 Meatte Avenue, Portageville, MO 63873
Legal Description:	see page two
UTM Coordinates:	see page two
Receiving Stream:	Tributary to Portage Open Bay
First Classified Stream and ID:	MUDD V1.08-20-13 (C) 3960 locally known as Portage Open Bay
USGS Basin & Sub-watershed No.:	Portage Open Bay – 08020204-0608

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

FACILITY DESCRIPTION

This facility performs injection molding, electroplating, and coating of plastics. There are four active permitted features; three are stormwater outfalls. See additional information on page two.

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

September 1, 2016 — Effective Date

December 19, 2016 — Modification Date

Harry D. Bozoian, Director, Department of Natural Resources

December 31, 2020 — Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

OUTFALL #001
Eliminated

OUTFALL #002 – Process Wastewater; SIC # 3471 & 3089; NAICS # 332813 & 326121
Injection molding, electroplating, & surface coating of plastic automotive parts. Also discharges contaminated groundwater recovered from well and sump. Process and groundwater receive treatment prior to release. Treatment is via reduction, neutralization, coagulation, flocculation, and pressure filtration. Sludge is hauled to landfill.

Legal Description:	NE¼, NE¼, Sec.36, T21N, R12E, New Madrid County
UTM Coordinates:	X=795508, Y=4035954
Receiving Stream:	Portage Open Bay Ditch
First Classified Stream and ID:	Portage Open Bay (C) 3960
USGS Basin & Sub-watershed No.:	Portage Open Bay (08020204-0608)
Design Flow:	0.415 MGD
Actual Flow:	0.155 MGD

OUTFALLS #003
Eliminated, no industrial stormwater exposure

OUTFALL # 004 – Stormwater – SIC # 3471 & 3089; NAICS # 332813 & 326121

Legal Description:	NW¼, NE¼, Sec.36, T21N, R12E, New Madrid County
UTM Coordinates:	X=795295, Y=4035924
Receiving Stream:	Portage Open Bay Ditch
First Classified Stream and ID:	Portage Open Bay (C) 3960
USGS Basin & Sub-watershed No.:	Portage Open Bay (08020204-0608)
Actual flow:	Dependent upon precipitation

OUTFALL #005
Eliminated, no industrial stormwater exposure

OUTFALL # 006 – Stormwater – SIC # 3471 & 3089; NAICS # 332813 & 326121

Legal Description:	NW¼, NE¼, Sec.36, T21N, R12E, New Madrid County
UTM Coordinates:	X=795296, Y=4035975
Receiving Stream:	Portage Open Bay Ditch
First Classified Stream and ID:	Portage Open Bay (C) 3960
USGS Basin & Sub-watershed No.:	Portage Open Bay (08020204-0608)
Actual flow:	Dependent upon precipitation

OUTFALL # 007 – Stormwater – SIC # 3471 & 3089; NAICS # 332813 & 326121

Legal Description:	NE¼, NE¼, Sec.36, T21N, R12E, New Madrid County
UTM Coordinates:	X=795559, Y=4035916
Receiving Stream:	Portage Open Bay Ditch
First Classified Stream and ID:	Portage Open Bay (C) 3960
USGS Basin & Sub-watershed No.:	Portage Open Bay (08020204-0608)
Actual flow:	Dependent upon precipitation

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #002

TABLE A-1
INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective on **September 1, 2016** and remain in effect through **August 31, 2020**. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		*	once/week	24 hr. total
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	*		*	once/week	composite ǂ
Cyanide, Amenable to Chlorination (Note 6)	µg/L	22		22	once/week	grab
Dissolved Oxygen (DO), (Note 3)	mg/L	* min		* min	once/week	grab
Hardness (as $CaCO_3$)	mg/L	*		*	once/week	grab
Oil & Grease	mg/L	52		26	once/month	grab
pH (Note 1)	SU	6.5 to 9.0		6.5 to 9.0	once/week	grab
Total Dissolved Solids	mg/L	*		*	once/month	grab
Total Suspended Solids	mg/L	60		31	once/week	composite ǂ
METALS						
Cadmium, Total Recoverable	µg/L	2.1		0.9	once/week	composite ǂ
Chromium, Total Recoverable	µg/L	2770		1710	once/month	composite ǂ
Chromium VI, Hexavalent, Dissolved (Note 7)	µg/L	*		*	once/week	grab
Copper, Total Recoverable	µg/L	900		900	once/week	composite ǂ
Lead, Total Recoverable	µg/L	690		430	once/month	composite ǂ
Nickel, Total Recoverable	µg/L	3980		2380	once/month	composite ǂ
Zinc, Total Recoverable	µg/L	2610		1480	once/month	composite ǂ
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE OCTOBER 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
METALS						
Chromium (III), Total Recoverable	µg/L	*		*	once/quarter ◊	composite ǂ
Silver, Total Recoverable	µg/L	430		240	once/quarter ◊	composite ǂ
OTHER						
Formaldehyde	mg/L	*			once/quarter ◊	grab
Whole Effluent Toxicity, Chronic (Note 5)	TUc	*			once/quarter ◊	composite ǂ
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JANUARY 28, 2017. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
OTHER						
Total Toxic Organics (Note 4)	mg/L	2.13			once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED YEARLY; THE FIRST REPORT IS DUE JANUARY 28, 2017. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

(see notes and descriptions on page 6)

OUTFALL #002	TABLE A-2 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **September 1, 2020** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		*	once/week	24 hr. total
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	120		90	once/week	composite ǂ
Cyanide, Amenable to Chlorination (Note 6)	µg/L	9.1		3.1	once/week	grab
Dissolved Oxygen (DO), (Note 3)	mg/L	* min		* min	once/week	grab
Hardness (as $CaCO_3$)	mg/L	*		*	once/week	grab
Oil & Grease	mg/L	52		26	once/month	grab
pH (Note 1)	SU	6.5 to 9.0		6.5 to 9.0	once/week	grab
Total Dissolved Solids	mg/L	*		*	once/month	grab
Total Suspended Solids	mg/L	60		31	once/week	composite ǂ
METALS						
Cadmium, Total Recoverable	µg/L	2.1		0.8	once/week	composite ǂ
Chromium, Total Recoverable	µg/L	2770		1710	once/month	composite ǂ
Chromium VI, Hexavalent, Dissolved (Note 7)	µg/L	14.4		6.4	once/week	grab
Copper, Total Recoverable	µg/L	73		42	once/week	composite ǂ
Lead, Total Recoverable	µg/L	690		430	once/month	composite ǂ
Nickel, Total Recoverable	µg/L	491		196	once/month	composite ǂ
Zinc, Total Recoverable	µg/L	2610		1480	once/month	composite ǂ
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE OCTOBER 28, 2020. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
METALS						
Chromium (III), Total Recoverable	µg/L	*		*	once/quarter ◊	composite ǂ
Silver, Total Recoverable	µg/L	430		240	once/quarter ◊	composite ǂ
OTHER						
Formaldehyde	mg/L	*			once/quarter ◊	grab
Whole Effluent Toxicity, Chronic (Note 5)	TUc	1.6			once/quarter ◊	composite ǂ
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JANUARY 28, 2021. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
OTHER						
Total Toxic Organics (Note 4)	mg/L	2.13			once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED YEARLY; THE FIRST REPORT IS DUE JANUARY 28, 2021. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

OUTFALLS #004, #006, #007 *stormwater*	**TABLE A-3 ∞ INTERIM EFFLUENT LIMITATIONS, BENCHMARKS, AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective on **September 1, 2016** and remain in effect through **August 31, 2019**. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS ∞	UNITS	INTERIM EFFLUENT LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS ∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY ∞	SAMPLE TYPE ∞
PHYSICAL						
Flow	MGD	*			once/quarter ◊	24 hr. est.
Precipitation	Inches	*			once/quarter ◊	measured
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	120			once/quarter ◊	grab
Oil & Grease (Note 2)	mg/L	**		10	once/quarter ◊	grab
pH (Note 1)	SU	6.5 to 9.0			once/quarter ◊	grab
Total Suspended Solids	mg/L	90			once/quarter ◊	grab
METALS						
Copper, Total Recoverable	µg/L	*	*		once/month ◊	grab
Nickel, Total Recoverable	µg/L	*	*		once/month ◊	grab
Zinc, Total Recoverable	µg/L	*	*		once/month ◊	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JANUARY 28, 2017.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

OUTFALLS #004, #006, #007 *stormwater*	**TABLE A-4 ∞ FINAL EFFLUENT LIMITATIONS, BENCHMARKS, AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **September 1, 2019** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS ∞	UNITS	FINAL EFFLUENT LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS ∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY ∞	SAMPLE TYPE ∞
PHYSICAL						
Flow	MGD	*			once/quarter ◊	24 hr. est.
Precipitation	Inches	*			once/quarter ◊	measured
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	120			once/quarter ◊	grab
Oil & Grease (Note 2)	mg/L	**		10	once/quarter ◊	grab
pH (Note 1)	SU	6.5 to 9.0			once/quarter ◊	grab
Total Suspended Solids	mg/L	90			once/quarter ◊	grab
METALS						
Copper, Total Recoverable	µg/L	26	26		once/month ◊	grab
Nickel, Total Recoverable	µg/L	750	750		once/month ◊	grab
Zinc, Total Recoverable	µg/L	209	209		once/month ◊	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JANUARY 28, 2020.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

* Monitoring and reporting requirement only.

** Monitoring and reporting with associated benchmark; see special conditions 10 through 13.

ǂ A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampling device.

∞ All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a discharge event does not occur within the reporting period, report as no discharge. The total amount of precipitation should be noted from the event from which the samples were collected.

◊ Quarterly sampling:

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

Note 1 - pH is measured in standard units and is not to be averaged. The permittee will report minimum and maximum values.

Note 2 - This parameter incorporates a Benchmark Value associated with Best Management Practices (BMPs). See special conditions numbers 10, 11, 12, and 13.

Note 3 - Dissolved Oxygen is a parameter which a minimum value is associated. The permittee will report the minimum value for the daily maximum.

Note 4 - The facility shall monitor for total toxic organics once per year. The parameters considered within this suite are found at 40 CFR 433.11(e).

Note 5 - See special condition 16 for whole effluent toxicity conditions.

Note 6 - The facility shall use method OIA-1677-09 developed by ALPKEM and the University of Nevada Reno Mackay School of Mines. EPA has approved this method and is listed in 40 CFR 136 as "available cyanide" by flow injection and ligand exchange, followed by gas diffusion amperometry. This method has a detection limit of 0.5 µg/L and a minimum level (ML) of 2.0 µg/L which is below permitted limits therefore no ML shall be established.

Note 7 –Test methodologies for Cr-6 can detect the parameter at 0.3 µg/L in electroplating waste according to *Standard Methods for the Examination of Water and Wastewater*, 22nd Edition, method 3500-Cr C; page 3-71. This method is an approved method according to 40 CFR 136 Table IB. The facility shall use any 40 CFR 136 approved method and shall ensure the selected method(s) are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards.

B. STANDARD CONDITIONS

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

C. SPECIAL CONDITIONS

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

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

2. All outfalls must be clearly marked in the field.

3. Water Quality Standards
   (a) To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
   (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
      (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
      (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
      (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
      (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
      (5) There shall be no significant human health hazard from incidental contact with the water;
      (6) There shall be no acute toxicity to livestock or wildlife watering;
      (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
      (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

4. Changes in Discharges of Toxic Pollutant
   In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
   (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, 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;
      (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
      (4) One milligram per liter (1 mg/L) for antimony;
      (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
      (6) The notification level established by the department in accordance with 40 CFR 122.44(f).
   (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
      (1) Five hundred micrograms per liter (500 µg/l);
      (2) One milligram per liter (1 mg/l) for antimony;
      (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
      (4) The level established by the Director in accordance with §122.44(f).

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

C. SPECIAL CONDITIONS (CONTINUED)

6. The permittee will supply a revised and updated Total Toxic Organic Solvent Management Plan to the department no later than one year after permit issuance. The most recent copy the department has on file is dated September 19, 1985 Revision No.: 0. The plan will follow the requirements in 40 CFR 433.

7. Reporting of Non-Detects
   (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
   (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non-Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
   (c) The permittee shall report the "Non-Detect" result using the less than sign and the minimum detection limit (e.g. <10).
   (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
   (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
   (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the "<MDL" shall be reported as indicated in item (C).

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

9. Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 ET. SEQ.) and the use of such pesticides shall be in a manner consistent with its label.

10. Facility SIC codes found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) shall implement a SWPPP and must be prepared and implemented upon permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated every five (5) years or as site conditions change (see Rationale and Derivation: antidegradation analysis and SWPPP in the fact sheet). 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: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in February 2009 (www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf). The SWPPP must include:
    (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater. The BMPs should be designed to treat the stormwater up to the 10 year, 24 hour rain event.
    (b) For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of antidegradation [10 CSR 20-7.031(3)]. Failure to implement and maintain the chosen BMP is a permit violation. For further guidance, consult the antidegradation implementation procedure at http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf .
    (c) The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
        i. Operational deficiencies must be corrected within seven (7) calendar days.
        ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.
        iii. Major structural deficiencies must be reported to the regional office within seven (7) days of discovery. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including the general timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. The permittee will work with the regional office to determine the best course of action, including but not limited to temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
        iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs.
        v. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department and EPA personnel upon request.
    (d) A provision for designating an individual to be responsible for environmental matters.
    (e) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.

C. SPECIAL CONDITIONS (CONTINUED)

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

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

12. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
    (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater 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 stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater 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.
    (f) Ensure that adequate provisions are provided to prevent surface water intrusion into the storage basin, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.

13. 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.

14. To protect the general criteria found at 10 CSR 20-7.031(4), before releasing water accumulated in secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen. If the presence of odor or sheen is indicated, the water shall be treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Table A. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP to be available on demand to MDNR and EPA personnel.

15. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.

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

SUMMARY OF CHRONIC WET TESTING FOR THIS PERMIT						
OUTFALL	AEC	TOXIC UNIT	SAMPLING FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY	
Interim #002	100%	* TUc	once/quarter	24 hr. composite	quarterly	
Final #002	100%	1.6 TUc	once/quarter	24 hr. composite	quarterly	
Dilution Series						
100%	50%	25%	12.5%	6.25%	(Control) 100% upstream, if available, or	(Control) 100% Lab Water, also called synthetic water

C. SPECIAL CONDITIONS (CONTINUED)

WET testing continued:

(a) Freshwater Species and Test Methods

(1) Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the most recent edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013; Table IA, 40 CFR Part 136). The permittee shall concurrently conduct 7-day, static, renewal toxicity tests with the following vertebrate species:

- ✓ The fathead minnow, *Pimephales promelas* (Survival and Growth Test Method 1000.0).

