STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No.	MO-0133574					
Owner: Address:	Metro Fill Development, L.L.C 1650 Des Peres Road, Suite 303, St. Louis, MO 63131					
Continuing Authority: Address:	Same as above Same as above					
Facility Name: Address:	Metro Fill Development Demolition Landfill 2100 S. River Road, St. Charles, MO 63303					
Legal Description:	A tract of land being part of lots 51,60,61, and 64 of Block 9 of Steen and Cunningham's Subdivision of St. Charles Commons Landgrant 2982, T46N, R4E St. Charles County					
Latitude/Longitude	Outfall 001: 3845102/-09030168 Outfall 002: 3845132/-09030120 Outfall 003: 3845150/-09030150					
Receiving Stream: First Classified Stream and ID: USGS Basin & Sub-watershed No.: is authorized to discharge from the fact as set forth herein:	Unnamed Tributary of Missouri River (U) Missouri River (P)(01604) 10300200-170001 cility described herein, in accordance with the effluent limitations and monitoring requirements					
FACILITY DESCRIPTION All Outfalls—Demolition Landfill—Storm water runoff. Design flow is 0.6 MGD. Actual flow is dependent upon rainfall						
	er discharges under the Missouri Clean Water Law and the National Pollutant Discharge to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of					
March 30, 2007 Effective Date	Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission					

Mike Struckhoff, Director, St. Louis Regional Office

March 29, 2012 Expiration Date

MO 780-0041 (10-93

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 6

PERMIT NUMBER MO-0133574

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

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls 001, 002, and 003						
(Notes 2 and 3)						
Flow **	MGD	*		*	once/quarter***	Instantaneous estimate
Rainfall	inches	*		*	daily measurement	grab
BETX	mg/L	0.75		0.75	once/quarter***	grab
Biochemical Oxygen Demand ₅	mg/L	60		45	once/quarter***	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter***	grab
Total Suspended Solids	mg/L	80		60	once/quarter***	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter***	grab
Total Dissolved Solids	mg/L	*		*	once/quarter***	grab
Conductivity (Specific Conductance)	micromhos/cm @ 25°C	*		*	once/quarter***	grab
Chloride Plus Sulfates	mg/L	1000		*	once/quarter***	grab
Iron, Total Recoverable	mg/L	*		*	once/quarter***	grab
pH – Units	SU	****		****	once/quarter***	grab

MONITORING REPORTS SHALL BE SUBMITTED **QUARTERLY**; THE FIRST REPORT IS DUE **July 28, 2007**. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Records shall be kept of all pumping events indicating the volume of discharge. Pumping time can be used to calculate this volume if up-to-date pump curves are developed.
- *** Sample once per quarter during the months of March, June, September, and December.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- Note 2: Effluent limits for settleable solids are only effective for discharges resulting from rainfalls in amounts less than a 25-year, 24-hour event.
- Note 3: A representative grab sample shall be collected during the first hour of rainfall which exceeds 0.1 inches and results in a discharge.

PAGE NUMBER 3 of 6

PERMIT NUMBER MO-0133574

A. 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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EF	FLUENT LIMI	ITATIONS	MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls 001, 002, and 003 (continued)						
(Note 3)						
Calcium	mg/L	*		*	once/year****	grab
Fluoride	ug/L	*		*	once/year****	grab
Total Hardness	ug/L	*		*	once/year****	grab
Barium, Total Recoverable	ug/L	*		*	once/year****	grab
Boron, Total Recoverable	ug/L	*		*	once/year****	grab
Cadmium, Total Recoverable	ug/L	*		*	once/year****	grab
Chromium, Total Recoverable	ug/L	*		*	once/year****	grab
Cobalt, Total Recoverable	ug/L	*		*	once/year****	grab
Copper, Total Recoverable	ug/L	*		*	once/year****	grab
Sodium, Total Recoverable	ug/L	*		*	once/year****	grab
Ammonia as N	mg/L	Note 4		Note 4	once/year****	grab
Nitrate and Nitrite as N	mg/L	*		*	once/year****	grab
Phosphorus, Total Recoverable	mg/L	*		*	once/year****	grab
Mercury, Total Recoverable	ug/L	*		*	once/year****	grab
Arsenic, Total Recoverable	ug/L	*		*	once/year****	grab
Lead, Total Recoverable	ug/L	*		*	once/year****	grab