And the following invertebrate species:

- ✓ The daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0).

(2) Chemical and physical analysis of an upstream control sample and effluent sample shall occur immediately upon being received by the laboratory, prior to any manipulation of the effluent sample beyond preservation methods consistent with federal guidelines for WET testing that are required to stabilize the sample during shipping. Where upstream receiving water is not available, synthetic laboratory control water may be used.

(3) Test conditions must meet all test acceptability criteria required by the EPA Method used in the analysis.

(4) 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.

(5) All chemical analyses shall be performed and results shall be recorded in the appropriate field of the report form. The parameters for chemical analysis include, but are not limited to: pH (SU), conductivity (µMohs), dissolved oxygen (mg/L), total recoverable copper (µg/L), total recoverable cadmium (µg/L), hexavalent chromium (µg/L), cyanide amenable to chlorination (µg/L), and total hardness (mg/L).

(b) Reporting of Chronic Toxicity Monitoring Results

(1) WET test results shall be submitted to the Southeast Regional Office, or by eDMR, with the permittee's Discharge Monitoring Reports Quarterly. The submittal shall include:

i. A full laboratory report for all toxicity testing.
ii. Copies of chain-of-custody forms.
iii. The WET form provided by the Department upon permit issuance.

(2) The report must include a quantification of chronic toxic units ($TU_c = 100/IC_{25}$) reported according to the *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* chapter on report preparation and test review. The 25 percent Inhibition Effect Concentration (IC_{25}) is the toxic or effluent concentration that would cause 25 percent reduction in mean young per female or in growth for the test populations.

(c) Chronic WET Permit Trigger (after final numeric limits are in place)

If the regularly scheduled chronic WET test exceeds a TU_c limit specified above, the permittee shall conduct accelerated follow up WET testing as prescribed in the following conditions. Results of the follow up accelerated WET testing shall be reported to the Southeast Regional Office in TU_c. This permit requires the following additional toxicity testing if any one test result exceeds a TU_c limit.

(1) A multiple dilution test shall be performed for BOTH test species within 15 calendar days of becoming aware that the regularly schedule WET test exceeded a TU_c limit, and once every two weeks thereafter until one of the following conditions are met:

i. Three consecutive multiple-dilution tests report TU_c in compliance with the limit. No further tests need to be performed until next regularly scheduled test period.
ii. A total of three multiple-dilution tests reports TU_c exceeding the limit.

(2) Follow-up tests do not negate an initial test result.

(3) The permittee shall submit a summary of all accelerated WET test results for the test series along with complete copies of the test reports as received from the laboratory within 14 calendar days of the availability of the third test exceeding a TU_c limit.

(4) Additionally, the following shall apply upon the exceedance of the TU_c limit in three follow up accelerated WET test. The permittee should contact the department within 15 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 department upon the third follow up test exceeding a TU_c limit, 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 within 60 calendar days of the date of the automatic trigger or the department's direction to perform either a TIE or TRE. The plan shall be based on EPA Methods and include a schedule for completion. This plan must be approved by the department before the TIE or TRE is begun.

(d) Permit Reopener for Chronic Toxicity

In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address chronic toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to chronic toxicity.

17. Electronic Discharge Monitoring Report (eDMR) Submission System
   (a) Discharge Monitoring Reporting Requirements. The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only Department approved reporting method for this permit.
   (b) Programmatic Reporting Requirements. The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:
      (1) Collection System Maintenance Annual Reports;
      (2) Schedule of Compliance Progress Reports;
      (3) Any additional report required by the permit excluding bypass reporting.
      After such a system has been made available by the department, required data shall be directly input into the system by the next report due date.
   (c) Other actions. The following shall be submitted electronically after such a system has been made available by the department:
      (1) General Permit Applications/Notices of Intent to discharge (NOIs);
      (2) Notices of Termination (NOTs);
      (3) No Exposure Certifications (NOEs);
      (4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs)
   (d) Electronic Submissions. To access the eDMR system, use the following link in your web browser: https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx.

D. SCHEDULE OF COMPLIANCE

Outfall #002: The facility shall attain compliance with final effluent limitations for: chemical oxygen demand (COD), cyanide amenable to chlorination, total recoverable nickel, hexavalent chromium, whole effluent toxicity, and total recoverable copper as soon as practicable and no later than **four years after date of issuance**.

Outfalls #004, #006, and #007: The facility shall attain compliance with final effluent limitations for: total recoverable nickel, total recoverable copper, and total recoverable zinc as soon as practicable and no later than **three years after date of issuance**.

The permittee shall submit interim progress reports detailing progress made in attaining compliance with the final effluent limits every 12 months from issuance date.

Please submit progress reports to:

Southeast Regional Office
2155 North Westwood Blvd.
Poplar Bluff, MO 63901

MISSOURI DEPARTMENT OF NATURAL RESOURCES
EDMR STATEMENT OF BASIS
MO-0001180
SRG GLOBAL COATINGS - PORTAGEVILLE

This Statement of Basis gives pertinent information regarding an internal minor permit modification to the above listed operating permit without the need for a public comment process. A statement of basis is not an enforceable part of a Missouri State Operating Permit.

Part I – Facility Information

Facility Type:	Industrial
Facility SIC Codes:	3471 and 3089
Facility Description:	plating

Part II – Modification Rationale

This operating permit was modified by adding a special condition (#C. 17.) to the permit to require the permittee to submit all discharge monitoring reports electronically (eDMR) to the department. The final rule (eReporting Rule) substitutes electronic reporting for paper-based reports and, over the long term, saves time and resources for permittees, states, tribes, territories, and EPA, while improving compliance and better protecting the Nation's waters. The final rule requires permittees and regulators to use existing, available information technology to electronically report information and data related to the NPDES permit program in lieu of filing paper-based reports. All authorized programs are required to electronically transmit the federally-required data (identified in appendix A to 40 CFR part 127) to EPA. The purpose and need for this rule was highlighted in the development of the Clean Water Act Enforcement Action Plan (Plan).

Announced by EPA in October 2009, the Plan was a collaborative effort by EPA and state environmental agencies to explore opportunities to improve water quality by emphasizing and adopting new approaches that will improve how the NPDES permitting and enforcement program is administered. The goals of the Plan include improving transparency of the information on compliance and enforcement activities in each state, connecting this information to local water quality, and providing the public with real-time, easy access to this information.

This modification also modified note 7 from: Note 7 –Test methodologies for Cr-6 can detect the parameter at 0.3 µg/L in electroplating waste according to *Standard Methods for the Examination of Water and Wastewater*, 22nd Edition, method 3500-Cr C; page 3-71. This method is an approved method according to 40 CFR 136 Table IB. The facility shall use this method.
To read: Note 7 –Test methodologies for Cr-6 can detect the parameter at 0.3 µg/L in electroplating waste according to *Standard Methods for the Examination of Water and Wastewater*, 22nd Edition, method 3500-Cr C; page 3-71. This method is an approved method according to 40 CFR 136 Table IB. The facility shall use any 40 CFR 136 approved method and shall ensure the selected method(s) are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards.

Part III –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.

DATE OF STATEMENT OF BASIS: 12/13/2016

COMPLETED BY:
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MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
MO-0001180
SRG GLOBAL INC. – PORTAGEVILLE

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 stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below. A factsheet is not an enforceable part of an operating permit. This factsheet is for an industrial facility.

Part I. FACILITY INFORMATION

Facility Type: Industrial
Facility SIC Codes: 3471 and 3089
NAICS Codes: 332813 and 326121
Application Date: 05/05/2015
Expiration Date: 12/31/2015
Last Inspection: 06/10/2013 In Compliance

FACILITY DESCRIPTION:
SRG Global is a plastics plating facility. They perform injection molding, electroplating, and surface coating of plastic automotive parts. The facility has four permitted features, three are stormwater outfalls.

SRG Global plates copper, nickel, and chrome onto plastic moldings. The plastic moldings to not conduct electricity which is required for the electroplating of these metals. An electroless process is used to chemically deposit a layer of copper on the plastic moldings to conduct electricity, thereby making the electroplating process possible. This electroless process requires the use of a high pH copper solution. In order to prevent the copper from precipitating out as an hydroxide ion in the plating bath, the copper must be in a strongly chelated form. EDTA is used as the chelating agent. Copper in this strongly chelated form cannot be removed from solution according to the facility. The facility also contests this strongly chelated copper is less toxic and unavailable to aquatic organisms.

OUTFALL TABLE:

OUTFALL	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#002	0.415 MGD	Reduction, neutralization, coagulation, flocculation, and pressure filtration	electroplating and remediated groundwater
#004	n/a	BMPs	stormwater
#006	n/a	BMPs	stormwater
#007	n/a	BMPs	stormwater

BMPs = Best Management Practices

FACILITY PERFORMANCE HISTORY & COMMENTS:
The facility has been struggling to meet permit limits and plans to replace their current facility with a completely new facility which will be connected to the city of Portageville. This permit provides interim limits to resolve an appeal presented in 2013. The facility is expected to hook up to Portageville WWTF in 2017/18 or meet the water quality standards as soon as reasonably achievable and before final limits for outfall #002 are in place.

The previous permit was issued in August 1, 2013 with an expiration of December 1, 2013. The facility filed a motion to stay under 1 CSR 15-3.320 to the Administrative Hearing Commission on July 31, 2013. The document describes how the last permit's final effluent limits for chemical oxygen demand (COD) and whole effluent toxicity (WET) would put the facility in immediate violation because they were not, and are still not, able to meet those final effluent limitations. COD limits in the previous permit were 120 mg/L for a daily maximum and 90 mg/L for a monthly average maximum. WET limits were changed from Acute to Chronic at the August 1, 2013 permit renewal. The stay was granted and extended several times. This permit will alleviate the stay. The permit stay is lifted at that time unless another continuance is granted. The permittee asked to be granted previous permit limits as effected in the permit dated October 8, 1999. The permit expired October 7 2004 and was not renewed until August 1, 2013. In that permit, there were no limits for COD; the limits for WET were percent survival in acute toxicity.

Please see additional comments under individual parameters: chemical oxygen demand at outfall #002, copper at outfall #002, hexavalent chromium at outfall #002, cyanide amenable to chlorination at outfall #002, and whole effluent toxicity at outfall #002. These parameters have been identified as parameters of particular concern to the facility as they have not been meeting permitted limits.

WATER EFFECTS RATIO (WER) STUDY:
The department has reviewed the WER from 2008 and determined the study was not completed satisfactorily. The determination was made because the study appeared to utilize the methods outlined in the *2001 Streamlined Water-Effect Ratio Procedure for Discharges of Copper* (EPA-822-R-01-005). This procedure should not have been used because the facility discharges to a low flow (7Q10) stream of zero. There is a concern a WER derived from 100% effluent may not adequately protect downstream conditions. Additionally, the WER limits are not protective as there have been numerous WET test failures. The facility will be held to new lower water quality based effluent limits (WQBEL) after a schedule of compliance.

A discharge monitoring report was retrieved for the facility from the last five years of data; May 2010 to May 2015. Below is a table of effluent limitation exceedances from the past five years.

Outfall #	*Monitoring Period End Date*	*Parameter Description*	*Units*	*Limit*	*Limit*	*Reported Value*	*Limit*	*Limit*	*Reported Value*
002	04/30/2015	Hexavalent Chromium	ug/L	14.4	Daily Max.	19	9.2	Mo Avg	9.6
002	03/31/2015	Hexavalent Chromium	ug/L	14.4	Daily Max.	25	9.2	Mo Avg	16.2
002	02/28/2015	Hexavalent Chromium	ug/L	14.4	Daily Max.	10	9.2	Mo Avg	10
002	01/31/2015	Hexavalent Chromium	ug/L	14.4	Daily Max.	10	9.2	Mo Avg	10
002	11/30/2014	Hexavalent Chromium	ug/L	14.4	Daily Max.	10	9.2	Mo Avg	10
002	10/31/2014	Hexavalent Chromium	ug/L	14.4	Daily Max.	10	9.2	Mo Avg	10
002	09/30/2014	Hexavalent Chromium	ug/L	14.4	Daily Max.	10	9.2	Mo Avg	10
002	08/31/2014	Hexavalent Chromium	ug/L	14.4	Daily Max.	10	9.2	Mo Avg	10
002	07/31/2013	Chromium, total recoverable	mg/L	0.28	Daily Max.	0.33	0.28	Mo Avg	0.15
002	06/30/2013	Chromium, total recoverable	mg/L	0.28	Daily Max.	0.35	0.28	Mo Avg	0.22
002	02/28/2013	Chromium, total recoverable	mg/L	0.28	Daily Max.	0.71	0.28	Mo Avg	0.13
002	01/31/2013	Chromium, total recoverable	mg/L	0.28	Daily Max.	0.3	0.28	Mo Avg	0.12
002	06/30/2012	Chromium, total recoverable	mg/L	0.28	Daily Max.	0.3	0.28	Mo Avg	0.1
002	04/30/2012	Chromium, total recoverable	mg/L	0.28	Daily Max.	0.45	0.28	Mo Avg	0.14
002	06/30/2013	Copper, total recoverable	mg/L	0.9	Daily Max.	1	0.9	Mo Avg	0.4
002	10/31/2012	Copper, total recoverable	mg/L	0.9	Daily Max.	2.1	0.9	Mo Avg	0.4
002	01/31/2015	Cyanide, free (amenable to chl.)	ug/L	8.1	Daily Max.	11	4	Mo Avg	6.2
002	12/31/2014	Cyanide, free (amenable to chl.)	ug/L	8.1	Daily Max.	5	4	Mo Avg	5
002	11/30/2014	Cyanide, free (amenable to chl.)	ug/L	8.1	Daily Max.	5	4	Mo Avg	5
002	10/31/2014	Cyanide, free (amenable to chl.)	ug/L	8.1	Daily Max.	5	4	Mo Avg	5
002	09/30/2014	Cyanide, free (amenable to chl.)	ug/L	8.1	Daily Max.	5	4	Mo Avg	5
002	08/31/2014	Cyanide, free (amenable to chl.)	ug/L	8.1	Daily Max.	12	4	Mo Avg	7.4
002	05/31/2014	Cyanide, free (amenable to chl.)	ug/L	22	Daily Max.	120	22	Mo Avg	32
002	12/31/2013	Cyanide, free (amenable to chl.)	ug/L	22	Daily Max.	110	22	Mo Avg	62
002	10/31/2013	Cyanide, free (amenable to chl.)	ug/L	22	Daily Max.	110	22	Mo Avg	62
002	09/30/2014	pH	SU	6.5	Minimum	6.4	9	Maximum	8.4
002	08/31/2013	pH	SU	6.5	Minimum	6.4	9	Maximum	8.5
002	07/31/2013	Total Dissolved Solids	mg/L	2500	Daily Max.	2720	2500	Mo Avg	2363
002	04/30/2013	Total Dissolved Solids	mg/L	2500	Daily Max.	2550	2500	Mo Avg	2455
002	03/31/2013	Total Dissolved Solids	mg/L	2500	Daily Max.	2640	2500	Mo Avg	2640
002	02/28/2013	Total Dissolved Solids	mg/L	2500	Daily Max.	3020	2500	Mo Avg	2763
002	12/31/2012	Total Dissolved Solids	mg/L	2500	Daily Max.	3350	2500	Mo Avg	3350
002	10/31/2012	Total Dissolved Solids	mg/L	2500	Daily Max.	2980	2500	Mo Avg	2660
002	09/30/2011	Total Dissolved Solids	mg/L	2500	Daily Max.	2930	2500	Mo Avg	2403
002	05/31/2010	Total Dissolved Solids	mg/L	2500	Daily Max.	3845	2500	Mo Avg	3845
002	03/31/2015	Total Suspended Solids (TSS)	mg/L	60	Daily Max.	109	31	Mo Avg	33.4
002	10/31/2012	Acute Wet-Ceriodaphnia	p/f				0	Mo Avg	Fail
002	10/31/2011	Acute Wet-Ceriodaphnia	p/f				0	Mo Avg	Fail
002	10/31/2012	Acute Wet-Pimephales	p/f				0	Mo Avg	Fail
004	09/30/2013	Chemical Oxygen Demand (COD)	mg/L	120	Daily Max.	172	90	Mo Avg	172
004	09/30/2011	Chemical Oxygen Demand (COD)	mg/L	120	Daily Max.	290	90	Mo Avg	290
004	09/30/2012	Total Suspended Solids (TSS)	mg/L	90	Daily Max.	78.8	60	Mo Avg	78.8
004	09/30/2011	Total Suspended Solids (TSS)	mg/L	90	Daily Max.	526	60	Mo Avg	320
005	09/30/2011	Chemical Oxygen Demand (COD)	mg/L	120	Daily Max.	101	90	Mo Avg	101
006	09/30/2013	Chemical Oxygen Demand (COD)	mg/L	120	Daily Max.	667	90	Mo Avg	667
006	12/31/2014	pH	SU	6.5	Minimum	6.4	9	Maximum	6.4
006	12/31/2013	Total Suspended Solids (TSS)	mg/L	90	Daily Max.	65	60	Mo Avg	65
006	09/30/2013	Total Suspended Solids (TSS)	mg/L	90	Daily Max.	776	60	Mo Avg	776
006	09/30/2011	Total Suspended Solids (TSS)	mg/L	90	Daily Max.	194	60	Mo Avg	194
007	03/31/2015	Chemical Oxygen Demand (COD)	mg/L	120	Daily Max.	125	90	Mo Avg	102.5
007	09/30/2013	Chemical Oxygen Demand (COD)	mg/L	120	Daily Max.	820	90	Mo Avg	820
007	12/31/2014	pH	SU	6.5	Minimum	6.2	9	Maximum	6.2
007	09/30/2013	Total Suspended Solids (TSS)	mg/L	90	Daily Max.	808	60	Mo Avg	808

Part II. RECEIVING STREAM INFORMATION

RECEIVING WATER BODY'S WATER QUALITY:
There are no concurrent water quality studies associated with the tributary or Portage Open Bay. Portage Open Bay is a newly classified water of the state. The facility discharges to an unclassified ditch which flows to Portage Open Bay.

303(D) LIST:
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.
✓ Not applicable. This facility does not discharge to an impaired segment of a 303(d) listed stream.

TOTAL MAXIMUM DAILY LOAD (TMDL):
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; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. 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 is not associated with a TMDL.

RECEIVING STREAMS TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO SEGMENT	12-DIGIT HUC
#002	Tributary to Portage Open Bay	n/a	n/a	GEN	0 mi	Portage Open Bay 08020204-0608
#002	Portage Open Bay MUDD V1.0 8-23-13	C	3960	IRR, LWW, SCR, WWH	0.38 mi	
#004	Tributary to Portage Open Bay	n/a	n/a	GEN	0 mi	
#004	Portage Open Bay MUDD V1.0 8-23-13	C	3960	IRR, LWW, SCR, WWH	0.25 mi	
#006	Tributary to Portage Open Bay	n/a	n/a	GEN	0 mi	
#006	Portage Open Bay MUDD V1.0 8-23-13	C	3960	IRR, LWW, SCR, WWH	0.28 mi	
#007	Tributary to Portage Open Bay	n/a	n/a	GEN	0 mi	
#007	Portage Open Bay MUDD V1.0 8-23-13	C	3960	IRR, LWW, SCR, WWH	0.39 mi	

n/a not applicable
WBID = Waterbody IDentification: Missouri Use Designation Dataset 8-20-13 MUDD V1.0 data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip
* As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream's beneficial water uses to be maintained are in the receiving stream table in accordance with [10 CSR 20-7.031(1)(C)].

Uses which may be found in the receiving streams table, above:
10 CSR 20-7.031(1)(C)1.:
AQL = Protection of aquatic life (Current narrative use(s) are defined to ensure the protection and propagation of fish shellfish and wildlife, which is further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses AQL effluent limitations in 10 CSR 20-7.031 Table A for all habitat designations unless otherwise specified.)
10 CSR 20-7.031(1)(C)2.: Recreation in and on the water
WBC = Whole Body Contact recreation where the entire body is capable of being submerged;
WBC-A = Whole body contact recreation supporting swimming uses and has public access;
WBC-B = Whole body contact recreation supporting swimming;
SCR = Secondary Contact Recreation (like fishing, wading, and boating).
10 CSR 20-7.031(1)(C)3. to 7.:
HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish;
IRR = Irrigation for use on crops utilized for human or livestock consumption;
LWW = Livestock and wildlife watering (Current narrative use is defined as LWP = Livestock and Wildlife Protection);
DWS = Drinking Water Supply;
IND = Industrial water supply
10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Table A currently does not have corresponding habitat use criteria for these defined uses)
WSA = Storm- and flood-water storage and attenuation; WHP = Habitat for resident and migratory wildlife species;
WRC = Recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = Hydrologic cycle maintenance.
10 CSR 20-7.031(6): GRW = Groundwater

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

RECEIVING STREAM MONITORING REQUIREMENTS:
No receiving water monitoring requirements recommended at this time.

Part III. RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & PERMIT CONDITIONS

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

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

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

- ✓ Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
  - ✓ The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
    - ✓ Outfalls #004, #006, and #007 are stormwater outfalls where previous permit limits were established in error, based on limits for industrial wastewater. The technical support document (EPA/505/2-90-001) was written for consistent flows for wastewater of which stormwater is typically fleeting in nature. This renewal establishes limits in the form of benchmarks and limits appropriate for stormwater discharges. Acute values are applied to stormwater in this permit. There will be no changes to industrial activities onsite or the composition of the stormwater discharge as a result of this renewal. The benchmark concentrations and required corrective actions are protective of the applicable water quality standards.
    - ✓ The permittee has contested and appealed the chemical oxygen demand (COD) permit limits of 120 daily maximum and 90 mg/L monthly average. This permit will provide a schedule of compliance to meet these permit conditions There are no state or federal water quality limits for COD for this type of facility however, dissolved oxygen in the effluent is very low.
    - ✓ The permittee has contested and appealed the chronic toxic unit limit of 1.6 TUc for whole effluent toxicity in the permit issued August 1, 2013. Numerous inconclusive toxicity identification evaluations (TIE) have tentatively proposed total dissolved solids and hardness as potential causes of toxicity. An SOC is provided to allow the permittee to determine the means by which they are going to limit toxicity in their wastewater.
  - ✓ Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.
    - ✓ Reasonable potential analysis was performed on Oil and Grease. There is no RP for O&G therefore the permittee is allowed to abide by less stringent limits; however, this parameter must be limited as it is found in the ELG as a contaminant of concern.
    - ✓ Reasonable potential analysis was performed on trivalent chromium and found no reasonable potential. Limits were removed, monitoring only for this parameter. This parameter is not listed on the ELG.
    - ✓ New site specific data regarding hardness was submitted. Hardness-dependent metals were recalculated using the new hardness data. Cadmium daily maximum limits were raised.
    - ✓ Reasonable potential analysis performed on zinc, no RP. Water quality limits removed and the higher ELG limits are in place.
    - ✓ RPA performed on lead; no RP. WQ limits removed, higher categorical limits in-place.

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

- ✓ Renewal no degradation proposed and no further review necessary.

BENCHMARKS:
When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer. Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the values in the permit. A benchmark is a threshold that helps determine if the facility has reasonable potential to impact water quality in the receiving stream. This considers both technology controls and the receiving stream water quality standards. In this case, there are a wide range of technologies that can be implemented to control stormwater runoff, so water quality standards were used to establish a base for those technologies to meet. The benchmark was based on the state water quality standards for protection of aquatic life.

Because of the fleeting nature of stormwater discharges, the department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater outfalls will only contain a maximum daily limit (MDL), benchmark, or monitoring requirement determined by the site specific conditions including the receiving water's current quality.

Numeric benchmark values are based on water quality standards. Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States.

- ✓ Applicable, this facility has stormwater-only outfalls with benchmark constraints. The benchmarks listed in the derivation discussion have been determined to be feasible, and protective of water quality and aquatic life.

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

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

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

- ✓ Not applicable. The permittee/facility is not currently under Water Protection Program enforcement action. However, a stay petition was filed with the administrative hearing commission on July 31, 2013. This permit addresses concerns within the motion. Schedules of compliance for affected parameters are provided and the issuance of this permit will rescind the stay.

GROUNDWATER MONITORING:
Groundwater is a water of the state according to 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

- ✓ This facility is monitoring the groundwater at the site. The department's Hazardous Waste Program Brownfields Voluntary Cleanup section is overseeing the groundwater remediation at the site. At this time, the Water Protection Program is not requiring reporting of the data to this branch. Groundwater which is removed from the sand and soils is treated and discharged through outfall #002.

INDUSTRIAL SLUDGE:
Industrial sludge is solids, semi-solids, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

- ✓ Permittee is not authorized to land apply industrial sludge. Sludge is removed by contract hauler and landfilled or appropriately disposed of; sludge from this facility may be classified as a hazardous waste. The facility determines the hazard prior to disposal.

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)(1)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

✓ Applicable; a RPA was conducted on appropriate parameters for the process water outfall. RP = Reasonable Potential. When an effluent is projected or calculated to cause an excursion above a water quality standard based on a number of factors including, as a minimum, the four factors listed in 40 CFR 122.44(d)(1)(ii). Reasonable Potential Analysis is conducted as per (TSD, EPA/505/2-90-001, Section 3.3.2). A more detailed version including calculations of this RPA is available upon request.

Parameter	units	Daily Maximum	Monthly Average	CMC	RWC Acute	CCC	RWC Chronic	n	Range-Max/Min	CV	MF	RP
Cadmium, TR	µg/L	2.10	0.79	36.2	2.42	1.1	2.42	109	1.41/0.15	1.16	1.72	yes
Chromium III, TR	µg/L	590.97	375.79	8823.1	418.44	421.8	418.44	10	216/78	0.34	1.94	no
Cr-VI, Dissolved	µg/L	15.00	8.51	15.0	55.58	10.0	55.58	12	25/5	0.45	2.22	yes
Copper, TR	µg/L	72.89	42.35	87.0	3008.11	48.9	3008.11	60	2100/300	0.43	1.43	yes
Lead, TR	µg/L	69.26	26.31	962.9	31.39	37.5	31.39	109	23.8/1	1.12	1.32	no
Nickel, TR	µg/L	491.13	195.67	2420.7	926.90	269.1	926.90	46	400/14	0.99	2.32	yes
Silver, TR	µg/L	106.42	53.05	106.4	2.13	NA	NA	7	0.6/0.5	0.60	3.54	no
Zinc, TR	µg/L	619.34	185.03	619.3	454.74	619.3	454.74	109	172/0.35	3.74	2.64	no
Cyanide-Amenable	µg/L	9.09	3.10	22.0	592.59	5.0	592.59	23	120/0.01	1.60	4.94	yes
Oil & Grease	mg/L	18.09	7.4	NA	10.0	10.00	10.0	60	5/0	0.93	1.997	no

- The permittee shows no reasonable potential for oil and grease, silver or zinc. However, because the effluent limitation guideline has listed these parameters as a pollutants of concern for the industry, limitations must remain.
- The permittee showed no reasonable potential for trivalent chromium; this parameter is not listed in the ELG therefore limits were removed. Monitoring only.

✓ Additionally, this permit establishes permit limits and benchmarks for stormwater. The department has determined stormwater is not a continuous discharge and is therefore not subject to mathematical RPAs. However, the permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the appropriate parameters in this permit. A RPD consists of reviewing application data and/or the discharge monitoring data for the last five years and comparing those data to the water quality standard. Should the data approach or exceed the water quality standards, the parameter is included in the permit with benchmarks or limits. Should all of the monitoring data be non-detects or well below the water quality standards, the parameter may no longer require monitoring. Intermediate results are typically included in the permit for monitoring; or possibly with an associated benchmark.

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.

✓ Applicable; the time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(10)]. The facility has been given a schedule of compliance to meet final effluent limits for chemical oxygen demand (COD), cyanide amenable to chlorination, hexavalent chromium, and total recoverable copper. The permittee has appealed the current permit and the schedule of compliance is afforded for COD to allow the facility to connect to the City of Portageville's wastewater treatment facility. The other parameters will follow the same schedule. A letter dated June 22, 2015 indicated they will be constructing a new wastewater treatment system and will connect it to the city of Portageville POTW. In this letter, they indicated the construction should be completed in October 2016 and would need a year to perform the changeover. The final effluent limitations will begin on November 1, 2017.

✓ Additionally, the facility has been given a one year schedule of compliance to meet new limits on stormwater discharges. The metals have been identified as having reasonable potential to cause or contribute to pollution of waters of the state. The EPA has directed the department such that all parameters with potential to violate water quality standards must have limits associated with those parameters. Benchmarks are not allowed therefore for most of the parameters at the stormwater outfalls.

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

STORMWATER 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 stormwater 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 Stormwater 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.

The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate pollution of stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged with during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values discussed in Part V above. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure that will assist in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit. Additional information can be found in 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].

Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed the facility will employ the control measures that have been determined to be adequate to achieve the benchmark values discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the benchmark value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at least once per month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

If failures continue to occur and the permittee feels there are no practicable or cost-effective BMPs that will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification; the application is found at: http://dnr.mo.gov/forms/index.html.

- ✓ Applicable; a SWPPP shall be developed and implemented for each area 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.