MONITORING REPORTS SHALL BE SUBMITTED **ANNUALLY**; THE FIRST REPORT IS DUE **October 28, 2007**. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- **** Annual sampling results shall be presented with the last quarterly monitoring report of each year. Sample should be performed during September if possible.
- Note 3: A representative grab sample shall be collected during the first hour of rainfall which exceeds 0.1 inches and results in a discharge.
- Note 4: The discharge shall not exceed the appropriate values in Table B 10 CSR 20-7.031.

PAGE NUMBER 4 of 6 PERMIT NUMBER MO-0133574

A. 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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls 001, 002, and 003 (continued)						
(Note 3)						
Selenium, Total Recoverable	ug/L	*		*	once/year****	grab
Silver, Total Recoverable	ug/L	*		*	once/year****	grab
Manganese, Total Recoverable	ug/L	*		*	once/year****	grab
Magnesium, Total Recoverable	ug/L	*		*	once/year****	grab
Zinc, Total Recoverable	ug/L	*		*	once/year****	grab
Antimony, Total Recoverable	ug/L	*		*	once/year****	grab
Beryllium, Total Recoverable	ug/L	*		*	once/year****	grab
Nickel, Total Recoverable	ug/L	*		*	once/year****	grab
Sulfate	mg/L	*		*	once/year****	grab
Thallium, Total Recoverable	ug/L	*		*	once/year****	grab
Total Organic Carbon	mg/L	*		*	once/year****	grab
Vanadium, Total Recoverable	ug/L	*		*	once/year****	grab
Oil and Grease	mg/L	15		10	once/year****	grab

MONITORING REPORTS SHALL BE SUBMITTED $\underline{ANNUALLY}$; THE FIRST REPORT IS DUE $\underline{October~28,2007}$. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ***** Annual sampling results shall be presented with the last quarterly monitoring report of each year. Sample should be performed during September if possible.
- Note 3: A representative grab sample shall be collected during the first hour of rainfall which exceeds 0.1 inches and results in a discharge.

C. SPECIAL CONDITIONS

- 1. All design and operating specifications and all Solid Waste Management Program approval conditions pertaining to water quality are hereby made a part of this permit and shall apply throughout the life of this permit without regard to other conditions, permits, occurrences, etc.
- 2. This permit does not allow the discharge of storm water that has contacted the open face of the landfill. This permit does not allow the discharge of untreated leachate. All leachate shall be handled in accordance with the <u>Solid Waste Disposal Area</u> Operating Permit, Report of Approval of Plans and Specifications (with conditions).
- 3. All activities performed to control erosion on the landfill site (seeding, mulching, terracing, etc.) shall be described and submitted along with the second quarter and fourth quarter Discharge Monitoring Reports. If no erosion controls are undertaken, indicate so on the reports.
- 4. 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.
- 5. All outfalls must be clearly marked in the field.
- 6. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 μg/L);
 - (2) Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- (c) That the effluent limit established in part A of the permit will be exceeded.
- 7. Report as no-discharge when a discharge does not occur during the report period.

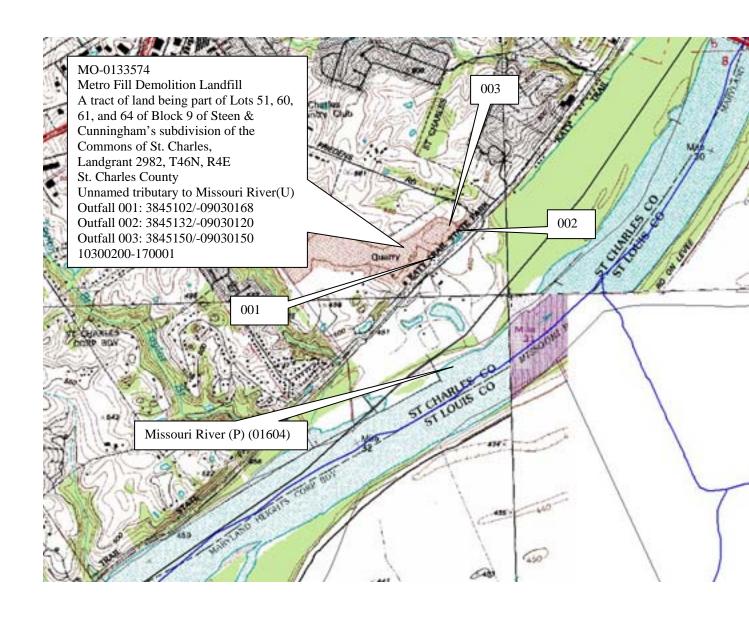
C. SPECIAL CONDITIONS (continued)

8. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;

Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

- 9. Permittee shall develop and implement a Storm Water Pollution Prevention Plant (SWPPP) for the facility in accordance with the guidelines described in Storm Water Management For Industrial Activities, Developing Pollution Prevention Plans and Best Management Activities, EPA document number EPA 832-R-92-006, published by the USEPA, September 1992, or other appropriate guidelines. The SWPPP must be kept on site. The SWPPP must include:
 - (a) A listing of Best Management Practices (BMPs) to be implemented at the facility to control and minimize the amount of potential contaminants that may contact storm water.
 - (b) A schedule for implementing the BMPs.
 - (c) A schedule for a monthly site inspection and brief written report or inspection log. The report or log should include observations and evaluations of BMP condition, effectiveness, deficiencies, and corrective measures to be taken. Inspection reports must be kept on site and made available to MDNR personnel upon request.
 - (d) A provision to designate an individual as responsible for environmental matters.
 - (e) A provision for training all involved personnel in material handling and storage, and housekeeping of maintenance areas.



Date of Fact Sheet: January 5, 2007

Date of Public Notice: January 26, 2007

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FACT SHEET

This Fact Sheet explains the applicable regulations and rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0133574

FACILITY NAME: Metro Fill Development Demolition Landfill

OWNER NAME: Metro Fill Development, L.L.C..

LOCATION: 2100 S. River Road, St. Charles, MO 63303

RECEIVING STREAM: Unnamed tributary of Missouri River

FACILITY CONTACT PERSON: Becky Lydon TEL (314) 835-1616

FACILITY DESCRIPTION AND RATIONALE

This demolition landfill is located in an inactive limestone quarry. The existing quarried pit is approximately 12 acres in size. There will be no process or sanitary waste waters generated at the proposed landfill. Only storm water and groundwater will be discharged. Storm water management requirements will change throughout the life of the landfill. There are three outfalls proposed. Storm water runoff that does not fall into the pit is routed to Outfalls 001 and 002. Initially all storm water within the quarry excavation will be collected from a low point in the bottom and is pumped to Outfall 001. (with a 400gpm pump, the discharge at 001 would be at a maximum 576,000qpd)(the quarry pit is not expected to be filled in this initial five year permit.) During the initial phases of the landfill project, storm water in the immediate area adjacent to Arena Parkway and the newly constructed haul road will be directed to Outfall 002. (This flow will depend upon precipitation) Groundwater that has not been in contact with solid wastes will be collected from below the landfill liner and will also be pumped to the surface. This will be Outfall 003.(an average of 11,000gpd has been estimated for this discharge) It will leave the property through Outfall 002. There will be a no discharge leachate control system. Leachate holding tanks and a truck loading spill pad will be constructed within secondary containment at the south end of the landfill. All leachate will be hauled to an off-site treatment facility or recirculated as allowed by the future solid waste management permit.

The volumes of storm water collected from within the quarry have been based upon the 25-year, 24 hour rainfall event.(approximately 1.8 million gallons of stormwater over the landfill.) There is adequate space in the storm water basin to store this volume until it can be pumped to the outfall location. At a 400 gpm pumping rate, 78 hours will be required to remove the stored storm water from a 25 year storm event. (The total maximum daily discharge from this site is estimated to bo 0.6 MGD)

Latitude/Longitude

Outfall 001: 3845102/-09030168 Outfall 002: 3845132/-09030120 Outfall 003: 3845150/-09030150

This permit will be issued for a period of $\underline{\text{five}}$ years.