WATER QUALITY STANDARDS:
Per [10 CSR 20-7.031(4)], 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.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

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

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

$$C = \frac{(Cs \times Qs) + (Ce \times Qe)}{(Qe + Qs)}$$ (EPA/505/2-90-001, Section 4.5.5)

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

- Acute wasteload allocations (daily maximum limits) were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).
- Chronic wasteload allocations (monthly average limits) were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ).
- Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's *Technical Support Document For Water Quality-based Toxics Control* or TSD EPA/505/2-90-001; March 1991.
- Number of Samples "n": In accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance which should be, at a minimum, targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of "n" for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for "n" must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is "n = 4" at a minimum. For Total Ammonia as Nitrogen, "n = 30" is used.

WLA MODELING:

Permittees may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

✓ Not applicable. A WLA study was either not submitted or determined not applicable by department staff. A water effects ratio study for copper was proposed but never promulgated through site specific criteria as listed in Code of State Regulations (CSR) Title 10 Division 20 Chapter 7 Table K.

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(4)(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 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_3)
☒ Other. Facility has had numerous WET test failures. A TIE was conducted but no conclusion was made. The facility has been sampling quarterly and will continue quarterly.

Part IV. 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.

Outfall #002 – Main Facility Outfall (Process Water)

Effluent Limitations Table:

PARAMETERS	UNIT	BASIS FOR LIMIT	DAILY MAXIMUM	MONTHLY AVERAGE MAXIMUM	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
FLOW	MGD	1	*	*	SAME	ONCE/WEEK	ONCE/MONTH	TOTAL
CONVENTIONAL								
CHEMICAL OXYGEN DEMAND	mg/L	6	*	*	120, 90	ONCE/WEEK	ONCE/MONTH	COMP
CHEMICAL OXYGEN DEMAND	mg/L	6	120	90	FINAL	ONCE/WEEK	ONCE/MONTH	COMP
CYANIDE, AMENABLE	µg/L	1, 2, 3	22	22	8.1, 4.0	ONCE/WEEK	ONCE/MONTH	GRAB
CYANIDE, AMENABLE	µg/L	1, 2, 3	9.1	3.1	FINAL	ONCE/WEEK	ONCE/MONTH	GRAB
DISSOLVED OXYGEN (MIN)**	mg/L	6	*	*	NEW	ONCE/WEEK	ONCE/MONTH	GRAB
HARDNESS ($CaCO_3$)	mg/L	6	*	*	NEW	ONCE/WEEK	ONCE/MONTH	GRAB
OIL & GREASE	mg/L	1	52	26	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
pH ‡	SU	1, 2, 3	6.5 to 9.0	6.5 to 9.0	SAME	ONCE/WEEK	ONCE/MONTH	GRAB
TOTAL DISSOLVED SOLIDS	mg/L	6	*	*	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS	mg/L	1, 2, 3	60	31	SAME	ONCE/WEEK	ONCE/MONTH	COMP
METALS								
CADMIUM, TOTAL RECOVERABLE	µg/L	1, 2, 3	2.1	0.8	1.8, 0.9	ONCE/WEEK	ONCE/MONTH	COMP
CHROMIUM , TOTAL RECOV.	µg/L	1	2770	1710	NEW	ONCE/MONTH	ONCE/MONTH	COMP
CHROMIUM (III), TOTAL RECOV.	µg/L	2	*	*	2770, 1710	ONCE/QUARTER	ONCE/QUARTER	COMP
CHROMIUM (VI), DISSOLVED	µg/L	1, 2, 3	14.4 I	9.2 I	14.4, 9.2	ONCE/WEEK	ONCE/MONTH	COMP
CHROMIUM (VI), DISSOLVED	µg/L	1, 2, 3	14.4	6.4	FINAL	ONCE/WEEK	ONCE/MONTH	COMP
COPPER, TOTAL RECOVERABLE	µg/L	1, 2, 3	900 I	900 I	900, 900	ONCE/WEEK	ONCE/MONTH	COMP
COPPER, TOTAL RECOVERABLE	µg/L	1, 2, 3	73	42	FINAL	ONCE/WEEK	ONCE/MONTH	COMP
LEAD, TOTAL RECOVERABLE	µg/L	1	690	430	58.8, 29.3	ONCE/MONTH	ONCE/MONTH	COMP
NICKEL, TOTAL RECOVERABLE	µg/L	1, 2, 3	3980 I	2380 I	3980, 2380	ONCE/MONTH	ONCE/MONTH	COMP
NICKEL, TOTAL RECOVERABLE	µg/L	1, 2, 3	491	196	FINAL	ONCE/MONTH	ONCE/MONTH	COMP
SILVER, TOTAL RECOVERABLE	µg/L	1	430	240	SAME	ONCE/QUARTER	ONCE/QUARTER	COMP
ZINC, TOTAL RECOVERABLE	µg/L	1, 2, 3	2610	1480	599, 299	ONCE/MONTH	ONCE/MONTH	COMP
OTHER								
TOTAL TOXIC ORGANICS	mg/L	1	2.13	n/a	*	ONCE/YEAR	ONCE/YEAR	GRAB
WET TEST, CHRONIC	TUc	8	*	n/a	INTERIM	ONCE/QUARTER	ONCE/QUARTER	COMP
WET TEST, CHRONIC	TUc	8	1.6	n/a	FINAL	ONCE/QUARTER	ONCE/QUARTER	COMP

* - Monitoring requirement only
** - For DO the Daily Maximum is a Daily Minimum and the Monthly Average is a Monthly Average Minimum.
‡ The facility will report the minimum and maximum pH values; pH is not to be averaged.
NEW - Parameter not previously established in previous state operating permit.
COMP = composite sample consisting of 48 sub-samples occurring over the course of 24 hours
I = interim limits established for this permit
LL = limit lowered
FINAL = final limits established for this permit

Basis for Limitations Codes:

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

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

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.

CONVENTIONAL:

Chemical Oxygen Demand (COD)
The permittee has appealed the previous permit. To resolve the appeal, the department has reverted to monitoring only as the interim limit. After the final limits are in place, the previous permit limits of **120 mg/L** daily maximum and **90 mg/L** monthly average will be reinstated.

Cyanide Amenable to Chlorination (CATC)
The department has determined limiting CATC is preferable to limiting total cyanide as allowed for in 40 CFR 433.13(b). Limits found in the ELG are 860 µg/L daily maximum, 320 µg/L monthly average. Previous permit final limits were 8.1 µg/L daily maximum, 4.0 µg/L monthly average. However, the facility petitioned to have the previous permit vacated for this parameter and the permit issued prior to had limits of 22 µg/L for daily maximum and monthly average; therefore these limits will apply until the schedule of compliance is terminated. Protection of Aquatic Life CCC = 5 µg/L, CMC = 22 µg/L, Background CN = 0 µg/L. WQS are more protective than the ELG limits.

Acute WLA: C_e = ((0.64325 + 0.0)22 – (0.0 * 0.0))/0.64325	C_e = 22 µg/L
Chronic WLA: C_e = ((0.64325 + 0.0)5 – (0.0 * 0.0))/0.64325	C_e = 5 µg/L
LTA_a = 22 (0.137) = 3.01 µg/L	[CV = 1.602, 99th Percentile]
LTA_c = 5 (0.249) = 1.245 µg/L	[CV = 1.602, 99th Percentile]
Use most protective number of LTA_c or LTA_a.	
MDL = 1.245 (7.29) = **9.1 µg/L**	[CV = 1.602, 99th Percentile]
AML = 1.245 (2.49) = **3.1 µg/L**	[CV = 1.602, 95th Percentile, n = 4]

The facility shall use method OIA-1677-09 developed by ALPKEM and the University of Nevada Reno Mackay School of Mines. EPA has approved this method and is listed in 40 CFR 136 as "available cyanide" by flow injection and ligand exchange, followed by gas diffusion amperometry. This method has a detection limit of 0.5 µg/L and a minimum level (ML) of 2.0 µg/L which is below permitted limits therefore no ML shall be established. At this time, the facility is unable to meet the new permit limits. The previous permit's interim limits of 22 µg/L for daily maximum and monthly average (same as the permit limits from the October 8, 1999 permit) will be used until the end of the SOC. Weekly sampling required; same as previous permit.

Dissolved Oxygen
During the inspection on June 10, 2013, the department conducted field monitoring of the effluent. The inspector found 0.4 mg/L of dissolved oxygen. In the 2011 inspection, the DO was 0.79 mg/L. The protection of aquatic life standard is 5 mg/L minimum. The facility will begin to monitor and report this parameter monthly.

Hardness, as $CaCO_3$
During the last permit cycle, the facility began a Toxicity Identification Evaluation (TIE) associated with failures of Whole Effluent Toxicity (WET) tests. After reviewing the data and reports, the permit writer has used best professional judgment to include this parameter for monitoring. While there are no water quality standards for hardness, excessive calcium and magnesium ions cause water to be hard. Preliminary TIE data support elevated water hardness may be a contributor or cause of the WET failures.

Oil & Grease
A reasonable potential analysis was performed and determined this pollutant does not have reasonable potential to violate Missouri water quality standards in accordance with 10 CSR 20-7.031 Table A: *Criteria for Designated Uses*; 10 mg/L monthly average (chronic standard). However, this parameter is found at 40 CFR 433 and therefore must be limited within the permit. The restriction has been reduced from 15 mg/L daily maximum and 10 mg/L monthly average to the ELG limits at 40 CFR 433.13 as **52 mg/L** daily maximum and **26 mg/L** monthly average. Sampling frequency was reduced from weekly to monthly.

pH
6.5 to 9.0 SU. The Water Quality Standard [10 CSR 20-7.031(5)(E)], states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 SU. Continued from previous permit. The ELG limits of 6.0 to 9.0 are not as protective of the receiving stream because the receiving stream has no assimilative capacity.

Total Dissolved Solids (TDS)
The facility has indicated in several different documents that total dissolved solids may be causing toxicity. Monitoring monthly is reinstated after removal in 2013.

Total Suspended Solids (TSS)
Effluent limitations from the previous state operating permit have been reassessed and verified they are still protective of the receiving stream's water quality. **60 mg/L** as a daily maximum and **31 mg/L** as a monthly average per 40 CFR 433.13(a).

METALS:
Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the "Technical Support Document For Water Quality-based Toxic Controls" (EPA/505/2-90-001) and "The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From A Dissolved Criterion" (EPA 823-B-96-007). General warm-water fishery criteria apply and an effluent water hardness of 670 mg/L is used in the conversion below. This facility has submitted hardness data to the department for consideration. The 95th percentile of the effluent hardness data was calculated at 695 mg/L during the last permit cycle with data provided from the facility.

A water effects ratio (WER) study for copper was submitted during the last permit cycle but was rejected because water effects ratios can only be computed when there is an upstream using the method they selected. There is no upstream flow in the tributary. Additionally, the WER could not be used because of antibacksliding regulations.

METAL	CONVERSION FACTORS HARDNESS 695 MG/L	
	ACUTE	CHRONIC
Aluminum	NA	NA
Antimony	NA	NA
Arsenic	1	1
Beryllium	NA	NA
Cadmium	0.863	0.828
Chromium III	0.316	0.860
Chromium VI	NA	NA
Copper	0.960	0.960
Iron	NA	NA
Lead	0.509	0.509
Mercury	0.85	NA
Nickel	0.998	0.997
Selenium	NA	NA
Silver	0.850	NA
Thallium	NA	NA
Zinc	0.980	0.980

Conversion factors for Cd and Pb are hardness dependent.
Values calculated using equation found in Section 1.3 of EPA 823-B-96-007
NA = not applicable.

Cadmium, Total Recoverable

The EPA has identified this parameter as a constituent of concern for the industry in 40 CFR 433. The ELG standard for cadmium is 690 µg/L daily maximum and 260 µg/L monthly average. Previous permit limits were 72 µg/L daily maximum and monthly average for the interim limits, and 1.8 µg/L daily maximum and 0.9 µg/L monthly average final values.

Acute AQL WQS: $e^{(1.0166 * \ln 695 - 3.062490)} * (1.136672 - \ln 695 * 0.041838) = 31.211$ [Hardness 695]

Chronic AQL WQS $e^{(0.7409 * \ln 162 - 4.719948)} * (1.101672 - \ln 695 * 0.041938) = 0.941$ [Hardness 695]

Total Recoverable Conversion $31.211 \div (1.136672 - \ln 695 * 0.041838) =$ [Hardness 695]
$31.211 \div 0.863 = 36.171$

Total Recoverable Conversion $0.941 \div (1.101672 - \ln 695 * 0.041938) =$ [Hardness 695]
$0.941 \div 0.828 = 1.137$

LTAa = 36.171 (0.179) = 6.463 [CV = 1.16, 99th Percentile]

LTAc = 1.137 (0.330) = 0.375 [CV = 1.16, 99th Percentile]

Use most protective number

MDL = 0.375 (5.60) = 2.1008 µg/L [CV = 1.16, 99th Percentile]

AML = 0.375 (2.10) = 0.7878 µg/L [CV = 1.16, 95th Percentile]

Daily maximum **2.1 µg/L**, monthly average **0.8 µg/L**. The permit writer has reviewed the current data obtained by the facility for cadmium. The facility will have until the end of the schedule of compliance to meet the new limits. Weekly sampling is required, continued from the previous permit. The daily maximum limit is effective immediately as it is higher than the current limit. Weekly sampling required.

Chromium, Total Recoverable

The EPA has identified total chromium as a constituent of concern for the industry in 40 CFR 433. Previous permits did not have this parameter included in monitoring. Limits from the ELG are **2770 µg/L** daily maximum, **1710 µg/L** monthly average. Because the ELG identifies this parameter a pollutant of concern for the industry, the parameter must be limited in the permit. Monthly sampling required.

Chromium, Trivalent

Missouri water quality standards are not in total chromium but in trivalent chromium. Previous permit limits were 2770 µg/L daily maximum, and 1710 µg/L monthly average. A reasonable potential analysis was performed on the trivalent chromium values. Reasonable potential was not found for this parameter. Monitoring only. During the last permit cycle, the facility reported 216 µg/L as the maximum value for this parameter. Sampling and reporting shall occur quarterly.

Chromium, Hexavalent, Dissolved

The EPA has identified total chromium as a constituent of concern for the industry in 40 CFR 433; however, because Missouri water quality standards are not in total chromium, the department has determined sampling for the two most prevalent valences of chromium is appropriate because water quality limits exist. The facility has contested on several occasions the reporting limit of the laboratory is 10 µg/L, which is above permit limits but should not be considered a violation. However, when performing testing for permitting-based actions, the facility is required by 40 CFR 136 to use a sufficiently sensitive testing method. The chronic in-stream protection of aquatic life standard is 10 µg/L. The previous permit limits were **14.4 µg/L** daily maximum, and **9.2 µg/L** monthly average. The facility should have been, and will need to use, a sufficiently sensitive method to show the true concentration of the effluent is below the current and proposed effluent limitations. Test methodologies for Cr-6 can detect the parameter at 0.3 µg/L in electroplating waste according to *Standard Methods for the Examination of Water and Wastewater*, 22nd Edition, method 3500-Cr C; page 3-71. This method is an approved method according to 40 CFR 136 Table IB.

Acute AQL WQS WLA= CMC = 15 [Hardness n/a]

Chronic AQL WQS WLA= CCC = 10 [Hardness n/a]

LTAa = 15 (0.242) = 3.625 [CV = 0.83, 99th Percentile]

LTAc = 10 (0.429) = 4.289 [CV = 0.83, 99th Percentile]

Use most protective number

MDL = 3.625 (4.14) = 15 **15 µg/L** [CV = 0.83, 99th Percentile]

AML = 3.625 (1.78) = 6.445 **6.4 µg/L** [CV = 0.83, 95th Percentile]

The maximum value reported for this parameter was 25 µg/L during the last permit cycle; from the reported data, the facility appears to be unable to meet the new permit limits. The facility will be held to the old permit limits until the schedule of compliance date. After that date, the limits are **14.4 µg/L** (to conform to antibacksliding regulations) and **6.4 µg/L** monthly average. Sampling for this parameter shall occur weekly; continued from previous permit.

Copper, Total Recoverable

The EPA has identified this parameter as a constituent of concern for the industry in 40 CFR 433. The ELG BPT standard for copper is 3380 µg/L daily maximum, and 2070 µg/L monthly average. Previous permit limits were **900 µg/L** for daily maximum and monthly average and have been this limit since 1994. In the fact sheet accompanying the permit issued on October 8, 1999 to the Plastene Supply Company, the permit writer allowed a 0.9 mg/L limit because the permittee alleged the acute aquatic life criterion of 0.067 mg/L could not be economically achieved.

The following description was taken from a WET report dated December 1993. Copper is used in the process of plating plastics. Plastic moldings to not conduct electricity which is required for the electroplating of these metals. An electroless process is used to chemically deposit a layer of copper on the plastic moldings to conduct electricity, thereby making the electroplating process possible. This electroless process requires the use of a high pH copper solution. In order to prevent the copper from precipitating out as an hydroxide ion in the plating bath, the copper must be in a strongly chelated form. EDTA is used as the chelating agent. Copper in this strongly chelated form can not be removed from solution according to the facility. The facility also contests that this strongly chelated copper is less toxic and unavailable to aquatic organisms. In 1993, the facility submitted effluent to a laboratory which performed Whole Effluent Toxicity (WET) testing on *Ceriodaphnia dubia* and *Pimephales promelas*. These acute tests appeared to support the facility's allegations that the chelated copper form was indeed less toxic to aquatic life organisms. The permittee has submitted additional documentation indicating chelated copper was 100 times less toxic than the non-chelated form.

During the pre-public notice review of the draft permit, the facility commented on the proposed limits. The permit writer stated that Streamlined WER could not be effectively completed when there was no upstream flow; the facility corrected that statement when in-fact two studies were completed; it is unknown if the first study was completed according to rules which may have been promulgated at that time. A survey-type study was completed prior to 2006 (likely due to the special permit condition (C) in the permit issued on May 11, 1984). On February 14, 1994 the department recommended three low-stream-flow copper samples be taken to determine if, at ¼ mile below the discharge, the facility was exceeding the 0.067 mg/L (67 µg/L) acute water quality criterion which was proposed in the permit but not adopted. On August 7, 2006, a Water Quality Review Sheet (WQRS) was completed by engineers within the Water Protection Program (WPP). This WQRS indicated the facility had finished a WER study which showed copper would potentially be allowed to be discharged at 9.55 mg/L daily maximum and 4.65 mg/L monthly average.

A second study was proposed April 24, 2008 which did take the form of a formal WER study. The permit writer at the time of issuance of the latest permit (August 1, 2013) kept the previous permit limits of 0.9 mg/L (900 µg/L) as a daily maximum and monthly average because the facility was able to meet those limitations at the time and therefore backsliding was not justified. In 2009 in a report of the water effects study, in the Conclusion section, the facility determined as the results of the study that a permit limit of 9.55 daily maximum and 4.65 mg/L monthly average was warranted but "we only request that the copper limit in the present permit remain the same".

The department can not grant permittee's unsubstantiated requests when they violate water quality standards. The department has reviewed the WER from 2008 in 2016 (in concomitance of writing the renewal permit) and determined the study was not completed satisfactorily. The determination was made because the study appeared to utilize the methods outlined in the *2001 Streamlined Water-Effect Ratio Procedure for Discharges of Copper* (EPA-822-R-01-005). This procedure should not have been used because the facility discharges to a low flow (7Q10) stream of zero. There is a concern a WER derived from 100% effluent may not adequately protect downstream conditions when only two samples are taken. Additionally, the WER limits are not protective as there have been numerous WET test failures. The facility will be held to new lower water quality based effluent limits (WQBEL) after a schedule of compliance.

In accordance with 40 CFR 122.44(l)(2)(ii), the permit writer must implement the most stringent standard for any parameter, whether that be the technology standards listed in the effluent guidelines or the water quality standards listed in state regulations if reasonable potential exists for that parameter. Therefore, the permit writer must base the limit for copper on the most stringent standard, so long as that is not less stringent than the previous permit limits. In this case, regardless of the historical limits granted to the facility, the facility will be required to meet water quality standards as calculated below and after the schedule of compliance has elapsed.

Acute AQL WQS:	$e^{(0.9422 * \ln 695 - 1.7003)} * 0.960 = 83.475$	[at hardness 695]
Chronic AQL WQS:	$e^{(0.8545 * \ln 695 - 1.7020)} * 0.960 = 19.093$	[at hardness 695]
Acute TR WQS:	83.475 ÷ 0.960 = 86.954	[total recoverable conversion]
Chronic TR WQS:	19.093 ÷ 0.960 = 48.900	[total recoverable conversion]
LTAa = 86.475 (0.420) = 36.509		[CV = 0.427, 99th Percentile]
LTAc = 48.900 (0.626) = 30.606		[CV = 0.427, 99th Percentile]
Use most protective number		
MDL = 29.66 (2.38) = 72.895 µg/L		[CV = 0.427, 99th Percentile]
AML = 29.66 (1.38) = 42.354 µg/L		[CV = 0.427, 95th Percentile]

Currently, the facility is not able to meet these limits; daily maximum **73 µg/L**, monthly average **42 µg/L**. The facility will have until the date of the schedule of compliance to meet these limits. The interim limits will be the previous permit limits (900 µg/L). Weekly sampling, continued from the previous permit.

Lead, Total Recoverable

Previous permit limits: 58.8 µg/L daily maximum, 29.3 µg/L monthly average. An analytical reasonable potential analysis performed using data supplied by the facility. No RP was found. However, because the EPA has identified this parameter as a constituent of concern for the industry in 40 CFR 433, the permit must contain limits. ELG limits are **690 µg/L** daily maximum, **430 µg/L** monthly average. Monthly sampling required.

Nickel, Total recoverable

Previous permit limits were 3980 µg/L daily maximum, 2380 monthly average.

Acute AQL WQS: $e^{(0.846 * \ln 695 + 2.255647)} * 0.998 = 2415.821$ [Hardness 695]

Chronic AQL WQS: $e^{(0.846 * \ln 695 + 0.058978)} * 0.997 = 268.305$ [Hardness 695]

Conversion to Total Recoverable: 2415.821 ÷ 0.998 = 2420.662

Conversion to Total Recoverable: 268.305 ÷ 0.997 = 269.112

LTAa = 2420.662 (0.206) = 498.267 [CV = 0.989, 99th Percentile]

LTAc = 269.112 (0.376) = 101.093 [CV = 0.989, 99th Percentile]

Use most protective number

MDL = 101.093 (4.86) = 491.128 **491 µg/L** [CV = 0.989, 99th Percentile]

AML = 101.093 (1.94) = 195.666 **196 µg/L** [CV = 0.989, 95th Percentile]

During the last permit cycle, the facility reported one value of 400 µg/L; the next highest value was 297 µg/L and the remainder of the reported values are considerably lower. Monthly sampling and reporting required; increased from previous permit to determine if the facility is able to control the nickel discharge at all times. The facility will have a schedule of compliance to meet the new limits.

Silver, Total Recoverable

Previous permit limits were **430 µg/L** daily maximum, **240 µg/L** monthly average. The site-specific data suggest there is no reasonable potential to contribute to pollution to waters of the state. The ELG limits will be retained because this parameter is a constituent of concern for the industry as provided in 40 CFR 433 and hence must remain limited in the permit. Quarterly sampling required; same as previous permit.

Zinc, Total Recoverable

Previous permit limits: 599 µg/L daily max; 299 µg/L monthly average. The facility showed no reasonable potential for this parameter; however, since the ELG has identified zinc as a parameter of concern, limits must remain in the permit. Limits are **2610 µg/L** daily maximum, **1480 µg/L** monthly average. Monthly sampling required; reduced from weekly sampling requirement.

OTHER:

Formaldehyde

Quarterly monitoring required. The permittee indicated this parameter was present at the facility within the application for permit renewal materials. Neither the effluent limitation guideline nor Missouri water quality standards contain limits for this parameter. However, the EPA's ECOTOX database [http://cfpub.epa.gov/ecotox/] indicates two studies were performed using Formalin/formaldehyde on the species *Ceriodaphnia dubia*. The LC_{50} of formaldehyde is 12.98 mg/L for the water flea. Chronic toxicity for *Pimephales promelas* ranged from 24.1 to 26.3 mg/L; acute toxicity was found at 81.5 mg/L for the minnow. Because Formalin is more dilute, formaldehyde is intuitively more toxic at lower concentrations.

The facility has indicated there are no water quality standards for this parameter therefore they shouldn't have to sample for it. Indeed, there are no numeric water quality standards for this parameter, nonetheless there are narrative water quality standards that require monitoring for this parameter. The general water quality criteria prohibit facilities from discharging pollutants in amounts that are toxic to aquatic life. In the case of formaldehyde, toxicity occurs at a levels described above. Monitoring is required to assess potential to cause or contribute to toxicity in the receiving stream. Past Whole Effluent Toxicity (WET) tests have determined the effluent at this facility is toxic.

Secondly, the permit must acknowledge this pollutant based on permit shield requirements of CWA 402(k), and as described in a memo from EPA's Office of Water dated July 1, 1994 found at http://www3.epa.gov/npdes/pubs/owm615.pdf . This document states that if the pollutant is described in the application as "present", the [state] has the requirement to acknowledge the parameter, otherwise the facility would not be allowed to legally discharge the parameter. The memo also indicates a NPDES permit does not authorize the discharge of any pollutants associated with waste-streams, operations, or processes which existed at the time of the permit application and which were not clearly identified during the application process. Through monitoring, the permit writer has acknowledged the parameter was identified by the permittee in the application as "present" and is therefore allowed to discharge that pollutant to waters of the state. While the permit can acknowledge the parameter without monitoring, the permit writer has chosen to gather data on this parameter due to in-stream toxicity issues.

Total Toxic Organics (TTO)

The effluent limitation guidelines have established this parameter as a pollutant of concern for the industry. The facility will begin to monitor for TTO. The ELG states TTO shall not be over 2.13 mg/L any calendar day. Monitoring for this parameter shall occur monthly. The facility is able to report "no-discharge" if they can certify according to 40 CFR 122.12(a) they have not discharged any TTO listed at 40 CFR 433.11(e). The facility originally submitted a Total Toxic Organic Solvent Management Plan dated September 19, 1985. The department does not have an updated plan.

WET Test, Chronic

Interim requirement is monitoring only. The permit writer has reviewed documentation where the facility has caused toxicity in the receiving stream. The facility has been dealing with toxicity issues which are not resolved. As far back as 1991, the facility has seen toxicity in aquatic species. The department conducted a toxicity assay which was collected on June 17-18, 1991. The results of the WET test showed 100% *Ceriodaphnia dubia* mortality in 100% effluent and significant mortality in *Pimephales promelas* in 100% effluent after 72 hours.

A possible cause is copper which is used in the process of plating plastics. Plastic moldings to not conduct electricity which is required for the electroplating of these metals. An electroless process is used to chemically deposit a layer of copper on the plastic moldings to conduct electricity, thereby making the electroplating process possible. This electroless process requires the use of a high pH copper solution. In order to prevent the copper from precipitating out as an hydroxide ion in the plating bath, the copper must be in a strongly chelated form. EDTA is used as the chelating agent. Copper in this strongly chelated form can not be removed from solution according to the facility. The facility also contests this strongly chelated copper is less toxic and unavailable to aquatic organisms. In 1993, the facility submitted effluent to a laboratory which performed Whole Effluent Toxicity (WET) testing on *Ceriodaphnia dubia* and *Pimephales promelas*. These acute tests appeared to support the facility's allegations that the chelated copper form was indeed less toxic to aquatic life organisms. The permittee has submitted additional documentation indicating chelated copper was 100 times less toxic than the non-chelated form.

Past TIE studies have indicated solids are a likely cause of toxicity yet the facility has done nothing to correct the issue. The facility has presented these findings to the department as far back as 2011.

Because the facility has demonstrated chronic toxicity, a chronic toxic unit limit of 1.6 applies as a final limit. The facility's toxicity is likely caused by high conductivity and a very high dissolved solids content and hardness. Previous permit limit was 1.6 TUc however a legal stay has excluded this parameter for violations associated with aquatic life toxicity. Past failures and indecisive Toxicity Identification Evaluations (TIE) necessitate a chronic toxic unit limit.

Chronic WLA:	C_e = 1.0 TUc	
Acute WLA:	C_e = 0.3 TUa*10 = 3.0 TUa,c	
LTA_c:	1.0 (0.527) = 0.527 TUa,c	[CV = 0.6, 99th Percentile]
$LTA_{a,c}$:	3.0 (0.321) = 0.963 TUa,c	[CV = 0.6, 99th Percentile]
most protective number of LTA_c or $LTA_{a,c}$		
MDL = 0.527 (3.11) = **1.6 TUc**		[CV = 0.6, 99th Percentile]

Acute and/or Chronic Allowable Effluent Concentration (AEC) for facilities that discharge to unclassified streams is 100%, The dilution series shall be 100%, 50%, 25%, 12.5%, & 6.25%. This test shall be performed quarterly and according to permit conditions.

OUTFALLS #004, #006, AND #007 – STORMWATER OUTFALLS

The permittee has indicated these outfalls undergo sedimentation prior to discharging.

EFFLUENT LIMITATIONS TABLE

PARAMETERS OUTFALLS #004, #006, #007	UNIT	BASIS	DAILY MAXIMUM LIMIT	MONTHLY AVERAGE	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL									
FLOW ǂ	MGD	1	*		-	SAME	ONCE/QUARTER	ONCE/QUARTER	EST.
PRECIPITATION	INCHES	6	*		-	NEW	ONCE/QUARTER	ONCE/QUARTER	24 HR TOT
CONVENTIONAL									
CHEMICAL OXYGEN DEMAND	MG/L	6	120		-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	MG/L	9	**		10	15, 10	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH	SU	1, 3	6.5 TO 9.0	6.5 TO 9.0	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TSS	MG/L	6	90	90	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
METALS									
COPPER, TOTAL RECOVERABLE	µg/L	1, 2	*	*	-	I, NEW	ONCE/MONTH	ONCE/QUARTER	GRAB
COPPER, TOTAL RECOVERABLE	µg/L	1, 2	26	26	-	FINAL	ONCE/MONTH	ONCE/QUARTER	GRAB
NICKEL, TOTAL RECOVERABLE	µg/L	1, 2	*	*	-	I, NEW	ONCE/MONTH	ONCE/QUARTER	GRAB
NICKEL, TOTAL RECOVERABLE	µg/L	1, 2	750	750	-	FINAL	ONCE/MONTH	ONCE/QUARTER	GRAB
ZINC, TOTAL RECOVERABLE	µg/L	1, 2	*	*	-	I, NEW	ONCE/MONTH	ONCE/QUARTER	GRAB
ZINC, TOTAL RECOVERABLE	µg/L	1, 2	209	209	-	FINAL	ONCE/MONTH	ONCE/QUARTER	GRAB

* - Monitoring requirement only
** - Monitoring with associated benchmark
ǂ The facility will report in MGD to fall in line with other industrial operating permits, previous reporting type was gallons per day.
I = interim
New = new parameter this permit

Basis for Limitations Codes:

1. State or Federal Regulation/Law
2. Water Quality Standard (includes RPA)
3. Water Quality Based Effluent Limits
4. Antidegradation Review/Policy
5. Water Quality Model
6. Best Professional Judgment
7. TMDL or Permit in lieu of TMDL
8. Benchmark based on MSGP
9. Benchmark based on Missouri WQS

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

Precipitation

Monitoring only requirement; measuring the amount of precipitation [(10 CSR 20-6.200(2)(C)1.E(VI)] during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measures that should be employed to ensure protection of water quality.

CONVENTIONAL:

Chemical Oxygen Demand

Previous permit limits were 120 mg/L for daily maximum, and 90 mg/L for monthly average. However, the department recognizes stormwater flows are acute events and averaging of the data is capricious. Therefore, this permit will only implement a daily maximum; **120 mg/L**.

Oil & Grease

Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A: *Criteria for Designated Uses*; **10 mg/L** will be used as the benchmark value.

pH

6.5 to 9.0 SU. The Water Quality Standard [10 CSR 20-7.031(5)(E)], states water contaminants shall not cause pH to be outside the range of **6.5 to 9.0 SU**. Continued from previous permit.

Total Suspended Solids

Previous permit limits were 90 mg/L for daily maximum, and 60 mg/L for monthly average. However, the department recognizes stormwater flows are acute events and averaging of the data is capricious. Therefore, this permit will implement a daily maximum; **90 mg/L** limit and also applied to monthly average. There were six exceedances of TSS over the last five years at all of the stormwater outfalls.

METALS:

The following three metals were chosen for stormwater monitoring because they were present in the sampling conducted for the permit renewal application. The facility will have three years from date of issuance to improve stormwater controls so limits are not violated.

Copper, Total Recoverable

This parameter was present in the stormwater at the site and is a constituent of concern for the industry. This parameter will receive a limit of **26 µg/L** based on the average stormwater hardness value of 193 mg/L and the acute water quality standard for protection of aquatic life. The facility reported 27.8 µg/L at outfall #004, 10 µg/L at outfall #006, and 3880 µg/L in outfall #007's discharges. Two of the three values are above the limits and therefore the best management practices and stormwater controls should be carefully evaluated and upgraded to decrease copper in the stormwater runoff from the site. Because the permit writer determined the facility has reasonable potential to cause or contribute to pollution of waters of the state, the facility is not allowed a benchmark value.

Acute AQL WQS:	$e^{(0.9422 * \ln 193 - 1.7003)} * 0.960 = 24.963$	[at Hardness 193]
Acute TR WQS:	$24.963 \div 0.96 = 26.003$	[Total Recoverable Conversion]
MDL & AML:	26 µg/L	

Nickel, Total Recoverable

This parameter was present in at least one stormwater outfall's discharge above detection limits and is a constituent of concern for the industry. This parameter will receive a limit of **819 µg/L** based on the average stormwater hardness value of 193 mg/L and the acute water quality standard for protection of aquatic life. The facility reported 6550 µg/L of nickel in outfall #007's stormwater discharge. The facility will need to consider updating environmental stormwater controls and improving best management practices to meet the limit in the future. Because the permit writer determined the facility has reasonable potential to cause or contribute to pollution of waters of the state, the facility is not allowed a benchmark value.

Acute AQL WQS:	$e^{(0.846 * \ln 193 + 2.255647)} * 0.998 = 817.198$	[at Hardness 193]
Acute TR WQS:	$817.198 \div 0.998 = 818.84$	[Total Recoverable Conversion]
MDL & AML:	819 µg/L	

Zinc, Total Recoverable

This parameter was present in at least one stormwater outfall's discharge above detection limits and is a constituent of concern for the industry. This parameter will receive a limit of **209 µg/L** based on the average stormwater hardness value of 193 mg/L and the acute water quality standard for protection of aquatic life. The facility reported 387 µg/L of zinc in outfall #007's stormwater discharge. The facility will need to consider updating environmental stormwater controls and improving best management practices to meet the value in the future. Because the permit writer determined the facility has reasonable potential to cause or contribute to pollution of waters of the state, the facility is not allowed a benchmark value.

Acute WQS:	$e^{(0.8473 * \ln 193) + 0.884} * 0.98 = 204.97$	[at Hardness 193]
Acute TR WQS:	$204.97 \div 0.98 = 209.16$	[Total Recoverable Conversion]
MDL & AML:	209 µg/L	

Part V. SAMPLING AND REPORTING REQUIREMENTS:

ELECTRONIC DISCHARGE MONITORING REPORTING:
Due to new federal regulations, all facilities will must begin submitting their discharge monitoring reports electronically, called the eDMR system. To begin the process, please visit http://dnr.mo.gov/env/wpp/edmr.htm. This process is expected to save time, lessen paperwork, and reduce operating costs for both the facilities and the water protection program. Additional information may also be found at http://dnr.mo.gov/pubs/pub2474.pdf.

SAMPLING FREQUENCY JUSTIFICATION:
Sampling and reporting frequency was generally retained from the previous permit. The exception is nickel at outfall #002. The permittee may not be effectively controlling the discharge of nickel from this outfall therefore more frequent monitoring is warranted. Sampling frequency for stormwater-only outfalls is typically quarterly even though BMP inspection occurs monthly. The facility may sample more frequently if they need additional data to determine if their best management technology is performing as expected. 40 CFR 122.45(d)(1) indicates all continuous discharges shall be permitted with daily maximum and monthly average limits.

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.* However, this facility has had issues with toxicity. The department believes quarterly sampling is suitable, monitoring frequency continued from previous permit.

SAMPLING TYPE JUSTIFICATION:
As per 10 CSR 20-7.015, TSS, and WET test samples collected from mechanical plants shall be a 24 hour composite samples. Grab samples, however, must be collected for pH, oil and grease, and total phosphorus. The facility has been collecting all other parameters which are sampled monthly as composite samples and will continue to do so. Obtaining grab samples for stormwater discharges are appropriate. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

Part VI. ADMINISTRATIVE REQUIREMENTS

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

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

✓ This permit will expire at the end of the fourth quarter of 2020 to retain permit synchronization.

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 was from 6/17/2016 to 7/18/2016. Two substantive comments were received.

Comment 1. On page 11 of the permit under Schedule of Compliance and on page 1 of the fact sheet, the language for outfalls #002, #004, #006, and #007 is to comply with the listed limits for each “as soon as practicable” and no later than 4 or 3 years (depending on the outfall). We would like to remove the “as soon as practicable” language since such an effort is not appropriate when the entire wastewater facility is being redesigned to route to the POTW.

Response 1. The department cannot remove the language as it is specifically identified in 10 CSR 20-6.010(7) as applicable to water quality schedules of compliance. Should the facility not route discharges to a POTW, these will be the water quality effluent limitations applicable to the facility.

Comment 2. On pages 2 and 13 of the fact sheet, DNR discusses the basis for rejection of the long-standing water effect ratio (WER) and site-specific limits for copper. As we have noted in previous comments, the regulations do not prohibit the use of WER studies in zero flow streams. We have reviewed 10 CSR 20-3.031(5)(S) as well as other EPA guidance documents. While we nor the guidance discusses the use of mixtures upstream and effluent waters for development of a WER, the guidance does not prohibit the development of WERs for zero flow streams (for example, see page 27 and Apx. F. of the *Interim Guidance on Determination of Water-Effects Ratios for Metals*, USEPA 1994). In fact there is guidance for development of a WER for discharges to zero flow streams as in SRG’s situation. For SRG’s discharge, the effluent comprises the entirety of flow during low flow conditions; thus the use of 100% effluent for development of a WER is acceptable. With respect to the administrative acceptance of the site-specific copper limits, we note the DNR has previously accepted the findings of the WER study and applied the site specific limits for copper at the Portageville facility since 2008. Even as recent as the August 2013 draft permit, the department accepted the results of the WER study and proposed site-specific permit limits. Based on the above, we contend the WER study and site specific limits for copper are acceptable for application to the SRG Portageville facility discharge.

Response 2. Regardless of how long the department allowed elevated permit limitations based on a WER to continue, for the study to maintain water quality protection of the streams at the facility, the WER was revisited as the permit writer believed it to be inadequate since Whole Effluent Toxicity testing found the effluent to continue to be toxic.

"Part 1.0 Synopsis" of the *Plan for Water Effect Ratio Study* (Rev 0; 4/24/2008) states: "This study will follow the *Streamlined Water-Effect Ratio Procedure for Discharges of Copper* [EPA-822-R-01-005, March 2001]. This procedure provides an alternative approach to the previous document *Interim Guidance on Determination of Water-Effects Ratios for Metals* [EPA-823-B-94-001, February 1994]." The watershed protection section (WPS) under the guidance of EPA determined the facility should not have used the *Streamlined Water-Effect Ratio Procedure for Discharges of Copper* and should have only used the *Interim Guidance on Determination of Water-Effects Ratios for Metals*. The disallowance response was made because the *Streamlined* guidance indicates throughout the document that an upstream sample must be collected. The *Interim* guidance allows for a zero-upstream flow. Because this facility discharges to a 7Q10 zero-flow classified stream, the department feels the *Streamline*d approach, taking only two samples, is inadequate for this facility.

Additional non-substantive and formatting corrections were made.

DATE OF FACT SHEET: JULY 25, 2016

COMPLETED BY:

PAM HACKLER, ENVIRONMENTAL SCIENTIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
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STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

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

Part I – General Conditions
Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
   b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.

2. **Monitoring Requirements**.
   a. Records of monitoring information shall include:
      i. The date, exact place, and time of sampling or measurements;
      ii. The individual(s) who performed the sampling or measurements;
      iii. The date(s) analyses were performed;
      iv. The individual(s) who performed the analyses;
      v. The analytical techniques or methods used; and
      vi. The results of such analyses.
   b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.

3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

4. **Test Procedures**. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.

5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

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

Section B – Reporting Requirements

1. **Planned Changes.**
   a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
      iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.

2. **Non-compliance Reporting.**
   a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

b. The following shall be included as information which must be reported within 24 hours under this paragraph.
   i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
   ii. Any upset which exceeds any effluent limitation in the permit.
   iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.

3. **Anticipated Noncompliance**. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.

4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.

5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.

6. **Other Information**. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

7. **Discharge Monitoring Reports.**
   a. Monitoring results shall be reported at the intervals specified in the permit.
   b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
   c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.

Section C – Bypass/Upset Requirements

1. **Definitions.**
   a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
   b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
   c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. **Bypass Requirements.**
   a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.
   b. Notice.
      i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
      ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
   c. Prohibition of bypass.
      i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
         1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
         2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
         3. The permittee submitted notices as required under paragraph 2. b. of this section.
      ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.

3. **Upset Requirements.**
   a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
   b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      i. An upset occurred and that the permittee can identify the cause(s) of the upset;
      ii. The permitted facility was at the time being properly operated; and
      iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
      iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
   c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section D – Administrative Requirements

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

imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed $10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

2. **Duty to Reapply.**
   a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
   b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
   c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. **Proper Operation and Maintenance**. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. **Permit Actions.**
   a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
      i. Violations of any terms or conditions of this permit or the law;
      ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
      iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
      iv. Any reason set forth in the Law or Regulations.
   b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. **Permit Transfer.**
   a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
   c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.

8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
    a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
    d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.

12. **Closure of Treatment Facilities.**
    a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
    b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.

13. **Signatory Requirement.**
    a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
    b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
    c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.

14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

AP 21183

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
FORM A – APPLICATION FOR NONDOMESTIC PERMIT UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED 5/5/15	FEE SUBMITTED ✓ SB

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

1. This application is for:
   - ☐ An operating permit for a new or unpermitted facility:
     Please indicate the original Construction Permit # _____
   - ☑ An operating permit renewal:
     Please indicate the permit # MO- 1180 Expiration Date 12/31/15
   - ☐ An operating permit modification:
     Please indicate the permit # MO-_____ Modification Reason: ____

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

2. FACILITY

NAME		TELEPHONE NUMBER WITH AREA CODE	
Siegel-Robert Automotive D.B.A SRG Global, Inc - Portageville		(573) 379-3857	
		FAX (573) 379-5677	
ADDRESS (PHYSICAL) 101 Meatte Avenue	CITY Portageville	STATE MO	ZIP CODE 63873

3. OWNER

NAME	EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE	
SRG Global, Inc	kdarnell@srgglobal.com	(573) 379-3857	
		FAX (573) 379-3857	
ADDRESS (MAILING) 101 Meatte Avenue	CITY Portageville	STATE MO	ZIP CODE 63873

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

4. CONTINUING AUTHORITY

NAME	EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE	
SRG Global, Inc. - Portageville	kdarnell@srgglobal.com	(573) 379-3857	
		FAX (573) 379-5677	
ADDRESS (MAILING) 101 Meatte Ave	CITY Portageville	STATE MO	ZIP CODE 63873

5. OPERATOR

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

6. FACILITY CONTACT

NAME	TITLE	TELEPHONE NUMBER WITH AREA CODE
Kevin Darnell	EHS Manager	(573) 379-1045
	E-MAIL ADDRESS kdarnell@srgglobal.com	FAX (573) 379-5677

7. ADDITIONAL FACILITY INFORMATION

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

002 SW ¼ NW ¼ Sec 36 T 21N R 12E NEW MADRID County
UTM Coordinates Easting (X): 254488.6 Northing (Y): 4041052.1
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

004 SW ¼ NW ¼ Sec 36 T 21N R 12E NEW MADRID County
UTM Coordinates Easting (X): 253427.1 Northing (Y): 4041390.8

006 SW ¼ NW ¼ Sec 36 T 21N R 12E NEW MADRID County
UTM Coordinates Easting (X): 253127.1 Northing (Y): 4041.90.8

007 SW ¼ NW ¼ Sec 36 T 21N R 12E NEW MADRID County
UTM Coordinates Easting (X): 254488.6 Northing (Y): 4041052.1

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

001 – SIC 3471 and NAICS 332813 002 – SIC 3089 and NAICS 326121
003 – SIC _____ and NAICS _____ 004 – SIC _____ and NAICS _____

8.	ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION (Complete all forms that are applicable.)		
A.	Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? If yes, complete Form C or 2F. (2F is the U.S. EPA's Application for Storm Water Discharges Associate with Industrial Activity.)	YES ☐	NO ☐
B.	Is application for storm water discharges only? If yes, complete Form C or 2F.	YES ☐	NO ☐
C.	Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C or 2F and D.	YES ☑	NO ☐
D.	Is wastewater land applied? If yes, complete Form I.	YES ☐	NO ☑
E.	Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.	YES ☐	NO ☐
F.	If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach any revision to your Nutrient Management Plan.		
F.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		

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

NAME			
Portageville Farmers Gin Company			
ADDRESS	CITY	STATE	ZIP CODE
105 Cotton Road	Portageville	MO	63873

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
Ron Randen - Plant Manager	(573) 379-3857
SIGNATURE	DATE SIGNED
	4-30-15

MO 780-1479 (07-14)

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

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

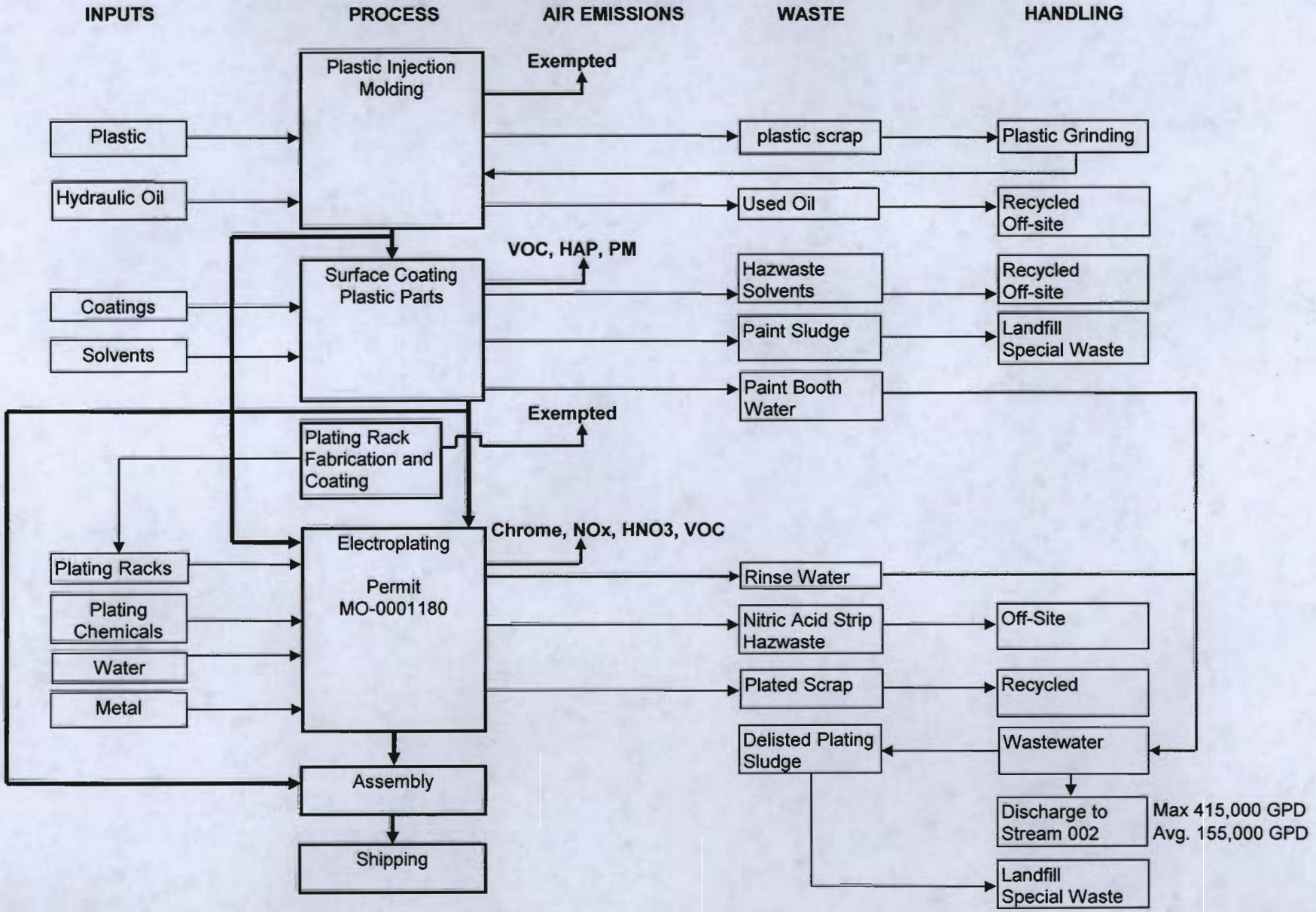
HAVE YOU INCLUDED:

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

SRGGI Environmental

Form No. EF-002.004SRA-Portageville | Approved By: Steve Sherriff
Date Issued: 8/13/2001 | Revision Date: 2/21/2012

SRGGI-PORTAGEVILLE
FLOW DIAGRAM



Note: Treatment chemicals include Sodium Bisulfite, Sulfuric Acid, Sodium Hydroxide, Lime and Polymer.
Aluminum based coagulants have not been utilized but may be utilized in the future.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY

Siegel-Robert Automotive D.B.A SRG Global, Inc - Portageville

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

MO-0001180

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

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

A. FIRST 3471 B. SECOND 3089

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) SW 1/4 NW 1/4 SEC 36 T 21N R 12E New Madrid COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
002, 004, 006, 007	Portage Open Bay

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Injection molding, electroplating, and surface coating of plastic automotive parts.

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent and treatment units labeled to correspond to the more detailed descriptions in item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, public sewers and outfalls. If a water balance cannot by determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of 1. All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water and storm water runoff. 2. The average flow contributed by each operation. 3. The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO.	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
(LIST)	A. OPERATION (LIST)	B. AVERAGE FLOW (INCLUDE UNITS) (MAXIMUM FLOW)	A. DESCRIPTION	B. LIST CODES FROM TABLE A
002	Electroplating	155,000 AVG.GPD , 415,000 MAX	Reduction	2-L
			Neutralization	2-K
			Coagulation	2-D
			Flocculation	1-G
			Pressure Filteration	5-R
			Landfill	5-Q
004	Storm Water		Sedimentation	1-U
006	Storm Water		Sedimentation	1-U
007	Storm Water		Sedimentation	1-U

2.40 CONTINUED

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

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

1. OUTFALL NUMBER *(list)*	2. OPERATION(S) CONTRIBUTING FLOW *(list)*	3. FREQUENCY		4. FLOW				C. DURATION *(in days)*
				A. FLOW RATE *(in mgd)*		B. TOTAL VOLUME (specify with units)		
		A. DAYS PER WEEK *(specify average)*	B. MONTHS PER YEAR *(specify average)*	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	

2.50 MAXIMUM PRODUCTION

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

☑ **YES** *(COMPLETE B.)* ☐ **NO** *(GO TO SECTION 2.60)*

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

☐ **YES** *(COMPLETE c.)* ☑ **NO** *(GO TO SECTION 2.60)*

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

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

2.60 IMPROVEMENTS

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

☑ **YES** *(COMPLETE THE FOLLOWING TABLE)* ☐ **NO** *(GO TO 3.00)*

1. IDENTIFICATION OF CONDITION AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
				A. REQUIRED	B. PROJECTED
Whole Effluent Toxicity		002	Toxicity Reduction Evaluation and implement selected measures	N/A	TBD based on results of TRE

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

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

3.00 INTAKE AND EFFLUENT CHARACTERISTICS

A. & B. SEE INSTRUCTIONS BEFORE PROCEEDING – COMPLETE ONE TABLE FOR EACH OUTFALL – ANNOTATE THE OUTFALL NUMBER IN THE SPACE PROVIDED.
NOTE: TABLE 1 IS INCLUDED ON SEPARATE SHEETS NUMBERED FROM PAGE 6 TO PAGE 7.

C. USE THE SPACE BELOW TO LIST ANY OF THE POLLUTANTS LISTED IN PART B OF THE INSTRUCTIONS, WHICH YOU KNOW OR HAVE REASON TO BELIEVE IS DISCHARGED OR MAY BE DISCHARGED FROM ANY OUTFALL. FOR EVERY POLLUTANT YOU LIST, BRIEFLY DESCRIBE THE REASONS YOU BELIEVE IT TO BE PRESENT AND REPORT ANY ANALYTICAL DATA IN YOUR POSSESSION.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
Formaldehyde	Electroplating		

3.10 BIOLOGICAL TOXICITY TESTING DATA

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

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

Whole Effluent Toxicity (WET) acute testing is conducted annually under NPDES permit requirements. Aquatic toxicity tests utilizing toxicity reduction evaluation test methods have been periodically conducted as part of the Toxicity Reduction Evaluation (TRE) required by the NPDES permit. In addition, the facility also conducts periodic chronic WET tests to identify constituents associated with the TRE work.

3.20 CONTRACT ANALYSIS INFORMATION

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

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

A. NAME	B. ADDRESS	C. TELEPHONE *(area code and number)*	D. POLLUTANTS ANALYZED *(list)*
EA Engineering, Science, and Technology, Inc.	231 Schilling Circle, Hunt Valley, MD 21031	410 584 7000	Ceriodaphnia Dubia Fathead Minnow
TEC Labs	2269 FE Wright Drive Jackson, TN 38305	731 423 5330	Cr6, Cu, Cd, Pb, Zn, Cr, Ni, Ag, COD, TSS O&G
Accutest Laboratories	2235 Route 130 Dyton NJ 08810	732 329 0200	Cr6, Cu, Cd, Pb, Zn, Cr, Ni, Ag, COD, TSS O&G

3.30 CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS APPLICATION AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
Ron Randen - Plant Manager	(573) 379-3857
SIGNATURE (SEE INSTRUCTIONS)	DATE SIGNED

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO. 002

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	66	228					1	mg/l	lbs/d			
B. Chemical Oxygen Demand (COD)	209	724	209	724	124.6	161.24	1	mg/l	lbs/d			
C. Total organic Carbon (TOC)	35.7	123					1	mg/l	lbs/d			
D. Total Suspended Solids (TSS)	32	110	32	110.9	15.8	20.5	50	mg/l	lbs/d			
E. Ammonia *(as N)*	0.695	2.40					1	mg/l	lbs/d			
F. Flow	VALUE 0.415		VALUE		VALUE 0.1551		356	MGD		VALUE		
G. Temperature *(winter)*	VALUE 20		VALUE		VALUE		1	°C		VALUE		
H. Temperature *(summer)*	VALUE 26		VALUE		VALUE		1	°C		VALUE		
I. pH	MINIMUM 6.4	MAXIMUM 8.7	MINIMUM	MAXIMUM			356	STANDARD UNITS				

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

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS														
A. Bromide (24959-67-9)		X												
B. Chlorine, Total Residual		X							1	mg/l	lbs/d			
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)	X		3.49	12.07					1	mg/l	lbs/d			
F. Nitrate - Nitrate *(as N)*	X		49.4	171					1	mg/l	lbs/d			

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*	X		57.4	198.66					1	mg/l	lbs/d			
H. Oil and Grease	X		1.7	5.9	1.7	5.89	0.70	0.908	50	mg/l	lbs/d			
I. Phosphorus *(as P)*, Total (7723-14-0)	X		ND											
J. Sulfate *(as SO^4)* (14808-79-8)	X		1320	4569					1	mg/l	lbs/d			
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)	X		7.5	26					1	mg/l	lbs/d			
M. Surfactants	X		0.813	2.81					1	mg/l	lbs/d			
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)	X		0.148	0.51					1	mg/l	lbs/d			
P. Boron, Total (7440-42-8)	X		8.89	30.77					1	mg/l	lbs/d			
Q. Cobalt, Total (7440-48-4)		X												
R. Iron, Total (7439-89-6)	X		6.53	22.6					1	mg/l	lbs/d			
S. Magnesium, Total (7439-95-4)	X		6.18	21.39					1	mg/l	lbs/d			
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)	X		ND						1	mg/l	lbs/d			
W. Titanium, Total (7440-32-6)	X		ND						1	mg/l	lbs/d			

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)	X		0.65	0.022			0.7325	0.000948	50	ug/l	lbs/d			
5M. Chromium III (16065-83-1)	X		0.216	0.7487			0.1823	0.2358	4	mg/l	lbs/d			
6M. Chromium VI (18540-29-9)	X		<10	<.0347			<10	<0.0064	50	ug/l	lbs/d			
7M. Copper, Total (7440-50-8)	X		0.60	2.0797			0.3913	0.5062	50	mg/l	lbs/d			
8M. Lead, Total (7439-92-1)	X		23	.0797			6.78	0.0088	50	ug/l	lbs/d			
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)	X		0.40	1.386			0.2978	0.3852	4	mg/l	lbs/d			
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X	0.0005	0.0017			<.00005	0.000647	4	mg/l	lbs/d			
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)	X		0.172	0.5962			0.0124	0.01599	50	mg/l	lbs/d			
15M. Cyanide, Amenable to Chlorination	X		120	0.4159			10.34	0.01338	50	ug/l	lbs/d			
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY

Siegel-Robert Automotive D.B.A SRG Global, Inc - Portageville

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

MO - 0001180

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

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

A. FIRST 3471 B. SECOND 3089

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) SW 1/4 NW 1/4 SEC 36 T 21 R 12E NEW MADRID COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
004	PORTAGE OPEN BAY

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Injection molding, electroplating, and surface coating of plastic automotive parts.

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO. 004

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	ND						1	mg/l	lbs/d			
B. Chemical Oxygen Demand (COD)	66	1.32			48.75	0.976	1	mg/l	lbs/d			
C. Total organic Carbon (TOC)	4.7	0.05					1	mg/l	lbs/d			
D. Total Suspended Solids (TSS)	25	0.12			14	0.28	1	mg/l	lbs/d			
E. Ammonia *(as N)*	0.32	0.0064					1	mg/l	lbs/d			
F. Flow	VALUE 0.0024 mgd		VALUE		VALUE					VALUE		
G. Temperature *(winter)*	VALUE 20		VALUE		VALUE			°C		VALUE		
H. Temperature *(summer)*	VALUE 26		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 6.21	MAXIMUM 6.68	MINIMUM	MAXIMUM				STANDARD UNITS				

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

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS														
A. Bromide (24959-67-9)		X												
B. Chlorine, Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate - Nitrate *(as N)*		X												

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*		X												
H. Oil and Grease	X		ND											
I. Phosphorus *(as P)*, Total (7723-14-0)		X												
J. Sulfate *(as SO^4)* (14808-79-8)		X												
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)		X												
R. Iron, Total (7439-89-6)		X												
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND-TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)	X		<0.010											
6M. Chromium VI (18540-29-9)	X		1.3	0.000026					1	ug/l	lbs/d			
7M. Copper, Total (7440-50-8)	X		27.8	0.00056					1	ug/l	lbs/d			
8M. Lead, Total (7439-92-1)	X								1	ug/l	lbs/d			
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)	X		43.2	0.00086					1	ug/l	lbs/d			
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)	X		49.2	0.00098					1	ug/l	lbs/d			
15M. Cyanide, Amenable to Chlorination	X		ND						1	ug/l	lbs/d			
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY

Siegel-Robert Automotive D.B.A SRG Global, Inc - Portageville

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

MO - 0001180

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

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

A. FIRST 3471 B. SECOND 3089

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) SW 1/4 NW 1/4 SEC 36 T 21 R 12E NEW MADRID COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
006	PORTAGE OPEN BAY

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Injection molding, electroplating, and surface coating of plastic automotive parts.

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO. 006

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	ND						1	mg/l	lbs/d			
B. Chemical Oxygen Demand (COD)	61	1.22			37.25	0.7455	1	mg/l	lbs/d			
C. Total organic Carbon (TOC)	4.3	0.086					1	mg/l	lbs/d			
D. Total Suspended Solids (TSS)	11	0.22			8.25	0.165	1	mg/l	lbs/d			
E. Ammonia *(as N)*	0.41	0.0082					1	mg/l	lbs/d			
F. Flow	VALUE 0.0024 mgd		VALUE		VALUE					VALUE		
G. Temperature *(winter)*	VALUE 20		VALUE		VALUE			°C		VALUE		
H. Temperature *(summer)*	VALUE 26		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 6.36	MAXIMUM 8.61	MINIMUM	MAXIMUM				STANDARD UNITS				

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

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS														
A. Bromide (24959-67-9)		X												
B. Chlorine, Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate - Nitrate *(as N)*		X												

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*		X												
H. Oil and Grease	X		ND											
I. Phosphorus *(as P)*, Total (7723-14-0)		X												
J. Sulfate *(as SO^4)* (14808-79-8)		X												
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)		X												
R. Iron, Total (7439-89-6)		X												
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND-TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)	X		<0.010											
6M. Chromium VI (18540-29-9)	X		0.55	0.000011					1	ug/l	lbs/d			
7M. Copper, Total (7440-50-8)	X		10	0.0002					1	ug/l	lbs/d			
8M. Lead, Total (7439-92-1)	X								1	ug/l	lbs/d			
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)	X		30.1	0.0006					1	ug/l	lbs/d			
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)	X		27.4	0.00055					1	ug/l	lbs/d			
15M. Cyanide, Amenable to Chlorination	X		ND						1	ug/l	lbs/d			
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY

Siegel-Robert Automotive D.B.A SRG Global, Inc - Portageville

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

MO - 0001180

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

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

A. FIRST 3471 B. SECOND 3089

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) SW 1/4 NW 1/4 SEC 36 T 21 R 12E NEW MADRID COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
007	PORTAGE OPEN BAY

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Injection molding, electroplating, and surface coating of plastic automotive parts.

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO. 007

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	618.9	0.178					1	mg/l	lbs/d			
B. Chemical Oxygen Demand (COD)	55	1.10			45	0.900	1	mg/l	lbs/d			
C. Total organic Carbon (TOC)	12.5	0.025					1	mg/l	lbs/d			
D. Total Suspended Solids (TSS)	32	0.64			12.75	0.255	1	mg/l	lbs/d			
E. Ammonia *(as N)*	0.54	0.0108					1	mg/l	lbs/d			
F. Flow	VALUE 0.0024 mgd		VALUE		VALUE					VALUE		
G. Temperature *(winter)*	VALUE 20		VALUE		VALUE			°C		VALUE		
H. Temperature *(summer)*	VALUE 26		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 6.21	MAXIMUM 8.61	MINIMUM	MAXIMUM				STANDARD UNITS				

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

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS														
A. Bromide (24959-67-9)		X												
B. Chlorine, Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate - Nitrate *(as N)*		X												

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*		X												
H. Oil and Grease	X		ND											
I. Phosphorus *(as P)*, Total (7723-14-0)		X												
J. Sulfate *(as SO^4)* (14808-79-8)		X												
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)		X												
R. Iron, Total (7439-89-6)		X												
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND-TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)	X		0.0045	0.000000009										
6M. Chromium VI (18540-29-9)	X		4.2	0.000084					1	ug/l	lbs/d			
7M. Copper, Total (7440-50-8)	X		3880	0.076					1	ug/l	lbs/d			
8M. Lead, Total (7439-92-1)	X								1	ug/l	lbs/d			
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)	X		6550	0.131					1	ug/l	lbs/d			
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)	X		387	0.0077					1	ug/l	lbs/d			
15M. Cyanide, Amenable to Chlorination	X		ND						1	ug/l	lbs/d			
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM D – APPLICATION FOR DISCHARGE PERMIT – PRIMARY INDUSTRIES

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY

Siegel-Robert Automotive D.B.A SRG Global, Inc - Portageville

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

MO - 0001180

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

INDUSTRY CATEGORY

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

APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES

TABLE II	
NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
MO-0001180	002

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

1. POLLUTANT AND CAS NUMBER (*If available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TEST-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*If available*)		C. LONG TERM AVRG. VALUE (*If available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-9)			✓												
2M. Arsenic, Total (7440-38-2)			✓												
3M. Beryllium, Total (7440-41-7)			✓												
4M. Cadmium, Total (7440-43-9)	✓			0.65	0.022			0.7325	0.00094	50	ug/l	lbs/d			
5M. Chromium III (16065-83-1)	✓			0.216	0.7487			0.1823	0.2358	4	mg/l	lbs/d			
6M. Chromium VI (18540-29-9)	✓			<10	<0.034			<10	<0.0064	50	ug/l	lbs/d			
7M. Copper, Total (7440-50-8)	✓			0.60	2.0797			0.3913	0.562	50	mg/l	lbs/d			
8M. Lead, Total (7439-92-1)	✓			23	0.0797			6.78	0.0088	50	ug/l	lbs/d			
9M. Magnesium Total (7439-95-4)		✓		6.18	21.39						mg/l	lbs/d			
10M. Mercury, Total (7439-97-6)			✓												
11M. Molybdenum Total (7439-98-7)			✓												
12M. Nickel, Total (7440-02-0)	✓			0.40	1.386			0.2978	0.3852	4	mg/l	lbs/d			
13M. Selenium, Total (7782-49-2)			✓												
14M. Silver, Total (7440-22-4)	✓			<0.0005	<0.001			<0.005	0.00064	4	mg/l	lbs/d			
15M. Thallium, Total (7440-28-0)			✓												
16M. Tin Total (7440-31-5)		✓		ND							mg/l	lbs/d			
17M. Titanium Total (7440-32-6)		✓		ND							mg/l	lbs/d			
18M. Zinc, Total (7440-66-6)	✓			0.172	0.5962			0.0124	0.01599	50	mg/l	lbs/d			

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination	☑	☐	☐	120	0.4159			10.34	0.01338	50	ug/l	lbs/d			
20M. Phenols, Total	☐	☐	☑												
DIOXIN															
2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6)	☐	☐	☐	**DESCRIBE RESULTS**											

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

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NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
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1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING RE-QUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC.MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	☑	☐	☐	ND							mg/l	lbs/d			
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	☑	☐	☐	ND							mg/l	lbs/d			
24V. Tetrachloroethylene (127-18-4)	☑	☐	☐	ND							mg/l	lbs/d			
25V. Toluene (108-88-3)	☑	☐	☐	ND							mg/l	lbs/d			
26V. 1,2 – Trans Dichloroethylene (156-60-5)	☑	☐	☐	ND							mg/l	lbs/d			
27V. 1,1,1 – Tri – chloroethane (71-55-6)	☑	☐	☐	ND							mg/l	lbs/d			
28V. 1,1,2 – Tri-chloroethane (79-00-5)	☑	☐	☐	ND							mg/l	lbs/d			
29V. Trichloro – ethylene (79-01-6)	☑	☐	☐	ND							mg/l	lbs/d			
30V. Trichloro – fluoromethane (75-69-4)	☑	☐	☐	ND							mg/l	lbs/d			
31V. Vinyl Chloride (75-01-4)	☑	☐	☐	ND							mg/l	lbs/d			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2 – Chlorophenol (95-57-8)	☑	☐	☐	ND							mg/l	lbs/d			
2A. 2,4 – Dichloro – phenol (120-83-2)	☑	☐	☐	ND							mg/l	lbs/d			
3A. 2,4 – Dimethyl – phenol (105-67-9)	☑	☐	☐	ND							mg/l	lbs/d			
4A. 4,6 – Dinitro - O-Cresol (534-52-1)	☑	☐	☐	ND							mg/l	lbs/d			
5A. 2,4 – Dinitro – phenol (51-28-5)	☑	☐	☐	ND							mg/l	lbs/d			
6A. 2-Nitrophenol (88-75-5)	☑	☐	☐	ND							mg/l	lbs/d			
7A. 4-Nitrophenol (100-02-7)	☑	☐	☐	ND							mg/l	lbs/d			
8A. P – Chloro – M Cresol (59-50-7)	☑	☐	☐	ND							mg/l	lbs/d			
9A. Pentachloro – phenol (87-86-5)	☑	☐	☐	ND							mg/l	lbs/d			
10A. Phenol (108-952)	☑	☐	☐	ND							mg/l	lbs/d			
11A. 2,4,6 – Trichloro-phenol (88-06-2)	☑	☐	☐	ND							mg/l	lbs/d			
12A. 2 - methyl – 4,6 dinitrophenol (534-52-1)	☑	☐	☐	ND							mg/l	lbs/d			

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CONTINUED FROM THE FRONT

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

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NPDES # (IF ASSIGNED)	OUTFALL NUMBER
MO-0001180	002

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

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TES-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
42B. N-Nitroso N-Propylamine (621-64-7)	☑	☐	☐	ND							mg/l	lbs/d			
43B. N-Nitro-sodiphenylamine (86-30-6)	☑	☐	☐	ND							mg/l	lbs/d			
44B. Phenanthrene (85-01-8)	☑	☐	☐	ND							mg/l	lbs/d			
45B. Pyrene (129-00-0)	☑	☐	☐	ND							mg/l	lbs/d			
46B. 1,2,4-Tri chlorobenzene (120-82-1)	☑	☐	☐	ND							mg/l	lbs/d			
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☑												
2P. α-BHC (319-84-6)	☐	☐	☑												
3P. β-BHC (319-84-6)	☐	☐	☑												
4P. γ-BHC (58-89-9)	☐	☐	☑												
5P. δ-BHC (319-86-8)	☐	☐	☑												
6P. Chlordane (57-74-9)	☐	☐	☑												
7P. 4,4'-DDT (50-29-3)	☐	☐	☑												
8P. 4,4'-DDE (72-55-9)	☐	☐	☑												
9P. 4,4'-DDD (72-54-8)	☐	☐	☑												
10P. Dieldrin (60-57-1)	☐	☐	☑												
11P. α-Endosulfan (115-29-7)	☐	☐	☑												
12P. β-Endosultan (115-29-7)	☐	☐	☑												
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☑												
14P. Endrin (72-20-8)	☐	☐	☑												
15P. Endrin Aldehyde (7421-93-4)	☐	☐	☑												
16P. Heptachlor (76-44-8)	☐	☐	☑												

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NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
MO-0001180	002

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

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

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

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

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

☐ **YES** *(COMPLETE C BELOW)* ■ **NO** *(GO TO SECTION 3.00)*

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

3.00 CONTRACT ANALYSIS INFORMATION

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

■ **YES** *(LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)*

☐ **NO** *(GO TO SECTION 4.00)*

A. NAME	B. ADDRESS	C. TELEPHONE *(area code and number)*	D. POLLUTANTS ANALYZED *(list)*
TEC Labs	2269 FE Wright Drive	(731) 423-5330	
	Jackson, TN 38305		

4.00 CERTIFICATION

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	PHONE NUMBER (AREA CODE AND NUMBER)
Ron Randen - Plant Manager	(573) 379-3857
SIGNATURE	DATE SIGNED

U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

The National Map
US Topo

PORTAGEVILLE QUADRANGLE
MISSOURI
7.5-MINUTE SERIES

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid: Universal Transverse Mercator, Zone 16S
10 000-foot ticks: Missouri Coordinate System of 1983 (east zone)

Imagery.....NAIP, June 2010
Roads.....6/2006-2011 TomTom
Names.....GNIS, 2011
Hydrography.....National Hydrography Dataset, 2010
Contours.....National Elevation Dataset, 2006
Boundaries.....Census, BWC, BC, USGS, 1972 - 2010

MN
GN
MAGNETIC NORTH
17°16'
10°28'

UTM GRID AND 2011 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
This Zone Designator not

SCALE 1:24 000

KILOMETERS
1 .5 0 1
MILES
1 .5 0 1

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.1

MISSOURI

QUADRANGLE LOCATION

Parma	Cotton	New Madrid
Bragdon	Portageville	Ft Jac Pleasant
Wardell	Steele	Hornersville

ADJOINING 7.5' QUADRANGLES

ROAD CLASSIFICATION

Interstate Route
US Route
Ramp
State Route
Local Road
4WD

Interstate Route
US Route
State Route

PORTAGEVILLE, MO
2012